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# Accountability report

On 10 March 2011, the Governing Board of the Swiss National Bank (SNB) submitted its accountability report for 2010 to the Federal Assembly in accordance with art. 7 para. 2 of the National Bank Act (NBA). The report is submitted to the Federal Council and the General Meeting of Shareholders for information purposes only and does not require their approval.

## Summary

### Monetary policy

(1) The SNB pursues a monetary policy serving 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, it is based on inflation forecasts rather than current inflation. The SNB's monetary policy strategy consists of three elements: a definition of price stability, a medium-term conditional inflation forecast, and, at operational level, a target range for a reference interest rate, which is the Libor for three-month investments in Swiss francs.

In 2010, the SNB maintained its expansionary monetary policy. It left the target range for the three-month Libor unchanged at 0.0–0.75% with the intention of keeping the Libor within the lower part of the range, at around 0.25%.

Given the severe downturn in the global economy, a serious threat of a deflationary trend had emerged in Switzerland at the beginning of 2009. In order to prevent this threat from materialising via appreciation of the Swiss franc, the SNB acted against any appreciation in the Swiss franc with respect to the euro from March 2009 on, intervening in the foreign exchange market to achieve this goal.

By the end of 2009, the SNB considered that, given the continuing recovery in the economy, the threat of deflation had receded. Consequently, a certain appreciation in the Swiss franc could be allowed without price stability being compromised. In December, the SNB therefore announced that it would act decisively only in the event of an excessive appreciation of the Swiss franc. This policy was maintained throughout the first half of 2010.

In spring 2010, with the escalation of the sovereign debt crisis in Europe, major tensions arose on financial markets. This environment resulted in a renewed flight to safe investments, and there was substantial upward pressure on the Swiss franc. The SNB considered that, at that time, a rapid and excessive appreciation of the Swiss franc against the euro would have placed the Swiss economy under such a strain that the threat of a deflationary trend would have come to the fore. It was not prepared to take this risk and therefore decided to acquire large quantities of foreign currency.

Towards the middle of the year, the recovery of the Swiss and global economy had consolidated to such an extent that the threat of deflation in Switzerland had largely disappeared. In June, the SNB therefore considered that an appreciation of the Swiss franc was no longer such a threat to price stability and the economy as it had been previously. Thus it refrained from carrying out any further interventions on the foreign exchange market in the second half of the year.

With its prudent policy, the SNB contributed to the recovery of the Swiss economy. By the third quarter, GDP had reached the same level as before the crisis. Overall, GDP rose by 2.6% in 2010, after having fallen by 1.9% in 2009.

In 2010, price stability was assured. The medium-term conditional inflation forecast published as part of the quarterly monetary policy assessments indicated a low level of inflation initially, although this picked up at the end of the three-year forecast horizon. In its monetary policy decisions, the SNB therefore drew attention to the fact that it would not be able to maintain its expansionary monetary policy indefinitely. Given the low rates of interest and rising real estate prices, it also warned banks, households and companies not to take excessive risks in the financing of real estate.

(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 2010, Swiss franc liquidity in the banking system rose sharply due to the extensive purchases of foreign exchange, and the three-month Libor fell below the targeted level of 0.25%. In the process, the banking system moved into a position of excess liquidity with respect to the SNB. Consequently, the former procedure for implementing monetary policy and managing the three-month Libor had to be adapted. The new procedure, which has been in place since mid-2010, is based on repeated absorption of excess liquidity by means of liquidity-absorbing repos and the issuance of SNB Bills. Thanks to this new management regime, it has been possible to neutralise the excess liquidity to a large extent, without causing an undesirable tightening in monetary policy in the process.

**Liquidity supply**

(3) The SNB 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 Swiss Confederation. Some local cash redistribution is carried out through the cantonal banks, which act as agencies on behalf of the SNB. In 2010, the SNB and the Berner Kantonalbank agreed to close the agencies run by the latter in Bienne and Thun, since the demand for cash services had declined at the agencies in question. In October, the SNB and the Basler Kantonalbank agreed to close the agency in Basel with effect from the end of January 2011.

**Cash supply and distribution**

In the course of the project on developing the new banknote series, it became clear at the end of 2009 that the new security features could be enhanced by further development. The SNB expects that the first denomination in the new series will be issued towards the end of 2012.

**Cashless payments**

(4) The SNB facilitates and secures the functioning of cashless payment systems. It maintains sight deposit accounts for the banks, steers the SIC interbank payment system and participates in the relevant payment system bodies. It has also begun to hold sight deposit accounts for insurance companies, as long as these are active in the repo market.

**Asset management**

(5) The SNB's assets fulfil important monetary policy functions. They consist mainly of foreign currency assets and, to a lesser extent, financial assets in Swiss francs. Their size and composition is determined by the established monetary order and the requirements of monetary policy. Currency reserves increased sharply in 2010 due to foreign exchange purchases. The foreign currency acquired during the course of the year was mainly invested in government bonds. In doing so, the principles of currency and asset class diversification were observed as far as possible. A good investment return was achieved in local currencies due to the declining yields and risk premia on a substantial proportion of bonds, and to rising share prices. However, in Swiss franc terms, returns were very negative because of substantial exchange rate losses.

**Financial system stability**

(6) The NBA confers on the SNB the mandate of contributing to the stability of the financial system. It fulfils this mandate by analysing sources of risk to the financial system, overseeing systemically important payment and securities settlement systems, and being actively involved in creating the operating framework for the financial sector. In doing so, it works in close cooperation with the Swiss Financial Market Supervisory Authority (FINMA), the Federal Department of Finance (FDF) and foreign authorities. In 2010, a major focus of the SNB's activities in the area of financial stability was its involvement in the commission of experts appointed by the Swiss Federal Council to examine ways of limiting the economic risks posed by large companies. The commission investigated how to alleviate the 'too big to fail' problem. At international level, the SNB participated in efforts to reform banking regulation. In addition, monitoring of the Swiss banking system was intensified, with particular attention being paid to the mortgage market. The SNB also reviewed its mandate and its set of instruments in the area of financial stability. It concluded that its set of preventive instruments needed to be strengthened in three areas, these being access to information, the right to participate in drawing up regulations and the implementation of regulations.

The overall risk of the stabilisation fund – set up by the SNB in October 2008 to purchase illiquid UBS assets, and managed by the SNB – was significantly reduced in 2010. This was due to interest payments and repayments on stabilisation fund investments as well as the sale of assets.

(7) The SNB participates in international monetary cooperation activities. Important bodies are the International Monetary Fund (IMF), the Bank for International Settlements (BIS), the Financial Stability Board (FSB) and the Organisation for Economic Co-operation and Development (OECD). In 2010, a major focus of work in these bodies was again the effort to strengthen global financial stability. At the IMF, the main focus was on quota and governance reform. The objective is to strengthen the IMF's capital base, in conjunction with a reallocation of quota shares in favour of the emerging economies. A result of this will be a reduction in Switzerland's quota share. In November, Kazakhstan joined the Swiss constituency. At the same time, Uzbekistan left it.

**International monetary cooperation**

(8) The SNB provides the Swiss Confederation with banking services in the areas of payment transactions as well as liquidity and securities management. In 2010, it issued money market debt register claims and bonds for the Confederation and carried out payment transactions on its behalf.

**Banking services for the Confederation**

(9) The SNB compiles statistical data on banks and financial markets, the balance of payments, direct investment, the international investment position and the Swiss financial accounts. In doing so, it works with the appropriate offices of the Confederation, FINMA, authorities from other countries and international organisations. In 2010, the main focus of its work included the revision of the bilateral agreement on statistics between Switzerland and the European Union.

**Statistics**

# 1 Monetary policy

## 1.1 Background

### Constitutional and legal mandate

Art. 99 of the Federal Constitution entrusts the Swiss National Bank (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 SNB 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 also means that the National Bank must gear its policy to the needs of the entire Swiss economy rather than the interests of individual regions or industries.

### Significance of price stability

Price stability is an important condition for growth and prosperity. Inflation (a sustained increase in the price level) and deflation (a sustained decrease in the price level), by contrast, hamper economic development. They complicate decision-making by consumers and producers, lead to misallocations of labour and capital, result in income and asset redistributions, and put the economically weak at a disadvantage.

By seeking to keep prices stable, the National Bank creates an environment in which the economy can fully exploit its production potential. The aim of the SNB's monetary policy is to ensure price stability in the medium and long term. Short-term price fluctuations, however, cannot be counteracted by monetary policy.

### Appropriate monetary conditions

To ensure price stability, the SNB must provide appropriate monetary conditions. If interest rates are too low for a lengthy period, the supply of money and credit to the economy will be too high, triggering an inordinate demand for goods and services. There is also the risk of excesses on the asset markets. Although this boosts production initially, bottlenecks occur over time and production capacity is stretched, causing a rise in the level of prices. Conversely, if interest rates are too high for a lengthy period, the supply of money and credit will be reduced, leading to an insufficient level of aggregate demand. This will have a dampening effect on the prices of goods and services.

Overall economic development is continually subject to influences and disruptions. These include changes in demand from abroad, movements in exchange rates, alterations to financial policies, and – in the past – an inappropriate supply of money. Inflationary pressures increase in phases of economic overheating, and decrease when the utilisation of production capacity slows. In each case the SNB must ensure price stability. In the first case it will therefore tend to tighten monetary policy, and in the second to ease it. A monetary policy aimed at fostering price stability thus smoothes fluctuations in aggregate demand and thereby secures economic growth.

**Taking economic activity into account**

Disruptions to the economy can also emanate from the supply side, for example a sustained rise in the price of oil or other commodities. This may present the SNB with a challenge. On the one hand, it must ensure that the higher production costs do not give rise to an inflationary spiral. On the other, it must take into account that rising costs can, under certain circumstances, heavily burden the economy. An overhasty restoration of price stability might therefore have serious repercussions for the business cycle and employment.

Under normal circumstances, the SNB influences economic and price developments by steering the interest rate, i.e. the Libor (London Interbank Offered Rate) for three-month investments in Swiss francs. If monetary policy needs to be tightened, the three-month Libor will be raised; if it needs to be relaxed, the Libor will be lowered. However, should there be a decline in aggregate demand at a time when the three-month Libor is already close to zero, this could give rise to a dangerous situation. If, under these circumstances, deflation expectations arise, real interest rates (i.e. adjusted for the deflation expectations) remain at a higher level than is desirable for the economic situation. If monetary policy is not relaxed, in the worst case a deflationary spiral can develop, in which the expectation of falling prices and a decline in demand reinforce one another. To prevent a deflationary trend from developing, and with its interest rate measures already fully employed, the SNB has little choice but to fall back on unconventional methods, like the direct purchase of bonds or foreign currency.

**Special challenges**

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. These apply to the cause and duration of disruptions, as well as the transmission mechanisms, the time lag that elapses before monetary policy measures impact on the business cycle and prices, and the extent of that impact.

**Numerous uncertainties**

## 1.2 Monetary policy strategy

### Monetary policy strategy

The SNB monetary policy strategy sets out the way in which the National Bank intends to fulfil its mandate. It consists of the following three elements: a definition of price stability, a medium-term conditional inflation forecast and – at operational level – a target range for a reference interest rate, the three-month Swiss franc Libor.

### Definition of price stability

The SNB defines price stability as an annual rise of less than 2% in the consumer price index (CPI). Deflation is also regarded as a failure to attain the objective of price stability. By aiming for a slightly positive rate of inflation, the SNB takes into consideration the fact that not every price increase is necessarily inflationary, and that inflation cannot be measured accurately. Measurement problems arise, for example, when the quality of goods and services improves. Such changes are not fully taken into account in the CPI calculation; as a result, the path of measured inflation trends slightly above that of actual inflation.

### Purpose of inflation forecast

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

### Preparing the 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 prepares a quarterly forecast on the development of inflation over the next three years. The period of three years corresponds more or less to the time required for the transmission of monetary policy stimuli to output and prices. Forecasts over such a long horizon involve considerable uncertainties. In preparing a medium-term forecast, the SNB takes account of the fact that the effects of monetary policy are lagged and it therefore has to adopt a forward-looking stance in its monetary policy decisions.

For a country like Switzerland with its strong international integration, cyclical developments in the global economy play an important role. Consequently, the inflation forecasts are based on assumptions with regard to the future path of the global economy.

In the medium and long term, the price trend depends essentially on the supply of money. For this reason, the monetary aggregates and loans are important elements in a number of quantitative models used for forecasting inflation. As regards the path of inflation in the short term, indicators relating to economic developments, as well as exchange rates and commodity prices (oil), are generally of greater significance.

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

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 sustained basis, the SNB would thus consider tightening its monetary policy. Conversely, it would schedule a monetary relaxation if deflationary trends were identified.

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

However, the SNB does not react mechanically to the inflation forecast. It also takes account of the general economic situation in its monetary policy decisions. If, for instance, inflation temporarily exceeds the 2% ceiling as a result of special factors, such as a sudden surge in oil prices, monetary policy does not necessarily need to be adjusted. The same applies to short-lived deflationary pressures.

**Communicating through conditional inflation forecast**

The SNB publishes an inflation forecast every quarter. This forecast is conditional, i.e. it is based on the assumption that the reference interest rate announced at the time of publication will remain constant for the next three years. Thus it shows how consumer prices would move assuming a given global economic scenario and an unchanged Swiss monetary policy stance. The direction that monetary policy is likely to take in the future can be derived from the path of the conditional inflation forecast over the next three years. For this reason, the inflation forecast is an important communication tool. However, it cannot be directly compared with forecasts by other institutions, which generally include anticipated SNB interest rate decisions in their forecasts.

The SNB implements its monetary policy by fixing a target range for the three-month Swiss franc Libor. The target range usually extends over one percentage point. As a rule, the SNB holds the Libor in the middle of the range.

**Target range for the three-month Libor**

The Libor corresponds to a trimmed mean of the current rates charged by 12 leading banks for unsecured interbank loans and is published daily by the British Bankers' Association in London. Even though the number of unsecured interbank loans upon which the Libor is based has declined significantly over the past few years, the Libor retains its economic importance. For instance, the Libor and the swap rate derived from it are the most important benchmarks for determining the interest rates of loans and bonds in the Swiss franc market. Thus the Libor continues to play a key role in the monetary policy transmission mechanism.

The SNB conducts an in-depth monetary policy assessment in March, June, September and December. Each of these assessments results in an interest rate decision and the publication of a medium-term conditional inflation forecast. The SNB sets out the reasons for its decisions in a press release and in a quarterly monetary policy report published in the *Quarterly Bulletin*. In June and December, it provides more information on the monetary policy decision at a news conference.

**Quarterly policy assessments**

## 1.3 International economic developments

### Recovery of the global economy

During the course of 2009, the international economy had overcome the deep recession that followed the financial crisis of autumn 2008. The recovery continued in 2010, but considerable uncertainty persisted with regard to its sustainability, both in Europe and in the US. Moreover, the differing pace of growth from one region to another was striking. For instance, manufacturing output in the large advanced economies at the end of 2010 was still below the pre-crisis level, while the corresponding level in the emerging economies was clearly exceeded.

### Regional differences

The solid recovery in the emerging economies was largely attributable to the fact that these countries were not very strongly affected by the financial crisis. Moreover, their public finances were comparatively sound, giving them scope for expansionary fiscal policies. By contrast, the effects of the financial crisis continued to weigh on many advanced economies. Unemployment remained high and this, together with the subdued financial position, held back household consumer spending. Due to more restrictive lending conditions, investment activity was cautious as well.

### Additional strains due to sovereign debt crisis

The European Economic and Monetary Union (the euro area) was faced with additional strains as a result of the sovereign debt crisis. Doubts arose about the long-term solvency of certain countries in view of the rising levels of budget deficits and sovereign debt. As a result, financial market premia on government bonds for the countries in question rose, jeopardising the refinancing of government debt. In addition, the crisis of confidence threatened to spill over to other euro economies. In mid-May, the European authorities, jointly with the International Monetary Fund (IMF), created a stabilisation mechanism in order to stabilise the financial situation in Europe. This mechanism includes a rescue fund of up to EUR 500 billion, expiring after three years, which is to be used to provide euro area countries with financial support in cases of need.

### Euro under pressure

In the course of the sovereign debt crisis, the euro came under pressure. It lost considerable value against most currencies, with losses against the Swiss franc proving particularly substantial.

### Moderate upturn in the US

GDP in the US rose by 2.8% in 2010. This growth was not sufficient to close the output gap. Significant support was provided to the economy by equipment investment and private consumer spending, which both increased despite continued reduction in debt. Moreover, higher profits and low interest rates stimulated corporate investment activity. Residential construction remained a weak area. The large supply of vacant real estate weighed on house prices and, as a result, investment in residential construction decreased slightly, despite the granting of tax credits to home buyers. In addition, the sluggish recovery of the labour market was a cause for concern. In December, the unemployment rate was 9.4%, which was only a little below the peak of 10.1% measured in October 2009.

In the euro area, GDP rose by 1.7% in 2010, which was significantly less than in the US. Moreover, the pace of the recovery varied considerably from one country to another.

**Mixed economic developments  
in the euro area**

Germany experienced the strongest upturn. Its export industry benefited from the weaker euro and the strong demand from the emerging economies. This led to an improvement in the labour market situation, which also lent momentum to the domestic economy. In many other euro countries, such as, for example, France, investment also began to revive, yet unemployment remained high. Greece and Ireland were in a difficult position, since both of them were faced with government budget problems. Rescue packages were put together for both countries in 2010. While the recession in Greece deepened, the Irish economy stagnated.

Asia saw a continuation of the strong recovery. In 2010, the Chinese economy expanded somewhat faster than in 2009, at about 10.3%. Government transfer payments and a robust labour market stimulated private consumption. However, the government cut back investment in infrastructure, which had been increased previously, resulting in a transfer of domestic demand from the public sector to the private sector.

**Strong upturn in Asia**

The export-oriented economies of South Korea, Taiwan, Hong Kong and Singapore benefited from the vigorous demand from China. Domestic demand in most of these economies was also healthy.

In Japan, GDP also grew strongly, at 3.9%. However, this did no more than restore nearly two-thirds of the GDP lost during the recession. The growth driver was the export industry, which benefited from the strong demand emanating from the emerging economies. Private consumption, supported by government stimulus programmes, also revived.

Inflation rates, as measured by the increase in consumer prices, increased slightly worldwide, largely reflecting rising prices for energy and commodities. In a number of emerging economies, inflation also increased as a result of strong economic growth and the increasing rate of capacity utilisation. By contrast, in the advanced economies core inflation – a measure of inflation that excludes food and energy prices – remained low. This reflected the considerable excess capacity still persisting in many places.

**Inflation rates creep  
up slightly**

**Consolidation of fiscal policy begins**

In 2010, most countries retained their expansionary fiscal policies, although the pressure to consolidate government budgets increased in view of high deficits and growing sovereign debt. In the US, federal investment in infrastructure projects, which had been resolved in 2009, came into effect, while tax cuts passed in the same year remained in force. At the same time, however, the federal states and local governments reduced expenditure in order to lower their budget deficits. In the second half of the year, the Japanese government passed further measures aimed at supporting the economy. This was a reaction to the imminent slowdown in growth, due partly to the appreciation of the yen against the euro and the US dollar. In Europe, the sovereign debt crisis forced a number of countries to push ahead with radical austerity measures aimed at consolidating their government finances.

