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## I. Macroeconomic developments and main policy challenges

Switzerland was in recession during the first semester of 2003, having been hit harder than the majority of the other OECD countries by the sluggishness of international activity since 2000-01, despite a rebound of activity in the third quarter of 2003. This is partly due to the nature of the downturn, which has strongly affected sectors that are particularly important to the Swiss economy. However, these poor results also reflect the negative trend growth differential that has existed for some time *vis-à-vis* other countries. Against this background, the most immediate challenge for the authorities is to create conditions that will support the recovery as foreign trade picks up. This chapter reviews recent developments in the Swiss economy and also, more generally, highlights the reasons for the poor medium-term growth performance. It goes on to assess the role of fiscal and monetary policies in the present phase of the cycle, and also their room for *manœuvre* and effectiveness should deflationary pressures fail to abate. Finally, the chapter reviews the main challenges that low trend growth poses for the economy.

### Recent trends and short-term prospects

#### *The downturn in activity has been more pronounced than in other countries since 2000*

Following the brief fall in activity in the second half of 2001, Switzerland suffered its second recession in two years during the first semester of 2003 (Table 1).<sup>1</sup> Despite a rebound of growth in the third quarter, the decline in output in the first three quarters of 2003 ( $-3\frac{3}{4}$  per cent over the corresponding period of the previous year), is the biggest in ten years. To a large extent, cyclical developments reflect the state of the world economy, but the downturn was more pronounced than in the United States or the euro area. It was especially marked in the capital goods and financial sectors, in which Switzerland is specialised. The drop in manufacturing exceeded 5 per cent in 2002 and was much sharper than in other OECD countries. The financial market slump also seriously affected the banking and insurance sector, which accounts for around 12 per cent of GDP and had been one of the engines of growth in the second half of the 1990s (Chapter IV). With the

**Table 1. Demand and output**  
Percentage changes from previous period, s.a.a.r., volume (1990 prices)<sup>1</sup>

	Average 1991-2000	1999	2000	2001	2002	2003 Q1	2003 Q2	2003 Q3
Private consumption	1.1	2.2	2.0	2.1	0.7	0.9	1.6	1.5
Government consumption	1.3	1.2	2.1	2.4	1.9	1.2	2.3	3.1
Gross fixed investment	0.8	2.7	5.8	-3.3	-4.1	0.3	-3.2	2.9
Construction	-1.0	-3.3	2.5	-3.2	2.1	1.9	1.9	1.3
Machinery and equipment	2.9	8.7	8.8	-3.4	-9.3	-1.2	-7.9	4.5
Final domestic demand	1.0	2.2	3.0	0.7	-0.3	0.8	0.5	2.1
Total domestic demand	0.9	2.5	2.5	0.7	-1.2	-0.9	0.3	0.8
Exports of goods and services	4.0	5.1	10.1	-0.0	-0.4	-3.7	0.3	5.2
Exports of goods	4.0	3.6	9.3	2.1	1.1	-5.5	-1.3	5.3
Exports of services	4.2	11.3	12.7	-7.5	-6.0	4.0	7.2	4.6
Imports of goods and services	4.2	7.4	8.4	-0.3	-3.5	-1.3	2.6	4.9
Gross domestic product	0.9	1.5	3.2	0.9	0.2	-2.0	-0.7	1.0
GDP price deflator	1.6	0.7	1.2	1.1	0.6	5.7	-2.6	1.9
Private consumption deflator	1.9	0.3	1.0	0.7	0.8	2.3	-0.7	1.0
<i>Memorandum items:</i>								
Index of industrial production <sup>2</sup>	2.4	3.5	8.4	-0.7	-5.1	0.9	-2.8	
Government consumption (% of GDP)	15.2	14.7	14.7	14.9	15.2	15.4	15.6	15.6

1. Adjusted for seasonal and random variations by the Secr tariat d'Etat   l' conomie (SECO) except for the price deflators. All data in volume are provided already deflated by the Swiss authorities.

2. Excluding construction.

Source: OFS; SECO; OECD, *Main Economic Indicators*.

fall in asset prices, the volume of bank business and revenue dropped sharply. The downturn in activity in these sectors then spread to others in the second half of 2002 and early 2003, which led the entire economy into a recession in the first semester. More recently, however, activity picked up somewhat in the financial sector and in industry.

The depressed state of the economy is not only due to the deterioration in the external environment. Domestic demand has also weakened appreciably because of the decline in investment and inventories. Corporate investment, which has been down for 10 consecutive quarters up to the second quarter of 2003, has fallen by more than 15 per cent since end-2000, despite the increase in the third quarter of 2003. As in many OECD countries, the steep increase in information technology-related machinery and equipment over the second half of the 1990s led to over-investment which resulted in a particularly sharp adjustment as of 2001.<sup>2</sup> In addition, the franc's real effective appreciation until early 2003 hit corporate profitability, which has fallen since 2000, especially in industry. Firms

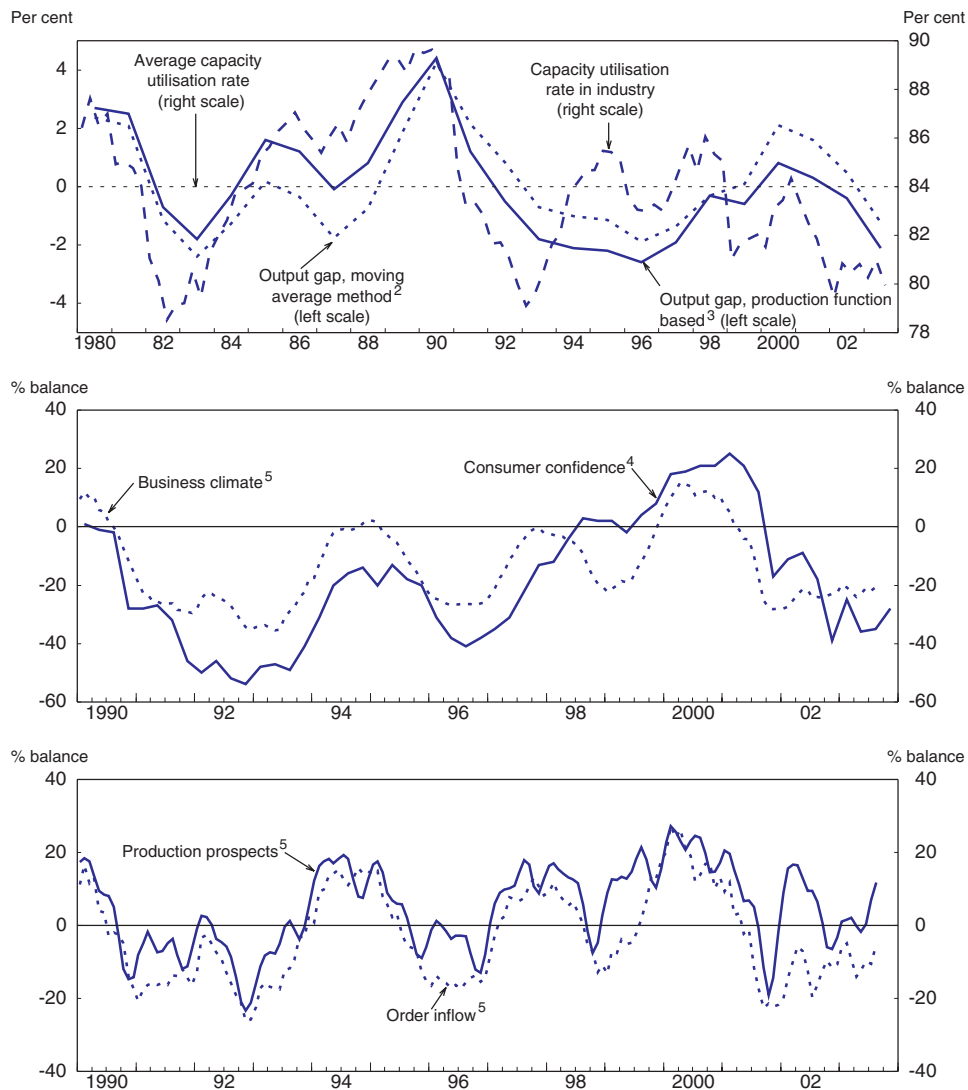
have responded with cost-saving measures by reducing their inventories and also by laying off staff.

The fall in domestic demand has been limited, however, by the growth of public consumption and, to a lesser extent, of construction expenditure which has been stimulated to a certain degree by the increase in public investment and the fall in interest rates.<sup>3</sup> In contrast with previous cycles, household consumption has risen uninterruptedly, although purchases of goods of a more cyclical nature are showing signs of flagging.<sup>4</sup> In fact, private consumption has lost momentum over the last two years and the savings ratio rose by 3 percentage points since 2000 to some 11 per cent in 2002, its highest level for ten years. Household confidence remained at a low level in autumn 2003 (Figure 1). The confidence problem stems primarily from labour market trends, in particular the fear of job losses. But it is also due to the likely scaling back of future pension benefits, notably those belonging to the second pillar of the system. The system is managed by funds that have announced substantial changes in contributions and benefits to adjust to the financial market losses (Chapter II).

The downturn in exports in 2002 and in early 2003 resulted in market share losses. Apart from capital goods, which account for one-third of exports, revenue from tourism, international transport and financial services has fallen. This is due mainly to the slowdown in foreign, and particularly German demand, but also to the real effective appreciation of the exchange rate, which reached 10 per cent between the first quarters of 2000 and 2003 (Figure 2). Since spring, the franc did however depreciate by about 4½ per cent in real effective terms. In view of the decline in imports prompted by the downturn in total demand as well as the terms-of-trade gains stemming from the franc's appreciation, the current account surplus rose somewhat in 2002, reaching more than 9 per cent of GDP, and was still at a very high level in early 2003.

### ***The labour market has deteriorated***

The deterioration of the labour market has continued until the third quarter of 2003 (Table 2), with the fall in employment affecting strongly the manufacturing and construction sectors. In services, the decline in employment was also particularly pronounced in financial intermediation. The bulk of the job losses concerned mainly prime-age male workers, working full time, but the worsening labour market situation was also reflected in a fall in the participation rate among men aged over 55, many of them taking early retirement (Chapter IV). On the other hand, part-time working, mainly by women, continued to increase despite the cyclical slowdown.<sup>5</sup> According to standardised data, the unemployment rate reached 4.2 per cent in the third quarter of 2003, *i.e.* 1.6 percentage points above the structural rate estimated by the OECD Secretariat. The share of the jobless with high skill levels has risen appreciably, reflecting the special nature of

Figure 1. Output gap<sup>1</sup> and economic activity indicators

1. Deviation of GDP from potential. Data for 2003 are OECD projections.

2. Method used by the national authorities to compute their cyclically-adjusted fiscal balance. See Amman, Y. (1995), "Le budget du plein-emploi – un réexamen", Office fédéral des questions conjoncturelles, Study No. 20.

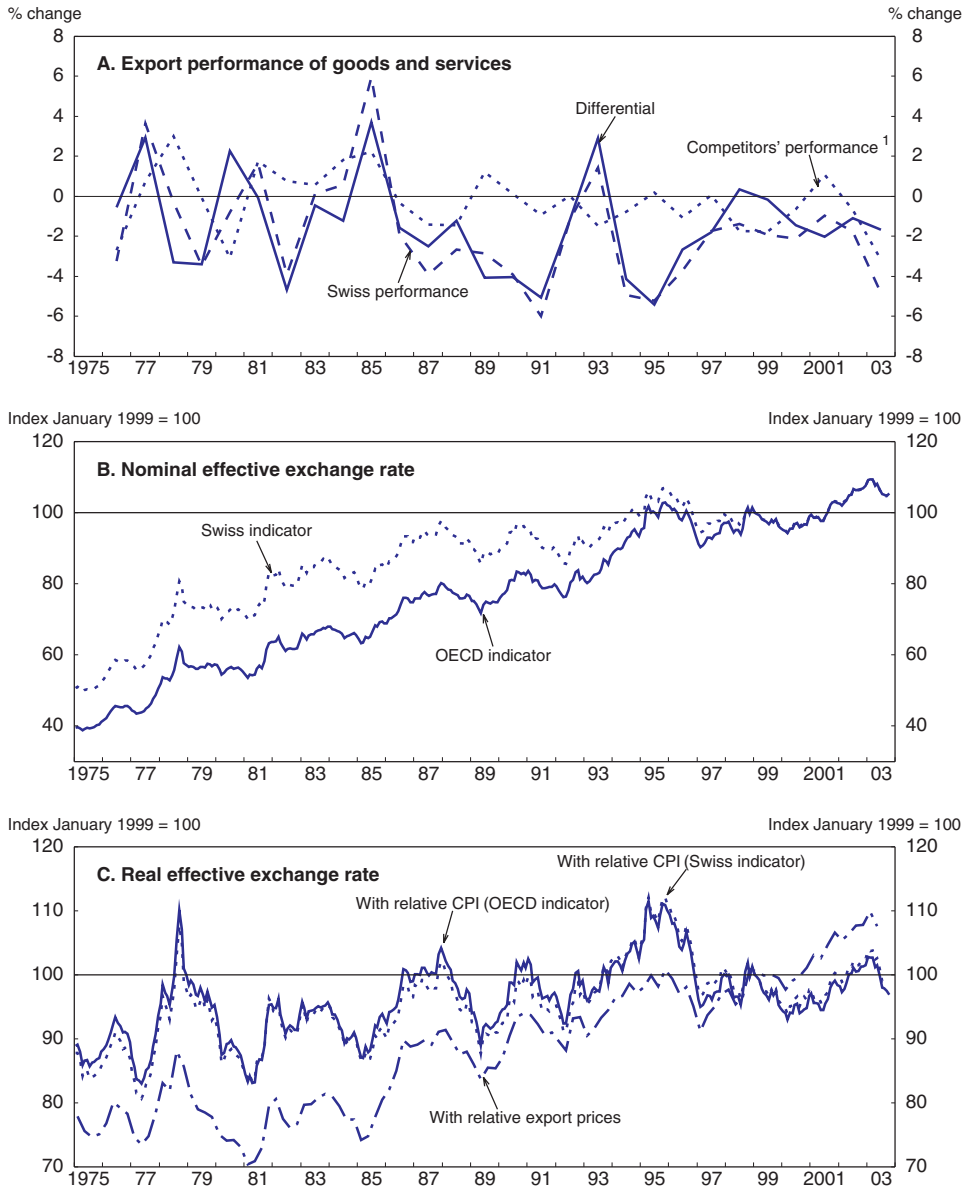
3. Estimate based on OECD method.

