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This Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

The economic situation and policies of Switzerland were reviewed by the Committee on 17 September 2007. 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 4 October 2007.

The Secretariat's draft report was prepared for the Committee by Claude Giorno, Andrés Fuentes and Eduardo Camero under the supervision of Peter Jarrett. Research assistance was provided by Francoise Correia.

The previous Survey of Switzerland was issued in January 2006.

BASIC STATISTICS OF SWITZERLAND

THE LAND

Area (1 000 sq. km)	41.3	Major cities (1 000 inhabitants, 31/12/2006)	
Cultivated land, grassland and pastures (1 000 sq. km)	15.3	Zurich	347.5
		Basel	163.9
Forests (1 000 sq. km)	12.7	Geneva	178.7
		Bern	122.2

THE PEOPLE

Population (thousands, 31/12/2006)	7 509	Civilian employment (thousands, 2006)	4 291
Number of inhabitants per sq. km (2006)	182	Primary (%)	3.7
Net natural increase (thousands, 2006)	13.1	Secondary (%)	23.7
Number of foreign workers (thousands, 2006)	1 094	Tertiary (%)	72.5

PRODUCTION

Gross Domestic Product, current prices (2006)		Gross fixed investment, current prices (2006)	
CHF billion	486.2	% of GDP	21.3
GDP per head (USD)	51 687	Per head (USD)	11 030

THE GOVERNMENT

Public consumption (% of GDP, 2006)	11.1
General government (% of GDP, 2005, estimates)	
Expenditure	33.4
Revenues	32.3
Gross debt	48.6

Composition of Parliament	National Council	State Council
Socialists	52	9
Central Democratic Union	55	8
Radical Democrats	36	14
Christian Democrats	28	15
Other	29	0

Last elections: October 2003

Next elections: 21 October 2007

FOREIGN TRADE

Exports of goods and services (% of GDP, 2006)	52.5	Imports of goods and services (% of GDP, 2006)	44.9
Commodity exports (billion CHF, 2006)	177.5	Commodity imports (billion CHF, 2006)	165.4
Distribution by area (% of total, 2006)		Distribution by area (% of total, 2006)	
To industrialised countries	78.8	To industrialised countries	89.2
To 27 EU countries	62.1	To 27 EU countries	81.6
To OPEC	3.1	To OPEC	2.5
Distribution by categories (% of total, 2006)		Distribution by categories (% of total, 2006)	0
Raw materials and semi-finished goods	22.9	Raw materials and semi-finished goods	26.4
Capital goods	29.9	Capital goods	25.9
Consumer goods	44.6	Consumer goods	39.3
Energy	2.6	Energy	8.5

THE CURRENCY

Monetary unit: Swiss franc	Currency unit per USD, average of daily figures	
	Year 2006	1.2532
	September 2007	1.1851

Executive summary

A vigorous economic expansion has allowed Switzerland to emerge from a decade of weak economic growth. However, some of the factors fuelling the current upswing are likely to prove temporary, as manufacturing has benefited from currency depreciation and financial intermediation from a rebound in global and domestic capital-market activity, which could be coming to an end. The recent large inflow of immigrants has the potential to make a longer-lasting positive contribution to aggregate supply. But, held back by weak competition in sectors not exposed to international trade, the productivity level is still moderate, and prices are high in comparison with other high-income countries, lowering living standards.

The government has taken a number of steps to remove barriers to product-market competition. Some have just come into force or still await parliamentary approval. Nonetheless, the pace of reform remains slower than in other OECD countries, entailing the risk that relative living standards may slip further in the medium term. While the government has stepped up efforts to control overall outlays, the trend rise in mandatory social spending is unbroken, limiting the extent to which public finances could serve to increase potential growth. The labour market has been fully opened to the residents of most EU countries and will remain attractive to other migrants, so the authorities will have to continue to try to make the most of immigrants' potential contribution to domestic prosperity. Therefore, to turn the recent cyclical upswing into a lasting improvement in growth outcomes, the policy challenges are as follows:

- **Public finances should focus on medium- and long-term sustainability so as to support potential growth.** *The general government has moved into a surplus position. However, welfare reform efforts need to halt the trend increase in mandatory social spending and preserve high labour-force participation. To this end, incentives for disability beneficiaries to return to work need to be improved. Mixed hospital funding responsibilities are problematic. Pension system design must confront demographic change. Tax reform could help to stimulate economic activity by lowering compliance costs and reducing distortions.*
- **Competition in product markets should be strengthened to raise productivity and lower prices.** *Measures taken to eliminate barriers to competition in product-market regulation need to be followed up if their benefits in terms of improved performance are to be reaped. Conditions are not yet in place to guarantee that new entrants in the network industries do not suffer discrimination by incumbents. Enforcement of general and sector-specific competition legislation would be improved by providing regulators with more resources and powers and by ensuring their independence. In agriculture, remaining production-related support and barriers to structural change in land law need to be removed.*
- **Immigrants' labour-market performance and human-capital acquisition should be nurtured.** *While most immigrants are well integrated in the labour market, discrepancies in outcomes between immigrants and natives are marked, and migrants' children under-perform in education. The acceptance of immigrants' foreign credentials needs to be facilitated. Stronger*

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incentives for foreigners to acquire local language skills would be helpful. Access of immigrant families to early childhood education and childcare needs to be widened, and non-selective lower secondary schooling should be developed. Such reforms would lower the impact of socio-economic background on all children's education outcomes.

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Assessment and recommendations

The major policy challenge is to turn the current economic upswing into a lasting pickup in potential growth

Switzerland has enjoyed a vigorous economic recovery since 2004. Growth has exceeded euro area outcomes for three consecutive years, after having lagged behind throughout the preceding decade. However, some of the factors fuelling the current upswing are likely to prove temporary. The significant contribution of the financial sector to the expansion has benefited from cyclical strength in global financial markets, which could be coming to an end, and manufacturing from a depreciating exchange rate and above-potential growth in important trading partners, especially Germany. On the other hand, immigration flows have increased, and they have the potential to make a longer-lasting positive contribution to aggregate supply.

The level of economy-wide labour productivity is lower than in many other high-income OECD countries and has fallen further behind since the late 1990s, held back by weaker outcomes in sectors that are sheltered from international competition. In 2004, the government launched a "growth package", including a series of measures aimed at boosting productivity. However, many of these measures are either not yet legislated or have only just taken effect. It intends to propose a further package of measures to parliament to strengthen potential growth in the next four years. While the general government balance has swung into surplus, spending on social entitlements is continuing to grow strongly. This may compromise the capacity of fiscal policy to support turning what is a substantial cyclical expansion into a lasting acceleration of potential output. The fundamental policy challenges are therefore as follows:

- *Improving the long-term sustainability of public finances and reducing tax distortions*. Budgetary rules across all levels of government, as well as control of tax rates through the exercise of direct democracy and tax competition among sub-national levels of government, have helped exercise overall spending restraint. However, better control of social entitlement outlays would avoid disincentives for labour supply and free up resources for measures more conducive to growth. Tax reforms could provide stronger support to labour-force participation and entrepreneurship.
- *Raising the contribution of productivity improvements to potential economic growth*. Switzerland continues to lag behind in a number of regulatory policy areas in which reforms favouring competition in product markets have had a marked impact on productivity performance across OECD countries. Implementation of the government's earlier "growth package" needs to be completed rapidly and followed up by further measures, outlined below.

- *Removing remaining hurdles for immigrants and their offspring to realise their full potential in the labour market*. Although immigration has become rich in skills in recent years, and integration efforts have been substantial, gaps between immigrants and the native population in labour-market performance as well as in educational outcomes are in some respects more significant than in other OECD countries. Scope remains to enhance the contribution of immigrants and their offspring to national prosperity.

Reforming the regulation of product markets and containing social spending were also identified as policy priorities in the OECD's 2007 *Going for Growth* publication.

The recovery gained strength in 2006 and has consolidated in 2007

2006 marked the fourth year of the expansion, with real GDP growth reaching 3.2%, exceeding the potential rate by more than one percentage point. While significant inflationary pressures have not emerged, the output gap is likely to be closed. Spending has been led by external demand. More recently, consumption has also accelerated. Financial sector value-added has been especially buoyant, boosted by rising stock-market indices and unusually strong increases in stock-market turnover, while low interest rates have supported lending activity. Employment gains have been sizeable, as increasing immigration has contributed to a significant expansion of labour supply, although the unemployment rate (registered unemployment count) has also fallen to 2.6%. The rise in immigration partly reflects the agreement between Switzerland and the European Union on the free mobility of workers concluded in 1999. Coming into force in June 2002, it took full effect in June 2007, although transitional quotas continue to apply to Central and Eastern European EU member countries.

The outlook depends in part on exchange-rate developments

While economic growth is projected to decelerate somewhat, it is expected to remain above its potential rate, given the favourable conjuncture foreseen in European trading-partner economies. At the same time inflation may edge up, in line with increasing demand pressures. Those pressures would be heightened if the Swiss franc continues its downward trend. In any case, there seems little reason to expect any significant decline in the long-standing but also surging current-account surplus, which has reached more than 15% of GDP. That surplus is attributable mainly to the huge balance on investment income, itself in large part a result of the important role of multinational enterprises in Switzerland, even if that role is exaggerated by international methodological conventions. In a more fundamental sense the rising surplus can be linked with a very high national saving rate – caused to some extent by the mandatory pension system – juxtaposed with a relatively low domestic investment rate, in part the consequence of already high capital intensity and modest total factor productivity growth. The continued weakness of the franc, despite the high and rising surplus, may be partly due to the "carry trade", which may reverse at some point.

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Monetary policy should leave sufficient room for expanding aggregate supply

In view of the surge in economic growth and the deterioration in the inflation outlook the Swiss National Bank (SNB) has withdrawn monetary policy stimulus, raising the target range for the 3 month Swiss Franc interbank interest rate by a cumulative 2 percentage points in the last two years, positioning it between 2.25 and 3.25%. At the same time, the SNB provided temporary additional short-term credit to banks in the aftermath of the turbulence in global financial markets in mid-August 2007, which had led to a significant increase in demand for liquidity. Further interest rate increases may be necessary should the expansion of output remain strong. The continued depreciation of the Swiss franc in 2006 and the first half of this year has contributed to more marked increases in import prices. Pass-through of such pressures to headline inflation may strengthen now that output slack has largely been eliminated in Switzerland as well as in Europe, and headline CPI inflation has risen slightly this year, to 0.7% in September. However, expanding labour supply has kept wage inflation low and some progress in opening up sheltered product markets to competition could in principle damp domestic price rises, offsetting rising import costs. Moreover, the impact of the global financial market turbulence on economic activity in Switzerland is as yet uncertain. Overall, these conditions warrant a slow paced and flexible approach to further tightening, in particular to allow the expansion of aggregate supply to be absorbed, even with the current robust activity.

The fiscal stance is appropriate for the economy's cyclical position

The general government's budget balance has improved from a deficit of around 1% of GDP in 2004 to an estimated surplus of about 1% in 2006, with a similarly-sized outcome expected for 2007, appropriately achieving consolidation at a time of high growth. The improvement reflects, in part, tighter spending control following the 2003 introduction of the "debt brake" rule, which requires the estimated cyclically adjusted federal budget to be balanced. Moreover, the recovery has impacted strongly on government revenues, reflecting the buoyancy of volatile profit and capital-income tax receipts, which yielded considerably more income than expected, in part reflecting booming financial-sector activity. However, spending on social programmes has continued to increase rapidly, notably in health care, disability insurance and social assistance, notwithstanding favourable labour-market developments.

Medium-term budgeting needs to be more firmly established

Since the federal debt-brake rule is binding for the annual budgets of the Confederation, there is a risk that control will be largely exercised through cuts on items that can be influenced in the short term, leaving increases in social entitlements, in particular, unchecked. A medium-term budgeting framework consistent with the rule would improve the setting of expenditure priorities. *The operation of the debt brake should be complemented by more medium-term planning of the federal finances.* The federal government is conducting a medium-term review of its spending tasks (*Examination of Tasks Programme,* ETP) in order to identify potential areas of savings. While the ETP would add a desirable degree of medium-term planning to budget management and therefore complement the operation of the debt brake, its implementation has run into delays, and no regular re-evaluations are foreseen. *Efforts should be made to complete the ETP soon. As an input into longer-term budgeting, sustainability reports should be prepared and complemented by scenarios reflecting impacts of possible policy reforms. The setting of medium-term spending priorities should be made a recurrent exercise.*

Reforms of social entitlement programmes should continue

The trend increase in social entitlement outlays generates the risk that future government spending on public services that contribute to raising potential output is crowded out. In some services – notably early childhood education and competition law enforcement – provision is already low. Moreover, benefit entitlements can lower incentives to work. Hence, measures to raise cost effectiveness are required:

- While the quality of medical services, health-insurance coverage and health status are excellent, some OECD countries achieve similar outcomes at lower cost. Hospital spending is particularly high. Ambulatory care is funded by health insurers, but recurrent hospital funding is characterised by shared financing by cantons and health insurers, fostering incentives to shift patients to the hospital sector. Therefore, *the mixed hospital funding responsibilities should be abandoned, assigning the entire role of collective coverage of health provision costs to the insurance companies but avoiding adverse redistributional effects of such a move through appropriate flanking measures.* Scope also exists to improve cost-saving incentives that can result from competition among providers and insurers. In particular, *the current system of transfers among insurers needs to be reformed so that they compete by raising cost-effectiveness rather than by "cream-skimming" of low-risk insurees. Once an effective system of risk equalisation is in place, insurers should be allowed greater contractual freedom, which, combined with better information on provider performance and minimum quality standards, would encourage value-based competition. Reducing the geographic fragmentation of service provision would also enhance the benefits of selective contracting.*
- The number of recipients of disability pensions has continued to rise, reflecting a decline in the outflow rate to very low levels. Replacement rates are relatively high, and benefits are withdrawn quickly as recipients take up work. *Introducing mandatory testing in the initial period of benefit receipt and phasing benefits out more slowly as labour income rises could help raise exit rates.*
- The pay-as-you-go first-pillar pension system is, on current policies, expected to register a deficit already in 2015, reflecting demographic factors including gains in life expectancy. To put the system on a sustainable footing *a package of changes in taxes, benefits and years of contribution, including indexation of the statutory retirement age to changes in life expectancy, is required.*
- Increasing life expectancy has also been contributing to rising outlays in the compulsory, funded, second-pillar occupational pension schemes, in which the level of pension benefits is fixed relative to the value of assets accumulated upon retirement by a conversion rate set in federal legislation. A further cut in this rate is necessary to ensure that pension benefits will be fully covered by accumulated assets. The federal

government's most recent proposal to reduce this rate is still being debated in parliament. It would be better if technical adjustments to the conversion rate that are necessary to ensure sustainability were not subject to political decisions. To this end, *determination of the conversion rate should be left to the occupational pension funds, subject to the regulatory requirement of actuarially appropriate calculation.*

Fiscal federal relations have been reformed, but inefficiencies remain

A reform of the assignment of spending responsibilities will come into force in 2008, reducing the degree of shared funding responsibilities across levels of government, such as in disability benefit spending, and improving mechanisms for co-operation across cantons in the provision of services. These measures are welcome, as they are likely to facilitate the setting of expenditure priorities and make spending more conducive to economic activity. However, scope remains for further improvements.