**Expansionary monetary policy in advanced economies**

The central banks of most advanced economies maintained their expansionary monetary policies. In an environment of low inflation and high unemployment, the US Federal Reserve maintained the target range for its reference interest rate unchanged at 0.0–0.25%. At the beginning of November, it announced a second large-scale purchase programme for long-term treasury bonds as part of its quantitative easing policy. Under the programme, USD 600 billion of treasury bonds are to be acquired by June 2011.

The European Central Bank's (ECB) main refinancing rate, which had been reduced to 1.0% in mid-2009, was held at this level throughout 2010, and the ECB continued to offer unlimited liquidity to banks. From May, the ECB also purchased government bonds from member states in difficulties in order to stabilise financial markets. The one-year covered bond purchase programme expired at the end of June and was not extended.

The Bank of Japan maintained its zero interest rate policy. It also intervened in the foreign exchange market in September in order to counteract the appreciation of the yen. In October, the Japanese central bank announced that it would maintain interest rates at zero until the fall in the price level had been brought to a halt. At the same time, it decided to acquire assets amounting to JPY 5,000 billion (including private sector assets) in order to lower market interest rates.

**Monetary policy tightening in the emerging economies**

Central banks in the emerging economies, faced with strong economic growth and an increasing threat of inflation, began tightening their monetary policy stance. The Chinese central bank raised its reserve requirement ratio for banks as well as its reference interest rates and took a number of further administrative measures aimed at curbing the strong growth in lending. In addition, it allowed a slight appreciation of the yuan to take place. By the end of the year, the Chinese currency had gained some 3.5% against the US dollar.

### Level of gross domestic product

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

In real terms,  
index: 100 = period average  
(Q1/2006 – Q4/2010)  
Sources: SECO, Thomson  
Financial Datastream



### Growth of gross domestic product

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

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



### Inflation

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

In percent  
Sources: SFSO, Thomson  
Financial Datastream



## 1.4 Economic developments in Switzerland

### Recovery in 2010

The year 2010 was one of recovery for the Swiss economy. GDP rose by 2.6% after having fallen by 1.9% in 2009. Significant momentum was provided by the domestic economy, but the export industry also contributed to growth.

### Real gross domestic product

Year-on-year change in percent

	2006	2007	2008	2009	2010
Private consumption	1.6	2.3	1.3	1.0	1.7
Government consumption	0.3	0.3	1.7	1.6	-1.6
Investment	4.7	5.1	0.5	-4.9	4.6
Construction	-1.4	-2.3	0.0	3.0	3.3
Equipment	10.1	11.1	0.8	-10.8	5.7
<b>Domestic demand</b>	<b>1.4</b>	<b>1.4</b>	<b>0.2</b>	<b>0.6</b>	<b>0.5</b>
Exports of goods and services	10.3	9.6	3.3	-8.7	9.3
<b>Aggregate demand</b>	<b>4.5</b>	<b>4.4</b>	<b>1.4</b>	<b>-3.0</b>	<b>3.7</b>
Imports of goods and services	6.5	6.1	0.3	-5.4	6.7
<b>Gross domestic product</b>	<b>3.6</b>	<b>3.6</b>	<b>1.9</b>	<b>-1.9</b>	<b>2.6</b>

Sources: SECO, SFSO

### Expanding foreign trade

Supported by the solid demand from abroad, exports of goods and services rose again in 2010, thereby recovering a large part of the losses suffered in 2009. However, around the middle of the year, the revival lost considerable momentum, partly as a result of the appreciation in the Swiss franc. The expansion in goods exports was broad based. In the case of services, growth was mainly attributable to higher net earnings from merchandising, while international banking operations derived little benefit from the recovery in global financial markets.

Imports increased substantially due to robust domestic demand and the strength of the Swiss franc. In the second half of the year, however, they also lost momentum.

A return to rising production and higher capacity utilisation supported the recovery in equipment investment, which had suffered an extremely sharp downturn in the crisis. However, at the end of the year, it was still at a lower level than before the crisis.

**Investment recovers**

Construction investment continued to expand in 2010 and provided an additional support to the economy. Favourable financing conditions and continuing immigration had a positive effect on residential construction investment. In addition, government subsidies for energy conservation measures stimulated renovation and refurbishment activities. Civil engineering was robust, benefiting from public sector infrastructure projects. However, commercial construction declined.

As a result of the increasing rate of capacity utilisation and the improvement in the labour market situation, the negative output gap narrowed markedly in 2010.

**Negative output gap narrower**

Job losses were moderate during the crisis, partly due to the use of short-time work, and thus the demand for labour during the recovery was modest. Therefore, employment (measured in terms of full-time equivalents) rose only slightly in 2010 (0.7%). New jobs were created in the areas of construction, trade, public administration and health, in particular. Manufacturing had been particularly hard hit by the crisis; in the second quarter of 2010 the job cuts came to a halt.

**Slightly higher level of employment**

## Labour market

	2006	2007	2008	2009	2010
Employment in terms of full-time equivalents <sup>1</sup>	2.0	3.3	2.7	-0.1	0.7
Unemployment rate in percent	3.3	2.8	2.6	3.7	3.9
Number of job seekers in percent	5.0	4.3	3.9	5.2	5.5
Swiss nominal wage index <sup>1,2</sup>	1.2	1.6	2.0	2.1	0.9
Compensation of employees, nominal <sup>1,2</sup>	4.2	5.3	5.5	3.0	1.6

1 Year-on-year change in percent.

2 2010: SNB forecast.

Sources: SECO, SFSO

**Unemployment falling over the course of the year**

The rate of unemployment, which had soared from 2.5% to 4.2% during the crisis, decreased slightly again in 2010. By the end of the year, it had fallen to 3.5% (seasonally adjusted), which corresponded to a reduction of about 24,000 to 139,000 people.

During the crisis, many companies had introduced short-time work, particularly in manufacturing. According to a study carried out by the State Secretariat for Economic Affairs (SECO), the number of employees on short-time work in May 2009 peaked at some 92,000 people (not seasonally adjusted), falling rapidly thereafter. In November 2010, only 7,300 people were still affected by short-time work. Contrary to expectations, the decline in short-time work was not associated with a corresponding increase in unemployment. This suggests that a majority of the employees engaged in short-time work have been fully reintegrated in the production process.

**Slight increase in wages**

Nominal wages increased only marginally in 2010. According to SNB estimates, nominal wages as measured by the Swiss wage index were up by 0.9%, following 2.1% in 2009. The total wage bill (compensation of employees) as measured by the national accounts rose by an estimated 1.6%. Given an increase in full-time equivalent employment of 0.7%, this resulted in a 0.9% increase in nominal wages for 2010, following 3.1% in 2009. Unlike the wage index, which relates to existing employment contracts, the data in the national accounts on compensation of employees also include changes in employment structure and bonus payments.

The fact that nominal wages rose only slightly reflects the situation following the economic crisis. First, the subdued economic environment had a negative impact on salary agreements at the end of 2009. Second, the strong increase in unemployment during the course of 2009 put a damper on salary agreements for people entering the labour market or changing jobs. In addition, no inflation adjustments were required because the consumer price index had fallen by 0.5% in 2009.

Since the consumer price index rose by 0.7% in 2010, real wages hardly increased at all. Both the Swiss wage index and the national accounts showed a 0.2% rise. In 2009, they had risen by 2.6%, according to the wage index, or 3.6%, according to the national accounts.

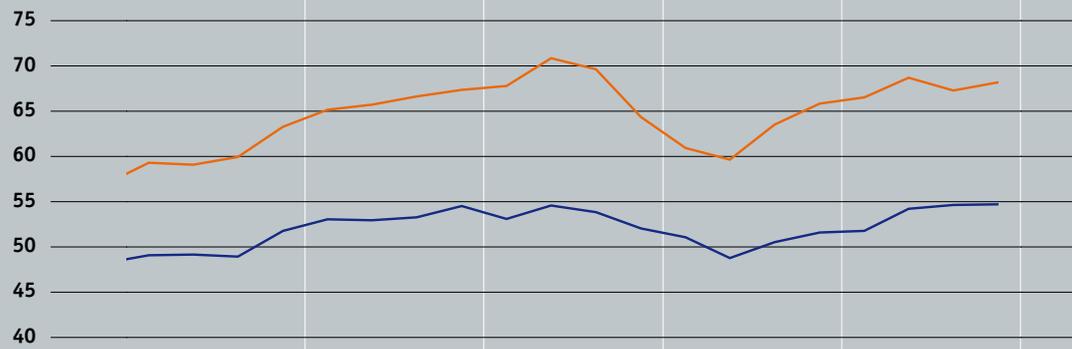
### Gross domestic product and components

— 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



**Robust growth in consumption**

Growth in private consumption gathered pace in 2010. Since incomes increased only marginally, households mainly financed additional consumption by reducing their saving rate. The decline in unemployment also had a positive impact, which showed itself in the form of an improvement in consumer confidence. The demand for new cars recovered particularly strongly and a major part of the sales losses suffered during the crisis were compensated. However, consumption of goods and services that are less sensitive to cyclical movements, including expenditure on food and accommodation, also rose further.

Following a phase of strong growth during the crisis, government consumption declined significantly in 2010. This was mainly because the stabilisation measures designed to support the domestic economy came to an end.

**Broad-based GDP growth in terms of individual industries**

GDP growth was broad based in 2010 in terms of individual industries. Those industries that had suffered the biggest losses during the crisis grew most strongly. They included manufacturing, trade and finance. But even the areas that had been spared by the crisis, such as the construction industry, public administration and healthcare, also supported the economy.

**Slightly higher producer and import prices**

The recovery of the global economy led to increasing prices for commodities and energy. As a result, Swiss producer and import prices also rose. Under the impact of the strong Swiss franc, however, inflationary pressure remained low. Overall, Swiss producer prices were down slightly from the previous year's level (-0.1%), while import prices were up by 0.8%. Excluding commodities and energy, import prices were 1.6% below the level of the previous year.

### 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

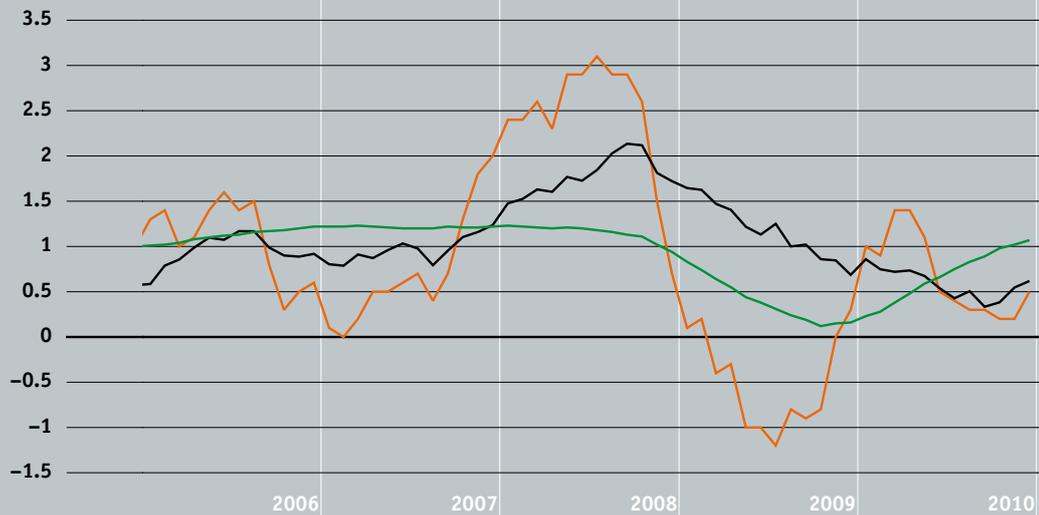
Year-on-year change  
 in percent  
 Source: SFSO



### Core inflation

 Consumer prices  
 Trimmed mean  
 Dynamic factor inflation

Year-on-year change  
 in percent  
 Sources: SFSO, SNB



## National consumer price index and components

Year-on-year change in percent

	2009	2010	2010			
			Q1	Q2	Q3	Q4
<b>Consumer price index, overall</b>	<b>-0.5</b>	<b>0.7</b>	<b>1.1</b>	<b>1.0</b>	<b>0.3</b>	<b>0.3</b>
Domestic goods and services	1.2	0.6	0.8	0.6	0.4	0.5
Goods	1.0	-0.1	0.4	0.0	-0.4	-0.5
Services	1.3	0.8	0.9	0.9	0.7	0.8
Private services (excluding rents)	0.6	0.6	0.8	0.7	0.5	0.4
Rents	2.5	1.1	1.3	1.1	0.9	1.2
Public services	0.8	0.9	0.7	0.8	0.7	1.2
Imported goods and services	-4.7	0.9	1.8	1.9	-0.1	-0.1
Excluding oil products	-0.3	-1.3	-0.9	-1.2	-1.4	-1.5
Oil products	-25.9	13.9	18.3	21.0	8.6	8.5
<b>Core inflation</b>						
Trimmed mean	1.1	0.6	0.7	0.6	0.4	0.6
Dynamic factor inflation	0.4	0.7	0.3	0.6	0.8	1.0

Sources: SFSO, SNB

### Decline in inflation over the year

The strong Swiss franc also exerted pressure on inflation as measured by the CPI, which fell from 1.0% in January to 0.5% in December. Thus the cost of imported goods (excluding oil products) decreased, on average, by 1.3%. At the same time, prices of domestic goods and services also rose more slowly. The rate at which rents increased fell from 2.5% in 2009 to 1.1% in 2010, which was probably attributable to the drop in the reference interest rate for tenancies.

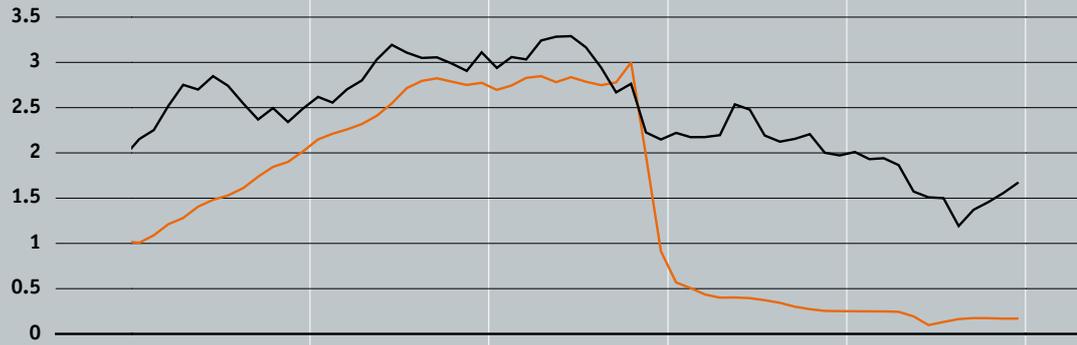
### Core inflation remains low

Numerous short-term fluctuations can have an impact on inflation, as measured by the CPI. The SNB calculates two core inflation rates, the trimmed mean and dynamic factor inflation, in order to analyse the inflation trend. The trimmed mean method excludes, each month, the goods with the highest price variation. In the case of dynamic factor inflation, core inflation is derived from a large number of prices, data from the real economy, financial indicators and monetary variables.

In 2010, the trimmed mean fell from 0.9% in January to 0.6% in December, although it remained in positive territory throughout the year. Dynamic factor inflation moved away from zero, and reached 1.1% by the end of the year.

### Money and capital market rates

Three-month Libor  
 Yield on ten-year  
 Swiss Confederation bonds  
 In percent



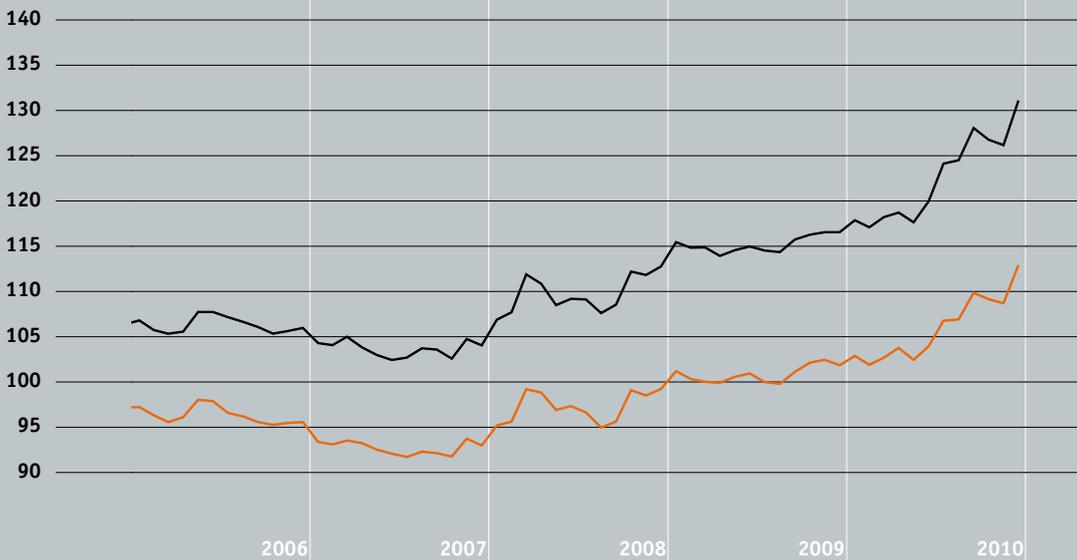
### Exchange rates

CHF/USD  
 CHF/EUR  
 Nominal



### Export-weighted Swiss franc exchange rates

Real  
 Nominal  
 40 trading partners  
 Index: January 1999 = 100



**Appreciation of Swiss franc**

In 2010, the Swiss franc gained considerably in value. The increase against the euro was particularly marked. In December, the Swiss franc was trading at CHF 1.28 on average against the euro, which meant that it had appreciated by some 17% from the average level of December 2009. The year-end rate for the Swiss franc was even higher (CHF 1.25 against the euro). After initially weakening against the US dollar, the Swiss franc also strengthened against the US currency in the second half of the year. In December, a dollar cost CHF 0.97 on average, an appreciation in the Swiss franc of some 6% against the US dollar compared to the year before. At the end of the year, the US dollar was trading at CHF 0.93.

In December, the export-weighted external value of the Swiss franc was 12.5% higher than a year before, in nominal terms. Adjusted for trading partners' price developments, the real appreciation in the Swiss currency amounted to 10.9%.

**Yield on government bonds declining**

The yield on ten-year Confederation bonds stood at around 2.0% in the first quarter. In May, the worsening of the European sovereign debt crisis gave rise to a flight to safe investments, including those in Swiss francs. Subsequently, the yield on ten-year Confederation bonds fell considerably, reaching a historic low of 1.1% in August. By December, it had risen again to 1.7%. Averaged out over the year, it came to 1.6%.

**Strong growth in monetary aggregates**

In 2010, money stocks held by domestic residents at banks rose further. The M3 aggregate exceeded the level of the previous year by an average of 6.6%. In view of the low interest rates and uncertain situation on the financial markets, the demand for liquid assets, such as those contained in the M1 and M2 aggregates, remained particularly strong. M1 and M2 continued increasing, but at a slower pace. For the year as a whole, M1 was on average 10.6% higher than in 2009, following a 38.1% increase in 2009; M2 was 10.2% up, following a 33.0% rise in the previous year.