4. Balance of positive and negative responses.

5. Three-month moving average.

Source: KOF/ETH, Konjunktur; OECD, *Main Economic Indicators*.

Figure 2. Competitiveness indicators and export performance



1. Represented by France, Germany, Italy, the United Kingdom and the United States.  
 Source: SNB and OECD.

Table 2. **Labour market trends**

Percentage changes from the same period of the previous year, unless otherwise indicated

	1999	2000	2001	2002	2002 Q4	2003 Q1	2003 Q2	2003 Q3
<b>Employment, total</b>	<b>0.8</b>	<b>1.0</b>	<b>1.7</b>	<b>0.6</b>	<b>0.3</b>	<b>0.1</b>	<b>0.0</b>	<b>-0.6</b>
<i>By nationality</i>								
Swiss	1.4	0.4	0.2	0.7	0.5	0.3	0.5	-0.5
Foreign	-1.0	3.0	6.1	0.0	-0.4	-1.1	-1.2	-0.8
<i>By sex</i>								
Males	0.7	1.0	1.2	-0.5	-0.3	-0.0	-0.0	-1.0
Females	0.9	1.2	2.3	2.0	1.1	0.0	0.1	0.0
<i>By sector</i>								
Agriculture	2.5	-4.3	-5.4	-1.3	1.6	1.7	-1.8	-1.4
Industry	-0.5	2.3	1.2	-2.1	-3.4	-4.5	-4.7	-4.6
Manufacturing	-1.1	2.6	1.6	-2.6	-4.7	-5.4	-5.5	-5.3
Construction	0.7	1.7	0.7	-0.9	-0.4	-2.7	-3.2	-3.4
Services	1.2	1.0	2.3	1.7	1.6	1.5	1.8	0.9
<b>Labour force, total</b>	<b>0.3</b>	<b>0.7</b>	<b>1.6</b>	<b>1.2</b>	<b>1.2</b>	<b>1.1</b>	<b>1.2</b>	<b>0.4</b>
<i>By nationality</i>								
Swiss	1.1	0.2	0.3	1.1	1.1	1.0	1.1	
Foreign	-2.1	2.0	5.4	1.3	1.4	1.2	1.3	
<i>By sex</i>								
Males	0.2	0.6	0.9	0.5	0.8	1.0	0.9	
Females	0.4	0.8	2.5	2.0	1.6	1.0	1.5	
<b>Unemployment rate, total<sup>1</sup></b>	<b>2.9</b>	<b>2.5</b>	<b>2.5</b>	<b>3.1</b>	<b>3.5</b>	<b>3.8</b>	<b>4.1</b>	<b>4.2</b>
<i>By nationality</i>								
Swiss	2.0	1.9	1.9	2.3	2.6	2.8	2.8	
Foreign	5.6	4.7	4.1	5.2	6.6	7.1	7.0	
<i>By sex</i>								
Males	2.5	2.1	1.9	2.9	3.5	3.7	3.6	
Females	3.4	3.1	3.3	3.3	3.8	4.1	4.3	
<i>Memorandum items:</i>								
Registered vacancies	8.8	-6.3	-8.1	-25.3	-30.2	-14.7	-14.4	
Labour productivity <sup>2</sup>	0.7	2.2	-0.8	-0.3	0.6	-0.7	-1.0	-0.1
FTE employment <sup>3</sup>	0.9	1.9	1.9	-0.2	-0.9	-1.2	-1.3	-1.7

1. Level.

2. Real GDP per person in employment.

3. Full-time equivalent employment in the industry and services sectors.

Source: OFS, *Statistique de population active occupée* and *Statistique d'emploi*; OECD, *Main Economic Indicators*.

the recession which has hit activities with skilled personnel, such as banking, insurance and information and telecommunications technologies (Table 3).

### ***Inflation, already low, has slowed still further***

The slowdown in nominal wage increases caused by the deteriorating employment situation seems to be relatively moderate in 2003. According to wage negotiations, pay should increase on average by 1.4 per cent, which is slightly down

Table 3. Structure of registered unemployment

	1999	2000	2001	2002	2003 <sup>1</sup>
	Rate <sup>2</sup>				
<b>Total unemployment rate</b>	<b>2.5</b>	<b>1.8</b>	<b>1.7</b>	<b>2.5</b>	<b>3.7</b>
<b>By citizenship</b>					
Swiss	1.7	1.3	1.2	1.8	2.7
Foreign	5.2	3.7	3.4	5.0	6.8
	Share in per cent				
<b>By duration</b>					
0-6 months	52.7	59.0	65.0	65.5	58.8
7-12 months	21.5	20.9	19.4	22.0	25.5
More than one year	25.8	20.1	15.7	12.5	15.7
<b>By function</b>					
Self-employed/homeworkers	1.4	1.4	1.3	1.1	1.0
Executives	5.5	6.0	6.4	6.8	7.0
Experts	49.4	51.1	51.0	51.8	54.0
Other workers	38.3	36.7	36.9	36.0	33.0
Apprentices/students	5.4	4.8	4.4	4.3	5.0

1. Average of the first eleven months of the year.

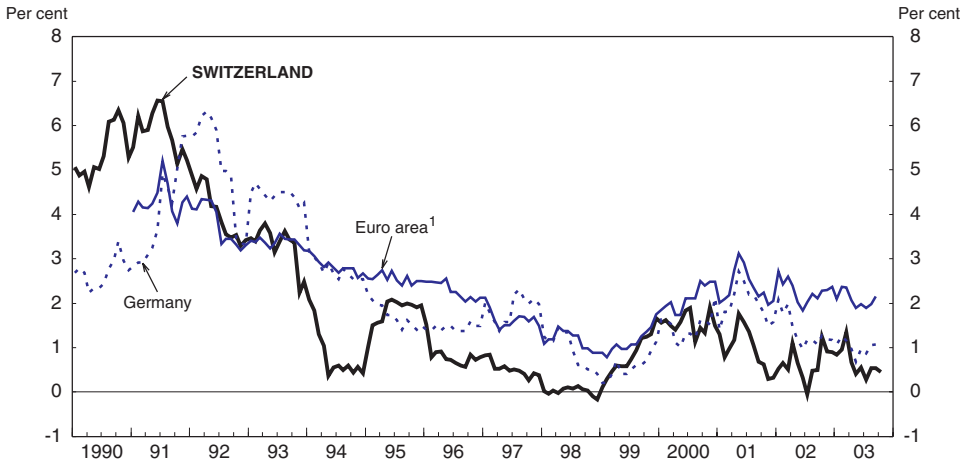
2. Official unemployment statistics include those who are partially unemployed. Official unemployment rates are expressed as a percentage of the workforce in the 2000 population census.

Source: SECO, Labour market statistics and *La situation sur le marché du travail en novembre 2003*, press document, December 2003.

on 2002 (1.8 per cent) and 2001 (2.5 per cent). As in previous years, however, per capita wage income could rise faster, as the upward trend in average wages prompted by higher qualifications is not taken into account by these indicators. While remuneration in some sectors, such as financial services, has fallen sharply, the rise in real wages could again outstrip productivity and increase unit labour costs, as happened in 2001 and 2002. These wage increases are relatively brisk, given the economic situation, and no doubt reflect a catch-up following the long period of restraint in the second part of the 1990s. According to Fehr and Goette (2003), nominal wage rigidity for those remaining in their jobs is quite high in Switzerland, including during periods of low growth, even though wages, which are negotiated on a decentralised basis, are more flexible than in the majority of OECD countries and tend to move in line with productivity in real terms.<sup>6</sup> Despite this recent increase in labour costs, inflation has fallen even further and is lower than in Switzerland's main partner countries (Figure 3). The rise in consumer prices, which was around 1 per cent in the fourth quarter of 2002 (year-on-year), was down to no more than ½ per cent in the fourth quarter of 2003. This is due partly to the fall in prices of imported goods, but entrepreneurs are also being forced to cut margins, especially in the industrial sector, because of the persisting sluggishness of sales in both the domestic and export markets (Table 4).



Figure 3. **Consumer prices: an international comparison**  
Year-on-year percentage changes



1. Harmonised CPI.

Source: OECD, *Main Economic Indicators*.

### ***The strength of the recovery will depend on the external environment***

The strength of the projected upturn will depend on the rapidity of the turnaround in the international situation, whose first positive effects have been felt in exports in the third quarter of 2003. This is consistent with the information provided by the leading indicators (Figure 4), which suggest that Switzerland has bottomed out. According to the latest KOF institute surveys, inflows of orders have also picked up, although order books remain bare. With output slow to pick up, activity could decline by  $\frac{1}{2}$  per cent on average in 2003, and the output gap could reach around 2 per cent, its highest level since 1996 (Table 5).<sup>7</sup> This low rate of factor utilisation, which is confirmed by business surveys,<sup>8</sup> is hardly likely to encourage firms to increase their capital expenditure strongly, particularly since there may still be a capital overhang from the earlier investment boom. Nor do the available surveys point to any rapid improvement in the labour market situation, and this will continue to weigh on households' consumer behaviour. All in all, the increase in GDP, which will probably not exceed  $1\frac{1}{4}$  per cent in 2004, *i.e.* a rate close to potential growth, will depend mainly on exports, and is predicated on the assumption that the exchange rate will remain stable at its early autumn 2003 level. In 2005, growth could accelerate to reach about  $1\frac{3}{4}$  per cent. This outlook does not presage a rapid fall in unemployment, which would not fall below  $3\frac{1}{2}$  per

Table 4. **Price trends**  
Percentage changes from the same period of the previous year

	Weight	1999	2000	2001	2002	2003 October	2003 Nov.
<b>Total supply index<sup>1</sup></b>							
	May 2003						
	100.0	-1.4	2.7	-0.1	-1.2	-0.3	
Producer price index	65.8	-1.0	0.9	0.5	-0.5	0.2	
Import price index	34.2	-2.2	6.7	-1.6	-2.8	-1.6	
<b>Consumer price index</b>							
	May 2000						
	100.0	0.8	1.6	1.0	0.6	0.5	0.5
Goods	42.9	0.7	3.1	-0.1	-0.5	0.1	0.2
Non-durables	26.6	1.0	5.0	0.9	0.0	0.9	1.1
Food, beverages, tobacco	13.6	0.3	1.6	2.0	2.2	1.9	1.9
Energy	5.9	2.1	11.4	0.4	-3.2	0.0	0.8
Services	57.1	0.9	0.4	1.8	1.5	0.7	0.7
Rents	19.7	0.7	1.5	2.8	1.0	0.3	0.3
Home produced goods and services	74.5	0.7	0.7	1.7	1.4	0.8	0.8
Imported goods and services	25.5	1.0	4.1	-1.2	-1.7	-0.5	-0.4
Core inflation	78.4	0.7	0.6	1.0	0.8	0.4	0.4
Export prices <sup>2</sup>	..	1.3	2.7	1.4	-1.9		
Import prices <sup>2</sup>	..	-1.3	5.9	1.0	-2.6		

1. The total supply price index is the weighted average of producer and import price indices.

2. Change in the price deflator of goods and services, national account basis, 1990=100.

Source: SNB, *Bulletin mensuel de statistiques économiques* and OFS, Communiqué de presse, series 5, December 2003.