Cost effectiveness of outlays on job placement services, including active labour market measures, is hampered by split funding and spending responsibilities, which may contribute to the relatively long duration of unemployment spells. The federal government finances cantonal active labour market policies on the basis of fixed lump-sum payments per registered job-seeker. This set-up may dull incentives for the cantons to move the unemployed rapidly into jobs, especially as unemployment benefits are also federally financed. However, there remain two kinds of incentives for the cantons to place their unemployed. First, regional placement offices are annually benchmarked with respect to their performance. The publication of these results creates political pressure on low performing cantons. Second, unemployed persons whose spells exceed the maximum benefit entitlement period become eligible for cantonal or communal social assistance. Nevertheless, *incentives for the cantons to place the unemployed rapidly and durably should be further strengthened*. Furthermore, participants in some activation policies can re-qualify for unemployment benefit receipt. *Such possibilities should be reduced*. Also, *performance-related elements in the disbursement of federal funds should be strengthened*.

Tax reform could reinforce entrepreneurial activity and labour supply

Even though corporate taxation is low in international comparison, heavy taxation of dividends generates incentives for tax evasion through constituting complicated corporate structures and might distort financing decisions of firms that cannot raise equity on international capital markets. The tax-induced incentives to retain earnings are further increased by the absence of a capital gains tax. The government intends to lower dividend taxation but plans to limit tax relief to owners of stakes exceeding 10% to limit revenue losses. This limit could create incentives for some companies not to raise equity capital from new shareholders, so that existing shareholders keep their shares above the 10% threshold. *Reductions in the taxation of dividends should not be subject to ownership limits*. The added cost of extending reduced dividend taxation to portfolio investments could be funded by introducing a moderate capital gains tax. Stamp duties on the issuance of equity stock also raise the cost of firm creation and growth without raising significant revenue. *They should be abolished*.

At the federal level, marginal income tax rates for second earners in married couples are in many cases significantly higher than the rates applying to a single earner in households with a couple, reducing married women's incentives to work. A reform of the taxation of married couples, effective from 2008 onwards, will reduce this differential through the introduction of a supplementary tax allowance for working spouses. A more fundamental review of the taxation of married couples is under way. *Reform of the taxation of couples should reduce the gap in marginal tax rates between main and secondary earners by moving from joint to individual assessment of each spouse's income.*

Barriers to competition are still holding back productivity performance

The degree to which product market regulation encourages effective competition is one of the determining factors of productivity performance. Over the last decade there have been efforts to make the regulatory framework in goods and services markets more conducive to competition, but compared to most OECD countries, product market reform is still lagging behind, especially in general competition law and in the regulation of agriculture and the network industries. Reforms in these policy areas could both stimulate trend total factor productivity growth, which has been low relative to other OECD countries, and raise the investment share of GDP (which has weakened in international comparison), thereby lowering the current-account surplus and arguably enhancing future output gains. The measures in the government's 2004 "growth package" will make progress in opening up these markets to competition if fully implemented. However, many will need to be followed up by further steps if they are to bring about the desired gains in productivity. Technical barriers to trade still contribute to high goods prices. *Products marketed in the EU internal market should be allowed to enter Switzerland without complying with further Swiss technical requirements.*

Enforcement of general and sector-specific competition legislation needs to be toughened

The reformed competition law, in force since 2005, has allowed the enforcement authority (the Competition Commission, *ComCo*) to step up action against anti-competitive practices. However, its independence is still compromised by the appointment of representatives of organisations such as the employers' association and trade unions. *Its independence should be ensured by excluding members that represent particular economic interests. Furthermore, its resources should be raised* so that its staff level comes into line with its enlarged responsibilities. Finally, action against hard-core cartels is still hampered by the need to prove abuse. *The prohibition principle should be applied to all hard-core cartels.*

In the enforcement of rules to ensure competition in network industries, short terms of office for senior staff, combined with the option of reappointment, weaken the perceived independence of regulators, as do, in some instances, lack of enforcement powers and low staffing. *The independence of sector regulators should be strengthened, for example by lengthening the terms of office of senior staff and by removing the possibility of reappointment.* A case in point is the postal services regulator, which does not have the power to fine market participants breaching its decisions and whose decisions require government approval. *All sector*

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regulators should have powers to fine those who contravene its regulatory determinations, and government departments should not be able to intervene in such judgements.

Despite reform, the regulatory framework in the network industries is still too weak

Performance in the network industries is held back by weak framework conditions, as reflected in productivity outcomes and prices. As part of the measures in the 2004 "growth package", a new regulatory framework for the electricity industry has been legislated and will come into effect in January 2008 – introducing sector-specific *ex ante* regulation of prices and gradually liberalising consumer choice. New entrants have been granted access to the incumbent's local loop in telecommunications. Planned railway reform foresees, *inter alia*, tendering of regional passenger transport services in cases where benchmarking indicates poor performance. While these measures mark significant progress, they should be followed up to ensure the intended competition-enhancing benefits are realised:

- Potential gains from competition in the *electricity industry* are likely to be strongest in generation. Competition in this activity requires ownership separation from transmission network operations, whereas the new legislation foresees only weak vertical separation requirements. *Ownership separation between electricity generation and transmission operations should be introduced.* With the impending liberalisation of consumer choice, the motivation for incumbent integrated generation and transmission operators to extend ownership to local distribution and retailing utilities will grow sharper, generating stronger incentives to discriminate against new entrants in the generation business and undermining those facing retailers to put competitive pressure on generators. *The acquisition of further stakes in electricity distribution networks by vertically integrated incumbents should be prevented.* The weakness of vertical separation constraints conflicts with the limited powers and staffing foreseen for the new regulator and reinforces the need to bolster its enforcement capacity.
- In the *telecommunications industry*, limits to the new access rights to the local loop for new entrants are likely to prolong the dominant market position of the telephony incumbent, notably in broadband services, where lack of competition has contributed to high prices and low data transmission speeds. *The legal limitations on access of competitors to the local loop should be lifted.* The absence of *ex ante* regulation has undermined the timeliness of regulatory decisions that should serve to maintain a level playing field among market players and, with respect to interconnection charges, may deter development of competing networks. Therefore, *ex ante price regulation should be introduced.*
- In the *railways industry*, competition is virtually absent in national passenger transport. Making the tendering of regional passenger services compulsory should be considered. Experience from other OECD countries suggests that such tendering requires removing incentives facing vertically integrated operators to discriminate against new entrants in investment decisions, as well as guaranteeing access of competitors to rolling stock. The incumbent operator exercises a high degree of discretion over small-scale investment projects, and access to rolling stock is unregulated. *Equal access to rolling stock should be ensured by obliging the incumbent operator to rent it out under non-discriminatory conditions. Investment decisions should be based on an independent assessment of costs and benefits.*

- In the *postal services*, legislation still keeps letter-delivery services largely closed to competition. The government intends to open this market further. Some current provisions create cost advantages for the incumbent *vis-à-vis* its competitors. *Regulations disrupting a level playing field for competition between the incumbent and market entrants should be removed*. Competitors are also required, in effect, to offer similar working conditions as the incumbent, including on wages, reducing the scope for cost reductions, such as through the introduction of new technology. *Regulation regarding the fixing of pay and working conditions that is specific to the sector should be abolished*. All services in market segments where La Poste Suisse holds a legally guaranteed monopoly are subject to price regulation by the relevant Ministry. Currently, cost-based *ex post* price regulation is applied, reducing incentives to lower costs. *Price caps should be used to regulate the prices of services for which La Poste Suisse holds a dominant or monopoly position and price regulation should be entrusted to an independent body.*

Progress in dismantling barriers to competition in agriculture is slow

Legislation adopted by Parliament in summer 2007 foresees keeping subsidies to the agricultural sector – currently worth about 1.3 % of GDP – constant until 2011, with some shifting from price support and export subsidies to less distorting forms of assistance. A limited unilateral reduction of feed grain tariffs is also part of the package, but tariff protection continues to contribute to the high overall price level in Switzerland. Prospects for a lower degree of tariff protection further in the future – for example, as a result of a free trade agreement with the EU, as sought by the government – reinforce the need to remove regulatory hurdles to structural adjustment, notably in land law, so as to avoid having trade liberalisation result in calls for extended subsidy payments. *Impediments to structural change in land law should be removed. The replacement of subsidies linked to production activities by direct income support in Switzerland should be accelerated, since it is less distortive of prices*. While positive environmental externalities remain a justification for some direct payments to farmers, *unconditional income support should be reduced by tying it to incumbent farmers, rather than farming businesses, so as to prevent government payments from biasing inheritance decisions*.

The positive contribution of immigrants to average living standards can be improved, as can their integration

Drawn by the prospects of comfortable living standards and strong labour demand, immigrants have been attracted to Switzerland over many decades. Immigrants have again boosted labour supply in recent years, turning Switzerland into one of the countries with the highest immigration rates in the OECD. The large inflow has been absorbed well overall, and the contribution of expanding labour supply to per capita GDP growth has been supported by the rising share of skilled immigrants. Sustained inflows may persist as a result of the recent removal of remaining restrictions with regard to worker mobility to and from most EU countries. Regarding immigration from other countries, policy has become more strongly oriented towards the admission of skilled workers. Nonetheless, integrating less-qualified workers from earlier immigration waves and their offspring remains a challenge. A persistent demand for low skilled workers, for example, from countries which joined the EU recently, provides additional justification for such efforts.

Labour-market outcomes among immigrants are less favourable than those among the native-born population, in terms of unemployment rates and wages, holding back the contribution immigrants can make to GDP growth. Some of these differences are more marked than in some other OECD countries that have experienced strong immigration flows. Employment and pay prospects of some immigrants are hampered by difficulties in foreign (especially non-EU) credentials recognition. *Further efforts should be made to improve the system for recognising qualifications and experience obtained abroad*. Discrimination against immigrant job applicants can lower their incentives to acquire human capital. While anti-discrimination legislation is in place, the effectiveness of its enforcement can be improved. *The legal recourse available to victimised foreigners should be facilitated, possibly with the help of associations combating discrimination. Also, employers' attention should be called to the issue of discrimination, in order to improve the integration of foreign workers in the Swiss labour market. In this regard, the public sector should set an example. Finally, the rules on the length of residency required by cantons and communes for naturalisation could be a barrier to geographic mobility and should therefore be harmonised.*

Underperformance of migrants' children in education is relatively pronounced, in part reflecting the negative impact of socio-economic background on performance more generally. *Hence, reforms in the schooling system should aim at lowering the impact of socio-economic background on all children's education outcomes*. Low participation in pre-school education and childcare exacerbates this deleterious impact, as does the early streaming of children into different school tracks, which generally occurs between the ages of 10 and 12. *Access by the foreign population to early childhood education and childcare services should be promoted. They should be made more widely available through better co-ordination of the provision of such services between different levels of government*. The planned lowering of the compulsory entry age into education from six to four years is a welcome step. Measures along these lines would also have significant benefits for native-born children from poor backgrounds and would improve incentives to work among women (another policy priority identified in the 2007 *Going for Growth* publication), who often choose not to work full-time because of a lack of availability of childcare facilities. *Non-selective educational models in the lower secondary cycle should likewise be developed. The standardisation and transparency of educational guidance systems assigning pupils to special classes can be improved.* Immigration inflows have become more diverse over the decades with regard to country of origin, with a larger share of immigrants not speaking any of the official languages. Some shortcomings in the availability and quality of language teaching have been identified. *The incentives for foreigners to enrol in language courses should be sharpened and supply improved,* inter alia *by introducing a standard certification system.*

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Chapter 1

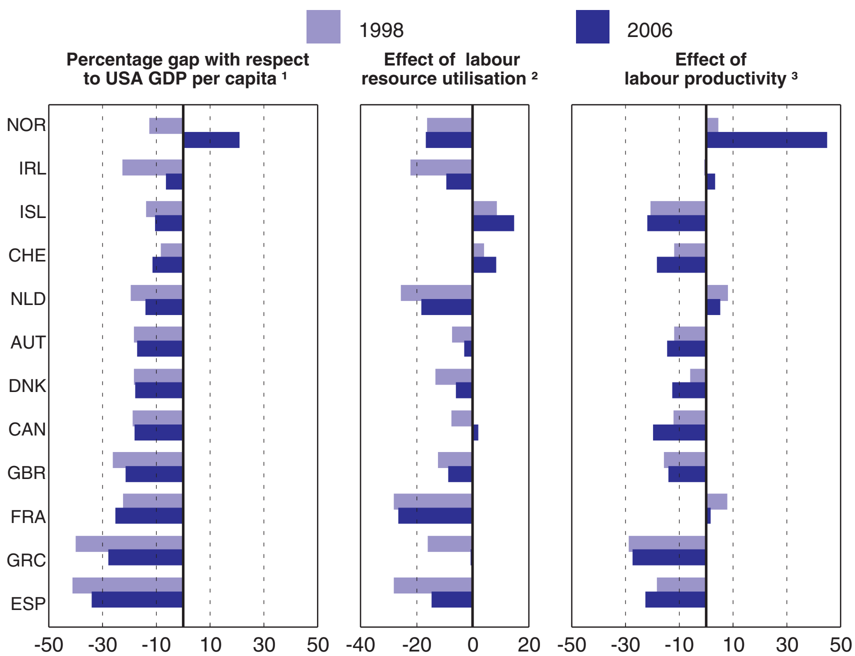
Macroeconomic performance and main challenges

Switzerland has been enjoying a vigorous economic expansion, which has benefited from buoyant financial market activity, strong foreign demand and a depreciating currency. Some of the drivers of this growth may prove to be temporary, although large immigration flows, which have contributed to substantial job creation, are likely to make a longer-lasting contribution to the expansion of potential output. Supported by high levels of employment, GDP per capita is still among the highest in the OECD. Yet economy-wide productivity is well below levels observed in leading countries, reflecting relatively weak productivity performance in sectors not exposed to international competition. While the general government's budget has swung into surplus in recent years, strong spending growth in social entitlement programmes poses risks for the capacity of fiscal policy to contribute to enhancing prosperity.

While Switzerland remains one of the countries with the highest levels of GDP per capita in the OECD,[1] its relative position has continued to erode over the past decade (Figure 1.1). In international comparison, labour utilisation has remained high, whereas hourly labour productivity, expressed in purchasing power parity terms, is modest in comparison to other high-income countries.[2] This low average productivity level cannot be explained by educational attainment, as Switzerland has one of the highest upper secondary attainment rates in the OECD, and tertiary education attainment is broadly in line with rates observed in other high-income countries.[3] Comparatively high labour utilisation could, in principle, entail low hourly productivity owing to composition effects, as labour utilisation is extended to workers with lower marginal contributions to output. In the case of Switzerland, such composition effects are likely to be limited. To a considerable extent, high labour utilisation in Switzerland stems from fairly long working lives, which is unlikely to depress productivity, and the share of unskilled workers is small.

Switzerland's position compares more favourably with respect to national income per capita, owing to large net foreign investment income inflows, which amount to about 12% of GDP. Moreover, net investment income inflows have increased dramatically in recent

Figure 1.1. **Decomposition of GDP per capita in PPP terms**



StatLink http://dx.doi.org/10.1787/138328268383

1. Based on current purchasing power parities and current prices.
2. Labour resource utilisation is measured as total number of hours worked divided by population.
3. Labour productivity is measured as GDP per hour worked.

Source: OECD, Annual National Accounts database and productivity database.

years. However, a substantial share of net investment income recorded in the Swiss current account accrues to multinational enterprises domiciled in Switzerland with significant foreign ownership, suggesting that gross national income is an overestimate of income available to Swiss residents (see below).