### Level of monetary aggregates

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



### Growth of monetary aggregates

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



## 1.5 Monetary policy decisions

### Monetary policy in 2010

In 2010, the SNB maintained its expansionary monetary policy. It left the target range for the three-month Libor unchanged at 0.0–0.75%, with the intention of keeping the Libor within the lower part of the range, at around 0.25%. Moreover, in the first half of the year, it counteracted an excessive appreciation in the Swiss franc by intervening in the foreign exchange market.

### Combating the threat of deflation in 2009

Given the severe downturn in the global economy, a serious threat of a deflationary trend had emerged in Switzerland at the beginning of 2009. In order to prevent this threat from materialising via appreciation of the Swiss franc – and given that the interest rate was at a de facto level of zero – the SNB acted against any appreciation in the Swiss franc with respect to the euro from March 2009 on, intervening in the foreign exchange market to achieve this goal.

### Threat of deflation reduced as economy recovers

By the end of 2009, the SNB considered that, with the progress in the recovery of the economy, the threat of deflation had receded. Consequently, a certain appreciation in the Swiss franc could be allowed without price stability being compromised. In December 2009, the SNB therefore announced that it would act decisively only in the event of an excessive appreciation of the Swiss franc. This policy was maintained throughout the first half of 2010.

### Strong upward pressure in spring

In spring 2010, with the escalation of the sovereign debt crisis in Europe, major tensions arose on financial markets. This led to a renewed flight to safe investments, with substantial upward pressure on the Swiss franc. The SNB considered that, at that time, a rapid and excessive appreciation of the Swiss franc against the euro would have placed the Swiss economy under such a strain that the threat of a deflationary trend would have again come to the fore. The SNB was not prepared to take this risk and therefore decided to acquire large quantities of foreign exchange.

### Economic recovery consolidates in second half of year

Towards the middle of the year, the recovery of the Swiss and global economy had consolidated to such an extent that the threat of deflation in Switzerland had largely disappeared. In June, the SNB therefore considered that an appreciation of the Swiss franc was no longer such a threat to price stability and the economy as it had been previously. Thus it refrained from carrying out any further interventions on the foreign exchange market in the second half of the year.

With its prudent policy, the SNB contributed to the recovery of the Swiss economy. By the third quarter, GDP had reached the same level as before the crisis. Overall, GDP rose by 2.6% in 2010, after having fallen by 1.9% in 2009.

Q4 2009

Q1 2010

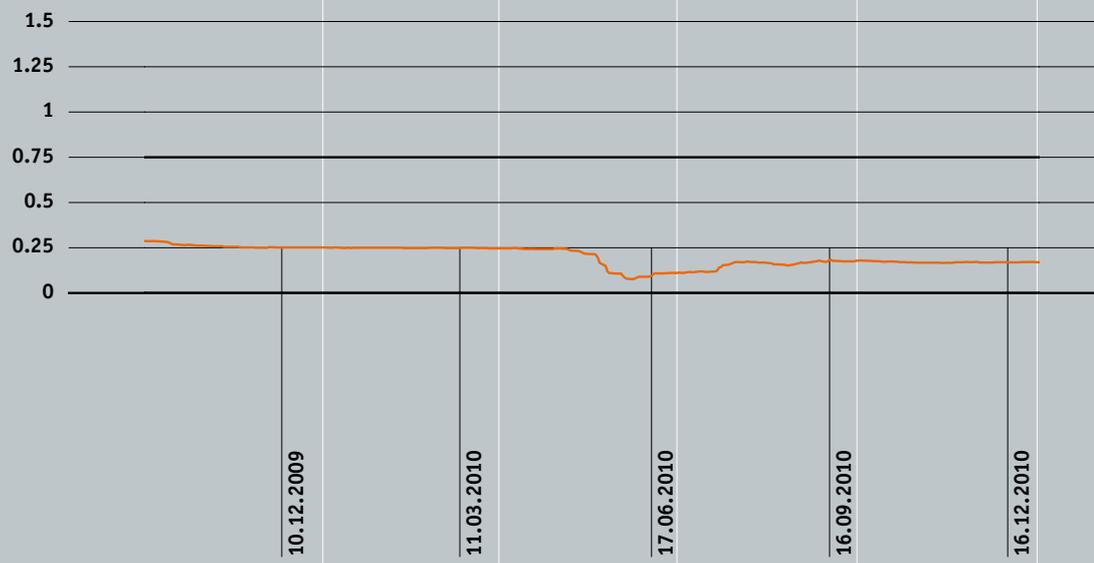
Q2

Q3

Q4

### Three-month Libor

— Three-month Libor  
— Target range  
Daily values in percent



Q4 2009

Q1 2010

Q2

Q3

Q4

## Price stability assured

In 2010, price stability was assured. The medium-term conditional inflation forecast published as part of the quarterly monetary policy assessments indicated a low level of inflation initially, although this picked up at the end of the three-year forecast horizon. In its monetary policy decisions, the SNB therefore drew attention to the fact that it would not be able to maintain its expansionary monetary policy indefinitely. Given the low rates of interest and rising real estate prices, it also warned banks, households and companies not to take excessive risks in the financing of real estate.

The four monetary policy decisions of March, June, September and December are summarised below in the form in which they were made – on the basis of the information available at the time – and elucidated in press releases and news conferences.

## Monetary policy assessment of 11 March

At the time of the quarterly assessment of March 2010, the signs of an economic recovery were becoming more tangible. In the emerging economies, particularly in Asia, growth momentum was strong, and in the US and Europe the recovery continued. While growth in the US was surprisingly positive, it was disappointing in Europe. Consequently, the SNB expected a moderate recovery in the US (2010: 2.9%; 2011: 2.6%) and modest growth in Europe (2010: 1.0%; 2011: 2.2%). At the same time, it drew attention to the fact that risks for the global economy remained significant.

In Switzerland too, the economic recovery was under way at the time of the quarterly assessment. According to estimates by SECO, real GDP had risen by an annualised 0.7% due to support from domestic demand and exports between the third and fourth quarters of 2009. Wholesale and retail trade, as well as finance and construction had recorded strong advances. Manufacturing, which had suffered most heavily in the recession, was also showing increasing signs of recovery. Moreover, the recovery began to be felt in terms of the demand for labour, and the increase in unemployment had come to a halt. At this time, the SNB expected GDP to increase by approximately 1.5%, although it noted that the recovery remained fragile and associated with uncertainties.

Monetary conditions reflected the SNB's expansionary monetary policy. The three-month Libor stood at the desired level of 0.25%. Although growth in the monetary aggregates had slowed in the months prior to the assessment, it was still substantial, at 16% compared to the year-back period for M2 and 6% for M3. Liquidity held by households and corporations was correspondingly high. Looking at mortgage loans, they had recorded growth of some 5% in the months preceding the quarterly assessment.

The export-weighted external value of the Swiss franc had increased further, mainly due to the weakening of the euro. From mid-December to mid-March, the Swiss franc appreciated by 3.3% against the euro, but lost 4.7% in value against the US dollar.

In view of the continued fragility of the recovery and the high downside risks, the SNB decided to maintain its expansionary monetary policy. It left the target range for the three-month Libor unchanged at 0.0–0.75% and continued to aim for a Libor within the lower part of the target range at around 0.25%. The SNB also announced that it would continue to act decisively to prevent an excessive appreciation of the Swiss franc against the euro. Furthermore, it warned the banks as well as corporations and households of the risks they would run if they did not remain disciplined with respect to real estate financing.

The conditional inflation forecast published at the time of the monetary policy decision was based on a three-month Libor of 0.25% and was almost unchanged from that of the assessment in December 2009. In the first quarter of 2010, inflation rose briefly due to a base effect resulting from the historically low level of the oil price a year previously. The conditional inflation forecast for 2010 lay slightly above that of December because economic activity was more robust than had been expected in December. However, prices were subdued by the fact that GDP remained below potential and by the appreciation of the Swiss franc. From 2011, the new inflation forecast was therefore slightly below that of December. However, the forecast also showed that inflation would increase significantly in 2011, and that it would exceed the 2% level in 2012.

Despite the setback in the second quarter resulting from the financial market turmoil, the recovery in the global economy was continuing at the time of the quarterly assessment in June. In the US, there was a further recovery in domestic demand and the labour market. In Europe, however, restrained expenditure on the part of households and companies meant that economic activity remained subdued. Overall, the SNB revised its forecast for global growth in 2010 and 2011 upwards while simultaneously drawing attention to the high downside risks.

**Monetary policy assessment  
of 17 June**

In Switzerland, economic momentum was positive at the time of the assessment. For the first quarter of 2010, SECO estimated that GDP had risen by 1.6%, on an annualised basis. Economic activity was mainly driven by household demand and exports. As the recovery strengthened, the demand for labour increased and short-time work fell significantly. Although the weakening of the euro against the Swiss franc dampened export activity, exports were supported by the growth in foreign demand. As a consequence, the SNB adjusted its forecasts upwards, projecting that GDP would rise by approximately 2% in 2010. In view of this development, the SNB, at this stage, considered that the threat of deflation had largely disappeared.

In the two months before the June assessment, however, the escalation of the European sovereign debt crisis and the associated renewal of financial market tension had led to substantial upward pressure on the Swiss franc. The SNB had considered that a rapid and excessive appreciation of the Swiss franc against the euro would have placed the Swiss economy under such a strain that the threat of a deflationary trend would have again come to the fore. The SNB was not prepared to take this risk and therefore decided to acquire large quantities of foreign exchange.

The expansion of liquidity in April and May, which had come about as a result of foreign exchange purchases, had an impact on monetary conditions. In mid-June, the three-month Libor stood at 0.09%. In May, the monetary base had attained the record level of CHF 128.6 billion. Monetary aggregate growth rates remained high, reaching some 10% for M2 compared to the year-back figure and 7% for M3. Mortgage loans again recorded a growth rate of some 5% compared to the year-back figure.

From mid-March to mid-June, the US dollar had gained some 10% in value against the euro, while the appreciation of the Swiss franc against the euro during the same period had amounted to 4%. This more modest rise in the Swiss franc against the euro was a consequence of the SNB's policy to counteract excessive appreciation. Since the Swiss franc lost value against the US dollar, the export-weighted external value of the Swiss franc increased only slightly in the second quarter.

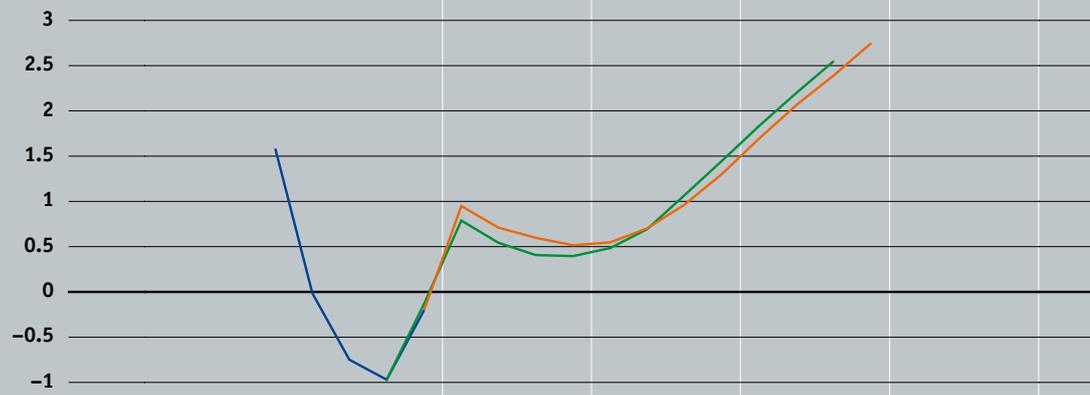
**Inflation forecast of 11 March 2010**

**Inflation**

December 2009 forecast:  
three-month Libor 0.25%

March 2010 forecast:  
three-month Libor 0.25%

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



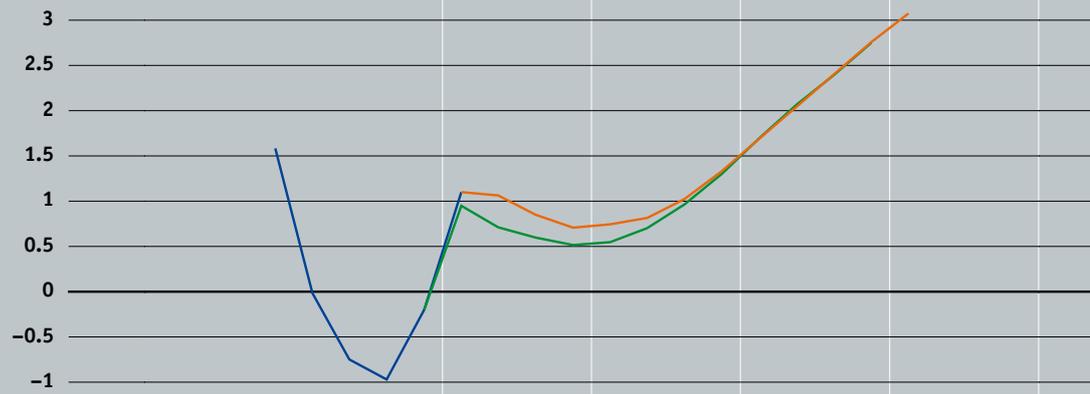
**Inflation forecast of 17 June 2010**

**Inflation**

March 2010 forecast:  
three-month Libor 0.25%

June 2010 forecast:  
three-month Libor 0.25%

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



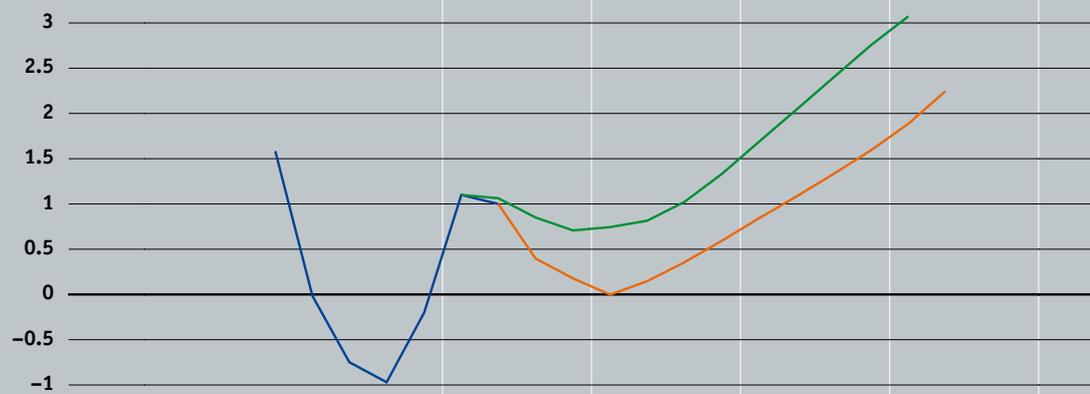
**Inflation forecast of 16 September 2010**

**Inflation**

June 2010 forecast:  
three-month Libor 0.25%

September 2010 forecast:  
three-month Libor 0.25%

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



**Inflation forecast of 16 December 2010**

**Inflation**

September 2010 forecast:  
three-month Libor 0.25%

December 2010 forecast:  
three-month Libor 0.25%

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



The SNB decided to maintain its expansionary monetary policy and leave the target range for the three-month Libor unchanged at 0.0–0.75%, holding the Libor in the lower part of the range at around 0.25%. It also stated that it considered that the deflationary risk in Switzerland had largely disappeared. At the same time, uncertainty had increased since the last assessment. The latest tensions on the financial markets related to the public finances of some individual countries had increased the downside risks. Consequently, the SNB drew attention to the fact that, should these downside risks materialise and, via an appreciation of the Swiss franc, lead to a renewed threat of deflation, it would take all the measures necessary to ensure price stability.

The conditional inflation forecast for 2010 and 2011 had increased slightly since March, although the inflation outlook was unchanged overall. It was based on a three-month Libor of 0.25%. To mid-2011, the conditional inflation forecast remained below the 1% level, because the base effect attributable to the oil price was petering out and GDP remained below potential. From the third quarter of 2011, inflation was expected to increase, reaching 2.2% in 2012. Consequently, the forecast showed that the expansionary monetary policy could not be maintained over the entire forecast horizon.

At the time of the quarterly assessment of September, the recovery of the global economy was proceeding at a somewhat slower pace than had been assumed in June. In the US and Asia, growth appeared to have faltered a little in the second quarter. In the euro area, by contrast, the economic situation had improved significantly due to strong foreign demand and a favourable exchange rate. As a consequence, the SNB slightly revised its growth forecasts for the US downwards, to 2.7% for 2010 and 2.5% for 2011. For the euro area, it expected somewhat stronger growth for 2010 (1.7%), but left the forecast for 2011 unchanged (2.2%).

In Switzerland, the revision of national accounts data published in September suggested that the recession of 2009 had been deeper than previously assumed. However, the rise in Swiss real GDP between the third quarter of 2009 and the second quarter of 2010 had been significantly stronger than potential output. In addition, manufacturing – which had been most seriously affected by the recession – had been clearly on the road to recovery during this period. Furthermore, unemployment and short-time work had declined further in the months prior to the September assessment. Consequently, the SNB forecast GDP growth of approximately 2.5% for 2010. This higher growth forecast, compared to the previous assessment, did not result from a reassessment of the economic outlook, but was due to the revision of the previous GDP figures. However, it was expected that, in the quarters ahead, GDP growth would slow as a result of the strong Swiss franc and the declining momentum of the global economy.

Compared to the June assessment, monetary conditions were somewhat less expansionary. The three-month Libor had again risen slightly and the Swiss franc had appreciated substantially against both the euro and the US dollar. However, liquidity in the banking sector remained substantial, and household and corporate money holdings were still rising at the time of the assessment. In the months prior to the assessment, M2 had risen by 10% year-on-year and M3 was up 6%. Lending remained brisk. However, the pace of growth in mortgage loans and real estate prices had flattened out slightly as compared with the end of 2009.

The SNB therefore decided to maintain its expansionary monetary policy and leave the target range for the three-month Libor unchanged at 0.0–0.75%, keeping the Libor within the lower part of the target range at around 0.25%. Uncertainty about the future outlook for the global economy remained high. The economic recovery was not yet sustainable and downside risks predominated. The SNB drew attention to the fact that, should downside risks materialise and result in a renewed threat of deflation, it would take the measures necessary to ensure price stability.

The inflation forecast published at the time of the assessment was based on a three-month Libor of 0.25% and was substantially below that of June. It assumed that inflation would be almost zero at the beginning of 2011. The main reason for this low figure was the disappearance of the base effect attributable to the increase in oil prices and the reduction in the price of imports due to the strength of the Swiss franc. The lower inflation outlook for 2011 and 2012 compared to the June forecast resulted from the strong Swiss franc and the anticipated slowdown in the international economy. Consequently, an expansionary monetary policy was appropriate in the short term, although it posed long-term risks to price stability.

At the time of the December assessment, the global economic recovery was continuing, supported by expansionary economic policies. In the third quarter, growth in the euro area had slowed and concerns about stability in this area had led to renewed tensions on financial markets. In this situation, the SNB revised its growth forecasts for Europe slightly downwards, to 1.8% for 2011 and 2.4% for 2012. No significant changes were made for the US.