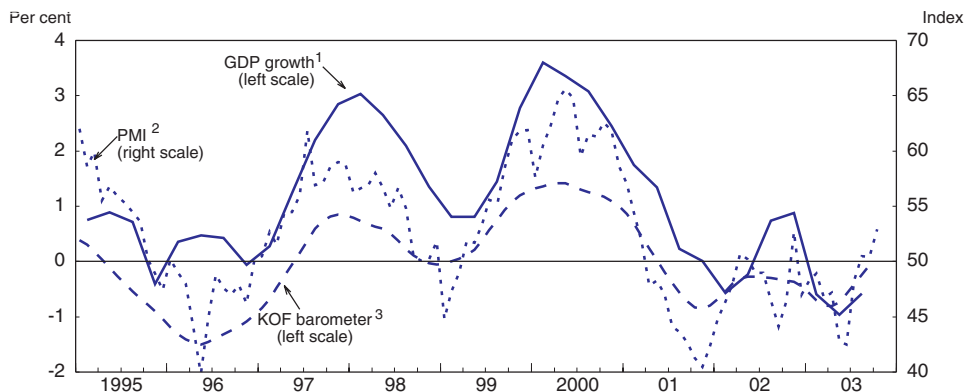
cent in 2005. With the output gap still negative, inflation could even get close to zero per cent for some time. In this context, deflation cannot be excluded if the conjuncture evolves substantially less favourably than foreseen. Deflation risks and policy responses are discussed in the monetary policy section.

## Medium and long-term performance

### *Switzerland suffers from insufficient trend growth...*

The poor growth performance of the last few years, by comparison with the OECD average, has characterised the Swiss economy for two decades. Between 1980 and 2002, the annual growth differential *vis-à-vis* the euro area averaged  $\frac{3}{4}$  of a percentage point, while *vis-à-vis* the United States it was over 1½ percentage points. Moreover, these differentials have widened since the early 1990s, reaching 1 percentage point on average with the euro area and over 2 percentage points with the United States. An international comparison reveals that, with the exception of general government consumption spending, the increase in all components of demand was lower in Switzerland than in its main trading partner countries

Figure 4. Leading indicators



1. Real terms. Year-on-year percentage changes.
  2. The Purchasing Managers' Index (PMI) is an index based on the response of 200 purchasing managers at Swiss industrial companies about their performance in the current month compared with the prior month. An index below 50 indicates that production is falling.
  3. The KOF barometer is a leading indicator of future GDP growth, with an average lead of 6 to 9 months.
- Source: KOF and OECD, *Quarterly National Accounts*.

(Figure 5). The growth differential is, moreover, particularly marked as regards exports of goods and services because Switzerland has suffered bigger export market share losses than have other countries. Since 1980, the performance of Swiss enterprises on foreign markets has been on average  $1\frac{1}{4}$  percentage points per year below that of their competitors (Figure 2). The trend rise in the real effective exchange rate, which has been  $\frac{1}{2}$  to 1 per cent per year since 1980, is related to this relatively limited increase in exports. The latter has been accompanied, however, by terms-of-trade gains so that income has risen faster than output.

### ***... although income growth has been stronger than real output***

Between 1980 and 2002, Switzerland's terms of trade improved by some 37 per cent, the biggest increase among OECD countries. However, the positive impact of this trend on real income is not properly accounted for by real GDP developments, which measure increases in output. For a number of years now, various studies have been carried out to account more accurately for the positive economic effects of these terms-of-trade improvements by basing estimates of real value added on a Törnqvist rather than Laspeyres index, which is usually used in national accounting (Kohli, 2003). Estimates based on such indices, which are approximated by the *command* GDP indicators (Box 1), suggest that traditional real GDP series have been underestimating real income growth by  $\frac{1}{2}$  percentage point per year on average since 1980. According to these indicators, growth of real

Table 5. **Short-term projections**  
Percentage changes, s.a. at annual rates, 1990 prices

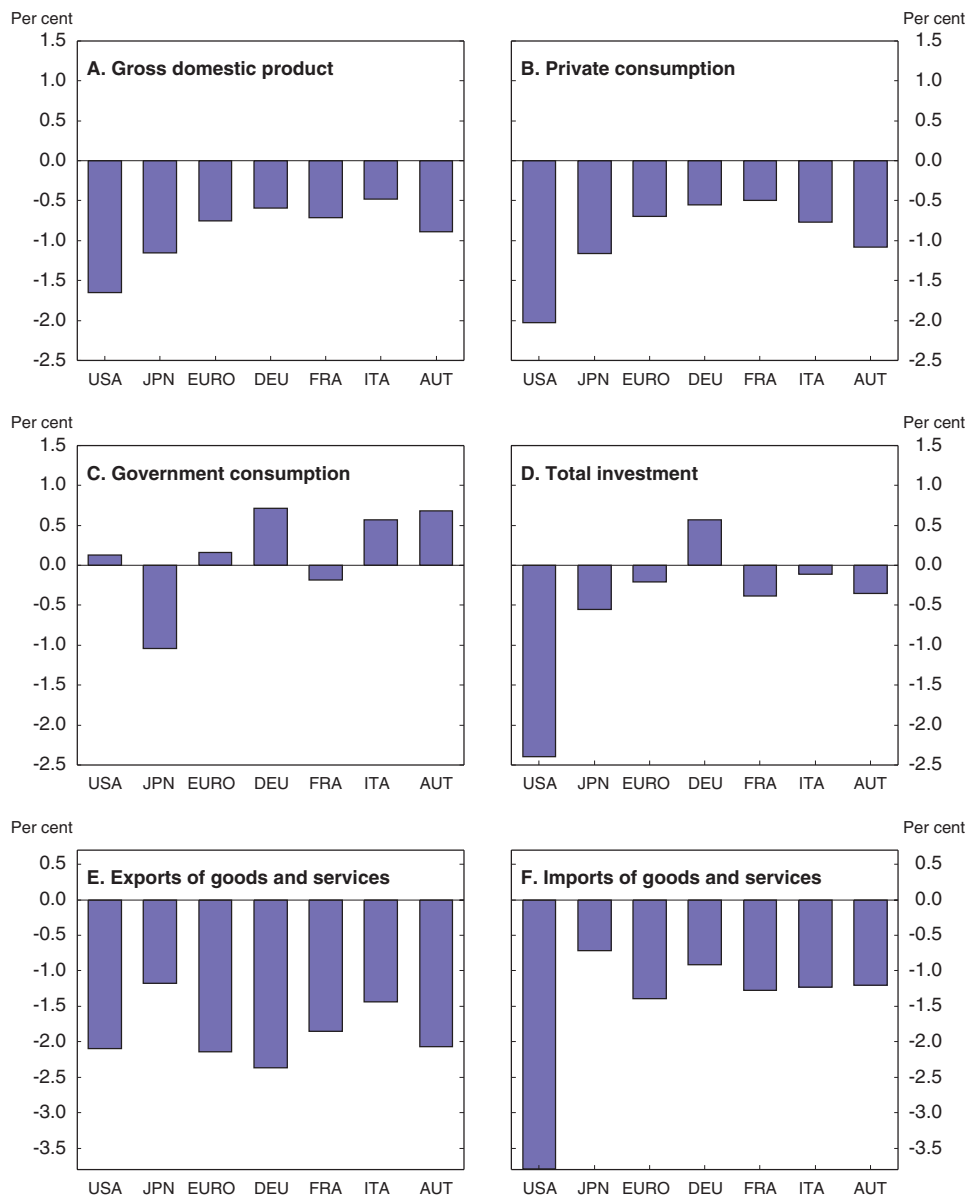
	2000		2001	2002	2003	2004	2005
	Current prices, CHF billion	% of GDP					
<b>Demand and output</b>							
Private consumption	242.0	59.6	2.1	0.7	0.4	1.2	1.8
Government consumption	59.7	14.7	2.4	1.9	0.9	0.4	0.4
Gross fixed investment	84.1	20.7	-3.3	-4.1	-2.1	0.6	3.0
Construction	40.6	10.0	-3.2	2.1	0.8	0.6	1.9
Machinery and equipment	43.5	10.7	-3.4	-9.3	-4.8	0.5	4.2
Final domestic demand	385.7	95.1	0.7	-0.3	-0.1	0.9	1.9
Stockbuilding <sup>1</sup>	-1.1	-0.3	0.0	-0.9	-1.2	0.4	0.0
<b>Total domestic demand</b>	384.6	94.8	0.7	-1.2	-1.4	1.3	2.0
Exports of goods and services	178.2	43.9	-0.0	-0.4	-0.5	3.8	5.9
Imports of goods and services	157.1	38.7	-0.3	-3.5	-2.4	4.4	6.5
Foreign balance <sup>1</sup>	21.2	5.2	0.1	1.4	0.8	-0.2	-0.1
<b>GDP at constant prices</b>			0.9	0.2	-0.5	1.2	1.8
GDP price deflator			1.1	0.6	-0.1	-0.1	0.3
GDP at current prices	405.8	100.0	2.0	0.8	-0.6	1.0	2.1
<i>Memorandum items:</i>							
<b>Consumer price index</b>			1.0	0.6	0.6	0.3	0.2
<b>Unemployment rate (level)</b>			2.5	3.1	3.9	3.9	3.6
Potential output, whole economy			1.4	1.2	1.3	1.0	1.2
Output gap, whole economy			0.6	-0.5	-2.2	-2.0	-1.4

1. Contribution to GDP growth.

Source: OFS and OECD.

income in Switzerland has in fact been quite close to that of Germany, France and Italy, even if it remains one of the lowest among OECD countries, especially in the 1990s<sup>9</sup> (Figure 6). This observation remains valid even when the income that Switzerland earns on its foreign investment is taken into account. Income growth measured on the basis of GNP, which includes investment income, has on average exceeded that of GDP by only 0.1 of a percentage point since 1980, although the differential widened to 0.2 of a percentage point per year on average between 1990 and 2002. Overall, the rise in average living standards, measured either by GDP, command GDP or GNP per capita, has been less rapid than in European countries and in the United States, especially since the beginning of the 1990s (Figure 7).

Figure 5. **Average growth differential between Switzerland and its main trading partners**  
1980-2002



Source: OECD.

**Box 1. *Command* GDP: a real income indicator**

Real GDP, as calculated traditionally by the national accounts, does not account adequately for the positive effect of an improvement in the terms of trade on real income. Terms-of-trade gains deriving from a fall in import prices result in an increase in import volumes leading, other things being equal, to a decline in real GDP. However, volume GDP, which measures production, underestimates the increase in real income that is amplified in this case by the improvement in purchasing power gained from the fall in import prices.

To correct this bias, which is substantial in the case of Switzerland in view of the trend improvement in the terms of trade observed since 1980, Kohli (2003) proposes an alternative estimate of GDP based on a translog production function, which allows Törnqvist indices to be used to deflate the nominal figures. Moreover, an approximation of the estimates obtained by using this method can be derived by means of a simple indicator (*command* GDP) calculated on the basis of the components of GDP and deflating nominal exports by the import price deflator.\* Thus:

$$\text{Command GDPV} = \text{TDDV} + \text{XGSV} * (\text{PXGS}/\text{PMGS}) - \text{MGSV}$$

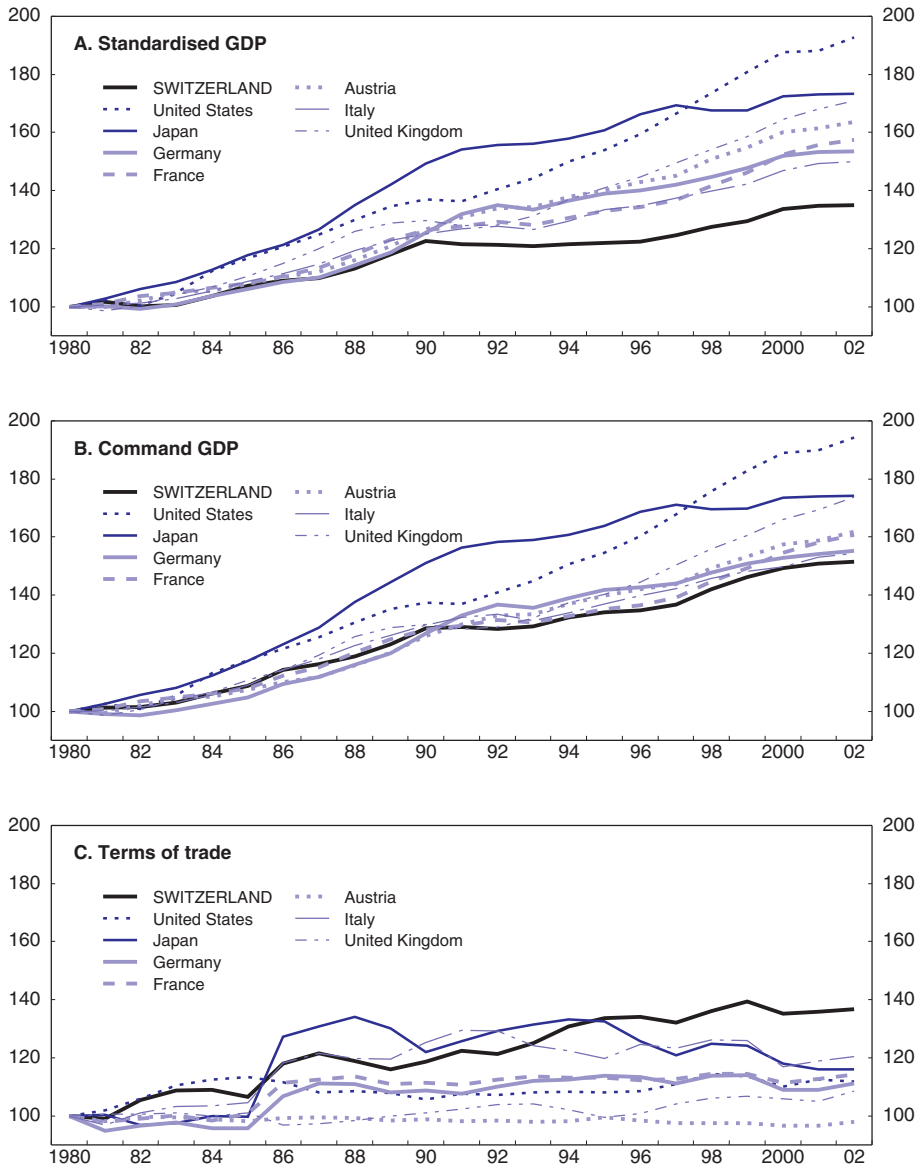
where TDDV is real domestic demand, XGSV and MGSV are, respectively, volume exports and imports, and PXGS and PMGS are the export and import deflators.