The government launched a programme of structural reforms in 2004 to revive growth, although many of the measures – which are evaluated in the subsequent chapters of this Survey as well as in Annex 1.A1 of this chapter – have not yet influenced economic outcomes, as they have just taken effect or still need to be approved by parliament. Nonetheless, since 2004, Switzerland has enjoyed a period of relatively strong economic growth and low inflation, accompanied by substantial employment creation, declining unemployment, improving budgetary outcomes and a surging current-account surplus. Immigration flows have risen considerably in recent years, placing Switzerland among those countries with the highest immigration rates in the OECD, with a significant potential impact on macroeconomic performance.

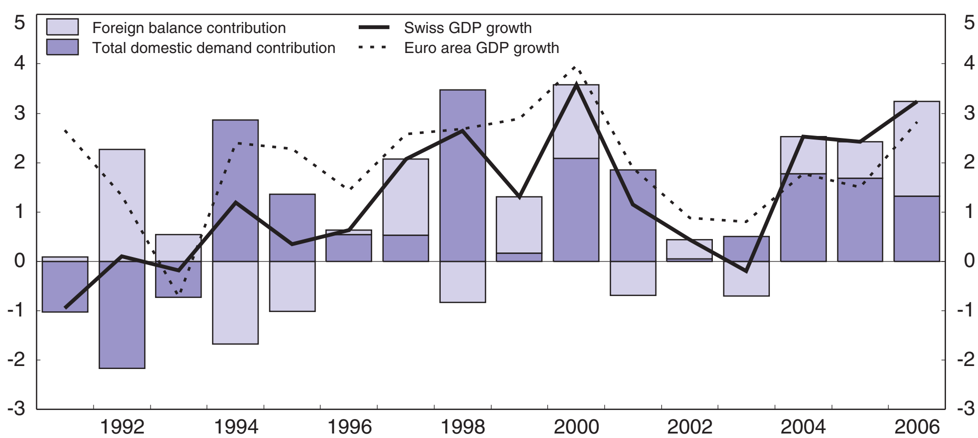
Recent economic developments paint a picture of continued strength

Switzerland is in the fourth year of a vigorous economic upswing, with economic growth reaching 3.2% in 2006, about 1¼ percentage points more than the potential growth rate as estimated by the OECD. While significant inflationary pressures have not emerged, the output gap appears to be closing in the course of 2007. Throughout the recent upswing growth has compared favourably to the euro-area outcome, unlike in the preceding decade (Figure 1.2).

The recovery has been led by buoyant external demand, which has benefited from a depreciating real currency and robust market growth in Germany (Switzerland's main trading partner, which absorbs about 30% of Swiss exports), contributing to a strong expansion in manufacturing. In particular, production of pharmaceuticals and precision instruments has gained from increased foreign sales. Financial intermediation made a large contribution to economic growth in 2005 and 2006, expanding by 7.5 and 7.6 % on average, respectively. Financial intermediation benefited from rising stock-market indices, as well as rapid growth in stock-market turnover, both of which have a significant impact

Figure 1.2. **Economic growth in Switzerland and the euro area**

Per cent



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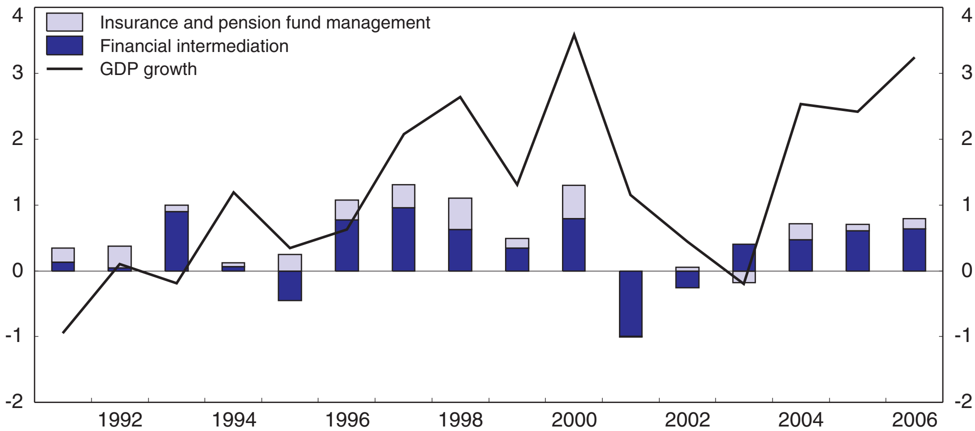
Source: OECD, Economic Outlook 82 database (forthcoming).

on revenue from asset management (SECO, 2006; Schriber, 2007). Moreover, low interest rates have boosted bank lending. However, the strong expansion of financial services may be coming to an end following the international financial market turmoil in the aftermath of the subprime-mortgage crisis in the United States. Value added in financial intermediation has been subject to pronounced cyclical fluctuations. Since the weight of the sector is significantly larger than in most other OECD countries – it accounts for 8.5% of Swiss GDP (compared to between 5 and 6% in the United Kingdom, for example) – the pronounced cyclical variations of activity in the sector account to some extent for the idiosyncrasies of variations in Swiss GDP growth over the past decade (Figure 1.3).

Figure 1.3. **The contribution of financial-sector value-added to economic growth**

Per cent, at constant prices



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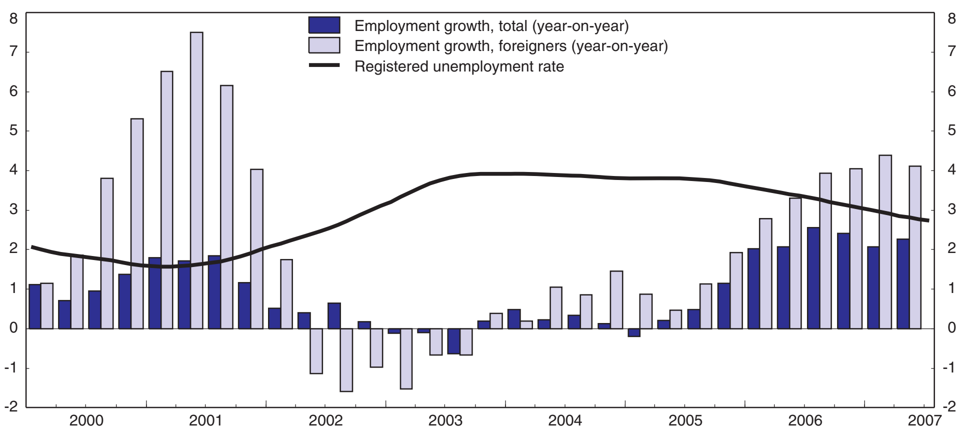
Source: State Secretariat for Economic Affairs (SECO).

Vigorous activity has allowed employment to grow steadily in 2006-07. Labour supply has expanded, fuelled by increasing immigration flows, although unemployment has also declined (Figure 1.4). Immigration flows have become increasingly rich in skills and have

Figure 1.4. **Labour market indicators**

Per cent



StatLink http://dx.doi.org/10.1787/138556138134

Source: Federal Statistical Office, STATEM/SPAO and OECD, Main Economic Indicators database.

helped sectors with a great deal of demand for highly trained workers to avoid shortages and to keep wage growth at very low levels (see below). The expansion is expected to continue this year and next, albeit at a somewhat slower pace (Box 1.1). Some factors that have driven the expansion are likely to be cyclical to a large extent, in particular the impact of the franc's depreciation on net exports and the recent above-trend growth of financial-sector activity, although the favourable impact of strong immigration on employment is likely to be longer lasting.

Box 1.1. **The OECD's short-term projections for Switzerland**

GDP growth remained brisk in the first two quarters of 2007, reaching 0.7% in each period, quarter on quarter. Private consumption accelerated on the back of rising labour incomes, as employment continued to increase vigorously, supported by the expansion of labour supply, and equipment investment growth benefited from high capacity utilisation. However, machinery and equipment investment has advanced more slowly in this recovery than its predecessor, which followed the downturn from 1991 to 1993. The contribution of financial services to GDP growth remained strong. Forward-looking indicators mostly suggest that business prospects remain bright in the near future, although residential investment appears to have peaked, reflecting the impact of monetary policy tightening over the past year, and export growth has weakened.

GDP growth is likely to exceed 2.5% this year, followed by a moderate slowdown in 2008, as the recent monetary policy tightening and the global financial market turbulence ensuing from the crisis in the US subprime mortgage market impact on activity in Switzerland. The contribution of the financial services sector to economic growth is likely to be more modest than in recent years, as stock-market turnover and credit expansion could moderate. Domestic demand is expected to remain buoyant in 2007, weakening somewhat in 2008. While income growth in major trading partners is likely to diminish, net exports are expected to be sustained by favourable price competitiveness of Swiss exporters, keeping the current account surplus at an exceptionally high level. The pace of the expansion will allow the unemployment rate to remain very low. Inflation will be subdued, though picking up slightly, reflecting higher prices of imported goods and capacity constraints. One important risk to the outlook stems from the "carry trade" in foreign exchange markets, which could unwind, leading to a significant appreciation of the exchange rate (see Chapter 2). The extent of the damping effect of financial market turbulence on activity in Switzerland is also uncertain. On the other hand the persistent expansion of labour supply (primarily through immigration from the European Union) could raise economic growth beyond the projected rate.

The general government's structural budget balance is expected to deteriorate slightly, although a substantial surplus is expected in 2008. The ongoing impact of consolidation measures taken in recent years, generating savings in subsidies and in administrative spending, will be offset by rising social transfer outlays and a pick-up in public investment expenditure. Tax revenues may also come under downward pressure. Cantons are required to lower personal income taxes to offset the impact of inflation in recent years on personal income tax burdens. A reduction in cantonal tax revenues could also result from increased incentives to cut tax rates following the introduction of the new fiscal equalisation mechanism (see Chapter 3).

Box 1.1. **The OECD's short-term projections for Switzerland** *(cont.)*

Table 1.1. **Gross domestic product and spending aggregates**

	2004	2005	2006	2007[4]	2008[4]
	Percentage changes, volume (chain-linked)				
Private consumption	1.6	1.8	1.5	1.9	2.0
Government consumption	0.8	0.5	–1.4	–0.7	0.3
Gross fixed capital formation	4.5	3.8	4.1	5.0	2.3
Final domestic demand	2.1	2.1	1.7	2.3	1.9
Stockbuilding[1]	–0.2	–0.2	–0.3	–2.0	0.2
Total domestic demand	1.9	1.8	1.4	0.2	2.1
Export of goods and services	7.9	7.3	9.9	7.9	4.2
Imports of goods and services	7.3	6.7	6.9	3.6	4.4
Net exports[1]	0.6	0.6	1.9	2.6	0.3
GDP at market prices	2.5	2.4	3.2	2.7	2.1
GDP deflator	0.6	0.3	1.6	0.8	0.9
Memorandum items:					
Consumer price index	0.8	1.2	1.1	0.5	1.3
Private consumption deflator	0.8	0.8	1.4	0.8	1.4
Unemployment rate (based on ILO definition)	4.2	4.3	3.8	3.4	3.2
General government financial balance[2, 3]	–1.1	–0.1[3]	1.1[3]	1.2	1.2
Current account balance[2]	13.0	13.5	15.1	15.8	15.0

1. Contributions to changes in real GDP (percentage of real GDP in previous year).
2. As a percentage of GDP.
3. OECD estimates in 2005 and 2006.
4. Interim projections prepared for *Economic Outlook 82* (forthcoming).

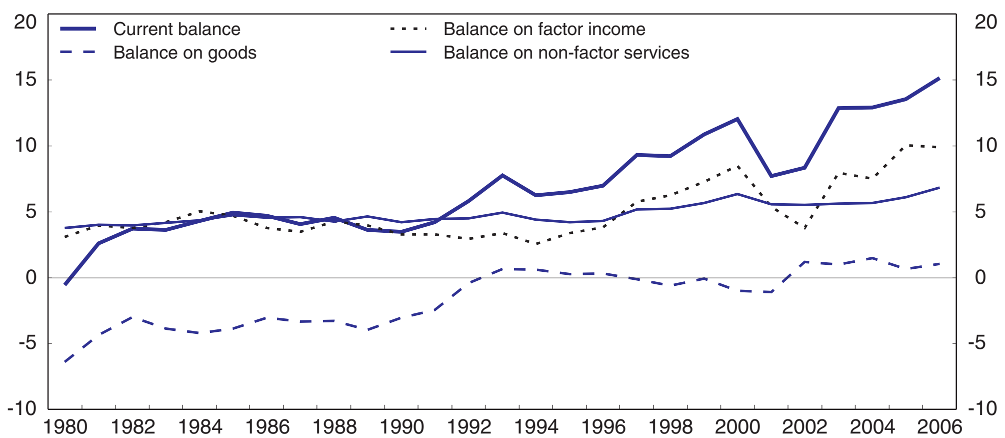
Source: Federal Statistical Office and OECD.

Current-account developments largely reflect foreign earnings of Swiss multinationals

The current-account surplus has risen considerably in recent years, reaching a record high of 15% of GDP in 2006 (Figure 1.5). Most of the surplus is accounted for by the net investment income balance. Non-factor service exports also make a significant

Figure 1.5. **The current account and its main components**

As a percentage of GDP



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Source: OECD, Main Economic Indicators database.

contribution, with financial-sector service exports (2.7% of GDP) – notably in asset management – contributing about a third of the total services surplus. Almost all of the foreign investment income balance results from net foreign direct investment income, which largely reflects the profits multinational companies domiciled in Switzerland earn abroad. To a large extent these profits are not distributed as dividends to their owners, who in many cases reside abroad, and therefore misleadingly contribute to the surplus (Box 1.2).[4] Foreign assets accumulated in the Swiss pension funds appear to play a less significant role in the current account surplus, as the share of net portfolio investment income in total investment income is smaller than the share of investment income derived from foreign direct investment. Increased profitability of Swiss multinationals has therefore driven the increase in the current account surplus in recent years, although, in 2006, rising exports of banking services were also important.

Box 1.2. **Measurement issues in the Swiss current account surplus**

The profits of Swiss multinationals should, in principle, be attributed to their owners, many of whom reside abroad. However, in the official current-account statistics, only the distributed profits are attributed as a portfolio investment income flow to the country of residence of the shareholders. Retained profits are attributed to the country in which the multinational enterprises are domiciled. To the extent that Swiss multinationals are owned by foreign shareholders their retained profits should therefore, arguably, not be considered as net income of Swiss residents. To this extent it could be argued that the current-account surplus of Switzerland is overestimated. Estimates of retained profits which accrue to foreign residents but are not attributed to them in balance of payments statistics range between 4% and 7% of GDP (Swiss National Bank, 2007b; IMF, 2007). On the other hand Swiss residents own shares in enterprises abroad which also retain part of their profits. The share of these retained earnings accruing to Swiss residents is not recorded as a current-account credit, resulting in an *underestimation* of the Swiss current-account surplus. On balance, however, the low corporate tax rates in Switzerland in international comparison provide incentives for multinationals to locate in Switzerland. Indeed, dividend outflows exceed dividend inflows in the balance of payments, suggesting that foreign equity holdings of Swiss corporations are larger than Swiss portfolios of foreign equity. Moreover, an upward bias in the Swiss current account also results from inflation differentials, as Swiss foreign assets are largely denominated in foreign currencies from countries where the inflation rate is higher than in Switzerland (*e.g.* US dollars and euros), whereas Swiss foreign liabilities are largely denominated in Swiss francs (see Chapter 2 for more details).