**Monetary policy assessment  
of 16 December**

In Switzerland, the economic trend continued positive at the time of the assessment. Capacity utilisation had returned to a normal level in manufacturing, while in construction it was above the long-term average. Employment also increased moderately and unemployment declined further. However, the weakening of exports, in particular, suggested a significant slowdown in growth in the quarters ahead. Consequently, the SNB expected GDP to grow by some 1.5% in 2011, following growth of approximately 2.5% in 2010.

Since the September assessment, liquidity-absorbing operations had continued. This had led to a decline in the monetary base. However, the broader monetary aggregates continued to expand strongly. In the months preceding the quarterly assessment, growth in M2 had been substantial, at approximately 9% compared to the year-back period, as had that in M3, at some 6%. In view of the expansionary monetary conditions, lending business had remained brisk. Banks had maintained their lending standards for companies and households in the third quarter of 2010 and this was reflected in a continuation of the high growth for mortgage volume in the months prior to the assessment.

Since the September assessment, the Swiss franc had gained in value against the US dollar while changing little with respect to the euro. The real export-weighted external value of the Swiss currency had decreased slightly in October and November, but remained at a high level.

The SNB therefore decided to maintain its expansionary monetary policy and leave the target range for the three-month Libor unchanged at 0.0–0.75%, keeping the Libor within the lower part of the target range at around 0.25%. Nevertheless, it drew attention to the high level of uncertainty and the downside risks in connection with the concerns about stability in the euro area. Should these tensions be exacerbated and put a strain on economic developments in the euro area, this would also have a detrimental effect on the Swiss economy. If a threat of deflation were to emerge as a result of such a situation, the SNB would take the measures necessary to ensure price stability.

The conditional inflation forecast published at the time of the assessment was based on the assumption of a three-month Libor of 0.25%, and for 2012 and 2013 was slightly under the September forecast. However, for the beginning of 2011, it showed inflation slightly above the figure published in September, because the oil price had increased. The increase in inflation in the third quarter of 2011 was attributable to a base effect, because inflation a year earlier had been comparatively low. The lower inflation outlook for 2012 and 2013, compared to the September forecast, resulted from the slowdown in the international economy. However, the rising path of inflation in 2012 and 2013 showed that the expansionary monetary policy could not be maintained over the entire forecast horizon without compromising long-term price stability.

## 2 Supplying the money market with liquidity

### 2.1 Background

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. This article also entitles the SNB to issue debt certificates of its own (art. 9 para. 1 (d) NBA). As lender of last resort, the SNB also provides emergency liquidity assistance (art. 9 para. 1 (e) NBA).

**Mandate**

By steering liquidity on the money market, the SNB implements its monetary policy. To this end, it influences money market rates. The three-month Swiss franc Libor serves as its reference interest rate. The SNB influences the three-month Libor indirectly via its money market operations (cf. also chapter 1.2).

The SNB steers the three-month Libor by means of liquidity-providing and liquidity-absorbing secured money market operations. The choice of liquidity management regime depends on the liquidity structure in the banking system. If the banking system shows signs of being undersupplied with liquidity, the SNB provides liquidity through short-term money market operations. If, however, the banking system is oversupplied with liquidity, the SNB absorbs liquidity via short-term money market operations. The SNB can influence the three-month Libor every day by means of the interest rates charged for these daily money market operations.

**Liquidity management**

Since the middle of 2010, the focus has been on liquidity-absorbing money market operations after the SNB had supplied the banking system with liquidity for an unlimited period to the amount of CHF 191 billion via foreign exchange purchases from March 2009. The structural liquidity deficit of the banking system vis-à-vis the SNB thus turned into considerable excess liquidity. As a result, demand for liquidity-providing money market operations came to a standstill in May 2010. The SNB subsequently discontinued these operations. Instead, it replaced them with liquidity-absorbing repo transactions and a greater number of SNB Bill issues.

In order for a bank to maintain its solvency, it must have sufficient liquidity at all times. A bank's 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. Sight deposits at the SNB bear no interest.

The individual financial market participants adjust their liquidity positions on the money market. Banks wanting to place funds on a short-term basis provide liquidity in the form of a loan to other banks that require short-term refinancing. These loans can be granted on a secured or unsecured basis. A disruption in the money markets impairs the liquidity adjustment process between the market participants and can threaten the solvency of the banks.

## 2.2 Monetary policy instruments

Within its set of monetary policy instruments, the SNB differentiates between open market operations and standing facilities. In the case of open market operations, the SNB takes the initiative in the transaction. Where standing facilities are concerned, it merely sets the conditions under which counterparties can obtain liquidity. Regular open market operations include repo transactions and the issuance of SNB Bills. Further instruments, such as foreign exchange purchases, are available if necessary. Standing facilities include the liquidity-shortage financing facility and the intraday facility.

In principle, all banks and securities dealers domiciled in Switzerland or the Principality of Liechtenstein are admitted as counterparties in monetary policy operations. Other domestic financial market participants such as insurance companies, as well as banks and other financial market participants domiciled abroad, may be admitted to monetary policy operations provided this is in the SNB's monetary policy interest and the said institutions contribute to the liquidity on the secured Swiss franc money market. In 2010, five domestic insurance companies were admitted as eligible counterparties.

The *Guidelines of the Swiss National Bank (SNB) on Monetary Policy Instruments* contain explicit information with regard to the SNB's scope of business as set out in art. 9 NBA and describe the instruments and procedures used by the SNB 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.

## Open market operations

The two regular types of open market operations conducted by the SNB, repo transactions and the issuance of SNB Bills, serve to manage liquidity on the money market.

In the case of liquidity-providing repo transactions, the SNB purchases securities from a bank (or another market participant admitted as counterparty in repo operations) and credits the associated sum in Swiss francs to the counterparty's sight deposit account with the SNB. At the same time, it is agreed that the bank in question will repurchase securities of the same type and quantity at a later date. The bank pays interest (repo interest rate) to the SNB for the term of the repo agreement. In the case of liquidity-absorbing repo transactions, the SNB sells securities to a bank and debits the associated sum to the latter's sight deposit account. At the same time, it is agreed that the SNB will repurchase the securities from the bank at a later date. The SNB pays interest (repo interest rate) to the bank for the term of the repo agreement.

From an economic perspective, a repo is a secured loan, with the SNB acting as cash provider in the case of a liquidity-providing operation and the commercial bank acting as cash provider in a liquidity-absorbing transaction. The repo rate, the volume and the term of the individual transactions depend on monetary policy requirements. The terms of repo transactions vary from one day (overnight) to several months.

The SNB may also issue its own debt certificates in Swiss francs (SNB Bills). This enables it to absorb liquidity on a large scale. SNB Bills are included in the list of securities eligible for SNB repo transactions and can therefore be used as collateral in such transactions. The SNB can also purchase or sell SNB Bills via the secondary market. Buyers of SNB Bills can sell the bills to other financial market participants – whether banks or non-banks – just like other securities. The issuance of SNB Bills reduces the banks' sight deposits at the SNB and therefore the monetary base (M0), which comprises sight deposits and banknotes in circulation.

SNB Bills do not represent legal tender and cannot therefore be used by banks to satisfy minimum reserve requirements.

**Liquidity-providing and liquidity-absorbing repo transactions**

**Issuance of SNB Bills**

## **Auction procedures**

The SNB conducts regular open market operations by means of auctions. Transactions are concluded via the Eurex Zurich Ltd electronic trading platform.

As a rule, repo auctions are conducted in the form of a volume tender. In this type of auction, each counterparty submits to the SNB offers for the amount of liquidity it is willing to provide or request for a given repo rate. If the total amount of all the offers exceeds the SNB's predetermined allotment volume, the SNB reduces the amounts offered proportionately.

SNB Bill auctions are, as a rule, conducted in the form of a variable rate tender with allotment according to the American system. The SNB's counterparties submit their offers comprising the amount of liquidity they are willing to provide and price at which they will do so. Each counterparty may submit as many offers as it wishes, and may also vary the interest rate from one offer to another. The SNB obtains liquidity from the participants that have offered at or below the highest interest rate accepted by the SNB, paying the participants the interest rate stated in their offers.

## **Bilateral operations**

By placing or accepting offers for repo transactions on the electronic trading platform, the SNB is able to influence interest rates in the money market at all times, and not just at the time of the auctions. Such fine-tuning transactions can be used for both providing and absorbing liquidity.

### **Standing facilities**

## **Liquidity-shortage financing facility**

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 110% collateral eligible for SNB repos 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. The special rate applicable for obtaining liquidity through the liquidity-shortage financing facility is based on the SARON (Swiss Average Rate Overnight) plus a surcharge of 50 basis points.

In 2010, the limits under the liquidity-shortage financing facility were increased by a total amount of CHF 1.5 billion to CHF 37.5 billion at the request of financial market participants. By the end of the year, 85 financial market participants had been granted a limit (2009: 79).

During the day, the SNB 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 drawn must be repaid by the end of the same bank working day at the latest. Intraday liquidity cannot be used to comply with minimum reserve requirements or liquidity requirements under banking law.

**Intraday facility**

### **Other monetary policy instruments**

In accordance with art. 9 para. 1 NBA, the SNB has further monetary policy instruments at its disposal. These include, in particular, spot and forward foreign exchange transactions, currency swaps, the purchase and sale of securities denominated in Swiss francs and derivatives on receivables.

In a foreign exchange swap, the purchase (sale) of foreign exchange at the current spot rate and the sale (purchase) of the foreign exchange at a later date are simultaneously agreed. Before the introduction of repo transactions in 1998, foreign exchange swaps were the most important monetary policy instrument for supplying the money market with liquidity.

**Foreign exchange swaps**

From October 2008 to January 2010, the SNB provided banks in Switzerland and abroad with additional liquidity via EUR/CHF foreign exchange swaps. The focus was especially on banks outside Switzerland, which had no access to the SNB's repo auctions. The foreign exchange swaps were conducted as auctions at a fixed price (volume tender). Due to declining demand and improved conditions on the Swiss franc money market, foreign exchange swap operations were discontinued in January 2010.

**EUR/CHF foreign exchange swaps**

A large proportion of the EUR/CHF foreign exchange swaps were conducted as part of the temporary swap agreements concluded in autumn 2008 with the European Central Bank, the National Bank of Poland and the Hungarian central bank. The SNB provided these three central banks with Swiss franc liquidity against euros through a foreign exchange swap facility, and they were then able to use auctions for allocating the funds to banks in their spheres of influence. In January 2010, the parties involved agreed not to renew these agreements.

**Swap agreements with the ECB, Poland and Hungary**

#### Swap agreement with the US Federal Reserve

The swap agreement concluded with the US Federal Reserve in December 2007, which enabled the SNB to obtain US dollars for Swiss francs, was no longer renewed in February 2010 for the time being. It had provided the basis for SNB repo auctions in US dollars (cf. chapter 2.7). In view of the tensions on the financial markets in May, the SNB and the other central banks participating in the agreement decided to reintroduce the temporary swap facilities for US dollar liquidity. In December 2010, these were extended to 1 August 2011.

#### Foreign exchange purchases

The SNB acquired substantial amounts of foreign exchange in 2010. The purchases were concluded almost exclusively via electronic trading platforms and involved a wide range of counterparties in Switzerland and abroad. The SNB also made use of short-term foreign exchange options to a limited extent in support of its foreign exchange purchases. The SNB sold marketable EUR/CHF options to its counterparties and received option premia in exchange. The options provided the counterparties with the right to sell euros against francs to the SNB at a predefined price. At the same time, the options caused counterparties to sell Swiss francs themselves when the euro was declining against the Swiss franc and thus to bolster the euro.

#### Sale of Swiss franc bonds

The Swiss franc bonds issued by domestic private sector borrowers, which the SNB had acquired in 2009, were either fully sold or redeemed upon maturity in 2010.

#### New liquidity management regime

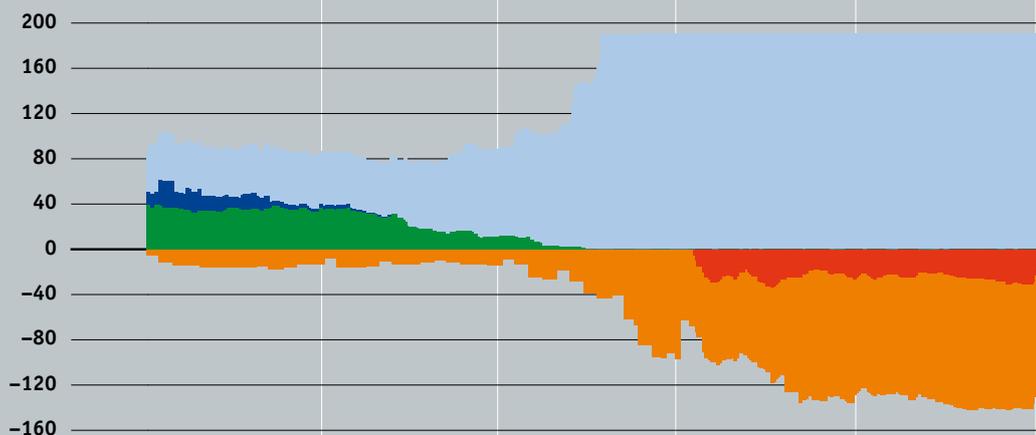
The large amounts of foreign exchange purchased by the SNB led to excess liquidity in the banking system. Consequently, the existing procedure for implementing monetary policy had to be adapted. The new implementation procedure is based on a repeated absorption of excess liquidity. This means that, as a rule, the SNB now provides refinancing only within the framework of the liquidity-shortage financing and intraday facilities.

In 2010, liquidity-absorbing repos and SNB Bills were used to absorb surplus liquidity. Whereas repo transactions are focused on steering interest rates, the main purpose of SNB Bill issues is to absorb liquidity.

## 2.3 Liquidity management in 2010

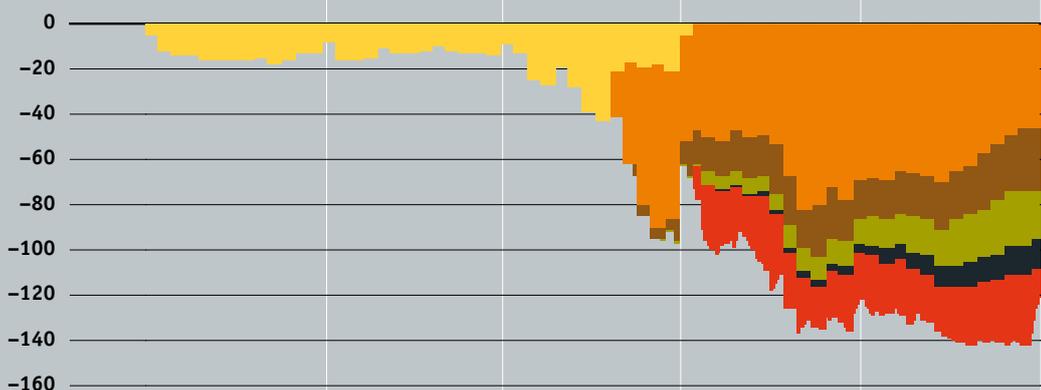
### Liquidity management on the money market

- Liquidity-providing repo transactions
  - Foreign exchange swaps
  - Foreign exchange purchases
  - Liquidity-absorbing repo transactions
  - SNB Bills
- Monetary policy operations outstanding at end of day, in CHF billions



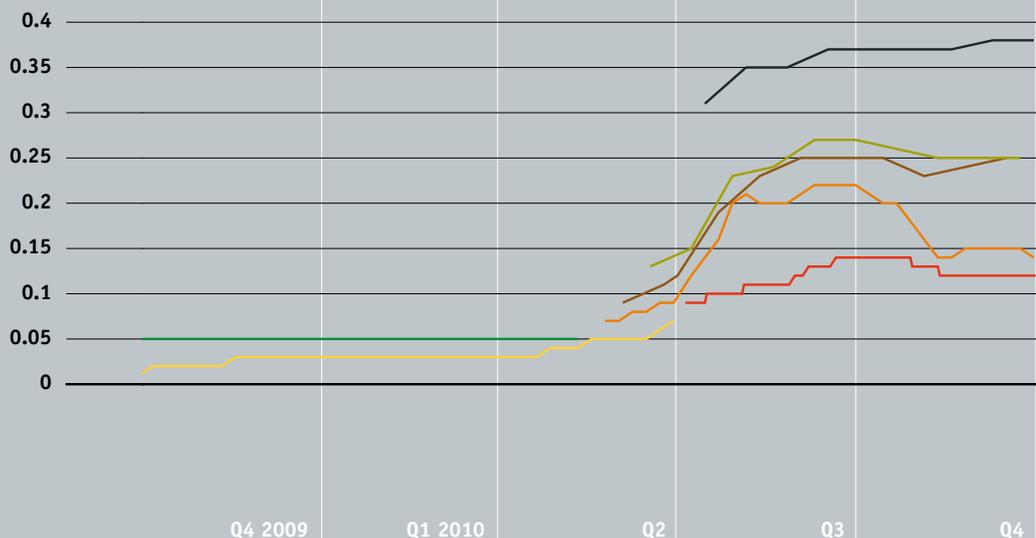
### Liquidity-absorbing open market operations

- SNB Bills, 7 days
  - SNB Bills, 28 days
  - SNB Bills, 84 days
  - SNB Bills, 168 days
  - SNB Bills, 336 days
  - Repos, 4 to 11 days
- Monetary policy operations outstanding at end of day, in CHF billions



### Interest rates for open market operations

- SNB repo rate (liquidity provision)
  - SNB repo rate (liquidity absorption)
  - SNB Bills, 7 days
  - SNB Bills, 28 days
  - SNB Bills, 84 days
  - SNB Bills, 168 days
  - SNB Bills, 336 days
- In percent



**Repo transactions to steer the three-month Libor**

Repo transactions serve to steer the three-month Libor. They are conducted daily in the form of an auction at the repo rate determined by the SNB (volume tender). As a rule, repos have a term of one week.

Liquidity-providing repo transactions were carried out up to 12 May 2010. Their average volume in 2010 amounted to CHF 6.2 billion, 57% of which was accounted for by transactions with a one-week term. Banks' daily bids at liquidity-providing repo auctions fluctuated between zero and CHF 5.12 billion, with the SNB allotting 100% at all times. The SNB discontinued its liquidity-providing repo auctions in May after market participants' demand for liquidity had come to a standstill owing to the strong expansion of liquidity through the SNB's foreign exchange purchases.

Liquidity-absorbing repo transactions have been conducted since 5 July 2010 in order to steer the three-month Libor. The average volume of these transactions amounted to CHF 11.6 billion, with the repo rate ranging between 0.09% and 0.14%. In the liquidity-absorbing repo auctions, the daily bids by banks reached an average of CHF 13.8 billion and were thus at times well in excess of the allotted amount. On average, 89.1% of the bids came from domestic banks, the remainder from international banks abroad. Allotment by the SNB averaged 34.8%.

If necessary, the SNB also used fine-tuning operations to influence call money rates. Such operations were used in special cases and to a limited extent only for the provision of liquidity to the market.

Issuing SNB Bills serves to absorb a large part of liquidity. The associated SNB Bill auctions are carried out in the form of a variable rate tender according to the American allotment system. This form of auction reflects the market participants' willingness to pay and therefore enables the SNB to absorb liquidity at market prices.