The idea behind this concept is that exports are only useful for the imports that they allow. So, if the terms of trade improve, more can be imported with the same volume of exports. If, moreover, domestic demand, foreign trade and therefore standard GDP remained unchanged in volume terms in the event of improved terms of trade, *command* GDP would increase and better account for the growth of real income.

The differential between the growth of the latter indicator and that of standard GDP between 1980 and 2002 is larger in Switzerland than in other OECD countries. Switzerland is in fact the country with the biggest improvement in its terms of trade and whose share of exports in production is larger than in other countries that have experienced similar trends in foreign trade prices (Italy and Japan, see Figure 6). According to the *command* GDP indicator, the real income growth rate is probably ½ percentage point higher than is indicated by the growth of standard GDP. That said, even on that count, Switzerland is still one of the OECD countries with the poorest long-term growth performance.

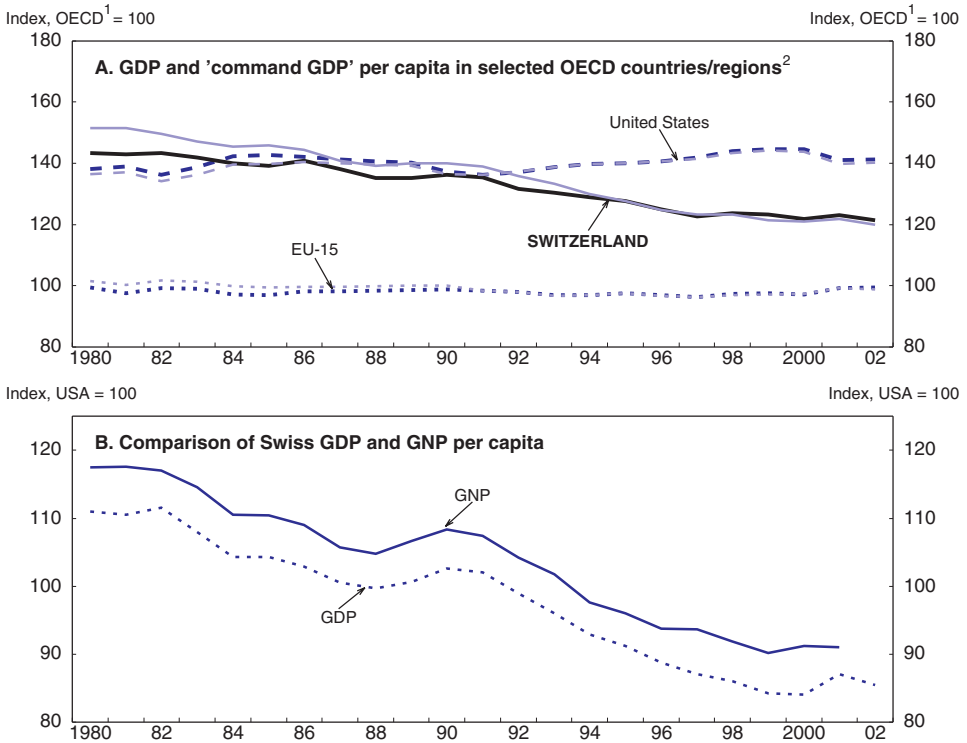
\* This indicator is similar to the *command-basis* GNP published by the Bureau of Economic Analysis since 1981. See Denison (1981). See also SECO (2002a) for a discussion of the statistical questions regarding Switzerland's poor growth performance.

Figure 6. **Various concepts of GDP**  
In real terms, index 1980 = 100



Source: OECD.

Figure 7. **Indicators of income and production per capita**  
At constant 1995 prices and PPPs



1. Excluding Czech Republic, Hungary, Poland and Slovak Republic.

2. The “command GDP” curves are in dark bold, with command GDP defined as:

$$\text{Command GDP} = \text{GDP} + (\text{Terms of Trade} - 1) * \text{Exports}$$

Since the terms of trade are equal to 1 in the 1995 base year, GDP and command GDP are the same for that year.

Prior to 1995, the lower level of the command GDP reflects that the terms of trade (expressed in 1995 prices) are below unity during that period. The trend decline in per capita command GDP has been smaller than that of per capita GDP.

Source: OECD, *National Accounts*.

***This poor growth performance is essentially due to sluggish productivity growth***

Analysed in the traditional framework of growth determinants, slow potential output growth reflects an insufficient increase in factor efficiency (Table 6). The rate of capital accumulation, which is encouraged by low interest rates, has in fact been similar to that of other countries over the last few decades. Also, employment has risen more than in Switzerland’s main neighbouring countries, although it has been lower than in the United States, especially if account is taken of the trend in the number of hours worked. Average hours worked has fallen in Switzerland, no



Table 6. **Decomposition of potential output growth**  
Annual averages, per cent

	Switzerland	United States	Three major European countries <sup>1</sup>	Austria
<b>1980-03</b>				
Potential output growth	1.5	3.0	2.1	2.3
Potential output growth of the business sector	1.5	3.1	2.2	2.6
<i>of which contribution of:</i>				
Capital stock	0.8	0.9	1.0	0.9
Trend labour efficiency	0.2	1.2	1.2	1.4
Trend hours	-0.2	0.0	-0.3	0.0
Potential employment	0.7	1.0	0.3	0.3
<i>of which:</i>				
Working-age population	0.5	0.8	0.3	0.4
Trend participation rate	0.3	0.2	0.1	0.0
Structural unemployment	-0.1	0.0	-0.1	-0.1
<b>1991-03</b>				
Potential output growth	1.2	3.1	1.8	2.3
Potential output growth of the business sector	1.3	3.2	1.9	2.6
<i>of which contribution of:</i>				
Capital stock	0.8	0.9	0.9	0.9
Trend labour efficiency	0.2	1.4	1.0	1.4
Trend hours	-0.1	0.0	-0.3	0.0
Potential employment	0.4	0.9	0.3	0.5
<i>of which:</i>				
Working-age population	0.4	0.8	0.1	0.4
Trend participation rate	0.1	0.0	0.2	0.1
Structural unemployment	0.0	0.0	0.0	0.0

1. For Germany, there is a break in series in 1991. Therefore data of that specific year are not included.

Source: OECD estimates.

doubt partly as a result of the increase in part-time work. Under these conditions, strengthening the medium-term growth performance, which is the main challenge for economic policy means increasing first and foremost factor productivity. This need to boost growth has been clearly recognised in a recent report by the Ministry for Economic Affairs (SECO, 2002b).

### Monetary policy

While structural reforms appear necessary to improve the medium-term growth performance, in the short term, the main task of the authorities is to promote the cyclical recovery with appropriate macroeconomic policies, both monetary and fiscal.

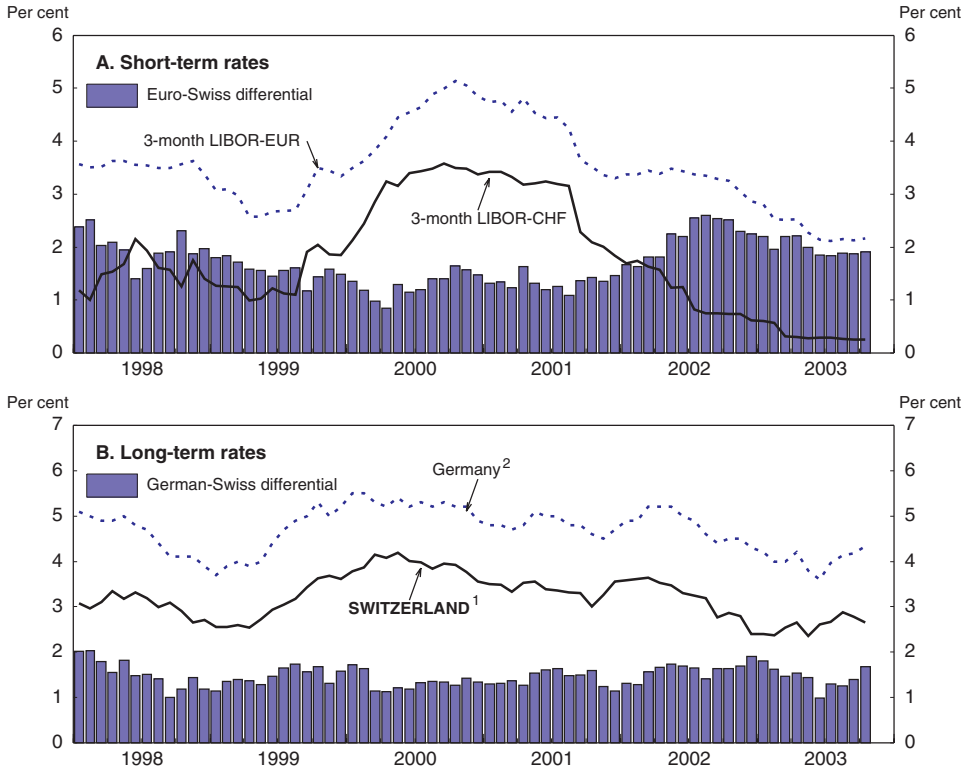
***Monetary policy has been appropriately accommodative over the last two years***

In 1999, the Swiss National Bank (SNB) adopted a new monetary policy framework. The major goal is to ensure price stability (defined by the SNB itself as price inflation of less than 2 per cent and avoiding deflation). An inflation forecast with a three-year horizon is used as main indicator to set interest rates at the right level to meet the price stability objective in the medium term. The published forecast, which is conditional on fixed interest rates, is based on a wide set of indicators and models. The new framework differs from the previous approach which had relied mainly on controlling monetary aggregates. The operating target is the 3-month LIBOR rate, which can fluctuate within a range of usually 100 basis points. As argued in the previous *Survey*, this framework has improved the conduct of monetary policy (OECD, 2002).

In the past two years, the monetary stance has been accommodative, with the interest rate being cut successively and aggressively in response to the severe downturn and the appreciation of the franc linked to safe haven effects. The central value of the target band had been  $3\frac{1}{2}$  per cent at the peak in mid-2000, but had been lowered to  $1\frac{3}{4}$  per cent by the end of 2001 due to the sharp deterioration in the international environment, and to the subsequent appreciation of the franc. However, as the recovery did not materialise, and to counter the further appreciation of the franc, interest rates were cut again by a total of 100 basis points by summer 2002, and were left unchanged until March 2003. In March 2003, due to global economic and political uncertainties linked to the outbreak of the Iraq conflict, rates were cut again pre-emptively by 50 basis points while the target range was narrowed to  $0\text{--}\frac{3}{4}$  per cent. After this move, the franc depreciated by more than 5 per cent against the euro. In June and September 2003 rates were not changed, but they now fluctuate in the low end of the target range, around  $\frac{1}{4}$  per cent. In its most recent report, the SNB considered that inflationary pressures would only revive at the end of the projection period. While the current low interest rate was thought not to be sustainable in the medium term, there would be sufficient time to raise it once the recovery is firmly established. Overall, the interest rate differential with the euro area has widened over the last two years, as the SNB has reduced interest rates faster than the ECB (Figure 8).

Other indicators confirm the accommodative stance of monetary policy. A monetary conditions index, which takes into account interest rate and exchange rate developments,<sup>10</sup> suggests that monetary conditions are easy (Figure 9). Money aggregates have shot up, in part because of the easy monetary stance but also reflecting the greater demand for less risky assets after the slump in stock markets. Indeed, the increase in money holdings has not been accompanied by strong credit growth, which was negative in the second quarter of 2002 before recovering to a moderate  $1\frac{1}{2}$  per cent by mid-2003. Yield curves, which can be used to gauge market expectations of future inflation, remain relatively flat at the two-year horizon, while ten-year bond yields are below  $2\frac{3}{4}$  per cent (Table 7).