Over the past 15-20 years the increase in the current account surplus has been associated with both a rise in national savings and a decline in domestic investment, in relation to GDP. The high level of national savings in Switzerland is likely to have been boosted by the compulsory fully-funded occupational pension scheme,[5] and possibly by the favourable tax treatment of some savings forms. More recently abundant corporate profitability has been reflected in corporate savings, and the improvement in government finances (see below) is also likely to have contributed to the rise in national savings. Moreover, developments outside Switzerland may have diverted investment away from Switzerland to other OECD countries. For example, improvements in the credibility of the monetary policy framework in many OECD countries have reduced inflation and currency risk, making these countries more attractive for capital inflows, lowering long-term real interest rates and boosting investment and consumption in these countries. This trend is likely to be reflected, to some extent, in the elimination of the real interest rate differential between Switzerland and other OECD countries, where *ex post* real interest rates, on average, fell to Swiss levels by the end of the 1990s (see Chapter 2). Weak gains in the efficiency in the use of factors of production, as reflected in weak total factor productivity growth (see below), may also have detracted from investment incentives, and could thereby have contributed to the external surplus.[6] Product market regulation limiting competition also tends to damp investment (see Chapter 4).

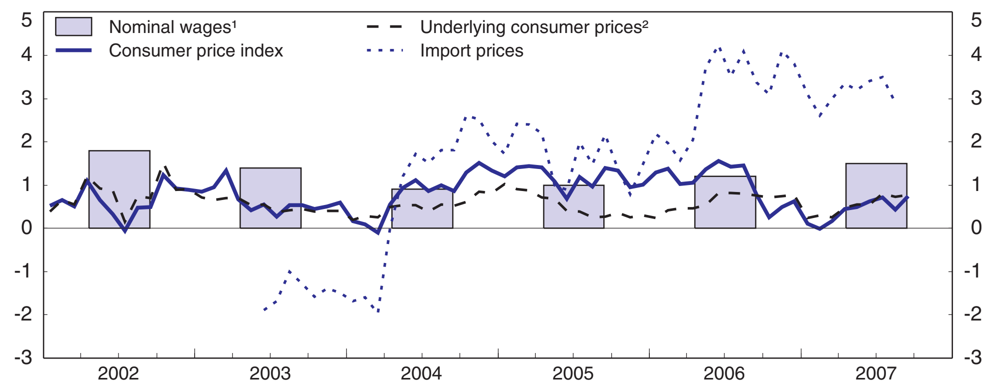
Macroeconomic policy must aim to head off a rise in inflation

Uncertain developments on the supply side of the economy complicate monetary policy

The expansion of labour supply has damped nominal wage growth, and collective bargaining settlements for 2007 suggest that wages are accelerating only slightly this year. While the subdued increases have helped to keep inflation low (Figure 1.6),[7] the robust recovery has required withdrawal of monetary policy stimulus resulting from low interest rates and a depreciating currency (Figure 1.7). The Swiss National Bank (SNB) aims to keep inflation between 0 and 2% per year. To that end it has raised the target range for the three-month Swiss franc interbank interest rate by a cumulative 2 percentage points since December 2005, to between 2.25 and 3.25%, most recently by a further quarter of a percentage point in September 2007. At the same time the SNB provided temporary additional short-term credit to banks in the aftermath of the turbulence in global financial markets in mid-August 2007, which had led to a significant increase in demand for liquidity and pushed the interbank interest rate close to the upper limit of the target range (2-3% at the time). While measures of core inflation suggest that underlying inflation is still low and has increased little, the continued depreciation of the Swiss franc this year has contributed to more marked increases in the prices of imported goods and services, and these may impact CPI inflation more strongly in the near future. Output slack in major trading partners, notably Germany, has also been shrinking rapidly, while capacity utilisation in Swiss manufacturing has reached a very high level. These developments

Figure 1.6. **Wage and price inflation**

Year-on-year percentage change



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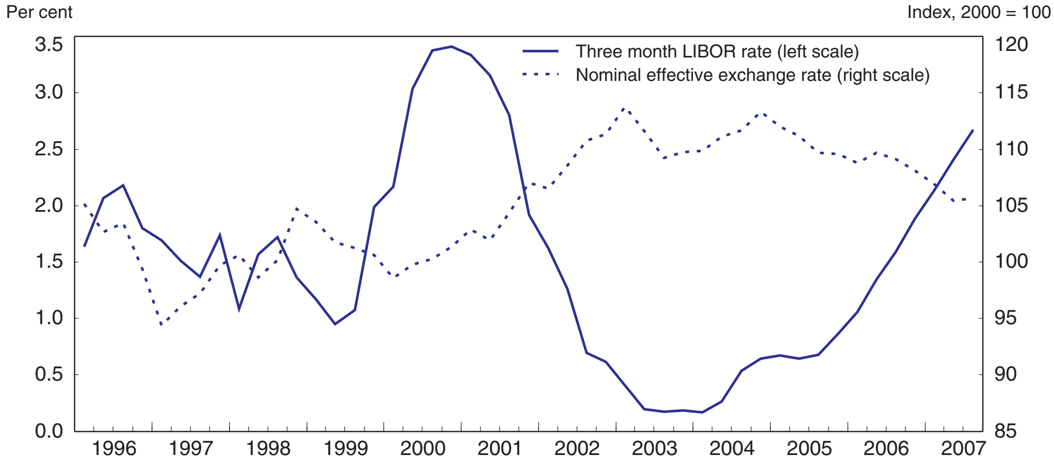
1. First and second quarter for 2007.
2. Excluding food, beverages, tobacco, seasonal products, energy and fuel.

Source: Federal Statistical Office and OECD, Main Economic Indicators database.

Figure 1.7. **Indicators of monetary policy**



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Source: OECD, Main Economic Indicators and Economic Outlook 82 database (forthcoming).

might raise inflationary pressures. Indeed, the SNB's latest inflation forecast (Swiss National Bank, 2007a), which is conducted on the assumption of constant short-term interest rates at 2.75%, projects that inflation will rise close to the upper limit of the target range of inflation in 2010.

However, the impact of the global financial market turbulence on economic activity in Switzerland is as yet uncertain. Moreover, the inflation forecasts cannot fully take into account structural changes in aggregate supply conditions, since the econometric models on which the inflation forecasts are based reflect structural conditions prevailing in the estimation period. In particular, the agreement between Switzerland and the European Union on the free mobility of workers, which has been implemented step by step since 2002, has boosted immigration flows, notably of skilled workers, with a marked increase in 2006; these flows may rise further as the last restrictions on immigration from most EU countries were lifted only in June 2007. Supply-side conditions are also likely to improve to some extent, as progress is also underway in reinforcing competition in goods and services markets, for example through application of the reformed competition law and steps to foster competition in telecommunications. However, the impact of these reforms on aggregate supply depends critically on the extent to which reforms are implemented and followed up (see Chapter 4). A declining relative preference of investors for Swiss franc-denominated assets could on the other hand further reduce the degree to which Switzerland benefits from lower neutral real interest rates than other countries. Overall, notwithstanding vigorous activity, these conditions should allow a cautious approach to further monetary-policy tightening, notably on account of immigration flows, so as to permit the resulting expansion of aggregate supply to be absorbed.

Fiscal consolidation has been successful

The budget balance has steadily improved since 2003 at all levels of government (Table 1.2), and consolidation has been achieved at a quicker pace than in the euro area and nearly as quickly as in the United States. After a deficit of around 1% in 2004, a surplus of almost 0.4% of GDP was reached in 2005 (Figure 1.8). Official estimates put the surplus in 2006 at around 1.2% of GDP, while OECD projections suggest that the general

Table 1.2. **Government accounts**

	CHF millions 2002	Percentage changes[1]				
		Outcomes		Estimates	Budget	
		2003	2004	2005[1]	2006	2007
Confederation[2]						
Expenditure	51 927	–1.2	2.7	–0.1	0.3	4.3
Revenue	51 431	–7.6	3.0	8.3	–1.6	7.3
Balance (CHF million)	–496	–3 773.0	–3 711.0	378.0	–1 668.0	918.0
Cantons						
Expenditure	66 591	2.0	1.4	2.0	–0.2	1.6
Revenue	66 290	–0.8	3.3	3.9	–3.1	2.9
Balance (CHF million)	–301	–2 215.0	–980.0	344.0	–1 700.0	–850.0
Municipalities						
Expenditure	42 498	3.8	0.5	1.7	0.4	2.6
Revenue	43 651	1.1	1.7	2.8	–0.7	2.8
Balance (CHF million)	1 153	–8.0	536.0	1 000.0	–500.0	600.0
General government[4]						
Expenditure	134 254	1.2	1.9	1.3	0.8	3.2
Revenue	134 611	–3.6	3.4	5.7	–2.5	5.1
Balance (CHF million)	357	–5 997.0	–4 154.0	1 722.0	–3 868.0	–325.0
Compulsory social security[3]						
Expenditure	44 994	7.9	2.2	2.5	1.3	2.5
Revenue	43 163	12.3	–0.7	3.5	–0.7	2.7
Balance (CHF million)	–1 831	–52.0	–1 487.0	–1 049.0	–2 049.0	–1 996.0
Consolidated account with social security[4]						
Expenditure	163 687	2.6	1.7	1.6	0.5	2.9
Revenue	162 213	2.2	1.8	4.8	–2.0	4.5
Balance (CHF million)	–1 474	–6 049.0	–5 877.0	–678.0	–4 917.0	–2 348.0
Balance (% of GDP)						
Confederation	–0.1	–0.9	–0.8	0.1	–0.4	0.2
Cantons	–0.1	–0.5	–0.2	0.1	–0.4	–0.2
Municipalities	0.3	0.0	0.1	0.2	–0.1	0.1
General government	0.1	–1.4	–0.9	0.3	–0.8	–0.1
Compulsory social security	–0.4	0.0	–0.3	–0.2	–0.4	–0.4
Consolidated account with social security	–0.3	–1.4	–1.3	0.1	–1.0	–0.5
General government debt (% GDP)	50.5	55.5	55.6	51.4	50.7	48.1

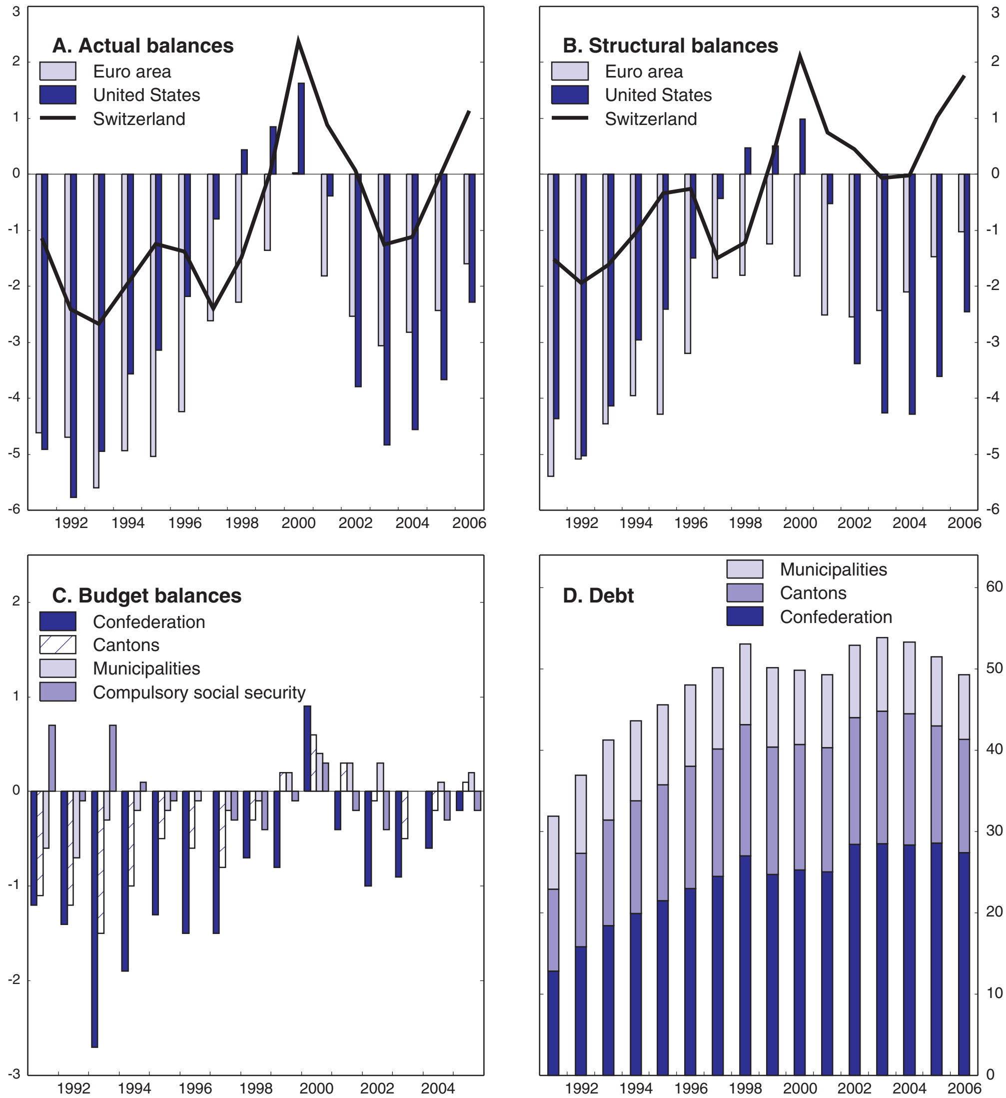
1. Unless otherwise indicated.
2. Including extraordinary spending.
3. Social security includes old age, disability, survivors' protection scheme as well as unemployment and income loss insurance. Following ESA95, the Swiss accident insurance is no longer part of this sector.
4. Double counting not included in the total.

Source: Administration fédérale des finances, Plan financier 2008-2010 ; Les finances publiques 2006.

government surplus in 2007 remained above 1% of GDP. The improvement is explained by two factors. *First*, the Confederation successfully completed its consolidation programme launched in 2003, one year early. It was designed to achieve structural equilibrium for the Confederation's accounts by 2007 by containing discretionary expenditure growth (in particular, subsidies and administrative spending). Similar efforts were followed by cantons and municipalities. *Second*, the favourable economic conditions translated into robust tax revenues that rose faster than nominal GDP. The buoyancy of volatile profit and financial transactions tax revenues, such as the withholding tax and stamp duties, was particularly pronounced, and are to a considerable extent related to financial-market developments.

Figure 1.8. **Public finance indicators**

As a percentage of GDP[1]



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1. Data for 2005 and 2006 are estimates.

Source: Federal Finance Administration and OECD Economic Outlook 81 database.

The introduction of the "debt-brake" rule has contributed to the successful consolidation. The rule requires that the Confederation's accounts be kept in balance throughout the cycle by limiting expenditure growth to expected revenue growth, adjusted for the cyclical position of the economy. However, the rule was not fully implemented starting in 2003, as originally planned, reflecting concerns that it could have jeopardised the impending recovery. Thus, Parliament authorised more leeway in the spending caps with the goal of initially stabilising the federal structural deficit at its 2003 level (¾ per cent of GDP), gradually eliminating it between 2005 and 2007 and applying the debt-brake rule thereafter. Budgetary rules are also in place in some cantons.