Since 25 May 2010, SNB Bills have, as a rule, been auctioned on a weekly basis with a term of 28 days. Auctions with longer terms of 84, 168 and 336 days are also conducted. The outstanding volume of SNB Bills rose from CHF 41.1 billion in May to CHF 107.9 billion in December. Bids submitted during this period ranged from CHF 1.7 billion to CHF 37.7 billion. An average of 73% of SNB Bills that were bid for was allotted. Overall, 83 banks participated at least once in an SNB Bill auction.

**SNB Bills to absorb liquidity at market prices**

### Sight deposits of domestic banks

Sight deposits

Weekly averages, in CHF billions



### Three-month Libor and one-week repo rate

Three-month Libor

SNB repo rate (liquidity provision)

SNB repo rate (liquidity absorption)

Target range

Daily values in percent



### Swiss franc reference rates (Swiss Average Rates, SAR)

SAR overnight (SARON)

SAR 1 week

SAR 1 month

SAR 3 months

Monthly averages of daily figures, in percent



Since the end of May, the average residual maturity of SNB Bills has increased by 52 days to 69 days. The marginal interest rate of issues with a 28-day term advanced from 7.1 to 22.0 basis points up to September and dropped back to 14.9 basis points by the end of the year. The marginal yields on issues with longer terms developed in a similar fashion, although the decrease was less marked towards the end of the year.

The weekly auctions of seven-day SNB Bills which the SNB conducted up to 29 June were replaced by liquidity-absorbing repo operations at the beginning of July.

**Other monetary policy instruments**

In 2010, the SNB purchased foreign exchange to the value of CHF 144 billion. The amount of outstanding foreign exchange options used as a supportive measure reached a nominal value of EUR 2.4 billion at most. Moreover, the SNB sold Swiss franc bonds issued by private sector borrowers for a total of CHF 3.2 billion. The turnover in the case of EUR/CHF swap transactions amounted to CHF 7.1 billion.

**Reduction in sight deposits**

Sight deposits of domestic banks were gradually reduced by means of the new liquidity management measures. They amounted to CHF 28 billion on a weekly average at the end of the year, after having reached a peak level of CHF 104 billion in May 2010.

**Money market rates remain low**

The target range for the three-month Libor remained unchanged at 0.0–0.75% in 2010. As a result of the strong increase in liquidity, the three-month Libor dropped to 0.08% at the beginning of June. With the reduction in sight deposits, the rate picked up slightly in the second half of the year. At the end of 2010, the three-month Libor stood at 0.17%.

Due to the excess liquidity and the low money market rates, activities on the Swiss franc money market almost came to a standstill. The secured Swiss franc money market revived slightly in the second half of the year following the introduction of the new procedure for implementing monetary policy.

**Standing facilities**

Average use of the intraday facility by banks rose from CHF 6.6 billion to CHF 7.4 billion year-on-year. Banks made use of the liquidity-shortage financing facility only in individual cases and for modest amounts. On an annual average, the associated volume amounted to just under CHF 1.0 million.

## Supplying the money market with liquidity in CHF billions

Monetary policy operations Terms	2009		2010	
	Outstanding Average <sup>1</sup>	Turnover	Outstanding Average <sup>1</sup>	Turnover
<b>Liquidity-providing operations</b>	<b>79.48</b>	<b>2 761.91</b>	<b>6.36</b>	<b>334.05</b>
<b>Repo transactions</b>	<b>40.05</b>	<b>799.84</b>	<b>6.19</b>	<b>183.24</b>
Up to 3 days	0	0	0.03	4.97
4 to 11 days	13.52	709.96	3.51	175.30
12 to 35 days	1.50	27.92	0.20	2.98
36 days to 1 year	25.03	61.95	2.45	0
<b>EUR/CHF swaps</b>	<b>39.43</b>	<b>1 911.60</b>	<b>0.17</b>	<b>7.10</b>
Up to 8 days	37.54	1 908.91	0.14	7.10
9 to 91 days	1.89	2.68	0.04	0
<b>Foreign exchange purchases</b>	<b>–</b>	<b>47.34</b>	<b>–</b>	<b>143.71</b>
<b>Swiss franc bond purchases</b>	<b>–</b>	<b>3.13</b>	<b>–</b>	<b>0</b>
<b>Liquidity-absorbing operations</b>	<b>16.06</b>	<b>736.80</b>	<b>76.12</b>	<b>1 657.75</b>
<b>Repo transactions</b>	<b>0</b>	<b>0</b>	<b>11.64</b>	<b>614.06</b>
4 to 11 days	0	0	11.64	614.06
<b>SNB Bills</b>	<b>16.06</b>	<b>736.80</b>	<b>64.48</b>	<b>1 040.45</b>
7 days	13.78	711.78	8.99	463.19
28 days	2.28	25.03	35.70	477.35
84 days	0	0	10.39	59.69
168 days	0	0	6.55	27.23
336 days	0	0	2.86	12.98
<b>Swiss franc bond sales</b>	<b>–</b>	<b>0</b>	<b>–</b>	<b>3.24</b>
<b>Standing facilities</b>				
Intraday facility	6.56	1 660.67	7.35	1 882.10
Liquidity-shortage financing facility	0.00	0.01	0.00	0.36

<sup>1</sup> Average level of monetary policy operations outstanding at the end of the day (with the exception of the intraday facility).

## 2.4 Emergency liquidity assistance

### Conditions for liquidity assistance

Within the context of the emergency liquidity facility, the SNB can provide liquidity assistance to domestic banks if they are no longer able to refinance themselves on the market ('lender of last resort' function). 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.

### Systemic importance of a bank

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 SNB obtains an opinion from the Swiss Financial Market Supervisory Authority (FINMA). The SNB determines what securities it will accept as collateral for liquidity assistance.

In 2010, the SNB did not provide any emergency liquidity assistance.

## 2.5 Minimum reserves

### Main features of the regulation

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 SNB. 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 towards 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 SNB for the number of days of the reporting period for which there was a shortfall. The interest rate is 4 percentage points higher than the average call money rate (SARON) over the reporting period in question.

## Minimum reserves in CHF millions

	2009 Outstanding Average	2010 Outstanding Average
Sight deposits at the SNB	53 698	43 961
Banknotes	6 000	5 727
Coins in circulation	103	98
Eligible assets	59 801	49 785
Requirement	8 947	9 488
Compliance in excess of requirement	50 854	40 297
Compliance in percent	669%	525%

In 2010 (from 20 December 2009 to 19 December 2010), statutory minimum reserves amounted to an average of CHF 9.5 billion. This represents a 6% increase year-on-year. Eligible assets amounted to an average of CHF 49.8 billion, which was slightly less than in the previous year. Banks exceeded the requirement by an annual average of around CHF 40.3 billion (2009: CHF 50.9 billion). The average degree of compliance, at 525%, was slightly below the previous year's level (669%).

In 2010, the statutory minimum reserve requirements were met by virtually all the banks (total number of banks: 296). Three banks breached requirements during one reporting period each. The sums involved were negligible. The total amount in interest that the contravening banks were required to pay came to CHF 38,105.

## 2.6 Collateral eligible for SNB repos

In accordance with art. 9 NBA, 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 so doing, the SNB protects itself against losses and ensures equal treatment of its counterparties. Art. 3 of the *Guidelines of the Swiss National Bank (SNB) on Monetary Policy Instruments* specifies the securities that are eligible as collateral in SNB transactions. *The Instruction Sheet on Collateral Eligible for SNB Repos* lists the criteria that have to be met for securities to be eligible for SNB repos. Only those securities included in the list of eligible collateral may be pledged as collateral for repo transactions.

Legal basis

**Collateral in foreign currencies**

The SNB pursues an open access policy and allows banks domiciled abroad to participate in its monetary policy operations, too. Securities denominated in foreign currencies are therefore also accepted as collateral besides Swiss franc securities. One condition is that the issuer of securities is domiciled in Switzerland or a member state of the European Union or the European Economic Area. The minimum requirements with regard to collateral in foreign currencies are higher than for those denominated in Swiss francs. In 2010, 95% of the securities eligible as collateral for SNB repos were denominated in foreign currencies.

**Stringent requirements relating to collateral**

By international standards, the SNB has a tradition of setting high minimum requirements with regard to the market liquidity and credit rating of collateral. In accordance with applicable regulations, securities in Swiss francs or in selected foreign currencies are eligible if they fulfil certain minimum requirements regarding rating, issue volume, delivery and settlement. As a result of the stringent requirements with regard to collateral eligible for SNB repos, banks are required to hold recoverable and liquid assets on their balance sheets. This is crucial if banks are to be able to refinance their operations on the money market even under difficult conditions. Eligibility as collateral for SNB repo transactions is also very important with regard to these securities' eligibility as liquid assets in accordance with art. 16 of the Banking Ordinance.

**Standard for the interbank repo market**

Collateral eligible for SNB repos is very important for the secured money market. Over 99% of all transactions between financial market participants that were concluded and settled via the repo system were covered by collateral eligible for SNB repos. The high requirements placed on the collateral serve especially to protect cash providers, and enable a wide range of market participants to take part in the repo system. During the financial crisis, the high quality of collateral delivered and the efficiency of the repo system proved crucial to the functioning of the money market.

**Volume of collateral eligible for SNB repos**

Translated into Swiss francs, the potential volume of collateral eligible for SNB repos receded from around CHF 10,000 billion to CHF 9,000 billion in 2010. The decrease resulted partly from a lower net total of newly accepted securities and from redemptions due to maturity. Exchange rate movements also reduced the total volume in Swiss francs. Furthermore, collateral in foreign currencies to a value of about CHF 275 billion was removed from the list of collateral eligible for SNB repos, since it no longer met the minimum requirements. The SNB did not modify its policy with regard to eligible collateral in 2010.

## 2.7 Repo auctions in US dollars

The SNB started conducting US dollar repo auctions in December 2007 as part of a coordinated action involving several 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.

**No more demand for dollar liquidity**

At the end of January 2010, the SNB discontinued its US dollar repo transactions after the swap agreement with the Federal Reserve had – in concert with the other central banks involved – no longer been renewed. Following the reactivation of the swap agreement in May, the SNB resumed the associated auctions and offered weekly repo transactions in US dollars with a term of seven days until December. There was still no demand for this financing instrument.

## 2.8 SNB USD Bills

On 16 February 2009, in accordance with art. 9 NBA, the SNB began to issue debt certificates in US dollars (SNB USD Bills) in addition to its own debt certificates in Swiss francs (SNB Bills). These US dollar debt certificates were used for the financing of the SNB's loan to the stabilisation fund (cf. chapter 6.7).

**Issuance discontinued in June**

The outstanding volume of SNB USD Bills reached a peak value of USD 20 billion in October 2009. A large proportion was issued with a term of 168 days. In 2010, there were 39 issues of SNB USD Bills with terms of 28, 84 or 168 days. As a result of reduced refinancing needs on the part of the stabilisation fund, the issuance of SNB USD Bills was discontinued in June. The last issue was carried out on 21 June, and the last SNB USD Bills were redeemed on 8 December 2010.

## 3 Ensuring the supply and distribution of cash

### 3.1 Background

#### Mandate

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 (coins and notes) in Switzerland. It works with commercial banks, as well as Swiss Post and the SBB, to ensure an efficient and secure cash payment system.

#### Role of the SNB

The SNB 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.

### 3.2 Offices and agencies

#### Turnover at offices

In 2010, the SNB's offices registered currency turnover (incoming and outgoing) amounting to CHF 133.1 billion (as in the previous year). They received a total of 482.9 million banknotes (2009: 482.1 million) and 1,780 tonnes of coins (2009: 1,729 tonnes). The SNB examined the quantity, quality and authenticity of the notes and coins. The incoming banknotes and coins were offset by an outflow of 492.2 million banknotes (2009: 483.7 million) and 2,307 tonnes of coins (2009: 2,289 tonnes).

#### Turnover at agencies

The agencies' turnover (incoming and outgoing) amounted to CHF 13.9 billion (2009: CHF 14.2 billion). Agencies are cash distribution services operated by cantonal banks on behalf of the SNB. They assist the SNB offices by distributing and redeeming cash in their respective regions. In order to do this, the agencies have access to cash belonging to the SNB.

In July, the SNB and the Berner Kantonalbank agreed to close the agencies run by the latter in Bienne and Thun with effect from the end of September. In October, the SNB and the Basler Kantonalbank agreed to close the agency in Basel with effect from the end of January 2011. The agencies were no longer needed because the demand for cash services had declined in recent years as a result of structural changes with regard to the supply and distribution of cash. Following the closures in Bienne, Thun and Basel, the SNB still has 13 agencies in operation.

#### Domestic correspondents

In August 2009, the SNB decided that, as of the end of May 2010, it would no longer support local cash redistribution between banks and post offices through its system of domestic correspondents. In recent years, the redistribution had become less and less important, and had latterly contributed only very little to the supply and distribution of cash.

### 3.3 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 their security. 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 existing features on current banknotes and to better protect new banknotes.

In 2010, banknote circulation averaged CHF 47.1 billion, which is slightly above the previous year's average of CHF 45.3 billion. Of the banknotes (mainly the CHF 1,000 note) for which there was additional demand in autumn 2008 as a result of the financial crisis, only a small portion have thus far returned to the SNB. In the year under review, the total number of notes in circulation averaged 325.1 million (2009: 315.6 million).

In 2010, the SNB put 75.2 million freshly printed banknotes (2009: 136.7 million) with a nominal value of CHF 5.1 billion (2009: CHF 13.6 billion) into circulation, and destroyed 77.3 million damaged or recalled notes (2009: 79.9 million) with a nominal value of CHF 4.8 billion (2009: CHF 5.5 billion).

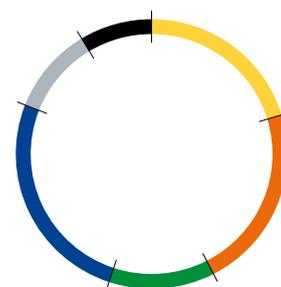
Approximately 4,400 counterfeit banknotes (2009: 4,900) were confiscated in Switzerland in 2010. The SNB's offices discovered 61 counterfeit notes (2009: 84). By international standards, 14 seized counterfeit notes per million Swiss franc notes in circulation (2009: 16) is a modest figure.

#### Mandate

#### Banknotes in circulation

#### Issue and disposal

#### Counterfeits



**Number of banknotes in circulation**  
In millions

CHF 10s:	66
CHF 20s:	72
CHF 50s:	41
CHF 100s:	84
CHF 200s:	34
CHF 1,000s:	28

Annual average for 2010

**Development of new banknote series**

In the course of the project on developing a new banknote series, it has become clear that the new security features being built into the banknotes for the first time could be enhanced by further development. The SNB therefore decided to postpone the issue date of the new banknote series, with the first denomination of the new series expected to be issued towards the end of 2012. Given that the high standard of security of the banknote series currently in circulation is unchanged, the supply of high-quality banknotes to the economy remains guaranteed.

## 3.4 Coins

**Mandate**

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 SNB's coinage services are not remunerated, as they constitute part of its mandate to supply the country with cash.

**Coin circulation**

In 2010, the value of coins in circulation averaged CHF 2,719 million (2009: CHF 2,664 million), which corresponds to 4,766 million coins (2009: 4,661 million).

## 4 Facilitating and securing cashless payments

### 4.1 Background

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.

**Mandate**

A large proportion of payment transactions between banks and selected financial market participants are settled through the Swiss Interbank Clearing (SIC) system, which is steered by the SNB. The prerequisite for participating in SIC is the opening of an SNB sight deposit account.

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; in this sense, they are comparable with cash payments. SIC is operated by SIX Interbank Clearing Ltd, a subsidiary of SIX Group Ltd, on behalf of the SNB.

**SIC: a real-time gross settlement system**

The SNB steers the SIC system. At the start of each clearing day, it transfers liquidity from the sight deposit accounts at the SNB to the settlement accounts in the SIC system, and at the end of each clearing day, it transfers the balances back again. Legally, the two accounts form a unit. The clearing day in SIC 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. The SNB is also responsible for crisis management.

**SNB steers SIC**

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

**SIC agreements**

Based on the SIC agreement, the SNB requests and approves modifications and upgrades to the SIC system. Furthermore, it has a seat on the Board of Directors of SIX Interbank Clearing Ltd and also exerts its influence by participating in working groups on payments.

**Involvement in the SIC system**

The system encompassing sight deposits and SIC, which is steered by the SNB, is a key element in the Swiss financial market infrastructure. This infrastructure is run by SIX Group Ltd. Aside from SIX Interbank Clearing Ltd, the financial holding company also includes the Swiss stock exchange (SIX Swiss Exchange Ltd), SIX SIS Ltd (which operates the securities settlement system SECOM) and SIX x-clear Ltd (the central counterparty). It is through SIX Interbank Clearing Ltd and SIX SIS Ltd that the SNB settles the money market transactions with which it supplies the money market with liquidity. It is thus not just in the area of payments that SIX Group Ltd operates infrastructures that are important for the fulfilment of the SNB's mandate.

## 4.2 Cashless payments in 2010

### Key figures on the SIC system

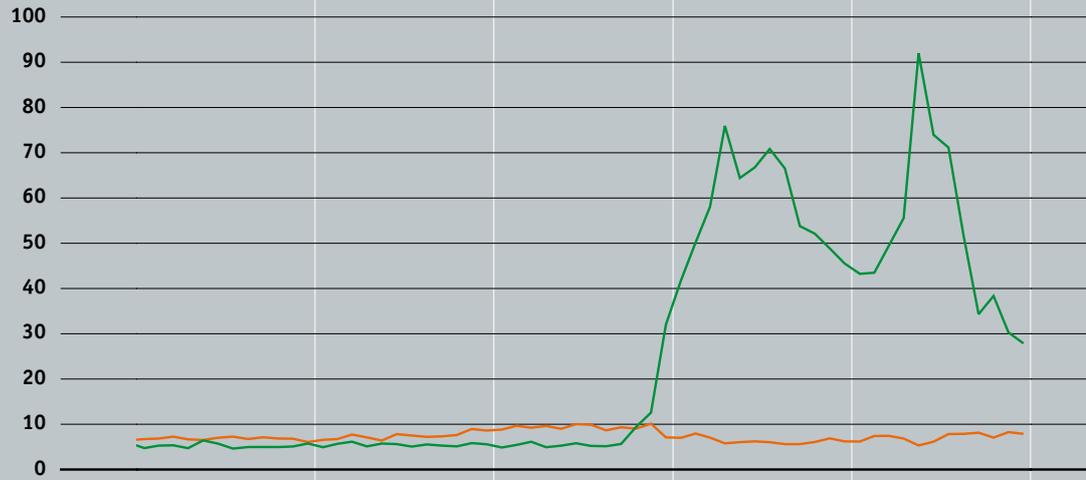
At the end of 2010, there were 377 participants in SIC (2009: 376). Every day, approximately 1.5 million transactions at a value of CHF 202 billion were settled. Compared to the previous year, this represents a 2.2% increase in the number of transactions and a 9.9% decrease in the value of transactions. Peak days saw up to 5.1 million transactions being settled, with values as high as CHF 425 billion.