Figure 8. Interest rates



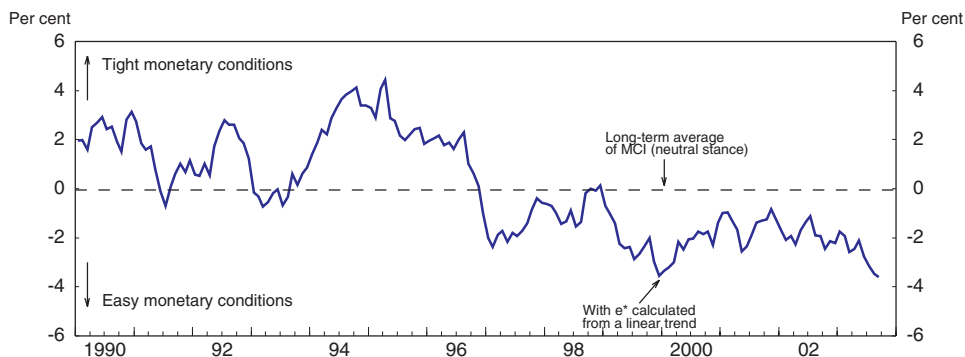
1. Confederation bonds of 10 years.

2. Listed federal securities with residual maturities of over 9-10 years.

Source: SNB and OECD.

### ***Deflation risks should not be exaggerated...***

Past periods of stagnation or recession were associated with higher rates of inflation than during this most recent episode. In the recession of 1983, for instance, inflation was near 3 per cent, while at the trough of the 1995 recession inflation was hovering around 2 per cent. The current business cycle conditions, with output remaining weak and a negative output gap estimated at 2 per cent, are likely to pull inflation further down from the already very low level. If negative risks materialise, delaying the recovery, inflation could enter into negative territory. Temporary deflation is not necessarily worrying as long as deflation does not become entrenched in expectations; indeed, in the recent past there have been sporadic episodes of negative inflation. Moreover, the risk of prolonged deflation should not be exaggerated, despite the current low rate of inflation, as the decline

Figure 9. **Monetary conditions index (MCI)**<sup>1</sup>

1. The MCI is defined as  $MCI = (r - r^*) + (e/e^* - 1) * w$ , where  $r$  is the real (CPI deflated) three-month LIBOR rate,  $r^*$  the long-term average of  $r$ ,  $e$  the real effective exchange rate (CPI based) and  $w$  is the weight of the exchange rate deviation from its average. It is set at  $1/3$ . Since the real exchange rate in Switzerland is characterized by a significant upward trend, the MCI uses the deviation of the real exchange rate from its (linear) trend  $e^*$  rather than from its long-term average. A negative MCI implies easy monetary conditions (relative to the long-term average).

Source: OECD.

Table 7. **Yield curve**  
Libor rates and bond yields, per cent<sup>1</sup>

	Libor 1 month	Libor 3 months	Libor 12 months	Bond 2 years	Bond 10 years
1998	1.25	1.41	1.71	1.81	3.07
1999	1.59	1.85	2.21	2.06	3.01
2000	3.37	3.37	3.37	3.52	3.88
2001	1.79	1.84	2.00	2.85	3.36
2002	0.61	0.62	0.69	1.84	3.22
2003 <sup>2</sup>	0.20	0.25	0.43	0.73	2.78

1. End-of-year values.

2. End September figures.

Source: SNB.

in Swiss prices would boost competitiveness and exports. A large negative shock to activity would be necessary to lead to a sizeable fall and prolonged decline in prices. In this context, the relatively high degree of wage rigidity limits deflation risks. Specifically, simulation exercises suggest that a shock to external demand induced by a delayed recovery in the European Union, or a temporary shock to household consumption, leading to lower GDP growth of  $\frac{3}{4}$  percentage point below the baseline, would not affect inflation in 2004 and would only have a small impact of about  $\frac{1}{2}$ - $\frac{3}{4}$  percentage point from 2005 onwards (Box 2). Only a substantial and sustained appreciation of the franc would result in a rapid and significant fall of

## Box 2. Deflation risks

In order to evaluate deflation risks, several medium-term scenarios have been elaborated using the OECD's INTERLINK model. The baseline scenario, which is used as a benchmark for comparison, is an extension of the current short-term projections until 2007. Around this, two simulations aim at illustrating the effects of a slowdown of external or internal demand on activity and prices with respect to the baseline.

The baseline scenario assumes that annual GDP growth would be 1¾ per cent between 2004 and 2008, significantly above potential growth to close the output gap by 2007. Inflation would decelerate to ¼ per cent in 2004-05 before increasing again with the acceleration of activity, while the unemployment rate would remain at around 4 per cent in 2004 and would fall afterwards to the estimated structural rate of 2½ per cent.

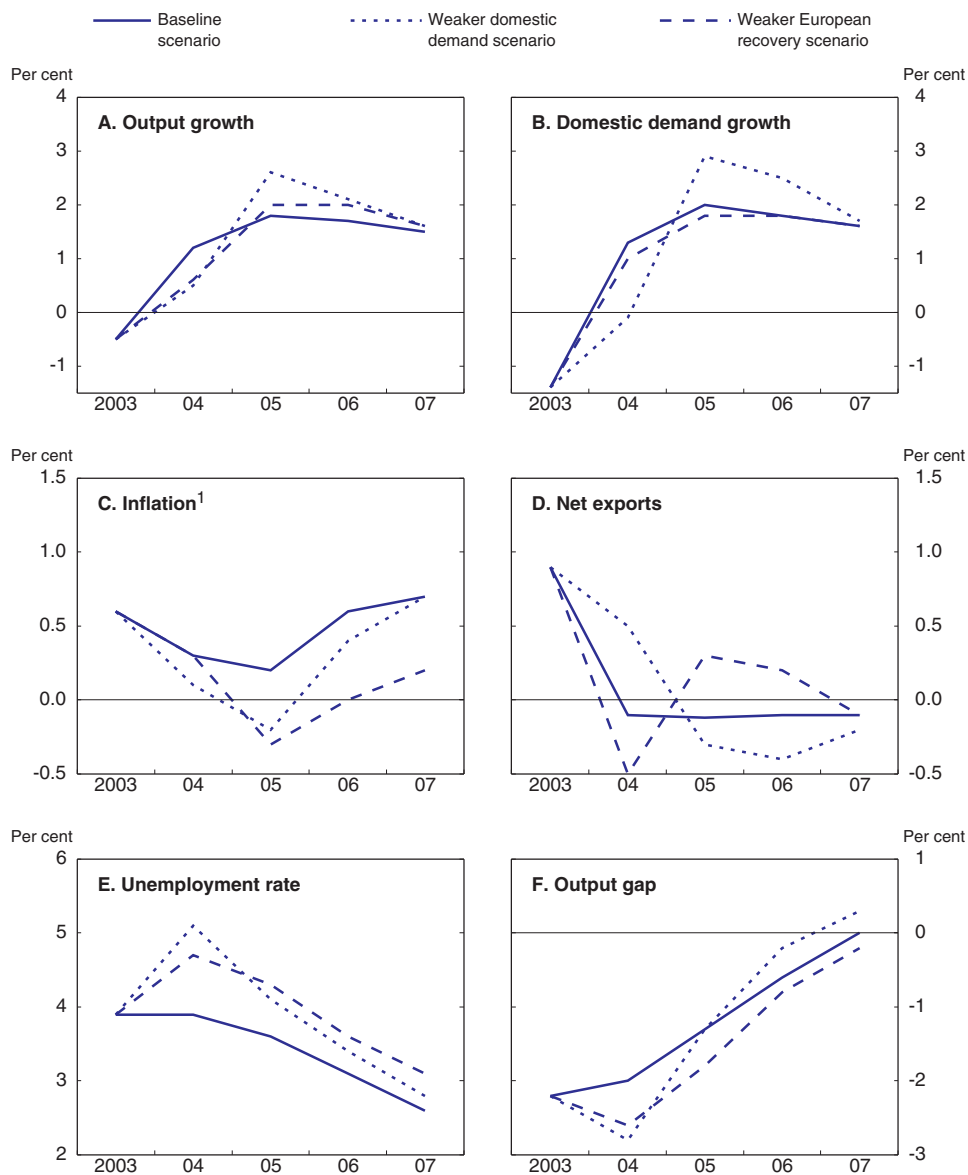
The scenario of lower external demand than in the baseline assumes a slower than projected recovery in the euro area, with growth 1 per cent lower in 2004, offset by an acceleration of ½ per cent above the baseline in 2005 and 2006. In this case, growth in Switzerland would be ¾ percentage point lower in 2004 than in the baseline, before progressively increasing as the external environment improves (Figure 10). Inflation would be scarcely affected in 2004, but could decelerate by ½ percentage point with respect to the baseline as from 2005 and remain close to zero.

The scenario of weaker than projected internal demand assumes that household consumption decelerates more than projected due to a deterioration of the labour market. Employment is assumed to grow *ex ante* ¾ percentage point less than in the baseline scenario in 2004, while the household savings rate would increase by 1¼ and ½ percentage point in 2004 and 2005 above the assumptions of the main scenario. In that case, and in the absence of a reaction of monetary policy, GDP growth would be ¾ percentage point lower than projected in 2004 to reach only ½ per cent, before increasing rapidly to 2½ per cent in 2005. Inflation could fall by ¼ percentage point in 2004 and ½ percentage point in 2005 with respect to the baseline, falling temporarily below zero. Overall, the impact on inflation of a delayed recovery due to internal or external reasons would be limited and unlikely to generate deflation.

An appreciation of the exchange rate, however, would have a stronger and more rapid effect on inflation. According to standard simulations, the reaction to a 10 per cent rise in the effective exchange rate would induce a reduction of the output level by around 1½-2 per cent below the baseline during two years and would decrease inflation by 2 percentage points. Such a shock, in the absence of a reaction from monetary policy, would put Switzerland in deflationary territory.

inflation, due to the large degree of openness of the Swiss economy. Specifically, an effective appreciation of 10 per cent would induce a fall of inflation of about 2 percentage points in the absence of a monetary policy reaction.

Figure 10. Downside risks around the projections



1. Change of the CPI over the previous year.  
 Source: OECD.

In the event that a protracted decline in prices were incorporated in expectations, demand could be affected further, with investment and consumption of durables being delayed in order to profit from lower prices in the future. At the same time, if falling prices were to affect real or financial assets, negative wealth effects could further damage demand and undermine the financial position of indebted households and businesses, which could destabilise the banking system. This situation could generate a mutually reinforcing process of deflation and recession; the experience of Japan in the past few years provides an example of such a situation.

However, the characteristics of the Swiss economy are quite different from those of Japan and provide a cushion against a prolonged period of deflation. *First*, Switzerland is a small open economy, whose cyclical dynamics depend to a large extent on those of the neighbouring countries, which makes an isolated deflationary process unlikely. If deflation and depression hit the European Union (its main trading partner) as a whole, policy action there could be expected. *Second*, both households and companies have sound financial accounts, with small debt burdens, implying that temporary deflation would not feed quickly into a large number of defaults. *Third*, the Swiss banking system is robust, which implies that the risk that deflation would generate a credit crunch is small. Finally, broad money growth has accelerated markedly and credit growth picked up recently, confirming that in Switzerland the monetary transmission mechanism is working as expected (Table 8).

Table 8. **Growth of money supply and domestic credit**  
Year-on-year percentage change

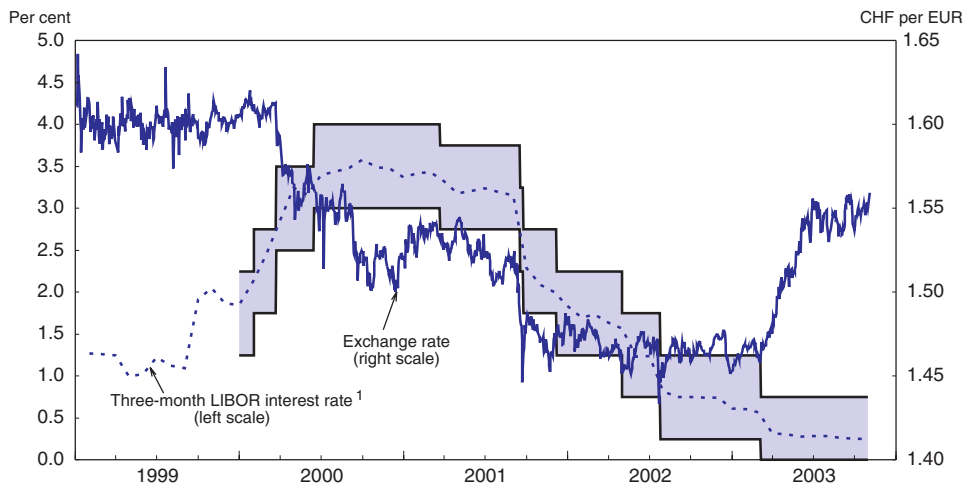
	2001	2002	2003		
			Q1	Q2	Q3
M1	1.0	8.7	15.0	25.3	23.5
M2	-2.3	8.1	13.4	19.7	18.6
M3	3.1	3.8	6.8	9.2	8.8
Domestic credit	1.5	-0.5	-0.3	0.3	0.7

Source: SNB, *Bulletin mensuel de statistiques économiques*, October 2003.