Medium-term challenges in fiscal policy are still substantial

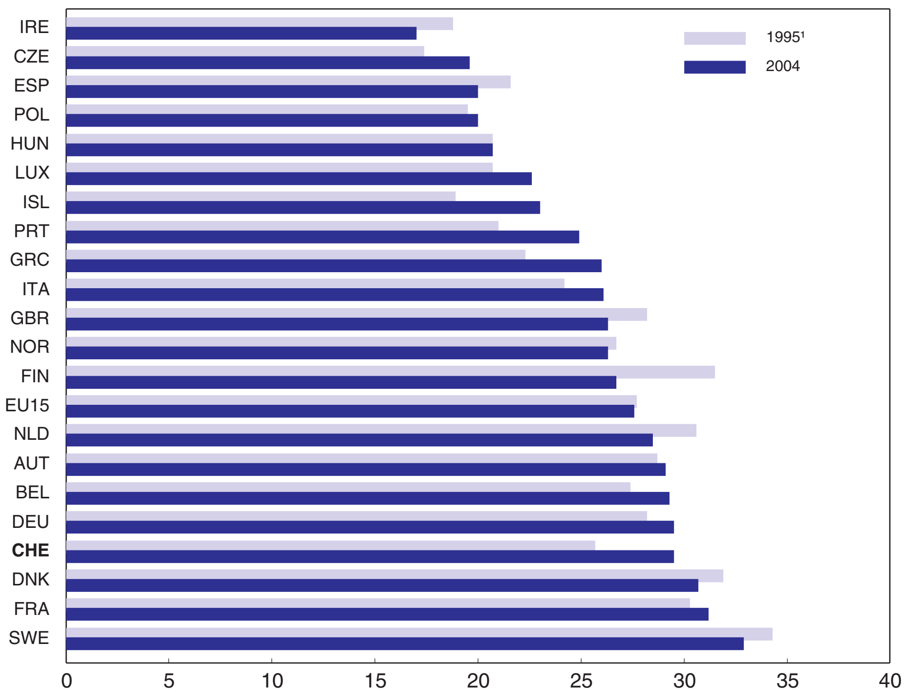
Social spending is on a rising trend

Social spending in Switzerland – as defined by EUROSTAT – was more than 2 percentage points of GDP below the European average in 1995 and is now above it (Figure 1.9),[8] notwithstanding the low level of structural unemployment. In 2005, lower spending on unemployment insurance benefits was not enough to prevent the share of social spending in GDP from rising. Spending on social welfare and on health care, the two biggest categories, has grown faster than all other components, at almost twice the rate of GDP (Figure 1.10). Outlays on disability insurance, in particular, rose in relation to GDP by almost one full percentage point in the last decade (to around 2.6% of GDP in 2005) – a level that is higher than the OECD average. The number of disability benefit recipients has risen as outflow rates have fallen to low levels. There is scope to reduce the cost of health care without compromising its quality, as equally good health outcomes have been achieved at lower cost in some other OECD countries. As in the other OECD countries, the demographic outlook will lead to upward pressures on medical and social services from around 2010 onwards. Population ageing is also expected to create a deficit in the first-pillar pension system by 2015. The shortfall could reach up to 3% of GDP by 2040, as the ratio of contributors to pensioners is likely to be halved already by 2035 from its level in the 1990s.

A significant share of social entitlement spending is funded through federal and cantonal budgets.[9] While the use of budgetary rules across levels of government as well as a tradition of strict control of tax rates through the exercise of direct democracy have

Figure 1.9. **Social spending in selected countries**

As a percentage of GDP



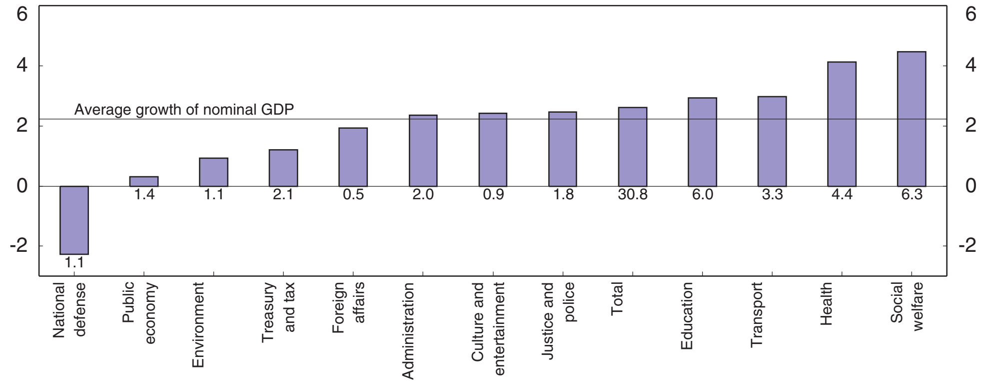
StatLink http://dx.doi.org/10.1787/138728066230

1. 1999 for Hungary and 2000 for Poland.

Source: Eurostat, Social protection expenditure database.

Figure 1.10. **Total public expenditure growth by category**[1]

Average 1995-2005, per cent



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1. The number below each bar indicates the share in GDP of each type of spending.

Source: Federal Statistical Office.

helped contain overall spending, rising social entitlement outlays risk displacing spending on publicly provided goods and services, which sustain rising prosperity and good labour market outcomes. Indeed, provision ofˆ some such services is relatively weak, for example, early childhood education and childcare as well as in the enforcement of competition law. Moreover, public investment as a share of GDP has been falling steadily in the last decade, and federal government research funding has declined in recent years. Reforms in social spending programmes would also help prevent an erosion of labour market participation resulting from benefit dependency and rising social insurance contribution rates (Chapter 3).

Medium-term budgeting is not firmly established

Weak control of entitlement spending reflects the absence of a medium-term budgeting framework, both at the federal and sub-national level. At the former, under the 2008-10 financial plan, which is the Federal Council's main medium-term planning and administrative tool, increasing federal government budget surpluses are planned for all three years and, based on prudent trend growth assumptions (Table 1.3), are likely to be achieved if new plans to curb expenditure growth are realised.[10] An Examination of Tasks Programme (ETP) was set up to determine the necessary spending reductions. However, its implementation has run into difficulties, and the authorities were unable to finalise it in time to include it in the 2008 budget. They have decided to implement the spending caps but are relying on individual ministries to come up with the savings. In addition, the budget proposal for 2008 includes extraordinary outlays, which are excluded from the debt-brake. These include a transfer to a federal government fund to finance new infrastructure as well as additional federal government expenditures arising from the introduction of the new financial equalisation scheme and the recapitalisation of public pension funds, amounting to close to 1% of GDP (CHF 5.2 billion).[11] Notwithstanding the inclusion of these outlays in the 2008 accounts, only a part of these transactions will increase federal government spending for the year. However, total government spending will not be affected. When spending eventually materialises (for example, once pensions to public employees are paid), it will be outside of the debt brake.

Table 1.3. **The financial plan of the Confederation for 2008-10**

CHF millions

	Budget 2007	Financial plan		
		2008	2009	2010
Revenues (a)	55 948	57 635	61 849	63 928
Ordinary revenues (b)	55 948	57 403	61 400	63 507
Extraordinary revenues[1]		232	449	421
Adjustment factor[2] (c) (in per cent)	0.991	0.994	0.997	0.999
Expenditure ceiling (d) = (b) * (c)	55 444	57 059	61 215	63 444
Extraordinary expenditures[3] (e)	–	4 132	–	–
Maximum "authorised" expenditures (f) = (c) + (e)	55 444	61 191	61 215	63 444
Total expenditures[4] (g)	55 030	61 547	60 975	62 893
Difference (h) = (g) – (f)	414	–356	240	551
Objective of the Examination of Tasks Programme (ETP)(i)		–700	–950	–1 200
Total expenditures with ETP (j) = ((h) + (i)	55 030	60 847	60 025	6 1693
Difference (k) = (f) – (j)	414	344	1 190	1 751
Balance (a) – (g)	918	–3 912	874	1 035
Balance with ETP (a) – (j)	918	–3 212	1 824	2 235
Economic assumptions:				
Real GDP growth	1.5	1.5	1.5	1.5
Nominal GDP growth	2.8	3.0	3.0	3.0
Long-term interest rate	3.0	3.5	3.5	3.5
Short-term interest rate	2.2	2.5	2.5	2.5
Exchange rate (against the euro)	1.6	1.6	1.6	1.6

1. Revenues from the CO_2 tax.
2. Adjustment for the economic cycle, computed as the estimated ratio of trend over actual GDP.
3. Includes the funding of the infrastructure fund and additional expenditures from the introduction of the new financial equalisation scheme, but not the capitalisation of the public employee pension fund. This last item, which was introduced only in the proposal for the 2008 budget, brings the total extraordinary expenditures to close to € 5.2 billion.
4. As per the Budget/Financial plan.

Source: Administration fédérale des finances, Plan financier 2008-2010.

The tax system could be more conducive to growth

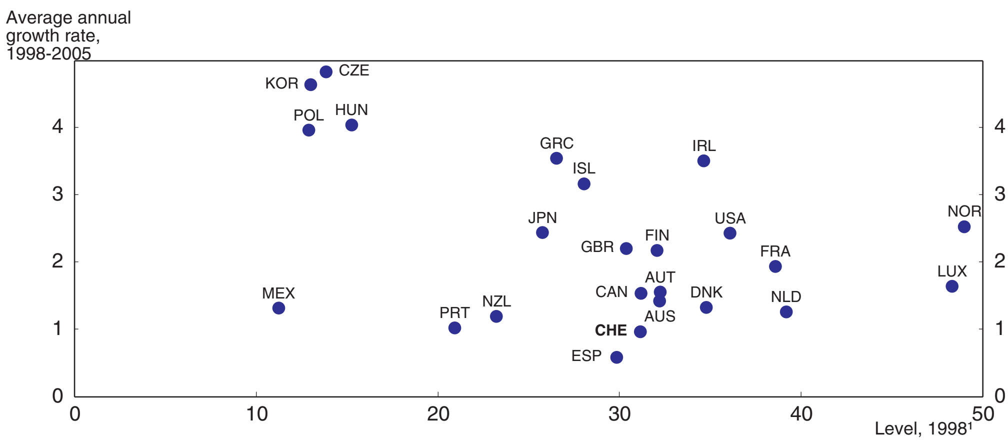
With good reason Switzerland is regarded as an attractive location from a fiscal perspective, in particular on account of its moderate corporate tax rates. The overall tax burden, as measured by the share of tax revenues in GDP, occupies a middle position in the OECD. There is wide agreement that the Swiss tax system is complex, resulting in high administrative and compliance costs (Zarin-Nejadan, 2004). As the tax burden has grown in recent years, it is likely that so have household and firms' efforts to avoid it. Tax compliance costs weigh particularly heavily on small business, which is likely to prevent new firms from starting up. In addition, the tax system is not always as neutral as it could be: distributed benefits are taxed both at the corporate and at the investor level, and married second-earners are still heavily taxed. The authorities are embarking on a series of measures to lower tax compliance costs and tax-induced distortions including reforms to the VAT, the corporate tax and the personal income taxation of families. Chapter 3 discusses these reform proposals.

Productivity in sectors lacking in competition is holding back growth performance

The labour productivity gap with respect to leading economies has widened

Labour productivity growth in Switzerland over the past decade has been lower even than in all countries with higher initial productivity levels (Figure 1.11). Trend total factor productivity growth appears to be particularly low – according to OECD estimates it has been 0.5% per year – and seems driven mainly by capital deepening rather than by increased efficiency in the use of factors of production, for example as a result of technological advances. Without an improvement in total factor productivity growth, rising capital intensity could lead to declining capital productivity and therefore falling investment. This finding is corroborated by estimates of capital productivity from the Federal Office for Statistics (OFS, 2006), which show a decline in capital productivity between 1991 and 2004. Trend total factor productivity is estimated to have accelerated by only 0.2 percentage point over the past 10 years. To some extent, measures taken to improve product market competition since the late 1990s[12] may not yet be fully reflected in trend productivity growth, given lags in the impact of such measures and the use of historical data in trend estimations. Progress in the reform of product market regulation nonetheless has been slower than in other OECD countries in some areas (see below).

Figure 1.11. **Labour productivity growth and level across countries**



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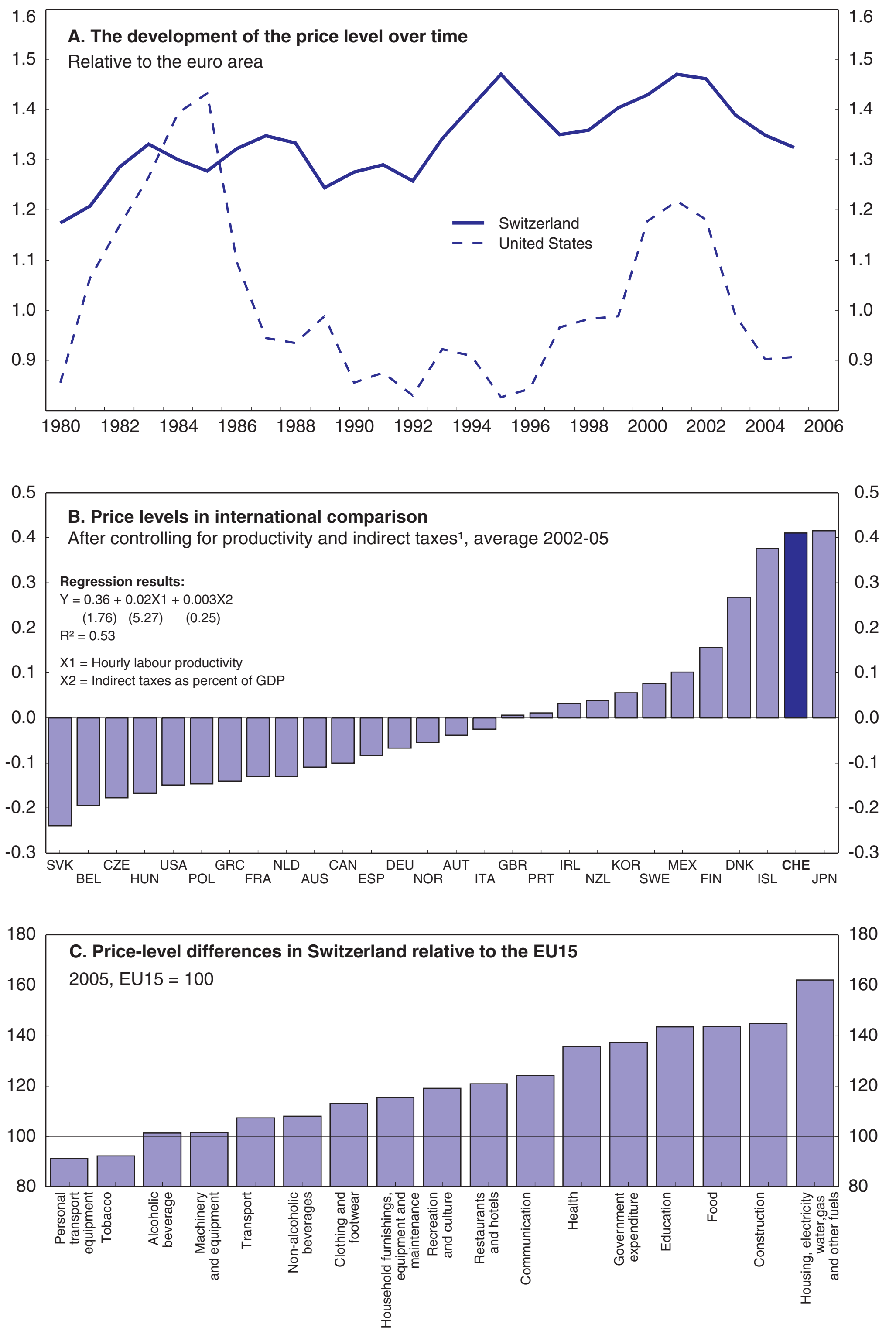
1. Thousand of US dollars at year 2000 PPP exchange rates.

Source: OECD, Annual National Accounts database and OECD productivity database.