### Key figures on the SIC system

	2006	2007	2008	2009	2010
<b>Transactions</b> (in thousands)					
Daily average	1 264	1 421	1 468	1 508	1 542
Peak daily value for year	3 844	4 167	4 350	4 788	5 056
<b>Values</b> (in CHF billions)					
Daily average	179	208	229	225	202
Peak daily value for year	318	337	343	411	425
<b>Average value per transaction</b> (in CHF thousands)					
	141	146	156	149	131
<b>Average liquidity</b> (in CHF millions)					
Sight deposits at end of day	5 217	5 470	8 522	57 886	50 489
Intraday liquidity	7 070	8 828	9 515	6 362	7 211

### Liquidity in the SIC system

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



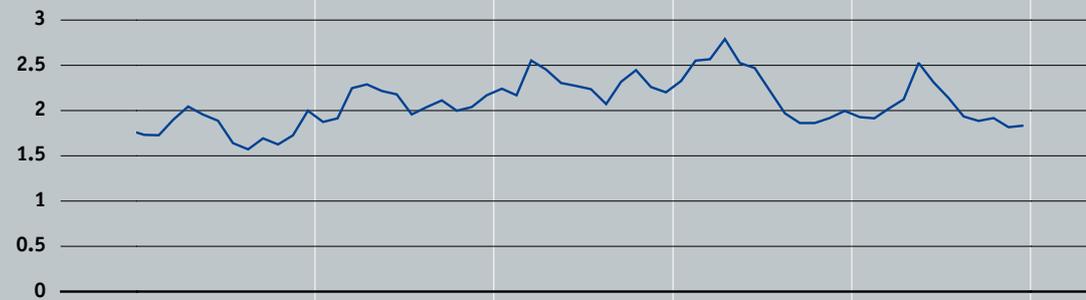
### Transactions in the SIC system

— Number of transactions  
 Monthly averages of daily figures, transactions in millions



### Turnover in the SIC system

— Turnover  
 Monthly averages of daily figures, in CHF 100 billions



Apart from banks, participants falling in the category 'other financial market participants' also use SIC, including companies that operate commercially on the financial markets. They include PostFinance, securities dealers and institutions that play a significant part either in payment transactions (at present, five cash processing institutions) or in the implementation of monetary policy. All participants in SIC must hold an SNB sight deposit account. Conversely, not all holders of an SNB sight deposit account are connected to SIC. The number of holders of an SNB sight deposit account as at 31 December 2010 was 491 (2009: 485), and of these, 377 participated in SIC (2009: 376). The majority of SIC participants are domiciled in Switzerland (259, as in the previous year), and of these, 19 (2009: 15) belong to the category 'other financial market participants'. Since the list of participants eligible for monetary policy operations was increased at the beginning of 2010, five insurance companies have joined SIC, and have mostly settled repo transactions through the system.

### 4.3 TARGET2-Securities

In 2008, the European Central Bank (ECB) committed to building TARGET2-Securities (T2S), a securities settlement system. T2S is intended to either totally or partially replace the existing domestic settlement systems of central securities depositories and to substantially reduce the cost of cross-border securities settlement in Europe. T2S is scheduled to go live in 2014.

The new European securities settlement system will also be important for the Swiss financial centre. In 2009, SIX SIS Ltd – in agreement with the SNB – signed a memorandum of intent with regards to its participation in T2S. This would reduce the cost to financial market participants in Switzerland of settling securities transactions in euros.

T2S is capable of handling multiple currencies, and the ECB is interested in increasing the number of currencies used in its system. The SNB is currently clarifying – together with the SIX Group and the banks – whether T2S would be advantageous for settling securities transactions in Swiss francs. A decision on the inclusion of the Swiss franc in T2S is expected by mid-2011.

## 5 Asset management

### 5.1 Background

The assets of the Swiss National Bank (SNB) fulfil important monetary policy functions. They consist mainly of gold and foreign currency assets and, to a lesser extent, of financial assets in Swiss francs. The composition of assets is determined by the established monetary order and the requirements of monetary policy. Under art. 5 para. 2 of the National Bank Act (NBA), the SNB is responsible for managing the currency reserves, part of which must be held in the form of gold (art. 99 para. 3 Federal Constitution).

The SNB's currency reserves are held primarily in the form of foreign currency investments and gold. The currency reserves also include international payment instruments and the reserve position in the International Monetary Fund (IMF). The National Bank requires currency reserves to ensure that it has room for manoeuvre in its monetary policy at all times. These reserves also serve to build confidence, and to prevent and overcome potential crises. The loan to the stabilisation fund does not form part of the currency reserves, as it represents a special asset of the SNB.

At the end of 2010, the SNB's financial assets in Swiss francs were made up exclusively of Swiss franc bonds. Depending on the way in which the money market is managed, this category can also contain claims from repo transactions.

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 its investment activity and for the investment and risk control process. Within this framework, investments are made in line with the principles of modern asset management. Diversification of investment aims at achieving an appropriate risk/return profile.

The purpose of the loan to the stabilisation fund was to finance the acquisition of illiquid assets from UBS. The objective of the stabilisation fund managed by the SNB is to successively liquidate the assets acquired. Income from the stabilisation fund portfolio (interest, sales and repayments of principal) is used primarily to repay the loan.

From February 2009, the loan was mainly financed through the issuance of SNB Bills denominated in US dollars (cf. chapter 2.8). During 2010, a sharp increase in foreign currency investments made it possible to replace this type of external financing with funding through these investments. Further information on the stabilisation fund may be found in chapter 6.7 (pp. 80–83) and in 'Financial information on the stabilisation fund' (pp. 163–172) of this report.

**Mandate**

**Currency reserves**

**Financial assets in Swiss francs**

**Primacy of monetary policy**

**Loan to stabilisation fund**

## 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. Internal risk management reporting is addressed to the Governing Board and the Risk Committee.

### Responsibilities of Governing Board

The Governing Board defines the requirements with regard to the security, liquidity and return of the investments, as well as the eligible currencies, investment categories, instruments and categories of debtor. It decides on the level and composition of the currency reserves and other assets, and defines 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 scope for active management at the operational level.

### Responsibilities of Investment Committee and Portfolio Management

An internal committee, the Investment Committee, determines the tactical allocation of the foreign exchange reserves at operational level. Within the strategically prescribed range, it adjusts currency weightings, terms and allocation to the different investment categories, to take account of changed market conditions. The management of the portfolios is the responsibility of Portfolio Management. The majority of investments are managed by internal portfolio managers. External asset managers are used to conduct performance comparisons with internal portfolio management. To avoid conflicts of interest, operational responsibilities for monetary policy and investment policy operations are largely kept separate.

### Responsibilities of Risk Management

The investment strategy is based on requirements specific to central banks as well as comprehensive risk/return analyses. Risk is managed and mitigated 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 SNB'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 are used. Credit limits are set on the basis of this information, and adjusted whenever the assessment of counterparty risk changes. Concentration and reputational risks 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 Changes in and breakdown of assets

At the end of 2010, the SNB's balance sheet total was just under CHF 270 billion, or CHF 63 billion higher than one year earlier (CHF 207 billion). The increase is due to the growth in currency reserves, which rose from CHF 112 billion to CHF 252 billion in the space of a year. This was mainly attributable to foreign exchange purchases. In addition, there were valuation gains on gold in the order of CHF 6 billion. Holdings of Swiss franc-denominated assets, by contrast, decreased. Claims from repo transactions, which at end-2009 had stood at CHF 36 billion, declined to zero, while Swiss franc bond holdings fell from CHF 7 billion to CHF 4 billion. Finally, the loan to the stabilisation fund also decreased. At the end of 2010, it amounted to CHF 12 billion, as compared to CHF 21 billion one year previously. The loan is denominated in various currencies, with interest being paid at 250 basis points above the one-month Libor for the currency concerned.

At the end of 2010, the bond portfolios in the foreign exchange reserves and the Swiss franc bond portfolio contained government and quasi-government bonds as well as bonds issued by supranational organisations, local authorities, financial institutions (mainly covered bonds) and other companies. In the case of foreign exchange reserves, a limited number of secured and unsecured short-term placements 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. 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 derivatives 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.

**Changes in assets**

**Debtor categories and instruments**

## Breakdown of foreign exchange reserves and Swiss franc bond investments at year-end

	2009		2010	
	Foreign exchange reserves	CHF bonds	Foreign exchange reserves	CHF bonds
<b>Currency allocation, incl. derivatives positions</b>				
CHF	–	100%		100%
USD	30%		25%	
EUR	58%		55%	
JPY	5%		10%	
GBP	5%		3%	
CAD	2%		4%	
Other (DKK, AUD, SEK, SGD)	–		3%	

### Investment categories

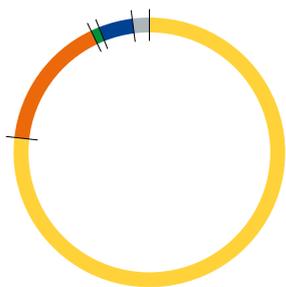
Investments with banks	0%	–	0%	–
Government bonds <sup>1</sup>	84%	19%	83%	35%
Other bonds <sup>2</sup>	9%	81%	6%	65%
Equities	7%	–	11%	

### Breakdown of bonds

AAA-rated	84%	82%	82%	78%
AA-rated	13%	11%	14%	21%
A-rated	2%	3%	3%	1%
Other	1%	4%	1%	–
Bond duration (years)	3.3	5.3	4.0	5.6

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

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



### Breakdown of SNB assets In percent

Foreign exchange reserves 76

Gold reserves 16

Securities in Swiss francs 1

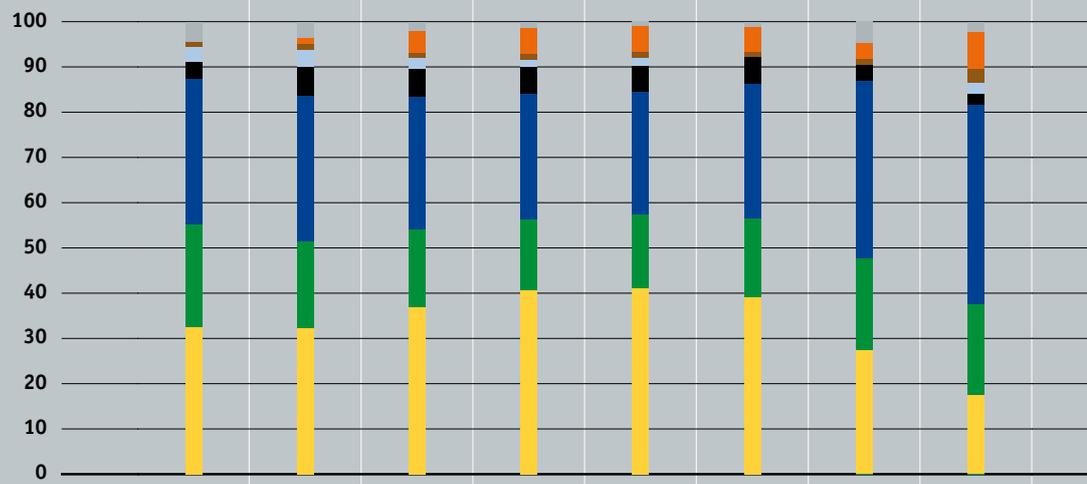
Loan to stabilisation fund 5

Monetary institutions 2

Total: CHF 270 billion  
At year-end 2010

Breakdown of currency reserves

- Gold
  - USD
  - EUR
  - GBP
  - Other
  - CAD
  - JPY
  - SDR
- In percent



The additional foreign currency purchased in 2010 was invested in government bonds in various currencies and with different terms, as well as in equities. The principles of currency and asset class diversification continued to be observed. The share of the main investment currencies, the US dollar and the euro, fell slightly to 25% and 55% respectively, while the shares of the Canadian dollar and Japanese yen rose. For the first time, funds were also invested in Australian dollars, Danish kroner, Swedish kronor and Singapore dollars. At the end of 2010, the share of gold in the currency reserves was lower than a year previously because the level of foreign exchange reserves rose faster than the value of the unchanged gold holdings. Holdings of Swiss franc securities decreased, following the sale or redemption of the Swiss Pfandbriefe and Swiss corporate bonds purchased during the financial crisis.

## 5.4 Risk profile

The main risk to the assets 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 risk by holding a considerable part of its investments in the world's most liquid currencies and bond markets. To a limited extent, it also takes on credit risk. The risk incurred in connection with the loan to the stabilisation fund is discussed in chapter 6.7 (pp. 80–83) and in 'Financial information on the stabilisation fund' (pp. 163–172) of this report.

The gold price and exchange rates continued to be the most important risk factors for the currency reserves, with the share of exchange rate risk in total risk rising markedly owing to the increase in foreign currency investments. Exchange rate risk on foreign currency investments is not hedged against Swiss francs as a matter of principle. First, such hedging could reduce the effectiveness of foreign exchange operations undertaken for monetary policy purposes and, second, it could restrict the SNB's overall freedom of action. Changes in the value of the Swiss franc, therefore, have a direct impact on the value of foreign currency investments. Given an average duration of four years for fixed rate investments and a share quota of 11%, interest rate risk and share price risk, by contrast, contributed very little to total risk. The absolute risk increased substantially due to the increase in the overall level of currency reserves.

The Swiss franc bond portfolio contained first and foremost bonds issued by the Confederation, the cantons and foreign borrowers, as well as Swiss Pfandbriefe. The additional Swiss Pfandbriefe and Swiss corporate bonds purchased as part of the measures to support the Swiss franc capital market were sold off over the course of the year. The duration of the portfolio was just under six years.

The SNB was exposed to credit risk through bond investments relating to various borrowers and borrower categories. These included bonds issued by public and supranational borrowers as well as covered bonds and similar instruments. In addition, corporate bonds totalling some CHF 4 billion were held in the foreign exchange reserves. Credit risk arising from non-negotiable instruments with respect to banks took the form of short-term deposits and replacement values of derivatives totalling around CHF 500 million. Gold lending did not entail any significant credit risk, as these operations were secured by bonds with above-average credit ratings.

**Credit risk**

Overall, credit risk was relatively low, since most of the investments were held in the form of top-quality government bonds. An overwhelming proportion of the investments (82%) bore the highest rating (AAA). In all, 99% of bonds were rated A or higher.

The SNB has high standards with regard to the liquidity of its investments. At the end of 2010, around 80% of foreign exchange reserves were denominated in the two major currencies, the euro and the US dollar, with highly liquid government bonds accounting for a large proportion of these.

**Liquidity risk**

The appreciation of the Swiss franc in 2010 led to corresponding losses on the currency reserves. As a result, the distribution reserve turned negative. At end-2010, it amounted to CHF –5 billion. CHF 0.7 billion was allocated to the provisions for currency reserves in 2010. Due to the decrease in equity capital compared to the previous year, as well as the significantly expanded balance sheet, the share of equity capital in the balance sheet total declined. The resilience of the National Bank's balance sheet is thus no longer assured to the same extent as hitherto. Nevertheless, the SNB's capital base continues to be robust, also by comparison with other central banks (cf. also the financial report).

**Balance sheet risk**

## 5.5 Investment performance

Investment performance is calculated for foreign currency investments (including derivatives), gold and Swiss franc bonds. Earnings and expenses arising from monetary policy operations are excluded from the calculation of returns.

The recovery on financial markets continued in 2010. Yields on a substantial portion of bonds declined, and share prices rose. Consequently, all investment categories posted positive returns in the relevant local currency. However, in Swiss franc terms, returns were negative as a result of the strong appreciation of the Swiss franc. Thus, the return on foreign currency investments, measured in terms of Swiss francs, was –10.1%. The Swiss franc value of the gold reserves rose by 15.3% due to the surge in the price of gold. The return on Swiss franc bonds was 3.7%.

### Return on investments<sup>1</sup>

	Currency reserves		Foreign currency investments			CHF bonds
	Total	Gold	Total	Currency return	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%
2009	11.0%	23.8%	4.8%	0.4%	4.4%	4.3%
2010	–5.4%	15.3%	–10.1%	–13.4%	3.8%	3.7%

<sup>1</sup> Cumulated, time-weighted daily returns.

## 6 Contribution to financial system stability

### 6.1 Background

Art. 5 para. 2 (e) of the National Bank Act (NBA) confers upon the Swiss National Bank (SNB) the mandate of contributing to the stability of the financial system. Financial stability means that financial system participants, i.e. financial intermediaries (banks) and infrastructures (payment and securities settlement systems) can perform their functions and are able to withstand potential disturbances. It is an important prerequisite for economic development and effective monetary policy implementation. As its contribution to financial stability, the SNB analyses sources of risk to the financial system, oversees systemically important payment and securities settlement systems, and participates in creating the operating framework for the Swiss financial centre.

**Mandate**

The SNB works together with the Swiss Financial Market Supervisory Authority (FINMA) and the Federal Department of Finance (FDF) to create a regulatory environment that promotes stability. The SNB addresses the issue mainly from a systemic perspective, and its focus is therefore on the macroeconomic and macroprudential aspects of regulation. For its part, FINMA is responsible, among other things, for monitoring of specific institutions, i.e. microprudential oversight. In the oversight of cross-border payment and securities settlement systems, the SNB liaises closely with foreign authorities.

**Cooperation with  
FINMA and FDF**

### 6.2 Main activities in 2010

In 2010, a major focus of the SNB's activities in the area of financial stability was its involvement in the commission of experts appointed by the Swiss Federal Council to examine ways of limiting the economic risks posed by large companies. The commission investigated how to alleviate the 'too big to fail' problem. 'Too big to fail' describes the constraint imposed by the fact that, for systemic reasons, very large, or nationally and internationally interconnected banks cannot be allowed to fail, and thus enjoy a de facto state guarantee.

**Attention focused on  
'too big to fail' problem**

At international level, within the framework of the Basel Committee on Banking Supervision and the Financial Stability Board (FSB), the SNB participated in efforts to reform banking regulation. In addition, the intensified monitoring of the Swiss banking system introduced during the financial crisis was further expanded, with particular attention being paid to the mortgage market.

In 2010, the business audit commissions of the National Council and the Council of States published their report on the conduct of the authorities during the financial crisis. The business audit commissions then invited the SNB to comment on the recommendations. In a response dated December 2010, the SNB reviewed its mandate and its set of instruments in the area of financial stability. It judged that the mandate set down in art. 5 para. 2 (e) NBA was appropriate and sufficiently precise. In contrast, it concluded that its own set of preventive instruments needed to be strengthened in three areas: first, it should be ensured that the SNB has timely access to all relevant information required for an assessment of financial stability. Second, its right to participate in drawing up regulations that are relevant for financial stability should be clarified and strengthened. Third, the SNB should be given powers as regards the implementation of regulations with a direct bearing on monetary policy or emergency liquidity assistance. This relates, in particular, to the definition of the level and type of banks' countercyclical capital buffers, and to the definition of systemically important banks and functions in the context of the implementation of 'too big to fail' regulations.

As part of the oversight of systemically important payment and securities settlement systems, the SNB, together with FINMA, monitored a number of projects undertaken by the central counterparty x-clear. It also supported international efforts to increase the resilience of the global financial market infrastructure for the clearing and settlement of over-the-counter (OTC) derivatives.

## 6.3 Monitoring the financial system

In June 2010, the SNB published its annual *Financial Stability Report*, in which it assessed the developments and risks in the economic environment as a whole and in the Swiss banking sector. The report noted that both the economic environment and the situation on financial markets had improved. The SNB still considered that uncertainty was high as regards the future path of the economy. A source of uncertainty was how the consolidation of state finances, which had become necessary in a number of countries, would affect economic development. The report also highlighted the risk of worsening sovereign debt problems in a number of euro area countries.