### **... but require continued surveillance**

While the effectiveness of monetary policy against high inflation has been repeatedly confirmed, fighting deflation appears to be more difficult. Once a deflationary process starts, traditional monetary policy instruments lose their power to pull the economy out of deflation, since interest rates hit the zero bound

Figure 11. Three-month LIBOR and the CHF/EUR exchange rate



1. The shaded area corresponds to the National Bank's intervention corridor.

Source: SNB, *Bulletin mensuel de statistiques économiques*, October 2003 and OECD.

and increases in the monetary base may not translate into higher demand. In this context, pre-emptive action is preferable. However, at the extreme, unorthodox instruments of monetary policy to raise inflation expectations may have to be used. The SNB has indeed reacted rapidly and pre-emptively to the appreciation of the franc with interest-rate cuts to cushion a negative external shock in a period of weak demand and inflation. In particular, the cut of the LIBOR by 50 basis points in March 2003 was beyond market expectations, sending a strong signal that it would counter appreciation pressures on the franc in a period of stagnation. Indeed, the franc depreciated against the euro after this move (Figure 11). Communication policy has also helped, as the SNB has made clear that it is ready to use unsterilised interventions in the foreign exchange markets if additional pressures on the franc materialise. The SNB rightly considers that intervention in foreign exchange markets would be a more effective instrument to generate inflation expectations than the purchase of other assets, like long-term bonds, this market being relatively illiquid in Switzerland.

### ***The exchange rate is an important variable in the management of monetary policy***

Over the last two decades the Swiss franc has shown a trend appreciation both in nominal and real effective terms (Figure 2). The main forces behind this trend are not clear-cut (Box 3). It is often argued that the relatively high productivity



### Box 3. The Swiss franc: ever stronger?

The Swiss situation is unusual. *First*, while the nominal effective exchange rate has clearly risen on both the official and OECD measure, the real effective exchange based on relative CPIs has shown a more modest rise, even though the rate based on relative export prices has shown a significant upward trend since the mid-1980s. *Second*, while Switzerland has a very large current account surplus, only about half of it is due to the external balance on goods and services. Other countries with a large current account surplus (Finland, Ireland, Korea and the Netherlands) showed a strong export performance, but Switzerland did not. *Third*, Switzerland benefited most of all OECD countries from terms-of-trade gains.

There are two prominent approaches to explain real exchange rate developments. These are: the purchasing power parity (PPP) model and structural models that determine medium to long run equilibrium exchange rates that satisfy stock/flow equilibrium.

The purchasing power parity hypothesis states that national price levels should be equal when expressed in a common currency. There are various reasons why PPP may not hold in the short run, but a large body of empirical work has examined the validity of PPP in the long run by either testing whether nominal exchange rates and relative prices move together in the long run or by testing whether the real exchange rate has a tendency to revert to a stable equilibrium level over time. Whether PPP holds in the long run remains contentious, but recent work modelling the real exchange rate in a non-linear fashion have found more evidence for mean reversion. These models suggest that the exchange rate becomes increasingly mean reverting with the size of the deviation from the equilibrium level. For Switzerland, Guerra (2003) and Kilian and Taylor (2001) find evidence for mean reversion, while Baum *et al.* (2001) do not. Mean reversion of the Swiss real exchange rate, when calculated with export prices, is however unlikely to hold.

PPP, the equalisation of aggregate prices, is not a necessary implication of open international markets. Theory would suggest only that at the commodity level, the price of traded goods should be equalised across borders, after allowing for transport costs and trade barriers. Also, differences of relative prices of traded goods may be due to quality effects. In addition, many goods are not traded, and their prices could differ systematically across countries. Trend differences in relative prices of non-traded goods across countries may account for trends in real exchange rates based on aggregate price indices. The Balassa-Samuelson hypothesis, for instance, ascribes trends in real exchange rates to the differences in relative price trends of non-traded goods and services, which are driven by differences in productivity growth. Aebersold and Brunetti (1998) found that this is important for Switzerland. In the Swiss Franc – Deutsche Mark case, there is a large divergence of the development of tradable and non-tradable prices, with the difference in productivity between the tradable and non-tradable sector being larger in Switzerland than in Germany. The Swiss central bank has established a similar empirical regularity in the case of the euro exchange rate.

**Box 3. The Swiss franc: ever stronger? (cont.)**

In the NATREX (NATURAL Real Exchange) approach, the real exchange rate is explained by changes in thrift and productivity, and for small countries by changes in the terms of trade and world interest rates. Thrift changes savings and productivity affects investment. Under the assumption of relatively high long-term capital mobility these factors drive the real exchange rate to produce the necessary change in the current account (Stein *et al.*, 1995). The fundamental equilibrium exchange rate (FEER) model is similar in spirit: it determines the real exchange rate that would bring the current account in line with some measure of desirable capital flows, the latter being investment and saving that are not distorted by public policy. No research applying the NATREX or FEER model to the Swiss case could be found. But clearly the stylised facts also accord with this model. When growth slowed down appreciably this implied a slower growth in the capital stock and a sizeable downward adjustment in the investment ratio. Indeed, the Swiss investment ratio has shown the steepest trend decline in the OECD, after Japan, while national saving has stayed very high. Thus, a large current account surplus emerged, and this was pushed higher by the large factor income flow from abroad. For reasons that are not well understood, the rise in foreign assets has not led to stronger consumption over the medium term, so that a significant rise in the real exchange rate was needed to hold exports back and encourage imports in order to keep the rise in the current account balance in check. According to the model, a further appreciation will be needed for the external position to stabilise, but the dynamics will depend strongly on whether it is possible to revive the Swiss economy. Stronger growth would imply higher imports, a smaller current account surplus and thus probably less of a medium-term appreciation that in itself tends to stifle growth.

growth in the exporting sector is the main explaining factor. Nevertheless, the loss of export market shares, common to many developed countries due to the catching-up of less developed ones, has been stronger in Switzerland than in other OECD countries. The high propensity to save of Swiss households and firms, reflected in a very large trend current account surplus of around 10 per cent, may also contribute to the appreciation trend.

Irrespective of the factors that explain the real trend appreciation, it is clear that the real exchange rate is an endogenous variable that reacts to shifts in underlying forces and it cannot be influenced by monetary policy. The nominal exchange rate is not a target of Swiss monetary policy, although nominal rates are an important information variable for the SNB, not least because of the high elasticity of inflation and activity to the exchange rate. The role of the franc as a safe haven currency in periods of international economic or geopolitical uncertainty complicates the implementation of monetary policy, as these exchange rate movements may lead to

monetary conditions that are not appropriate for the underlying economic conditions in Switzerland. In this sense, lower fluctuations of the exchange rate around a long-term trend may be desirable, although the negative impact of exchange rate volatility on output is difficult to pin down in empirical studies.

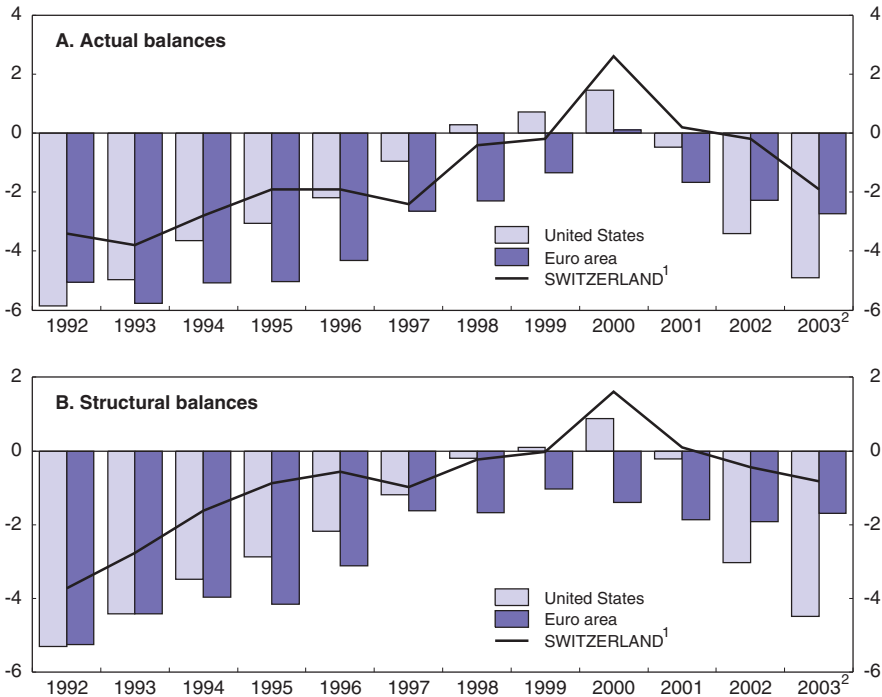
Over the recent past a more stable exchange rate *vis-à-vis* the European countries (which account for 60 per cent of Swiss exports) has been apparent. This greater stability reflects to some extent the reaction of monetary policy to pressures on the franc that were considered to be linked to safe haven considerations. It is also the result of the introduction of the euro, which implies that there is a reduced risk of currency misalignments among European currencies. The anti-inflationary reputation acquired by the European Central Bank since its creation may also have had a positive stabilising effect. The latter two factors may contribute in the future to reduce pressures on the franc as a temporary safe haven, which should facilitate the management of monetary policy and be beneficial for the Swiss economy as a whole.

### Fiscal policy

Following the fiscal consolidation of the 1990s, public finances have deteriorated uninterruptedly over the last few years, though the deficit remains smaller than in the euro area on average and in the United States (Figure 12). In international comparison, fiscal policy remains relatively sound, the more so as public debt is also low by international standards and contingent liabilities related to population ageing are smaller than in other countries. Nevertheless, recent budget trends are a cause for concern. The budget balance moved from a surplus of 2½ per cent of GDP in 2000 to a deficit of almost 1 per cent in 2002 (excluding exceptional receipts). It affected all levels of government, particularly the Confederation, and continued in 2003, with the overall deficit expected to reach some 2 per cent of GDP (Figure 13). The deterioration is partly due to the negative impact of the economic situation. But it also reflects a marked widening of the cyclically-adjusted budget deficit which could reach approximately ¾ per cent of GDP in 2003. In particular, federal revenue declined markedly following a brisk increase until 2000, partly due to fluctuations in the financial asset cycle which distorted both developments in and estimates of structural balances. According to the authorities, the Confederation's balance (financial accounts definition) could show a deficit of ¾ per cent of GDP in 2003, instead of the balanced budget that had been expected.<sup>11</sup> Overall, the fiscal stance has eased substantially since 2000. While this probably has supported economic activity, it emphasises the importance of ensuring that medium-term fiscal soundness is not put at risk.

Fiscal policy is bound by the debt containment rule which, starting in 2003, requires the federal accounts to be in balance in structural terms by capping expenditure.<sup>12</sup> Strict implementation of this rule in 2004 would require a

Figure 12. **Fiscal balances of general government**  
As a percentage of GDP



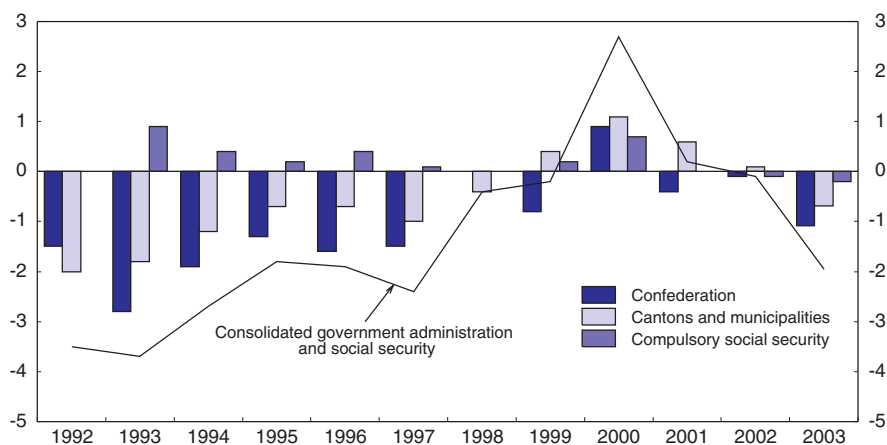
1. "Statistique financière révisée" basis. The Swiss structural balance excludes exceptional factors such as the sale of shares in Swisscom in 2002.

2. Estimates.

Source: Administration fédérale des finances and OECD.

fiscal tightening to eliminate the 2003 structural deficit. Given the risk that such a policy could further weaken an already depressed economic situation, and with the uncertain outlook, the Federal Council has suggested easing the short-term constraint imposed by this rule. It has proposed to Parliament to raise the expenditure ceiling on a temporary basis. Although consistent with the spirit of the constitutional rule on debt containment, this measure must not damage its credibility or call into question the authorities' commitment<sup>1</sup> to restore public finance equilibrium on a sustainable basis. This is why these measures are part of a medium-term fiscal consolidation strategy (Chapter II). In the short term, however, the fiscal stance could remain slightly accommodating.

Figure 13. **Budget balances by level of government<sup>1</sup>**  
As a percentage of GDP



1. "Statistique financière révisée" basis. Data for 2003 are estimates.  
Source: Administration fédérale des finances.