Prices of goods and services remain high in international comparison, notwithstanding the depreciation of the Swiss franc over the past three years and continued low inflation (Figure 1.12, Panel A). Indeed, the price level in Switzerland, in comparison to other OECD countries, is considerably higher than would be predicted given the overall productivity level and the burden of indirect taxation (Panel B). While temporary factors, such as exchange-rate movements caused by capital flows or changes in domestic absorption, can contribute to differences in price levels, the durability of the high price level in Switzerland suggests that the causes must be sought in supply conditions, notably in marked productivity differentials between traded and non-traded sectors, barriers to imports and diminishing competitive forces in the determination of goods and services prices.[13]

Labour productivity is high in sectors exposed to international competition, notably in manufacturing. In financial services, the nominal value added per hour worked is even more than twice as high as in manufacturing. Hence the causes for the mediocre overall productivity performance must be sought in the performance of the remaining sectors, which are less open to international competition. Low productivity in these sectors raises high prices for goods and services not exposed to international competition, contributing

Figure 1.12. **The price level remains high**



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1. Residuals of regression of price level on hourly labour productivity and the share of indirect taxes in GDP.

Source: OECD, Annual National Accounts database, OECD productivity database, and Eurostat database.

to the overall high price level. Indeed, prices are high especially in services markets such as communication, transport and health services, construction and accommodation (Panel C). Price differentials also exist in some tradable goods, notably in agricultural goods, where they reflect trade barriers. Elevated costs for accommodation – which have a large weight in consumer spending and therefore have a significant impact on welfare – may also be explained by limitations in the supply of land for residential use as well as high costs in construction.

Strengthening competition in sheltered goods and services markets could re-invigorate productivity

Making product market regulation more conducive to competition could make a significant contribution to raising total factor and labour productivity. The removal of barriers to trade could make a contribution to reducing the productivity gap with respect to other high-income countries, as measured in purchasing power parity terms, by lowering the prices final customers in Switzerland pay for imported goods, especially in agriculture, although scope remains to lower non-tariff trade barriers for manufactured goods, too (see Chapter 4). Removal of these barriers would also improve the allocation of resources within the Swiss economy.

Available empirical evidence suggests that more vibrant competition is particularly likely to generate dynamic gains through more innovation in countries and sectors which – as is the case in Switzerland in a number of manufacturing industries – are close to the technological frontier (Conway *et al.*, 2006). One way in which competition can foster innovation and productivity performance is by boosting firm creation, which is low in Switzerland in international comparison.

Reform of regulation of goods and services used as intermediate products – such as telecommunications services – boosts productivity performance beyond the sectors directly concerned, fostering more efficient use of intermediate goods in downstream sectors. Services provided by network industries – notably electricity, telecommunications, railways and postal services – play an important role in providing intermediates to other industries. Reforms in these areas – which have advanced considerably more slowly than elsewhere in the OECD – would therefore strengthen productivity outcomes throughout the economy. Empirical evidence suggests that, over an eight-year period, business-sector labour productivity growth in most OECD countries could be boosted by at least 0.4 percentage point through improved regulation of network industries, with potentially significantly larger impacts for countries with a relatively restrictive regulatory stance.[14] Opening agriculture up to more competition could also increase productivity gains and competition in retailing – a sector with a heavy weight in the economy. Indeed, profit margins appear to be relatively large in Switzerland in this sector.

Immigration inflows have sustained labour supply

Immigration has had a positive impact on growth of the population of working age, as has the rising number of cross-border commuters (OFS, 2007a), who comprise about 4.5% of domestic employment (Table 1.4).[15] Participation of women in the labour market has also continued to rise. Overall labour input – measured in terms of total hours worked per head of population – has nonetheless declined slightly between 1998 and 2005, as these favourable trends have been offset by somewhat higher unemployment as well as by an erosion of labour-market participation of men aged between 55 and 64 and of prime-age

Table 1.4. **Decomposition of labour utilisation**

Per cent change, 1998-2005

	Per cent
Labour utilisation[1]	–1.0
Average hours worked	–0.6
Ratio domestic/national employment	+0.1
Employment rate	–1.0
Share of working-age population in total population	+0.6

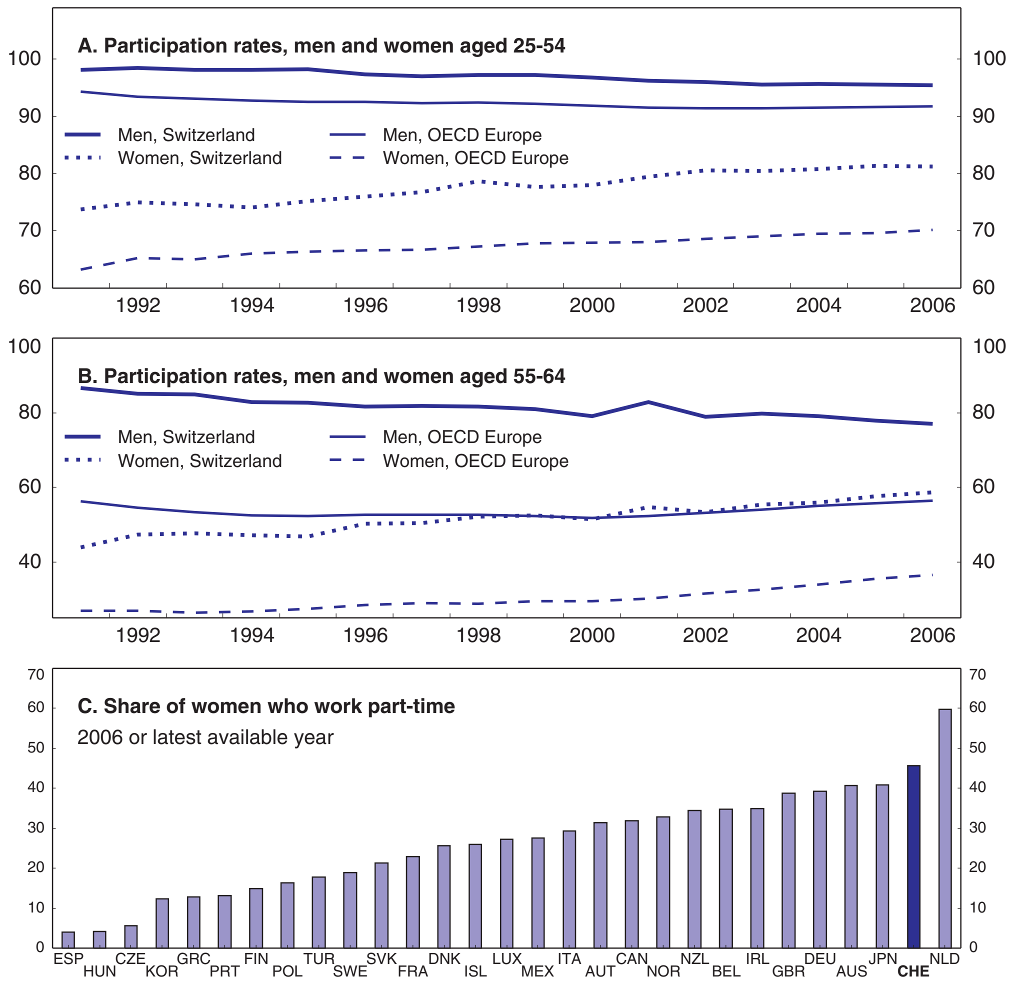
1. Labour input relative to total population.

Source: OECD Analytical database, Labour Force Survey Statistics, National Accounts database.

men (Figure 1.13). The rising number of individuals receiving disability and social-assistance benefits as well as moves into early retirement are likely to have contributed to this development.[16] The contribution of rising female labour supply to labour input has been

Figure 1.13. **Participation trends in the labour market**

Per cent



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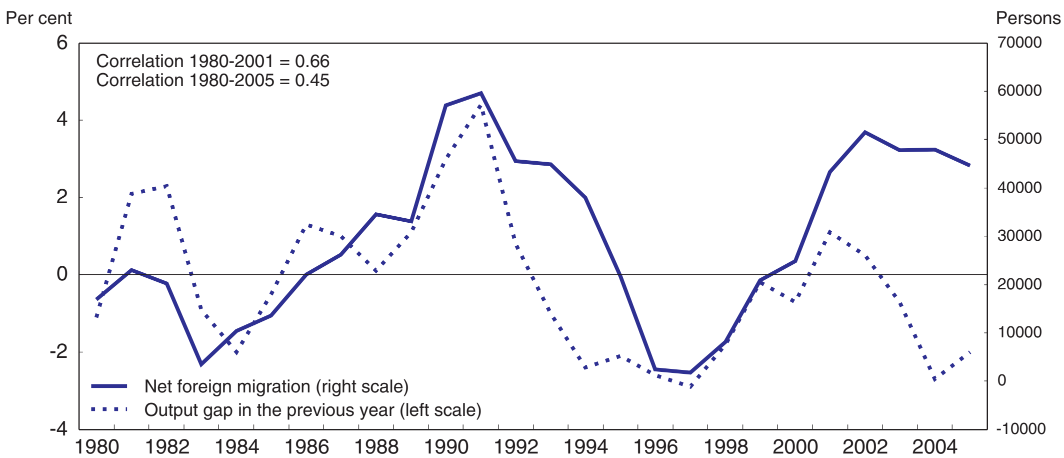
Source: OECD, ELS database.

attenuated by an unusually high share of women who work part-time, which has contributed to the continued decline in aggregate hours worked per employed person.[17] Scope for further increases in female participation is, however, limited, as the participation gaps between men and women and between young and older women are now small.

Immigration has risen and has become less responsive to labour-market conditions

The sustained and dramatic rise in immigration flows in recent years (Figure 1.14) has not prevented the unemployment rate from falling to one of the lowest levels in the OECD, indicating that the overwhelming majority of immigrants are well integrated and appear not to have displaced native workers to a significant extent. Immigration has gone some way to making up for low fertility rates and mitigating the labour-supply consequences of adverse demographics, even if it cannot do so entirely. Moreover, the contribution of immigration to potential GDP growth has been supported by the high level of skills of many immigrants. These skill levels of foreign workers arriving in Switzerland have been improving growing steadily more favourable since the early 1990s (Figure 1.15). Indeed, the proportion of immigrant workers in Switzerland with at least an upper secondary degree has been only a little lower than the corresponding share of the prime-age resident population, while the proportion of immigrant workers with a tertiary degree has been almost twice as high. Indeed, the large immigration flows in Switzerland have arguably raised per capita GDP levels (see Chapter 5).

Figure 1.14. **Net migration flows over time**



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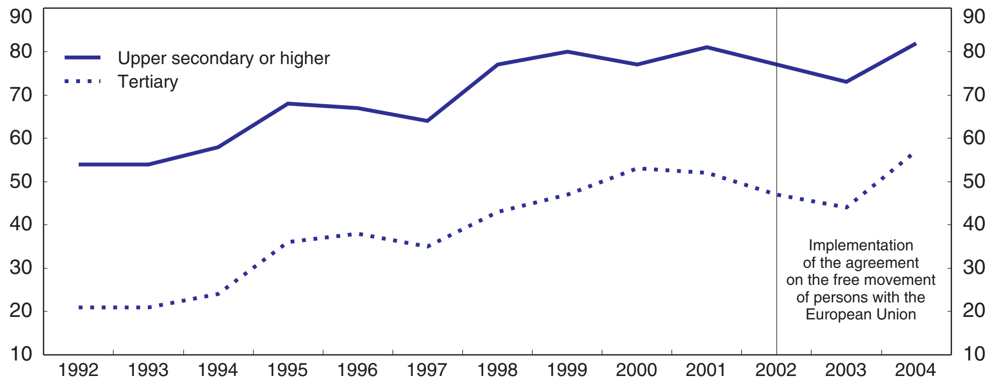
Source: Federal Statistical Office and OECD, data for output gap has been estimated.

Immigration flows have had a pronounced cyclical pattern, which, however, has been diminishing. Indeed, the negative correlation between the growth of foreign population and unemployment has decreased substantially, suggesting that migration flows may play a smaller role than heretofore in mitigating cyclical developments in the labour market (Figure 1.16). The share of immigrants staying in Switzerland on the basis of either seasonal or temporary permits has fallen, which may have lowered the share of immigrants who return to their country of origin when labour-market conditions deteriorate.

Figure 1.15. **Educational level of the foreign working population**[1]

In the second quarter 2005, according to period of arrival in Switzerland



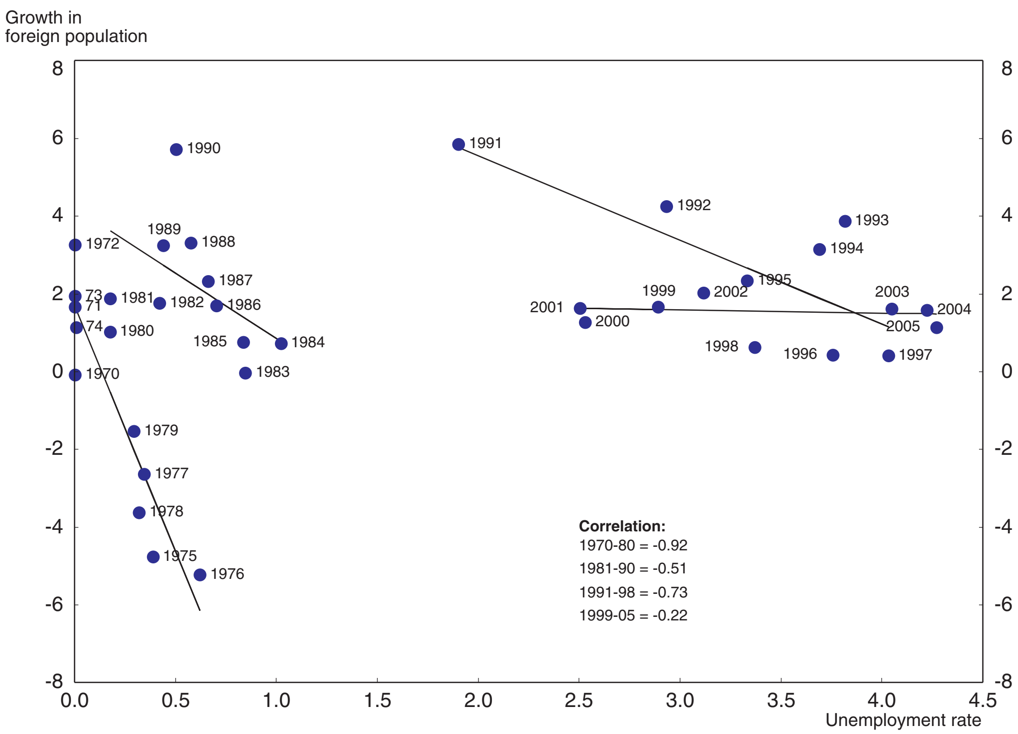
StatLink http://dx.doi.org/10.1787/138377627124

1. Account has been taken solely of foreigners who have held a permit for over a year, who immigrated to Switzerland as adults (18 years and over) and who were working in 2005.

Source: Federal Statistical Office, Swiss survey of the working population.