With regard to the two Swiss big banks, the report noted that the situation had improved. Results for 2009 were significantly better than those one year earlier, and the risk-weighted capital ratios were good by international standards. Owing to their very high leverage, however, both institutions had only a small capital buffer. Both banks were still far from reaching the target leverage ratio that will apply in Switzerland from 2013. The potential consequences of a misjudgement of risks were thus considered to be serious.

With regard to banks with a domestic business focus – cantonal banks, regional banks and Raiffeisen banks – the SNB warned of an increase in credit and interest rate risks. In this connection, it referred to the special survey it conducted in early 2010 among the most important banks in the mortgage market, which revealed a lack of conservatism in the lending practices of some institutions.

As part of its monitoring effort, the SNB conducted regular surveys on lending in the banking sector. The quarterly lending surveys revealed that the situation on the lending market eased markedly over the course of 2010, and that the feared credit crunch following the 2008 financial crisis did not materialise. Lending volumes continued to grow, and the tighter lending conditions reported in previous surveys were partly relaxed again during the first two quarters of 2010. From the second quarter of 2011, the survey, which was originally intended as a temporary exercise, will become a regular SNB survey as provided for by art. 5 of the National Bank Ordinance (NBO).

Against a background of surging domestic mortgage volumes and rising real estate prices, mortgage lending business became an increasing focus of attention for the SNB. In addition to the special survey on mortgage lending activity conducted in early 2010, the National Bank held discussions with selected banks in the third quarter of the year. It also began examining, jointly with FINMA, areas for possible action, including improvements to data reporting. Thus, in the future, a special survey on mortgage lending will include questions on relevant risk factors such as loan-to-value ratios and affordability criteria.

The SNB further expanded its monitoring of systemically important banks. The intensified monitoring of the big banks prompted by the financial crisis thus became a permanent feature of the National Bank's activities. In collaboration with FINMA, standardised risk assessment tools are being created and stress tests will be performed.

**Signs of a relaxation of lending standards**

**Heightened monitoring of mortgage market**

**Monitoring of systemically important banks expanded**

The cooperation with FINMA was intensified further in 2010 with the revision of the Memorandum of Understanding (MoU). The MoU sets out the areas of common interest on financial stability and defines the framework for cooperation while at the same time preserving the different statutory responsibilities and powers of both parties. The revised MoU contains two innovations. First, a steering committee was set up to govern the cooperation between the two authorities at a strategic level. Second, the MoU specifies that, where there are common areas of interest, one authority may request the other to take measures, or to provide information.

## 6.4 Measures to strengthen financial stability

At the end of June 2010, the new liquidity regime for both Swiss big banks entered into force. It is based on an agreement between FINMA and the big banks and was drawn up with the collaboration of the SNB. The new liquidity regime imposes quantitative and qualitative minimum requirements, as well as disclosure requirements. The quantitative requirements are based on a stress scenario defined by FINMA and the SNB. This scenario depicts two stress events: first, a loss of confidence leading to the bank's solvency and liquidity being called into question; second, tension on the financial markets which reduces financial market liquidity. In this scenario, the bank suffers a damaging withdrawal of deposits and is no longer able to refinance itself in the market, even against collateral. The new liquidity regime is designed to ensure that the big banks have sufficient liquidity at their disposal to meet their payment obligations in such unusual stress situations.

An important lesson from the crisis has been the need to reduce interconnectedness within the banking sector and thereby increase banking system resilience. The risk diversification requirements set down in the Capital Ordinance to the Banking Act, which are aimed at limiting a bank's exposure to a single counterparty, represent a starting point in this regard. In 2010, a national working group, led by FINMA and involving the SNB, drew up corresponding requirements for those banks that are either using the Basel standardised approach or the internal ratings-based approach for calculating required capital. These requirements entered into force at the beginning of 2011, and will lead to a further reduction of counterparty risk. The requirements should also be expanded during the course of 2011 to cover banks that are using the Swiss approach for calculating required capital.

In 2010, the SNB was actively involved in the commission of experts appointed by the Federal Council to examine ways of limiting the economic risks posed by large companies; the SNB held the joint vice-chairmanship with FINMA. The commission's report was submitted to the Federal Council at the end of September 2010. The proposed measures cover capital, liquidity, risk diversification and the organisation of systemically important banks, and will result in a clear alleviation of the 'too big to fail' problem.

**Measures to alleviate the 'too big to fail' problem**

In October, the Federal Council welcomed the commission's recommendations, and in December it launched the consultation procedure for the requisite change in the law. The SNB was involved in the implementation of the recommendations. Parliament is due to debate the proposed legislation during the course of 2011.

In the area of capital adequacy, the measures introduce three capital components: the minimum requirement, the buffer and the progressive component. The minimum requirement covers the equity capital that is necessary for normal business activity to be maintained. The buffer allows banks to absorb losses without falling short of the minimum requirement. Finally, the level of the progressive component rises with the increasing systemic risk posed by the bank concerned. It is intended to create the necessary financial room for manoeuvre to combat crises, and to provide incentives for banks to limit their systemic importance. Assuming that institution size and risks remain unchanged, the recommended measures will mean that both big banks will have to hold total capital of CHF 74 billion each. This is roughly double the levels required under the existing regulations.

**Capital adequacy**

The commission's proposals on liquidity for systemically important banks largely correspond to the new liquidity regime introduced for the big banks in June 2010. It will be written into law as part of the 'too big to fail' measures.

**Liquidity requirements**

The commission's recommended measures on risk diversification regulations impose specific requirements as regards exposures to systemically important banks. They are aimed at reducing individual banks' counterparty risk exposure and limiting the operational dependence of small and medium-sized banks on systemically important banks. The measures complement the revisions to the risk diversification regulations which are currently under way.

**Risk diversification regulations**

## Organisation

The organisational measures recommended by the commission are aimed at ensuring an orderly resolution of systemically important banks if there is a danger of insolvency. A key aspect of this is that systemically important bank functions (such as deposit and lending business) can be separated out from the other bank services, thus allowing them to be maintained. If a bank were unable to demonstrate that such functions can be maintained independently in the event of insolvency, FINMA would order organisational measures to be taken.

## 6.5 Oversight of payment and securities settlement systems

### Mandate

The NBA (art. 5 para. 2 (c) and (e), and arts. 19–21) 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 SNB to impose minimum requirements on the operation of systems that might pose a risk to the stability of the financial system. The NBO (arts. 18–39) lays down the details of system oversight.

### 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, SIX Interbank Clearing Ltd, SIX SIS Ltd and SIX x-clear Ltd, 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 counterparties LCH.Clearnet Ltd (LCH), domiciled in the UK, and Eurex Clearing, domiciled in Germany. 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. An agreement governing the exchange of information with Germany's Federal Financial Supervisory Authority (BaFin) and the Deutsche Bundesbank, which are responsible for the supervision and oversight of Eurex Clearing, is due to be signed in 2011.

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 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 (art. 21 para. 1 NBA and art. 23bis para. 4 Banking Act). This applies in particular to the collection of information required for prudential supervision and system oversight. When assessing whether a system operator complies with the minimum requirements, the SNB relies as far as possible on information already gathered by FINMA.

The SNB cooperates with authorities abroad in the oversight of cross-border payment and securities settlement systems. In the case of CLS, the US 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. 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.

In connection with x-clear's efforts to offer its services to additional markets in Denmark, Finland and Sweden, the SNB signed a memorandum of understanding in 2010 with these countries' central banks and supervisory authorities. As x-clear also plans to set up a clearing link with the European Multilateral Clearing Facility N.V. (EMCF), a central counterparty domiciled in the Netherlands, the SNB also signed a memorandum of understanding with the central bank and supervisory authority of the Netherlands in 2010. Looking ahead to the launch of TARGET2-Securities (T2S), the National Bank is also involved in arrangements for the cooperative supervision and oversight of T2S (cf. chapter 4.3).

Finally, the SNB participates – together with the other central banks in the former 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 and the functioning of financial market infrastructures.

**Compliance with regulatory requirements high**

In 2010, the SNB assessed compliance with regulatory requirements by the system operators SIX Interbank Clearing Ltd, SIX SIS Ltd and SIX x-clear Ltd. The assessment covered the operators' corporate governance, the management and monitoring of settlement risk, and the systems' information and IT security. The SNB concluded that compliance with the requirements was high in all areas assessed.

**Corporate governance**

The assessment with regard to corporate governance showed that the system operators are appropriately structured and well managed, and have adequate internal control systems.

**Risk management**

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 identification, mitigation and monitoring of credit and liquidity risks are appropriate.

**IT and information security**

To assess the systems' information and IT security, the SNB relies mainly on external auditors. In 2010, the audits, whose scope and degree of detail are determined by the SNB, focused on the progress made in implementing the recommendations arising out of the 2007–2009 audits. The audit report notes that the majority of these recommendations have been implemented. However, action is still needed as regards directives on information security and the consistent application of classification requirements for sensitive information.

**Operational crisis prevention measures**

The SNB also took steps to encourage further improvements to the financial sector's operational crisis prevention measures. Work in this area 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. A financial sector-wide crisis exercise was carried out in November 2009 in order to test the existing alarm and crisis organisation, giving rise to a number of conclusions as regards the future work of the steering committee. The role and responsibilities of the alarm and crisis organisation now need to be clarified further, and appropriate resources need to be directed to maintaining it. The steering committee plans to carry out further crisis exercises over the next few years.

As a member of the OTC Derivatives Regulators' Forum, the SNB supports efforts to strengthen the global market infrastructure for clearing and settling OTC derivatives. These efforts are, on the one hand, aimed at centrally recording the most important derivatives transactions and thus enhancing market transparency. On the other, the intention is to have derivatives transactions increasingly cleared through central counterparties. Central counterparties facilitate market participants' risk management and reduce the complexity of the financial system. A market infrastructure that reduces the interconnections between individual financial institutions should contribute to facilitating the orderly resolution of systemically important institutions in the event of a crisis.

## **6.6 International cooperation on financial market regulation**

The Financial Stability Board (FSB) 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. In April 2009, the G20 gave the FSB a mandate to promote financial stability and formulate appropriate regulatory and oversight measures. Since then, as part of this mandate, the FSB has drawn up a number of reform proposals, in whose formulation the SNB was actively involved. The proposed reforms are largely aimed at alleviating the 'too big to fail' problem. The main objective is to increase systemically important banks' loss absorption capacity, and to ensure their orderly resolution ('resolvability'). It is planned to mitigate the problem even further by strengthening the financial market infrastructure. The FSB expects that national authorities will intensify their oversight of systemically important banks, and that they will draw up and implement guidelines in that regard.

**Financial Stability Board**

The measures put forward in Switzerland by the Federal Council's commission of experts are consistent with the FSB's reform proposals and with the regulations being advocated. For example, the FSB calls for a capital surcharge for systemically important financial institutions. Moreover, the commission's proposals take account of Switzerland's special situation and, as regards capital and liquidity requirements, go beyond the minimum standards laid down by the FSB and the Basel Committee on Banking Supervision.

In 2009, the Basel Committee on Banking Supervision launched a reform of banking regulation to reflect the lessons drawn from the 2008 financial crisis. The revised standards, known as 'Basel III', were released in December 2010. They are aimed at ensuring that, in the future, banks maintain larger and better-quality capital and liquidity buffers. This should enable banks to withstand shocks, even severe ones, on their own, thus increasing the resilience of the global banking system.

The regulatory minimum for risk-weighted capital has been raised, and a capital buffer introduced, which can be built up in good times and used to absorb losses in the event of a crisis. The stricter requirements are also based on a narrower definition of capital. For example, part of the capital base must now consist of common equity. Moreover, in 2018, an upper limit for the leverage ratio is due to be introduced.

In addition, the Basel Committee proposed a global minimum liquidity standard. The aim is to ensure that banks build up a liquidity buffer which allows them to remain liquid under short and medium-term stress situations. The Basel Committee's minimum standard is compatible with the new liquidity regime for both Swiss big banks.

## 6.7 Stabilisation fund

The SNB stabilisation fund was established in autumn 2008 as part of the package of measures adopted by the Federal Council, the Swiss Federal Banking Commission (now FINMA) and the SNB to strengthen the Swiss financial system. It was set up to take over illiquid assets from UBS in order to provide the big bank with liquidity and restore the confidence that had been lost as a result of the crisis.

Structured as a limited partnership for collective investment, the stabilisation fund took over assets totalling USD 38.7 billion between December 2008 and April 2009. The asset transfer was financed by an SNB loan accounting for 90% of the transfer; the remaining 10% was financed by UBS. This 10% was transferred as equity capital for the stabilisation fund and also serves as the SNB's primary loss protection. The SNB received further loss protection in the form of a warrant for 100 million UBS shares at nominal value should it incur a loss on its loan upon complete liquidation of the assets. With its financing contribution, UBS was granted the option to repurchase the stabilisation fund in the event of full repayment of the SNB loan. Detailed explanations of the provisions governing the operation of the fund, its organisation and its legal structure can be found in the 2008 and 2009 editions of the SNB's *Annual Report*.

## Business activity and results

In 2010, the stabilisation fund's overall risk was reduced from USD 24.1 billion at the end of 2009 to USD 14.7 billion. This was due to interest payments and repayments on stabilisation fund investments as well as to asset sales, which were possible because of the improved market conditions. The reduction in the overall risk was also due in large part to derivatives positions being actively closed out or reaching maturity.

**Substantial reduction in overall risk**

For 2010, the stabilisation fund recorded an annual profit of USD 2.5 billion. Its equity capital as at 31 December 2010 amounted to USD 2.1 billion. Detailed information on the financial situation of the fund can be found in 'Financial information on the stabilisation fund' (pp. 163–172) of this report.

The possibility of UBS repurchasing the stabilisation fund ahead of schedule was raised on a number of occasions in 2010. The SNB and UBS felt that no action was needed in this regard, however.

**No early repurchase by UBS**

## Portfolio management

The liquidation strategy established by the stabilisation fund's Board of Directors determines the portfolio's management. The main objective of this strategy and the associated investment guidelines is full repayment of the SNB's loan, while at the same time maximising the proceeds from the portfolio. Whenever reasonable, assets are to be held for as long as their intrinsic values can be realised. Earlier sales are possible if there are grounds for liquidating the assets prematurely. The right to restructure and to make modifications to certain loan agreements should be exercised actively. The investment guidelines are assessed on a quarterly basis by the fund's Board of Directors, and, if necessary, adjusted. The guidelines provide the framework for the operational management of the assets and also regulate the division of responsibilities between the general manager, who is in charge of the fund's operational management, and the portfolio's investment manager, a function that has been outsourced to UBS.

**Liquidation strategy**

Given that the intrinsic values of the fund's assets play a key role in the management of the portfolio and in the accounting valuation, major efforts went into creating comprehensive cash flow models. Based on different macroeconomic scenarios, these models forecast the cash flows to be expected for the individual portfolio positions, making it possible to evaluate the intrinsic values in various scenarios. On the basis of this information, decisions can be made on the management of the different assets. The cash flow models are reviewed and refined continually, and the forecasts are recalculated every three months.

**Cash flow models**

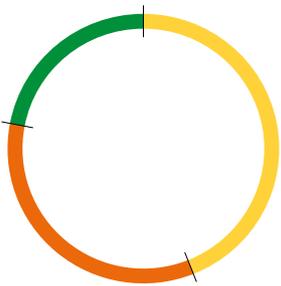
## Changes in risk situation

### Substantial reduction in risk

In 2010, significant sales were made in secondary markets. This was attributable to the generally favourable market environment for the various sectors of the portfolio (including residential and commercial real estate, in particular) and the trading conditions in the US and European securitisation markets. In the process, attention was paid to selling not only assets with higher liquidity and credit ratings, but also to liquidating assets of a lower quality, provided they were close to their intrinsic values. As a result, larger portfolios of commercial mortgages in the US and Japan, for instance, were successfully sold. Consequently, the risks in all areas were reduced substantially.

### Significant sales of assets

Overall, assets worth USD 2.5 billion net were sold, of which USD 0.7 billion was accounted for by the euro area, the UK and Japan. Most of the sales were conducted in the first quarter, and to a lesser extent, in the fourth quarter. This was attributable to the fact that market liquidity and the valuations for the sales were most favourable during these periods. Furthermore, the portfolio benefited from considerable interest and principal repayments amounting to USD 3.6 billion, which also contributed to greatly diminishing the risk borne by the stabilisation fund. The non-funded risks, which largely comprise CDS contracts (credit default swaps), decreased as a result of maturing positions, on the one hand, and the unwinding of such transactions, on the other.

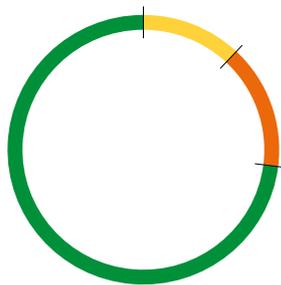


### Portfolio by category

In percent

Residential real estate	44
Commercial real estate	34
Other	22

As at 31 December 2010



### Portfolio by instrument

In percent

Derivatives	12
Loans	15
Securities	73

As at 31 December 2010

The table below provides an overview of how various factors contributed to the reduction in risk, the development of the loan and the associated overall risk for the SNB. The loan outstanding fell from USD 20.3 billion at the end of 2009 to USD 12.6 billion at the end of 2010. During the same period, the overall risk for the SNB was reduced by USD 9.4 billion to USD 14.7 billion.

## SNB loan and overall risk

### Loan to stabilisation fund

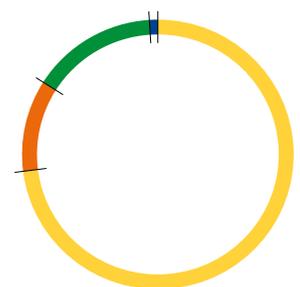
In USD billions	Financed	Non-financed	Overall risk
<b>Total as at 31 December 2009</b>	<b>20.3<sup>1</sup></b>	<b>3.8</b>	<b>24.1<sup>1</sup></b>
Interest on SNB loan	0.5	–	0.5
Sales <sup>2</sup>	–2.5	–1.3	–3.8
Repayments	–2.8	–0.1	–2.9
Interest received	–0.8	–	–0.8
Other	–2.1	–0.3	–2.4
<b>Total as at 31 December 2010</b>	<b>12.6</b>	<b>2.1</b>	<b>14.7</b>

<sup>1</sup> Including the liquid funds available in the stabilisation fund as at 31 December 2009, the outstanding loan would amount to USD 19.7 billion and the overall risk to USD 23.5 billion (cf. *Annual Report, 2009*, p. 89).

<sup>2</sup> Sales, including active liquidation of CDS (net).

The funds that flowed to the SNB from the stabilisation fund's interest payments and principal repayments were initially used to reduce refinancing via SNB USD Bills. After the sharp rise in the SNB's foreign exchange reserves following the purchases of foreign exchange, the SNB discontinued its issues of SNB USD Bills. From that point on, the payment of interest and principal repayment flowed directly back into the foreign exchange reserves from which the funds had been taken in order to repay the SNB USD Bills that were due to mature during the remainder of the year. At the end of the year, there were no outstanding SNB USD Bills.