### ***The public accounts worsened in 2002 and the federal budget is in structural deficit in 2003***

Whereas a balanced outcome for general government was projected for 2002, a deficit of some CHF 650 million (0.2 per cent of GDP) was recorded. However, this includes exceptional revenues of CHF 3.7 billion (0.9 per cent of GDP) from the sale of Swisscom shares. Excluding this, the deviation from the forecast is in excess of 1 per cent of GDP. The slippage is attributable to the marked downturn in federal tax revenue and the optimistic forecast of social security revenues, whereas expenditure by these levels of government was contained (Table 9). According to preliminary information on the 2003 budget outcome, the forecasts for general government, which anticipated a deficit of  $\frac{3}{4}$  per cent of GDP, will not be met again because of further slippages in the federal and social security accounts. The deficit could reach nearly 2 per cent of GDP. Federal tax revenue has remained sluggish since the second half of 2002 and total resources of the Confederation could be more than 7 per cent down on the budget forecast (*i.e.* CHF 3.7 billion). Tax revenues from financial and stock market activities, which are important for the central government, have remained very depressed,<sup>13</sup> while the unforeseen stagnation of economic activity in 2003 has also weakened other revenues, particularly corporate income tax.

Table 9. Government accounts

	Outcomes		Budgets		Estimates		Financial plan <sup>1</sup>		
	2000	2001	2002	2003	2002	2003	2004	2005	2006
<b>Confederation<sup>2</sup></b> (CHF millions)									
Expenditure	48 208	51 136	52 530	52 605	51 970	52 075	53 193	55 308	56 992
Revenue	51 994	49 436	51 226	51 147	51 430	47 517	48 804	52 188	54 341
Balance	3 786	-1 700	-1 304	-1 458	-540	-4 558	-4 389	-3 120	-2 651
Expenditure excl. special proceeds <sup>3</sup>	48 208	50 056			51 281	52 075			
Revenue excl. special proceeds <sup>3</sup>	50 362	47 531			46 577	47 517			
Balance excl. special proceeds <sup>3</sup>	2 154	-2 525			-4 704	-4 558			
<b>Cantons</b> (CHF millions)									
Expenditure	60 151	64 001	64 400	67 000	67 000	67 000	67 093	67 870	68 660
Revenue	62 818	65 257	63 800	65 000	67 000	65 000	64 888	66 378	67 900
Balance	2 667	1 256	-600	-2 000	0	-2 000	-2 205	-1 492	-760
<b>Municipalities</b> (CHF millions)									
Expenditure	40 599	41 709	42 800	44 400	43 500	44 400	44 008	44 224	44 440
Revenue	42 068	43 033	42 400	43 700	44 000	43 700	42 525	43 203	43 890
Balance	1 469	1 324	-400	-700	500	-700	-1 483	-1 021	-550
<b>Compulsory social security</b> (CHF millions)									
Expenditure	44 388	46 179	48 949	51 501	48 625	52 671	54 117	54 047	54 621
Revenue	47 105	46 309	51 383	52 196	48 009	51 842	51 815	54 893	57 142
Balance	2 717	130	2 434	695	-616	-829	-2 302	846	2 521
Expenditure excl. special proceeds <sup>4</sup>	43 338	44 479			47 475	52 671			
Revenue excl. special proceeds <sup>4</sup>	47 105	46 309			48 009	51 842			
Balance excl. special proceeds <sup>4</sup>	3 767	1 830			534	-829			
<b>Consolidated account of general government<sup>5</sup></b> (CHF millions)									
Expenditure	152 524	159 977	165 802	168 396	168 014		170 291	172 370	178 937
Revenue	163 163	160 986	165 932	164 933	167 358		165 760	172 752	179 188
<b>Balance</b>	<b>10 639</b>	<b>1 010</b>	<b>130</b>	<b>-3 463</b>	<b>-656</b>	<b>-8 087</b>	<b>-10 379</b>	<b>-4 787</b>	<b>-1 440</b>
<b>Balance excl. special proceeds<sup>3,4</sup></b>	<b>10 057</b>	<b>1 885</b>			<b>-3 670</b>	<b>-8 087</b>	<b>-10 379</b>	<b>-4 787</b>	<b>-1 440</b>
<b>Balance (% of GDP)</b>									
Confederation	0.9	-0.4	-0.3	-0.3	-0.1	-1.1	-1.0	-0.7	-0.6
Cantons	0.7	0.3	-0.1	-0.5	0.0	-0.5	-0.5	-0.3	-0.2
Municipalities	0.4	0.3	-0.1	-0.2	0.1	-0.2	-0.3	-0.2	-0.1
Compulsory social security	0.7	0.0	0.6	0.2	-0.1	-0.2	-0.5	0.2	0.5
<b>Consolidated general government</b>	<b>2.6</b>	<b>0.2</b>	<b>0.0</b>	<b>-0.8</b>	<b>-0.2</b>	<b>-1.9</b>	<b>-2.4</b>	<b>-1.1</b>	<b>-0.3</b>
<b>Balance excl. special proceeds<sup>3,4</sup></b> (% of GDP)									
Confederation	0.5	-0.6			-1.1	-1.1			
Cantons	0.7	0.3			0.0	-0.5			
Municipalities	0.4	0.3			0.1	-0.2			
Compulsory social security	0.9	0.4			0.1	-0.2			
<b>Consolidated general government</b>	<b>2.5</b>	<b>0.5</b>			<b>-0.9</b>	<b>-1.9</b>			
<b>Debt (% of GDP)</b>	51.2	51.4			55.4	55.7			

1. Partially estimated. Includes the expected outturns of the 2003 fiscal reduction plan proposed by the Federal Council.

2. Includes railway infrastructure financing fund and Swiss Federal Institutes of Technology.

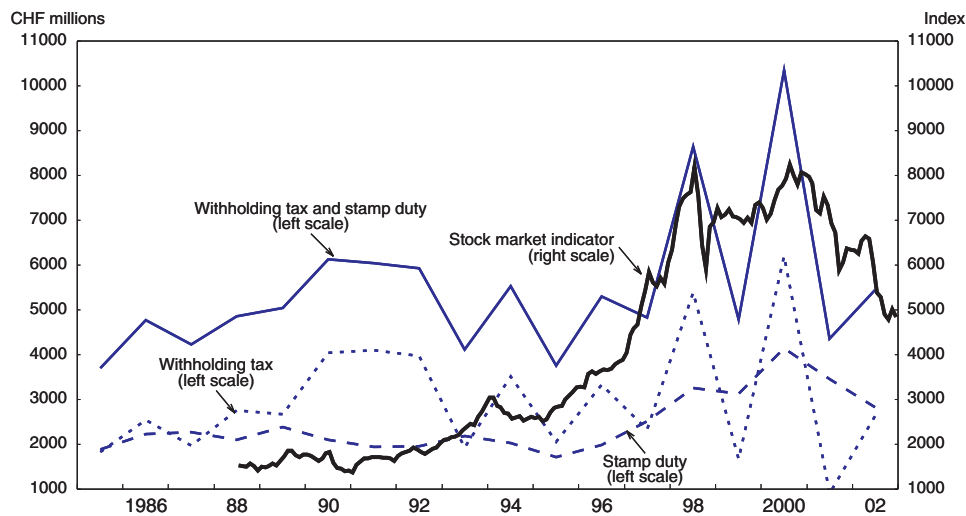
3. Excluding proceeds from the sale of shares in Swisscom (CHF 3.7 billions) in 2002. The Confederation account was also adjusted for the reimbursement of loans granted to the unemployment insurance which was included in the social security account.

4. Excluding transfers related to grants and their subsequent repayment from the Confederation to the unemployment insurance system.

5. Double counting not included in the total.

Source: Administration fédérale des finances.

Figure 14. Federal tax revenues and the stock market



Source: Datastream and OECD.

According to official estimates, over half (2½ percentage points) of the deterioration in public finances between 2000 and 2003 (4½ per cent of GDP, excluding exceptional factors) is attributable to a reduction in the cyclically-adjusted budget balance, which is largely (1¼ per cent of GDP) due to the federal level. The structural balance of the cantons and communes also worsened by almost 1 per cent of GDP as a result of the easing of fiscal policy following the exceptional results achieved in 2000, while the balance of the social security account remained more or less stable.<sup>14</sup> The easing of federal fiscal policy between 2000 and 2003, as measured by the cyclically-adjusted balance, does not reflect the adoption of discretionary measures by the authorities but the end of the temporary factors that had swelled revenues. In Switzerland as in other countries, the financial asset cycle and other specific factors temporarily increased non-cyclical tax revenue in the late 1990s and early 2000s. The high levels of revenue during this period, especially from stamp duty and withholding tax, was partly due to the exceptional financial market situation and to corporate profits, which have dipped sharply since (Figure 14). Corporate profits were also boosted until the early 2000s by a change in accounting standards which resulted in the elimination of hidden reserves. This temporarily increased the cyclically-adjusted budget balance, but that phenomenon came to an end during the recent period, notably as a result of the bursting of the financial bubble.<sup>15</sup> This development led to the re-assessment of the Confederation's structural budget balance, with the

authorities now forecasting a deficit of between  $\frac{1}{2}$  and 1 per cent of GDP in 2003 instead of a balanced budget as previously projected.

The official figures may slightly underestimate (by about  $\frac{1}{2}$  per cent of GDP) the scale of the structural deterioration in the consolidated government accounts in recent years.<sup>16</sup> The OECD Secretariat's estimate suggests that it could have amounted to almost 3 per cent of GDP between 2000 and 2003 because the structural weakening of the social security accounts may have been underestimated.<sup>17</sup> Official estimates indicate no deterioration in the social security's cyclically-adjusted balance despite the continuous worsening of the disability insurance budget and the cut in the rates of contribution to unemployment insurance in 2003, which was only partially offset by the reduction in the maximum duration of compensation and the increase in the minimum contribution period. Also, there could be a slight distortion in the official estimates of the structural balances if, as the OECD Secretariat's estimates suggest, the output gap is larger in 2003 ( $-2\frac{1}{4}$  per cent) than the authorities' estimate indicates ( $-1\frac{1}{4}$  per cent). This difference suggests, that the cyclically-adjusted deficit of the Confederation for 2003 could be towards the bottom end of the range of the official estimate ( $-\frac{1}{2}$  per cent of GDP). This slight overestimation of the structural deficit, which also affects the cantons and communes, is however offset by the social security balance being overestimated in 2003.

### ***Fiscal policy will be slightly expansionary in the short term***

*The federal authorities want to avoid pursuing a pro-cyclical fiscal policy*

The difficulty to take account of the transitory nature of certain factors, which led to the cyclically-adjusted federal budget deficit being underestimated for 2003, make the management of the Confederation's finances more complex. The debt containment rule requires permanent structural balance and strict application of the rule would mean eliminating the deficit as of 2004. Such an adjustment would mean adopting a restrictive policy, and could weaken an already depressed economic situation or to check an incipient upturn. The government has recognised the need to temporarily amend the fiscal rule and has submitted a proposal to Parliament which would allow the non-cyclical federal deficit to be reduced gradually. According to the Federal Council this strategy, which does not invoke the exceptionality clause provided by the debt containment rule,<sup>18</sup> would be consistent with the spirit of the constitutional mandate to take the economic situation into account in applying the fiscal rule. Under the proposal, to be discussed this autumn, the ceiling on expenditure permitted by the debt containment rule would be raised, allowing an overshoot of CHF 3 billion in 2004 ( $\frac{3}{4}$  per cent of GDP), CHF 2 billion in 2005 ( $\frac{1}{2}$  per cent of GDP) and CHF 1 billion in 2006 ( $\frac{1}{4}$  per cent of GDP). These measures are



accompanied by a medium-term consolidation plan, which will also be discussed by Parliament this autumn (Chapter II).

#### *Main features of the 2004 budget*

The 2004 budget will be based on GDP growth of 1 per cent, which is below potential growth. With the fiscal policy options under discussion until the autumn, it is difficult to forecast the consolidated general government budget. The provisional estimates suggest that it could worsen slightly on 2003 and show a deficit of 2½ per cent of GDP. For the Confederation, the objective for 2004 is to stabilise spending in real terms, which is to be achieved at least partly through the early implementation of some of the measures included in the medium-term consolidation programme. The result should be savings of CHF 800 million, achieved by a number of measures, in most areas of federal spending. In view of the expected revenue trend, the federal deficit is likely to be reduced only marginally, so that fiscal policy will probably be neutral (Table 9). The social security accounts, on the other hand, could be slightly expansionary. As in 2003, unemployment insurance contributions are scheduled to fall, in accordance with the reform adopted in autumn 2002 (Chapter IV). These adjustments are compatible with continuing equilibrium of the unemployment insurance accounts over an entire cycle. However, further slippage of the disability pension system is probable, corrective measures being unlikely to come into effect before 2005. Overall, the social security deficit could rise by ¼ per cent of GDP compared to 2003, despite the projected upturn. Greater uncertainty surrounds the policy of the cantons and communes. According to the autumn 2002 financial plan it was designed to maintain the fiscal positions achieved in 2003 and will probably be slightly expansionary. That said, increased fiscal stringency as regards expenditure in particular cannot be ruled out, especially at cantonal level, following the deterioration of the last few years.