Figure 1.16. **Unemployment and foreign population**

Per cent



StatLink http://dx.doi.org/10.1787/138425355440

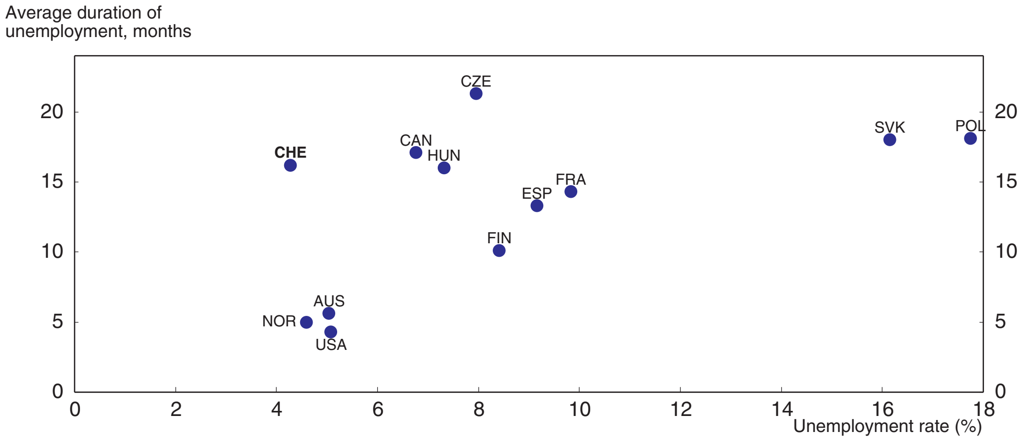
Source: Federal Statistical Office and OECD, Economic Outlook 81 database.

The long duration of unemployment spells poses a risk for the resilience of the labour market to shocks

Despite the fact that the unemployment rate in Switzerland is among the lowest in the OECD, the duration of unemployment spells is long in international comparison (Figure 1.17), notwithstanding limited statutory employment protection. Flexible wage-

Figure 1.17. **Unemployment rates and duration of incomplete unemployment spells**

In months for both men and women of all age groups, 2005



StatLink http://dx.doi.org/10.1787/138433150220

Source: OECD, Unemployment by duration database and Economic Outlook 81 database.

setting arrangements, which allow for a high degree of decentralisation at the level of individual firms, help to limit unemployment through a low inflow rate. Relatively generous unemployment-related benefits combined with inefficiencies in the assignment of responsibilities related to job placement across levels of government are likely to contribute to longer spell durations (see Chapter 3). However, a majority of the long-term unemployed live in households in which no individual receives social benefits, so only part of long-term unemployment is associated with benefit dependency. Long average spell duration is likely to diminish the resilience of the labour market to shocks, as, in the event of a large adverse economic event, a substantial increase in the inflow rate would lead to a larger increase in the stock. This issue may be of more policy relevance in the future if, as recent evidence suggests, immigration flows become less responsive to the cycle.

The average duration of spells is shorter according to the registration data. The shorter durations of spells of registered unemployment in part reflect participation in active labour market measures, notably training programmes, which typically leads to the interruption of registered spells. Some active labour market programmes, such as job subsidies and cantonal job creation programmes entail a new entitlement to federal unemployment insurance benefits.[18] Participation in activation measures is significant in international comparison, notwithstanding the low level of unemployment, with the share of the labour force engaged in training measures reaching 1% in 2004, one of the highest in the OECD (OECD, 2006b).

Scope remains to improve the integration of immigrants and their offspring in the labour market

Substantial efforts have been undertaken to facilitate integration of immigrants into the labour market, notably through the apprenticeship system, which provides most upper secondary qualifications in Switzerland (see Chapter 5). Nonetheless, gaps in labour-market outcomes between foreign and Swiss resident workers remain. Wage differentials between immigrants and native workers are significant, even for a given level of qualifications, and appear to persist more over the duration of residence than in other OECD countries. Unemployment rates are higher among immigrants than among the native population, notably for immigrants from countries other than EU member States, and a number of OECD countries have managed to limit such discrepancies in unemployment rates to a greater extent than is the case in Switzerland. Differences in education outcomes among immigrants' children and children of the native population are relatively marked, and wage earnings of second-generation immigrants depend more strongly on parental labour earnings than is the case for non-immigrant workers. This holds, in particular, when the parental labour earnings are modest (Riphahn and Bauer, 2007). An increasing share of immigrants does not speak any of the Swiss languages, further increasing the need to ensure effective integration of immigrants' children through the education system.

To some extent the relatively high unemployment rates among immigrants reflect the less favourable skill characteristics of earlier immigration inflows. At the same time Switzerland is likely to be attractive to both low skilled and highly skilled workers in future, owing to its high wage levels. While immigration of unskilled workers can have a favourable impact on employment and wage prospects of native workers, reflecting complementarities in the different skills contributed by foreign and domestic workers (see, for example, Ottaviano and Peri, 2005; Peri, 2007), integrating these less qualified immigrant workers and their offspring remains a policy challenge.

Notes

1. Recently, substantial debate has taken place on the question of whether GDP per capita is an adequate measure of social welfare. Boarini *et al.* (2006) provides a summary of this debate, concluding that the cross-country rankings of other "extended" measures (that include leisure time and distributional considerations) are similar, though they have evolved differently over time. However, survey-based measures of happiness and life satisfaction are only weakly related to levels of GDP per capita. For what it is worth, Veenhoven's (2007), "World Database of Happiness", shows that Switzerland is ranked second among 94 nations (following Denmark) in both average happiness and inequality-adjusted happiness for the decade ending in 2005.
2. International price-level comparisons for the determination of purchasing power parities refer to narrowly defined categories of goods and services and therefore ensure comparability, for example with respect to quality. In a few services, notably education, health and housing, quality differences are more difficult to take into account, so differences in price levels may nonetheless reflect quality differences to some extent. Such quality differences might entail somewhat overestimated price levels (and therefore underestimated productivity levels) in countries where prices are high, such as Switzerland.
3. Among the countries listed in Figure 1.1, tertiary attainment rates are somewhat higher in the United States (39%), Norway (32%) and Denmark (32%) than in Switzerland (28%). Upper secondary attainment rates are marginally higher in Norway and the United States (both 88%) than in Switzerland (85%). See OECD (2006a).
4. Such an overestimation also results from the profits Swiss enterprises with foreign shareholders make in their domestic business, to the extent that these profits are not distributed to shareholders, because the share of these profits accruing to foreign shareholders is likewise not attributed to them in the balance of payments. The overestimation results regardless of whether or not enterprises domiciled in Switzerland reinvest such retained earnings abroad or in Switzerland.
5. Compulsory contributions to the occupational pension regime are unlikely to have been fully offset by reductions in voluntary forms of savings. Moreover, the occupational funded pension scheme became compulsory only in 1985 so has not yet completely matured. The occupational funded pension scheme may also have reinforced the positive impact of past demographic developments on national savings, marked by a significant increase in the ratio of the population of working age to the total population.
6. However, weak productivity growth could have a negative effect on savings – notably on account of life-cycle effects – with an offsetting impact on the current-account balance.

7. Collective bargaining outcomes for 2007 suggest wage growth has not accelerated significantly thus far in 2007.

8. As measured by the European System of Integrated Social Protection Statistics (ESSPROS), social protection encompasses all interventions by public or private bodies intended to relieve households and individuals of the burden of a defined set of risks or needs. A number of differences might arise between the ESSPROS and the national accounts for several reasons. One of the main discrepancies lies in the fact that the national-accounts definition of social benefits includes the function Education, while the ESSPROS does not. Other discrepancies might arise because of differences in the statistical units used by each system and the way they distinguish social benefits in cash and in kind. More detailed information can be found in the Appendix 1 of the ESSPROS Manual, available at *http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/CA-99-96-641/EN/CA-99-96-641-EN.PDF*.

9. In the current system, 20% of spending by the pay-as-you-go pension system and 50% of disability benefit insurance expenditure are funded by the federal government's and the cantonal budgets. Following the reform of fiscal federal relations (see Chapter 3), the cantons' share shifted to the federation from 2008 onwards. In health care, cantonal and federal budgets fund about half the cost of hospital services as well as transfers to low-income households to subsidise health insurance premia.

10. Revenues are expected to increase at a robust pace of 5% per year on average, faster than projected annual nominal GDP growth of about 3%. Total expenditures will increase by 4% if the goals to reduce spending that were to be achieved through the implementation of the Evaluation of Tasks Programme are met. The switch, beginning in 2007, to an accruals-based accounting method is responsible for a further 0.4 percentage point of the increase, although this will have no effect on the balance. Apart from several transfers to regional governments and to social-security programmes, the increase in federal expenditure is limited to 2.2%, less than projected nominal GDP growth.

11. The figures for the Financial Plan 2008-10 foresaw extraordinary spending of only CHF 4.1 billion. However, the budget proposal for 2008 includes additional extraordinary expenditures that bring the total requested for 2008 to CHF 5.2 billion.

12. These include progress in removing cross-cantonal trade barriers (1996), the introduction of some competition in telecommunications and the railways in 1998, bilateral trade agreements with the EU to reduce international trade barriers (1999 and 2003, some reductions in producer support in agriculture and improvements in competition law (1997 and 2004-5). See OECD (2000) and Chapter 4 below.

13. Price discrimination on the part of exporters with market power charging higher prices in countries with high income levels can also play a role, although this can be limited by importing goods from markets where they have been sold more cheaply.

14. The period under investigation refers to 1995-2003 – see Conway *et al.* (2006). Significant growth effects have also been estimated by SECO (2005).

15. Table 1.1 and Figure 1.1 assume that the number of hours worked per worker resident in Switzerland (resident concept) has grown at the same rate as hours worked per worker working in Switzerland (domestic concept). The latter include cross-border workers. According to data from the Federal Statistics Office, hours worked per worker according to the domestic concept declined by 2.2% between 1998 and 2005, a stronger decline than indicated in Table 1.1. On the other hand, the statistics on the total volume of hours worked indicate that labour input relative to population declined by only 0.4%. The statistics on hours worked per worker and total volume of hours worked are, however, not consistent with headcount measures of domestic employment (OFS, 2007b).

16. The number of social-assistance recipients as a share of the total population rose from 3% in 2004 to 3.3% in 2005 (OFS, 2007c). See Chapter 3 for details on the evolution of the number of disability-benefit recipients.

17. Hours worked per male worker also fell. See OFS (2007c).

18. Thus, such episodes lead to a new unemployment spell in the registered unemployment count but may not do so according to the labour force survey, in which interviewees are prompted to provide information as to when they started search and when they left their last job.

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ANNEX 1.A1

Progress in structural reforms

This annex reviews action taken on recommendations from previous *Surveys*. Recommendations that are new in this *Survey* are listed at the end of the relevant chapter.

Recommendations in previous *Survey*	Action taken since March 2005
COMPETITION	
Ensure the political independence of *ComCo*, by excluding members that represent economic interests and raise its resources.	Staffing of *ComCo* has been raised but by less than considered necessary for it to fulfil its enlarged duties.
Move from the abuse to the prohibition principle.	The prohibition principle continues not to formally apply to hard core cartels, but a recent Federal Court ruling upheld the decision to ban price fixing for books.
Apply the Cartel Law in a rigorous, effective and comprehensive way.	The first direct sanctions have been imposed. The Federal Council did not exempt book price fixing from Cartel Law.
Consider introducing criminal sanctions as a means of punishing people responsible for anti-competitive behaviour.	None.
Revise the Domestic Market Act to ensure the freedom of establishment and strengthen the role of *ComCo* in its enforcement.	Implemented.
Adopt the "*Cassis de Dijon*" principle to reduce technical barriers to trade. Make competition of imports of patented products more effective.	The draft law implementing the principle, subject to a limited list of exemptions, was subject topublic consultation.
In telecommunications, unbundle the local loop and reduce interconnection charges. Prevent horizontal agreements in mobile telephony.	Local loop unbundling was introduced in 2007, but significant restrictions remain, notably in line sharing. *ComCo* fined *Swisscom* for abuse of its dominant position in mobile telephony; the decision is currently under appeal.
Liberalise the electricity and gas sectors in a way that is compatible with EU rules.	To be implemented by 2013 according to approved legislation, although vertical separation requirements on distribution networks are more limited (only accounting separation).
Accelerate the pace of reform of postal services. Create an independent regulator to ensure that the financing of the universal service does not interfere with competition.	The legally protected monopoly of the incumbent in the delivery of letters weighing above 100 g has been lifted. The Federal Council mandated the infrastructure ministry to prepare a proposal for a further opening up of the postal sector.
Continue to open up the railway market to foreign competition. Create a network regulator independent of the two main rail companies; eliminate the obstacles to competition on regional passenger lines.	The government intends to introduce compulsory tendering of regional passenger transport licenses as well as wider market entry access rights for foreign operators, but this has not yet been approved by Parliament.
Improve the rules concerning public procurement contracts. Limit the possibilities for splitting contracts.	Federal government and the cantons plan to facilitate electronic contracting of public procurement and are considering options to harmonise procurement rules across levels of government.
Reduce the protection of the agricultural sector. Accelerate the de-linking of subsidies from production. Clearly identify the environmental objectives, which need to be pursued directly.	Parliament approved a bill holding subsidies to the sector constant in nominal terms while progressively eliminating export subsidies and redirecting price support to direct payments.

Recommendations in previous *Survey*	Action taken since March 2005
INNOVATION	
Reform the bankruptcy law to reduce the prescription period and facilitate the use of the procedure of "concordat".	None.
Give public funding for research a high priority. Intensify co-operation in international research without endangering national research funding.	Federal government funding for research declined in nominal and real terms in 2005 and 2006. The Federal Council submitted a proposal to Parliament suggesting a 6% increase in federal funds for education, research and innovation (ERI).
Increase private funding of university research, by expanding the activities of the offices of technology transfer and facilitating the direct business funding of university research.	None.
Stimulate applied research by increasing the resources of the Commission for Technology and Innovation (CTI) to better bridge the gap between fundamental research and the market.	Within the proposed increase of ERI-related spending (see above), funding of CTI will grow by around 7%.
LABOUR MARKET	
Be careful in using the possibility of imposing minimum wages and extending collective agreements to prevent social dumping as a result of immigration.	The possibility of facilitated extension of collective agreements has not been used so far. Minimum wages have been introduced for household workers in one canton.
Increase the involvement of the Confederation in the provision of childcare services. Provide public support through targeted subsidies or through tax breaks. Allocate at least part of the childcare subsidies directly to parents instead of providers.	None. Federal government co-funding of childcare facilities will expire in 2011.
Encourage cantons to increase out-of-school care, move to continuous schooling hours, and provide canteens so as to enable parents to work or work longer.	According to an agreement among cantons (Concordat HarmoS), continuous schooling hours and out-of-school care should be provided in the coming years.
Condition any increase in child benefits on the exercise of an activity or the use of childcare.	A minimum child benefit has been introduced across cantons, but they are not conditioned on the work activity of both parents.
Lower maximum duration of unemployment benefits.	None. Among other measures to guarantee the financial equilibrium of the unemployment insurance system, an experts' committee suggested shortening the maximum duration of benefits.
Reduce pension contribution rates for older workers and bring them in line with those of younger workers. Introduce incentives for prolonging work or increase accrual rates after the standard retirement age.	None. Early retirement for older workers with bleak job prospects has been facilitated.
Provide students from non-EU countries graduating in Switzerland more time to find a job in Switzerland.	None.
EDUCATION	
Tackle low literacy of new immigrants.	The cantons have improved the supply of support for children with learning difficulties.
Develop early childhood education and promote earlier entrance in the education system.	Cantons agreed to lower the entrance age for compulsory schooling to the age of 4.
Implement reform plans of secondary education to improve quality and increase attention to weaker students.	The Confederation has been given the constitutional right to harmonise the school system if the cantons cannot agree on common quality standards.
Pursue the reform of the university system, including the specialisation and profile building of universities, the introduction of a standard education subsidy per student and the development of quality assessments of universities.	A first draft law on the university system is in the consultation process and should enter into force by 2012.
Consider a rise in tuition fees while developing a system of loans with income-contingent repayments.	None.
Expand lifelong learning, by improving the certification of training, by introducing a time entitlement and by eventually raising public funding.	A federal law on adult training is planned, but its content has not been determined yet.
FISCAL FRAMEWORK	
Apply the debt-brake rule to medium-term financial plans.	The Evaluation of Tasks Programme planned to limit the Confederation's expenditure to nominal GDP growth from 2008 until 2015. It has not yet been finalised.
Implement the proposed reform of spending assignments and fiscal equalisation schemes. Adjust conditional grants to better reflect spillover effects across jurisdictions.	The proposed reform will come into effect in 2008 as planned.