## Financing the loan



### Portfolio by currency In percent

USD 73

EUR 11

GBP 15

JPY 1

As at 31 December 2010

## 7 Involvement in international monetary cooperation

### 7.1 Background

#### Mandate

Art. 5 para. 3 of the National Bank Act (NBA) stipulates that the Swiss National Bank (SNB) shall participate in international monetary cooperation. The objective of this cooperation is to promote the functioning and stability of the international monetary system and help overcome crises. As a globally integrated economy, Switzerland derives particular benefit from these aims.

#### Participation in different institutions

The SNB makes a contribution to international monetary cooperation through its active participation in various international institutions. Together with the Federal Department of Finance (FDF), it represents Switzerland in the International Monetary Fund (IMF) and the Financial Stability Board (FSB). It also participates in the IMF's General Arrangements to Borrow (GAB) and New Arrangements to Borrow (NAB). Furthermore, it is a member of the Bank for International Settlements (BIS) and, together with the Swiss Confederation, represents Switzerland in the Organisation for Economic Co-operation and Development (OECD).

### 7.2 International Monetary Fund

#### The IMF's mandate

The IMF is the central institution for international monetary cooperation. It works to promote stable monetary conditions worldwide and facilitate both free trade and free international payment flows.

The accounting unit used by the IMF is the Special Drawing Right (SDR). It is calculated on the basis of weighted exchange rates for the US dollar, euro, yen and pound sterling. At the end of 2010, one SDR was equivalent to CHF 1.4405.

#### Switzerland's representation in the IMF

The Chairman of the Governing Board of the Swiss National Bank sits on the Board of Governors of the IMF, the Fund's highest decision-making body. The Head of the FDF represents Switzerland and the countries of the Swiss-led constituency on the International Monetary and Financial Committee (IMFC). Switzerland is part of a constituency whose other members include Azerbaijan, the Kyrgyz Republic, Poland, Serbia, Tajikistan and Turkmenistan. These were joined in November 2010 by Kazakhstan. At the same time, Uzbekistan left the constituency.

As the constituency member with the most votes, Switzerland appoints the group's executive director. The executive director 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 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 global financial and economic crisis continued to affect the IMF's activities in 2010. Despite the economic recovery, the IMF saw considerable risks remaining. These include uneven growth between industrialised countries and emerging economies as well as internal imbalances between public and private demand. Furthermore, high unemployment levels, rising sovereign debts and fragile banking systems continued to give cause for serious concern. The IMF therefore urged countries to push ahead with the consolidation of their government finances and the reforms to the financial sector in 2011.

The global economic crisis prompted the IMF to reform its lending regulations. The aim of the reform was to ease access to IMF instruments, so that they may be employed as a precautionary measure, before a crisis hits. One such reform strengthened the precautionary Flexible Credit Line (FCL), introduced in 2009, by extending the lending term from one to two years and removing the informal cap. An additional credit line for crisis prevention was also introduced – the Precautionary Credit Line (PCL). This new instrument aims to grant access to IMF facilities to countries that have sound economic fundamentals, but do not meet the FCL qualification standards. As is the case with the FCL, the PCL is also subject to qualification criteria. In contrast to the FCL, however, countries that qualify for the PCL are permitted to have some moderate vulnerabilities. The PCL thus has focused ex-post conditionality aimed at addressing the vulnerabilities identified during the qualification process.

IMF lending reached an all-time high as a result of the crisis. At the end of 2010, regular lending amounted to SDR 137.4 billion. Over the course of the year, the IMF Executive Board approved 14 non-concessional loan agreements totalling SDR 107.7 billion. Particularly noteworthy are the lending arrangements approved for the two euro area countries of Greece and Ireland, amounting to SDR 26.4 billion and SDR 19.5 billion respectively, as well as the precautionary arrangements under the FCL with Colombia, Mexico and Poland, for a total of SDR 47.5 billion. Credit arrangements under the concessional (i.e. subsidised) lending facilities to poor countries – which are financed by a separate trust fund – came to a total of SDR 3.0 billion at the end of 2010. Close to half of the 30-odd arrangements were approved in 2010.

**Residual risks affecting global economic recovery**

**New regulations on lending practices**

**High number of loan commitments**

## IMF financial resources

Owing to the high level of lending, the IMF increased its quota-funded resources by signing a number of bilateral loan agreements. Overall, 21 countries or central banks pledged resources amounting to SDR 158.9 billion in the form of bilateral loan agreements and bilateral note purchase agreements. These do not include the loan agreement in the maximum amount of USD 10 billion promised by Switzerland in spring 2009 and concluded by the SNB with the IMF in autumn 2009, as based on the Federal Act on International Monetary Assistance. Before this loan agreement – which is financed by the SNB and guaranteed by the Confederation – can enter into force, the Federal Assembly first has to approve an additional temporary credit facility amounting to CHF 12.5 billion (referred to as ‘IMF exceptional assistance’). The Council of States approved the temporary increase in May 2009 and the National Council voted in its favour in March 2011.

## Expansion of New Arrangements to Borrow

By temporarily supplementing its resources through bilateral loan agreements, the IMF can bridge the gap until the agreed measures for increasing lending resources enter into effect on a permanent basis. These permanent measures include the expansion of the NAB, which was agreed by NAB participants in November 2009 and formally approved by the IMF Executive Board in April 2010. In place since 1998, the NAB is a standing multilateral borrowing arrangement under the terms of which member countries and central banks provide the IMF with temporary resources in exceptional crisis situations or in the event of a shortage of funds. The proposed expansion involves increasing the number of participants from 26 to 39 member countries and extending the maximum amount of resources available for lending from SDR 34 billion to SDR 367.5 billion. For the SNB this would mean an increase in its maximum loan commitment from SDR 1.54 billion to SDR 10.9 billion in monetary terms; proportionally, however, its share would in fact fall from 4.5% to 3.0%. In March 2011, the National Council was the second of the two parliamentary chambers to approve Switzerland’s participation in the amended NAB.

## Quota and governance reform

A further measure to augment the lending resources permanently is to increase the quotas to SDR 476.8 billion. This move is part of a comprehensive package of quota and governance reforms and will involve a major realignment of quota shares in favour of emerging markets and developing countries. The reform package also calls for a reduction of the number of executive directors representing advanced European countries by two. In return, all members made an informal commitment to maintaining the size of the Executive Board at 24 members. The agreed amendments were pushed ahead by the efforts of the G20 and were approved by the Board of Governors in December 2010 after extensive negotiations. Since the reforms still need to be ratified by the relevant authorities in a number of member countries, they will probably not enter into effect before the end of 2012.

For Switzerland, the proposed augmentation of the quota resources will mean an increase in its quota from approximately SDR 3.5 billion to SDR 5.8 billion, and a decrease in its quota share from 1.59% to 1.21%. However, owing to the fact that Poland and Kazakhstan's quota shares will increase, the overall quota of the Swiss-led constituency will hardly change.

**Consequences of reform for Switzerland**

In June 2009, the IMF Executive Board also decided to augment the arrangements under the Poverty Reduction and Growth Trust (PRGT) by SDR 10.8 billion. By the end of 2010, 13 countries had committed to provide loan resources to the PRGT totalling SDR 9.3 billion for this purpose. Switzerland announced it would provide a loan of SDR 500 million. The loan will be granted by the SNB and guaranteed by the Confederation. In March 2011, the National Council was the second of the two parliamentary chambers to approve the federal guarantee for the loan from the SNB.

**Augmentations under PRGT**

The IMF's equity consists of the quotas of its member countries. Total quotas in the IMF currently amount to SDR 217.4 billion (CHF 313.2 billion), with Switzerland's quota coming to SDR 3,458.5 million (CHF 5.0 billion). The Swiss quota is financed by the SNB. The portion of the quota that is used by the IMF is Switzerland's reserve position in the Fund. For the SNB, this represents a liquid asset vis-à-vis the IMF and thus forms part of the currency reserves. At the end of 2010, Switzerland's reserve position amounted to SDR 740.7 million, compared with SDR 761.8 million a year earlier.

**Switzerland's reserve position**

In May 2010, the SNB and the IMF jointly organised a conference on the reform of the international monetary system. Central banks from 19 countries participated in this high-level conference, which was held in Zurich.

**Conference on international monetary system**

On 14 May 2010, the IMF Executive Board concluded the annual Article IV consultation with Switzerland. Within the framework of the Article IV consultations, the IMF regularly reviews the economic policy of its member countries and issues recommendations. The IMF commended Switzerland on its well-structured financial stabilisation measures and stated that the country's sound economic policy before the crisis was one of the reasons it had weathered the recession so well. The IMF considered Switzerland's expansionary monetary policy to be appropriate and supported the SNB's intention to normalise the situation as soon as possible. It endorsed Switzerland's prudent fiscal policy and recognised the benefits of the debt brake rule for Switzerland. Furthermore, it welcomed the proposed reforms to strengthen the supervision of financial institutions. At the same time, however, it also encouraged Swiss authorities to preserve the momentum for reform and to continue their efforts in the area of systemic risk and the 'too big to fail' issue.

**Article IV consultation**

## 7.3 Bank for International Settlements

### BIS as forum for central banks

The Bank for International Settlements (BIS) is an international organisation which has its head office in Basel. It fosters international monetary and financial cooperation and serves as the bank for central banks. The governors of member central banks meet every two months to discuss developments in the global economy and the international financial system. The SNB also 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 on Banking Supervision

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 6.6, which looks at international cooperation with regard to financial market regulation.

### Committee on Payment and Settlement Systems

The Committee on Payment and Settlement Systems (CPSS) is concerned with developments in national and international payment and securities settlement systems. In 2010, the CPSS published two reports. The first one – compiled under the direction of the SNB – examines the market infrastructure for the clearing and settlement of repo transactions in various markets, and identifies ways in which the market infrastructure could be strengthened further. The second report investigates developments in the market structure of central counterparties and the implications for financial stability. The CPSS – in collaboration with the International Organization of Securities Commissions (IOSCO) – also initiated a revision of the current standards and recommendations for systemically important payment systems, central counterparties and securities settlement systems.

### Committee on the Global Financial System

The Committee on the Global Financial System (CGFS) monitors developments in the international financial markets and analyses their impact on financial stability. In 2010, the CGFS published six reports. Four of them deal with the lessons learned from the financial crisis, the fifth one focuses on the long-term determinants of cross-border financial intermediation, and the sixth one looks at ways in which BIS international financial statistics can be used to better understand global financial stability issues.

### Markets Committee

The Markets Committee serves as a platform for central bank officials responsible for monetary policy operations. It examines current developments in money, currency, capital and commodity markets, as well as the functioning of these markets. In 2010, the financial crisis and its implications were once again the main topic of discussion. The committee looked, among other things, at the unconventional monetary policy measures taken by central banks as well as the rise in central banks' balance sheets.

## 7.4 OECD

### Participation in the OECD

Switzerland is a founding member of the Organisation for Economic Co-operation and Development (OECD). On the organisation's intergovernmental committees, it works to promote the development of relations among the 34 member states with regard to economic, social and development policies. 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). On a political and academic level, the EPC and its working groups deal with current developments in the global economy as well as with structural policy. The CFM analyses ongoing developments in the international financial markets and examines regulatory issues. The CSTAT drafts standards for the national accounts in association with other supranational organisations. Furthermore, within the framework of the global project 'Measuring the Progress of Societies' and in collaboration with international and regional organisations, it is considering ways to improve the measurement of GDP and looking for alternatives to it.

In 2010, the OECD accepted four new members, namely Chile, Estonia, Israel and Slovenia. It also offered enhanced engagement to major emerging economies and broadened its relations with the G20 states. Furthermore, it devoted considerable attention to the financial crisis and its impact on economic development, government finances and social security systems. It drew up proposals for a reorganisation of the financial market architecture as well as strategies for sustainable government finances and long-term economic growth. The emphasis was on structural reforms and recommendations as to how and when the expansionary monetary policy and fiscal measures taken by central banks and governments could be discontinued without jeopardising economic recovery.

## 7.5 Technical assistance

<b>Principles</b>	<p>The SNB provides technical assistance upon request to the central banks of developing countries and emerging markets. Technical assistance includes the transfer of knowledge specific to central banks and contributes to maintaining the good relations between central banks worldwide. The SNB primarily provides technical assistance to the group of the countries with which it cooperates in the IMF.</p>
<b>Assisting countries in the Swiss-led IMF constituency</b>	<p>The main recipients of SNB technical assistance in the period under review were the central banks of the Kyrgyz Republic (NBKR) and Tajikistan (NBT). The NBKR received advice in the areas of monetary policy, financial market operations, risk management, banking operations and security. Cooperation with the NBT was expanded, so that assistance now covers monetary policy, currency reserve management and security. The SNB also continued to assist the central banks of Azerbaijan (in matters relating to research, human resources, central accounting and controlling) and Serbia (currency reserve investment, controlling, money market and foreign exchange).</p>
<b>International seminars</b>	<p>In May, the SNB and the National Bank of Poland jointly organised their seventh annual seminar – held alternately in Switzerland and Poland – for the central banks of the countries in the Swiss-led IMF constituency as well as other countries of the former Soviet Union and Southeast Europe. This year’s seminar was held in Warsaw and focused on monetary policy and financial stability within the context of the financial market turmoil.</p>
<b>Assisting other countries</b>	<p>Outside the Swiss-led constituency, the SNB provided support on payment systems to the central banks of India, Peru and Russia. In addition, as part of the South Asia Payments and Securities Settlement Initiative (SAPI) launched by the World Bank, it assisted the central bank of Bangladesh in its reform efforts in the area of payment transactions and securities settlement. Within the context of the World Bank’s Reserves Advisory and Management Program (RAMP), the SNB provided assistance to the central banks of Namibia and Swaziland in connection with the management of foreign exchange reserves.</p>
<b>Study Center Gerzensee</b>	<p>In 2010, the Study Center Gerzensee, a Swiss National Bank foundation for the training of central bankers, bankers and business specialists from Switzerland and abroad, organised several courses for employees of central banks. The courses offered training in the fields of monetary policy and financial markets and were attended by a total of 145 participants from 79 countries.</p>

## 8 Banking services for the Confederation

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

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. Details of the services to be provided and the remuneration are laid down in an agreement concluded between the Confederation and the SNB.

In 2010, the SNB issued both MMDRCs and Confederation bonds on behalf of and for the account of the Confederation. MMDRCs amounting to CHF 76.7 billion were subscribed and allocated for a total of CHF 33.7 billion. The corresponding figures for Confederation bonds were CHF 6.8 billion and CHF 4.1 billion respectively. The auction procedure was used for these issues. MMDRCs with terms of six and twelve months recorded auction yields of a maximum of 0.125% and 0.158% respectively, while three-month MMDRCs recorded rising auction yields of up to 0.158% in the second half of the year.

In the area of payment transactions, the SNB carried out roughly 181,000 payments in Swiss francs on behalf of the Confederation and approximately 24,000 payments in foreign currencies.

**Mandate**

**Remuneration for banking services**

**Issuing activities**

**Payments**

## 9 Statistics

### Purpose of activities in the field of statistics

The Swiss National Bank (SNB) collects the statistical data it requires to fulfil its statutory tasks on the basis of art. 14 of the National Bank Act (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. The National Bank Ordinance (NBO) lays down the details of the SNB's activities in the field of statistics (arts. 3–11 NBO).

### Institutions required to provide data

Banks, stock exchanges, securities dealers, 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). The SNB may also collect statistical data on the business activities of other private individuals or legal entities where this is 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. 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).

### Survey activity kept to a minimum

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

### Confidentiality and exchange of data

The SNB 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).

### Surveys and statistics

The SNB manages a data bank containing 4.9 million time series and publishes the results of its surveys in the form of statistics. An overview of the SNB's statistical surveys is contained in the appendix to the NBO.

### Statistical publications

Statistics are published in the *Monthly Statistical Bulletin*, the *Monthly Bulletin of Banking Statistics* and *Banks in Switzerland*, which appears annually. These publications are supplemented by reports on the balance of payments, the international investment position, direct investment and on the financial accounts and household wealth in Switzerland. All SNB statistical publications appear in German, French and English and can be accessed on the SNB website ([www.snb.ch](http://www.snb.ch), *Publications*). Data are also available online as Excel or text files, generally with longer time series than in the printed publications.

Since mid-2010, the SNB publishes data on its website which are in line with the IMF's Special Data Dissemination Standard (SDDS). By subscribing to the SDDS, Switzerland has committed to publishing certain data in the format prescribed by the standard. This includes the SNB's monetary aggregates and currency reserves.

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 collected qualitative data on the lending policies of about 20 banks since the first quarter of 2008. The supplementary survey yielded important results during the financial crisis, and is also valuable under normal circumstances. Consequently, as of the second quarter of 2011, it will be employed as a regular SNB survey, as provided for by art. 5 NBO.

In compiling statistical data, the SNB collaborates with the relevant federal government bodies, particularly the Swiss Federal Statistical Office (SFSO) and the Swiss Financial Market Supervisory Authority (FINMA), as well as with the 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).

The SNB has a close working relationship with the SFSO. Reciprocal data access is governed by a data exchange agreement; this agreement also covers the collaboration between the two institutions in drawing up the Swiss financial accounts. Moreover, the SNB belongs to a number of bodies that work with Swiss federal statistics. These include the federal statistics commission (*Bundesstatistikkommission/Commission de la statistique fédérale*) and the group of experts for economic statistics (*Expertengruppe für Wirtschaftsstatistik/Groupe d'experts de statistique économique*).

The SNB collects quarterly data on mortgage rates from about 80 banks on behalf of the Federal Office for Housing (FOH). 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, which also publishes the reference interest rate.

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, liquidity and interest rate risk of banks and securities dealers.

**Survey on bank lending**

**Collaboration ...**

**... with the SFSO**

**... with the FOH**

**... with FINMA**

... in the banking statistics committee

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

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

A group of experts under the direction of the SNB provides assistance in the compilation of the balance of payments. It comprises representatives from industry, banking, insurance, various federal agencies and the KOF Swiss Economic Institute at ETH Zurich. In 2010, the group of experts gave special attention to the serviceBOP project. This project aims to expand the SNB's survey on foreign trade in services (data that form part of the balance of payments (BOP)), and to adapt it to the requirements of the bilateral agreement on statistics between Switzerland and the European Union (EU).

... with the Principality of Liechtenstein

The SNB also surveys Liechtenstein-based companies when preparing its balance of payments figures and its statistics on Switzerland's international investment position. It works with the relevant authorities in Liechtenstein (the Office of Economic Affairs and the financial market supervision authority).

... with the EU

The bilateral agreement on statistics between Switzerland and the EU was revised in 2010. The agreement, which dates back to 1 January 2007, sets out how the two parties cooperate in the area of statistics. Where previously it applied to the financial accounts and parts of the banking statistics, it now also includes the balance of payments. This means that as of 2014, the SNB will have to adhere to the requirements of the Statistical Office of the European Communities (Eurostat) when compiling the balance of payments. The National Bank actively participates in various Eurostat bodies.

... with other foreign agencies

In the area of statistics, the SNB works closely with the Bank for International Settlements (BIS), the Organisation for Economic Co-operation and Development (OECD) and the IMF. This collaboration is aimed at harmonising statistical survey methods and analyses.

In 2010, the SNB participated in several international working groups concerned with filling data gaps in financial market statistics. Improving the statistical basis will help identify undesirable trends (such as those that developed prior to the financial crisis in 2008) at an early stage.