#### *Assessment*

The Federal Council's decision not to tighten the Confederation's budget by proposing to lift the debt containment constraint temporarily is judicious, bearing in mind the persisting sluggishness of the economic situation and the uncertainty about the strength of the economic upturn in 2004. The macroeconomic assumptions underlying the budget seem slightly optimistic, as they rely to a large extent on a swift euro area recovery which may be more muted. In this context, it is better not to risk weakening activity any further through budgetary restrictions at federal level, particularly if the latter were to be complemented by the cantons and communes. This strategy allows the authorities to remain in line with the spirit of the debt containment rule by allowing the automatic stabilisers to play their role, and to wait for the upturn before adopting a more restrictive stance. The slight

reduction in the cyclically-adjusted social security balance also seems justified inasmuch as it reflects a decline in unemployment insurance contributions that does not endanger the equilibrium of the accounts in the long term. While the recovery must not be hindered in the short term by a restrictive fiscal policy, it is however important to avoid any further major structural deterioration in the government accounts, which would be neither desirable nor an effective way of stimulating activity. Recourse to fiscal activism in the past, as in 1997, was not as effective as expected, so that focusing on budgetary sustainability over the medium term is no doubt the best option. It is a strategy that ought to be applied at all levels of government.

### **The main medium and long-term policy challenges**

Overall, the macroeconomic policy followed by the authorities appears well adapted to the current cyclical position as it supports the recovery, while minimising deflation risks. However, the difficulties ahead in ensuring the long-term viability of public finances should not be underestimated, especially if trend growth remains weak. In particular, efforts are required to better control government spending. Medium and long-term issues concerning the sustainability of the public finances are taken up in Chapter II. The main policy challenge is however to strengthen trend growth. To that end, stepping up productivity gains will no doubt require important reforms to the functioning of the product markets and a strict implementation of the new competition policy framework. This should be a priority on the reform agenda and is indispensable for raising potential output growth. The persisting problems in this domain are analysed in Chapter III, which also provides a set of recommendations to correct the main shortcomings. Chapter IV of the Survey focuses on the other structural reforms required to reinforce employment performance, including raising education results. Measures stimulating the participation of females and older workers in the labour market would also be desirable to raise trend growth, even though the employment ratio is already high in international comparison.

## Notes

1. Recession is usually defined as two or more consecutive quarters of negative GDP growth. However, the Swiss authorities do not apply the same definition for a recession.
2. Measured in constant francs, the ratio of investment to GDP rose by 4½ percentage points between 1993 and 2000, *i.e.* substantially more than in other European countries, reaching its highest level since 1970. Despite having fallen by 2½ percentage points since 2000, the investment ratio is still quite high in a historical perspective. Measured in current francs, the rise in the investment ratio in the late 1990s was much the same as in France or Germany, while the recent fall has been more pronounced than in these countries.
3. However, the effect of interest rates on construction investment is limited as a quarter of this expenditure is made by government.
4. In the third quarter of 2003, new car registrations had fallen by 13 per cent since end-2000.
5. During both the expansion and the contraction phases of the cycle, part-time work has increased. Since the start of 1998, it is up by 175 000 persons (+20 per cent), whereas full-time employment has fallen by 35 000 people (-1.4 per cent).
6. Nominal downward wage flexibility being greater for people changing jobs (and those working part time), the present phase of redundancies ought to be followed by a period of greater wage restraint during the initial improvement in the labour market.
7. These projections are consistent with those presented in the OECD *Economic Outlook*, No. 74, December 2003.
8. The capacity utilisation rate reached 81 per cent in industry in the first half, but remains well below the multi-year average (84 per cent).
9. However, according to standard national accounting data, this increase in income does not seem to have helped consumption to grow faster than output, compared to other countries (Figure 5).
10. The index of monetary conditions uses the fluctuations of real exchange rates around its long-run trend, which is ½ per cent per annum.
11. Swiss government accounts are not available on a national accounts basis, as in other countries, nor with the same degree of detail. The consolidated accounts are based on the revised financial statistics. Moreover, where the Confederation is concerned, budget discussions are based on the financial accounts data. The latter does not incorporate special funds such as that for major railway projects. The debt containment rule applies to the financial account of the Confederation.
12. The debt containment rule requires federal accounts to be in balance once cyclical effects on the budget have been taken into account. To achieve this, a ceiling on

- expenditure has been set on the basis of estimated cyclically-adjusted revenue so that, while revenue can fluctuate cyclically, the rule prevents these fluctuations from having an impact on expenditure (OECD, 2002).
13. In 2003, revenue from withholding tax and stamp duty, which makes up some 15 per cent of federal tax receipts, could be over 40 and nearly 25 per cent down, respectively, on budget projections.
  14. Official estimates suggest that there is a gap between the sum of the structural balances of the different levels of government and that of government as a whole. This statistical problem accounts for approximately  $\frac{1}{4}$  per cent of GDP of the fall in the consolidated general government balance.
  15. The increase and then the fall in revenue due to financial market developments result from an “automatic stabilisation” effect of the financial asset cycle stemming from the impact of the tax system on their valuation and on financial transactions. This effect is not, however, taken into account by the traditional methods of estimating structural budget balances.
  16. The change in the output gap by some  $2\frac{3}{4}$  percentage points between 2000 and 2003 is likely to have increased the budget deficit by  $\frac{1}{4}$  to  $1\frac{1}{2}$  per cent of GDP. Standard estimates indicate that a 1 percentage point fall in the output gap reduces the budget balance by  $\frac{1}{2}$  per cent of GDP in the majority of OECD countries. In this case, more than 3 percentage points of the deterioration in the general government balance of  $4\frac{1}{2}$  per cent of GDP between 2000 and 2003 would be attributable to non-cyclical factors.
  17. The method used by the authorities to estimate the structural balance of the social security system is not consistent with that used for the other levels of government, being based on an evaluation of the cycle different from that measured by the output gap. Whereas, for example, the authorities estimated the output gap in 2002 to be zero, the cyclical budget balance of the social security was not zero, in contrast with that of the other levels of government.
  18. The budgets voted by Parliament may exceed the expenditure ceiling as defined by the debt containment rule for reasons stipulated by law. These include exceptional events that cannot be controlled by the Confederation (such as a serious recession, a natural disaster or some other specific event), but also payment peaks due to accounting practices as well as adaptations of the accounting system. In this case, a qualified majority vote by Parliament (*i.e.* an absolute majority of the members in the two Chambers) is necessary.

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## Glossary of acronyms

<b>AI</b>	Disability insurance
<b>AIMP</b>	<i>Accord international sur les marchés publics</i> (Inter-cantonal Agreement on Public Procurement)
<b>ALMPs</b>	Active labour market programmes
<b>AP</b>	Agricultural Policy
<b>AVS</b>	First pillar of the old-age insurance
<b>BAK</b>	Conjuncture Institute of Basel
<b>BLS</b>	Bureau of Labour Statistics
<b>CDIP</b>	<i>Conférence suisse des directeurs cantonaux de l'instruction publique</i> (Swiss Conference of Cantonal Ministers of Education)
<b>CFR</b>	Federal railway company
<b>CHF</b>	Swiss franc
<b>ComCom</b>	Federal Communications Commission
<b>COMCO</b>	Competition Commission
<b>CPI</b>	Consumer Price Index
<b>DFI</b>	Federal Department of the Interior
<b>DI</b>	Disability Insurance
<b>DMA</b>	Domestic Market Act
<b>EC</b>	European Commission
<b>ECB</b>	European Central Bank
<b>EEA</b>	European Economic Area
<b>EFTA</b>	European Free Trade Area
<b>EMS</b>	<i>Établissements médico-sociaux</i> (Medico-social institutes caring for the elderly)
<b>EU</b>	European Union
<b>EUR</b>	Euro currency
<b>FBC</b>	Federal Banking Commission
<b>FEER</b>	Fundamental Equilibrium Exchange Rate
<b>FOPI</b>	Federal Office of Private Insurance
<b>g</b>	gram
<b>GDP</b>	Gross Domestic Product
<b>GHG</b>	Greenhouse gas
<b>GNP</b>	Gross National Product
<b>HES</b>	<i>Hautes Écoles Spécialisées</i>
<b>HFCs</b>	Hydrofluorocarbons
<b>HMO</b>	Health Maintenance Offices (Health-care networks)
<b>HP</b>	Hodrick-Prescott (filter)
<b>INTERLINK</b>	Macroeconomic model of the OECD Economics Department
<b>kg</b>	kilogram

<b>KOF</b>	Federal Polytechnic School of Zurich
<b>KWh</b>	kilo watts per hour
<b>LACI</b>	Unemployment insurance law
<b>LIBOR</b>	London Interbank Offered Rate
<b>LPP</b>	Occupational benefit law
<b>mg</b>	milligram
<b>MLCA</b>	Money Laundering Control Authority
<b>MWh</b>	mega-watts per hour
<b>NAIRU</b>	Non-accelerating inflation rate of unemployment
<b>NATREX</b>	Natural real exchange rate
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>OFAS</b>	Office <i>fédéral des assurances sociales</i> (Federal Social Insurance Office)
<b>OFEFP</b>	Office <i>fédéral de l'environnement, des forêts et du paysage</i> (Swiss Agency for the Environment, Forests and Landscape)
<b>OFS</b>	Office <i>fédéral de la statistique</i> (Federal Statistics Office)
<b>OPCA</b>	Office <i>parlementaire de contrôle de l'administration</i> (Parliamentary body)
<b>ORPs</b>	Regional placement offices
<b>OSEL</b>	Organisation of the Electricity Sector
<b>PET</b>	Polyethylene terephthalate
<b>PFCs</b>	Perfluorocarbons
<b>PISA</b>	Programme for International Student Assessment
<b>PPP</b>	Purchasing Power Parity
<b>R&amp;D</b>	Research and Development
<b>SIA</b>	Strategic Impact Assessment
<b>SMEs</b>	Small and medium-sized enterprises
<b>SNB</b>	Swiss National Bank
<b>STEP</b>	OECD working group on short-term projections
<b>SWX</b>	Swiss Exchange
<b>UB</b>	Unemployment benefit
<b>UBS</b>	Union Bank of Switzerland
<b>UMTS</b>	Universal Mobile Telephone System (third generation mobile telephone system)
<b>USD</b>	United States dollar
<b>VAT</b>	Value Added Tax
<b>WTO</b>	World Trade Organisation

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## BASIC STATISTICS OF SWITZERLAND

### THE LAND

Area (1 000 sq. km)	41.3	Major cities (1 000 inhabitants, 31.12.2001):	
Cultivated land, grassland and pastures (1 000 sq. km)	15.3	Zurich	340.9
Forests (1 000 sq. km)	12.7	Basel	164.9
		Geneva	176.0
		Bern	122.5

### THE PEOPLE

Population (thousands, 31.12.2002)	7 138	Civilian employment (thousands, 2002)	4 172
Number of inhabitants per sq. km (2002)	177	Agriculture (%)	4.1
Net natural increase (thousands, 2002)	10.6	Industry and construction (%)	25.1
Number of foreign workers (thousands, 2002)	1 058	Services (%)	70.8

### PRODUCTION

Gross domestic product, current prices (2002)		Gross fixed investment, current prices (2002)	
CHF billion	417.3	% of GDP	18.9
Per head (USD)	36 630	Per head (USD)	6 912

### THE GOVERNMENT

Public consumption (% of GDP, 2002)	15.2	Composition of Parliament		
General government (% of GDP, 2002)		(No. of seats)	National Council	State Council
Expenditure	40.3	Socialists	52	9
Revenues	40.1	Central Democratic Union	55	8
Debt	55.4	Radical Democrats	36	13
		Christian Democrats	28	14
		Other	29	2

Last elections: October 2003

Next elections: October 2007

### FOREIGN TRADE

Exports of goods and services (% of GDP, 2002)	37.3	Imports of goods and services (% of GDP, 2002)	33.1
Commodity exports (billion CHF, 2002)	130.4	Commodity imports (billion CHF, 2002)	123.1
Distribution by area (% of total, 2002)		Distribution by area (% of total, 2002)	
To OECD countries	82.5	From OECD countries	91.3
To EU countries	60.0	From EU countries	80.4
To OPEC countries	3.0	From OPEC countries	1.5
Distribution by categories (% of total, 2002)		Distribution by categories (% of total, 2002)	
Raw materials and semi-finished goods	25.1	Raw materials and semi-finished goods	26.2
Capital goods	32.4	Capital goods	26.6
Consumer goods	42.2	Consumer goods	42.9
Energy	0.3	Energy	4.3

### THE CURRENCY

Monetary unit: Swiss franc		Currency unit per USD, average of daily figures	
		Year 2002	1.5568
		October 2003	1.3235

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*The economic situation and policies of Switzerland were reviewed by the Committee on 5 November 2003. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 12 December 2003.*

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*The Secretariat's draft report was prepared for the Committee by Claude Giorno and Miguel Jimenez under the supervision of Peter Hoeller.*

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*The previous Survey of Switzerland was issued in May 2002.*



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