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Recommendations in previous *Survey*	Action taken since March 2005
Favour a more global approach to fiscal management, including the preparation of more detailed medium-term consolidation plans.	A fiscal sustainability report will be published in early 2008.
Increase use of benchmarking of the cost and effectiveness of government programmes.	A new outcome-based management approach of public spending was adopted, and a number of administrative units are governed by contract with the Federal Council.
TAX SYSTEM	
Further reduce double taxation of dividends to levels comparable with other countries. Replace the progressive tax on corporate income in a number of cantons by a flat rate tax on corporate profits.	The decision by Parliament to reduce the double taxation of dividends by taxing only 50% (if held as corporate assets) and 60% (if held as private assets) of them will be subjected to a referendum in early 2008.
Ease the tax burden on married couples with two incomes. Improve the link between the tax and social welfare systems.	By 2008, the second earner in a married couple will benefit from a separate tax-free allowance amounting to about 50% of the main earner's allowance (generally about 5 000 CHF).
Reduce the number of VAT rates and widen the tax base.	Reforms aiming at significantly simplifying the VAT are in the process of consultation.
MODERNISING GOVERNMENT	
Provide more determined political support for the development of e-government. Speed up the reform to reduce fiscal administrative burdens for businesses. Adopt the "silence means consent" principle for delivering administrative authorisations.	The Confederation is pursuing a new e-government strategy. Draft legislation aims to reduce the administrative and compliance burdens of enterprises.
Develop benchmarking to reduce the cantons' and communes' operating expenditure by publishing comparable statistics for employment and civil servants' salaries according to area of spending.	None.
OLD-AGE AND DISABILITY INSURANCE PROGRAMMES	
Take decisions to ensure the funding of basic pensions quickly, including beyond 2020, prolonging the average working life. Remove obstacles to work of older workers.	The 11th reform, still in the legislative process, focuses only on the medium-term solvency of the system. The retirement age of women will be slightly increased, but early retirement options will increase for older workers with low prospects of earning a sufficient income in the labour market.
Revise the conversion rate for occupational pensions downwards.	Parliament rejected the most recent attempt to lower the rate.
Remove the obstacles to the diversification of pension fund investments and reduce the tax exemptions for contributions.	None.
Develop a multi-disciplinary approach to deal promptly with persons becoming disabled.	The fifth revision contains early identification and intervention measures with the goal of reducing inflows into the system
Consider providing financial incentives to firms, to avoid an excessive recourse to the disability insurance system.	None.
Improve co-ordination among social assistance, disability and unemployment schemes in order to promote more actively re-entry in the labour market.	None.
HEALTH CARE	
Consider ways to reduce or eliminate cantonal frontiers in the organisation of both health-care provision and insurance.	A parliamentary sub-committee recommended giving patients more freedom to choose their hospital, but the proposal has not been voted on.
Remove barriers to effective competition by ending the obligation for insurers to contract with all providers on the same terms and refining the criteria of the risk equalisation system.	Parliament has asked the government to draw up a report on the subject of contractual freedom. Selective contracting is under consideration.
Consider introducing a monistic system of hospital funding.	Parliament has recommended a more rigid joint financing system, in which cantons would have to finance at least 55% of the total cost of hospital stays (the exact percentage is being discussed in Parliament).
Encourage the development of a standard payment per patient for doctors in the framework of the expansion of managed care systems.	None.
Remove the obstacles to foreign competition on the drugs market. Introduce a prescription system based on active substances.	New legislation introduced a higher co-payment on branded off-patent drugs if generics are available.
Consider allowing profits to be made in the basic insurance market.	None.
SUSTAINABLE DEVELOPMENT	
Link support to renewable energy to either the cost of emission permits or the carbon tax. Introduce market-based instruments such as a carbon tax or emissions trading scheme.	A tax on CO_2 emissions from heating fuels will be introduced in 2008. A permit-trading system will be introduced.

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Chapter 2

The significance of Switzerland's enormous current-account surplus

Switzerland has had a long-standing surplus on its current account. But over the past 15 years that surplus has surged to levels unmatched by nearly any other OECD country at any point. This chapter dissects the surplus from both a balance of payments vantage point as well as from the optic of the excess of national saving over domestic investment. It then seeks possible explanations for the uptrend and assesses whether it results to any extent from market, institutional or policy failures that could call for reforms. A number of important measurement issues are raised. But the key recommendation is that the authorities should prepare for a possible sharp increase in the value of the Swiss franc if and when investors engaged in the "carry trade" *unwind their positions. To that end they should examine labour, capital and product markets with a view to ensuring they are as flexible as possible and that factors are as mobile as possible, both geographically and sectorally. This will allow any necessary adjustment to a higher exchange rate to be smoothly accommodated.*

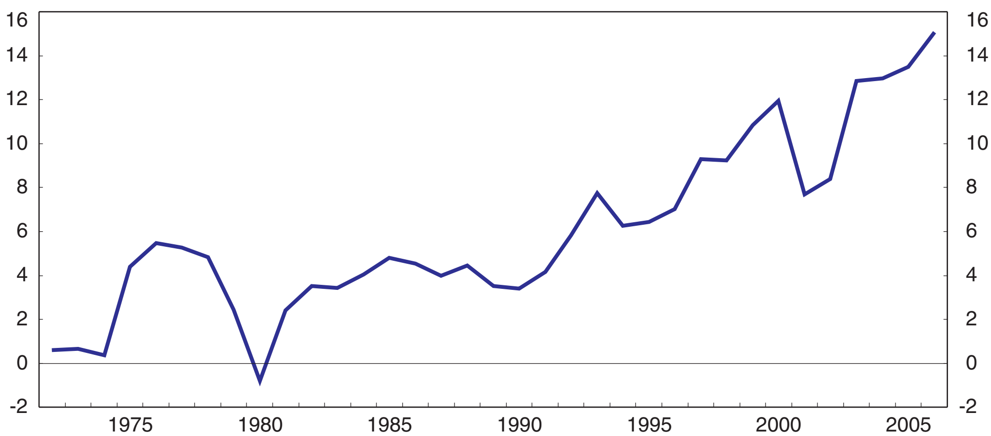
Recent developments in Switzerland's balance of payments

A traditionally sizeable external surplus has been on an uptrend since 1991 and has surged since 2002

Switzerland has traditionally recorded a surplus on its current external account. Prior to the 1990s that surplus showed no particular trend as a share of its GDP, averaging around 4%. However, beginning in 1991 it began what has been an almost uninterrupted ascent, culminating in the extraordinary figure of 15.6% of GDP in 2006 (Figure 2.1).[1] Indeed, this figure is unsurpassed in the history of OECD countries with the exception of Norway, though only in 2006 (thanks to its substantial oil revenues). But Switzerland has no significant natural resources. Its surplus should therefore be more amenable to analysis using the economist's normal toolkit. The question to be faced here is what has caused this development and whether the surplus is appropriate for Switzerland, or, if not, what market or policy failures might be operating, and what should be done to remedy the situation.

Figure 2.1. **Evolution of the current account**

As a percentage of GDP



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Source: OECD, Main Economic Indicators database.

Taking the normal balance of payments components of the current account, it is obvious that, even if goods and especially non-factor services[2] have likewise been in gently rising surplus over the past 15 years, the main driver of the surging current-account surplus has been factor income and investment income in particular.[3] Indeed, the CHF 59 billion balance on investment income represented 80% of the total surplus in 2006 (Table 2.1); that outcome was exceeded only by those recorded by Japan and the United Kingdom. Those receipts are first and foremost from direct investment, but with a substantial presence of portfolio and other investment income receipts as well. Furthermore, even though of course Switzerland's accounts follow international

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Table 2.1. **Switzerland's balance of payments in 2006**

CHF billions

		Capital transfers, net	–3.4
Current account	73.6	Financial account	–90.9
of which:		*of which*:	
Goods	5.1	Direct investment	–54.4
Non-factor services	33.2	*of which*:	
of which:		Equity capital	–37.8
Tourism	1.0	Reinvested earnings	–11.9
Financial services	13.1	Portfolio investment	–53.5
Labour income	–11.0	*of which*:	
Investment income	59.2	Debt securities	–36.7
of which:		Equity securities	–16.8
Direct investment	41.2	Other investment	21.2
Portfolio investment	13.9	*of which*:	
Current transfers	–12.9	Commercial bank lending	23.5
		Corporate lending	15.1
		Change in reserve assets	–0.4
		Net errors and omissions	20.7

Source: Swiss National Bank (2007), "Swiss balance of payments in Q2 2007".

methodological norms, those guidelines lead to significant distortions in its case (as described in Box 1.2):[4] profits earned abroad by Swiss-based multinational enterprises are attributed to Switzerland, even if the ultimate owners of those firms are to a large extent resident abroad (think of the many investors in, for example, Nestlé reside outside Switzerland). While it is not possible to be precise, central bank calculations show that correction for this factor on the payments side of the ledger alone would cut the current-account surplus by some 4¼ percentage points of GDP, leaving the true balance in 2006 closer to 11% of GDP (SNB, 2007, Table 9). The IMF estimates that it could be as much as 7 points of GDP (IMF, 2007). Of course these are gross figures, and the same distortion is in the data for other countries and for Swiss portfolio holders of shares in foreign multinationals. Indeed, using figures provided in the annual SNB report on the 2006 balance of payments,[5] the corresponding correction on the receipts side would probably be nearly 1½ percentage points of GDP, leaving the net adjustment at less than 3 percentage points of GDP and the adjusted current account at almost 13% of GDP.

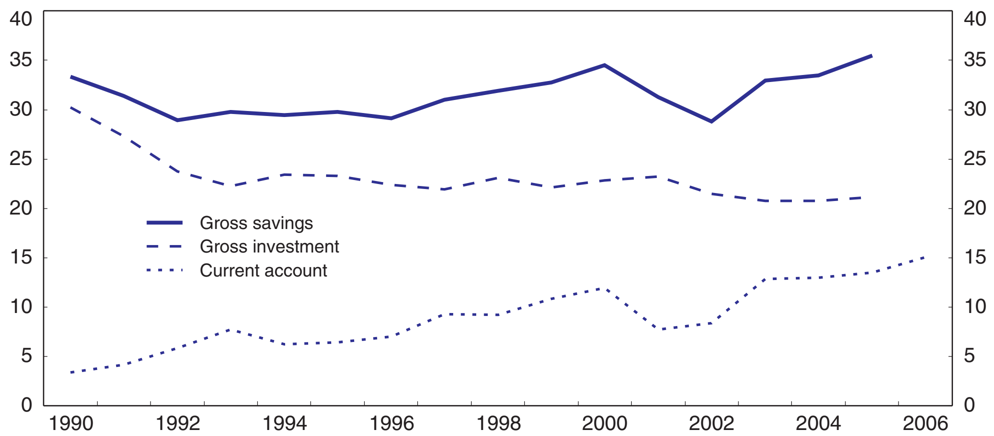
On the financial account the numerous large Swiss multinational enterprises manage to earn significant profits, leading to outsized net outflows of direct investment; in 2006, this was offset to some extent by inward direct investment in Switzerland.[6] Otherwise portfolio flows in both debt and equity form go predominantly abroad; they dwarf their counterpart flows into Switzerland. This is consistent with a portfolio diversification explanation of these capital flows: as elsewhere, home bias (unexploited diversification potential) has been decreasing steadily but is believed not to have been entirely eliminated. The other items on the financial account represent mainly corporate and commercial account borrowing and lending activities. In 2006 they were primarily increases in liabilities of Swiss banks and non-financial enterprises to foreign banks. Finally, the accumulation of reserve assets has often been another counterpart of the current-account surplus, but in 2006 they were largely unchanged. This conforms to the pattern of the evolution of the franc: under semi-constant upward pressure in most of the post-Bretton Woods era, its uptrend seems to have come to an end several years ago, together with the steady rise in what has become known as the "carry trade", discussed further below. Against the euro its value has been falling for the past five years. On an effective basis the cumulative decline since the early-2003 peak has reached nearly 8%.

In the last decade the rise in the surplus has been mainly driven by higher domestic saving

The current account is also the excess of gross national saving over gross domestic investment. While in the early 1990s both aggregates were falling in relation to GDP, the national saving rate began to rise around the middle of the 1990s, reaching around 35% of GDP by 2000 (Figure 2.2), although this figure might be overestimated due to the share foreigners hold in Swiss multinationals (see Box 1.2). The investment share showed no such uptrend, with the result that the current account surged. Following a brief interruption in 2001-02, when the saving ratio fell, the investment share too began to shrink in 2002, and the difference between the two resumed its rise. It is as yet unknown which component lies behind the most recent jump in the surplus, as no savings/investment data are as yet available for 2006.

Figure 2.2. **Trend in savings, investment and net current account**

As a percentage of GDP



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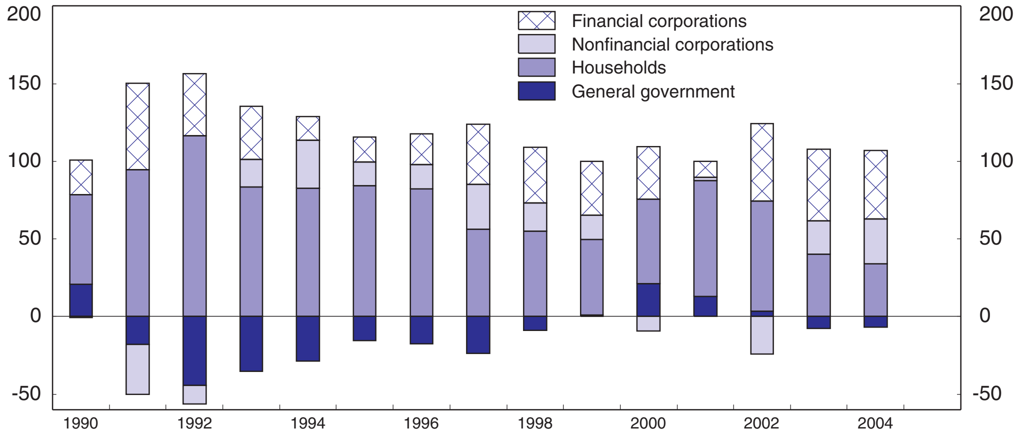
Source: Federal Statistical Office and OECD, Annual National Accounts database.

That increase in saving is largely attributable to financial corporations and, more recently, government

Taking a closer look by economic agents (Figure 2.3), it is households that have traditionally contributed the largest share of the excess of saving over investment, although their share has been shrinking in recent years. This is partly because of the well developed and mature pension system: second-pillar pension savings are around half of household financial wealth.[7] Government incurred a saving shortfall for most of the 1990s, then ran a series of surpluses before returning to deficit in 2003-04; while outcomes thereafter are not definitive, it seems highly likely that general government saving returned to the black in 2005-06. At the same time, government investment has been dropping steadily relative to GDP since the early 1990s, with a cumulative decline of around 1¼ percentage points of GDP (about a third of its level in 1991). Not surprisingly, corporations' outcomes have been highly correlated with the business cycle, although mainly for the non-financial

Figure 2.3. **Split of the savings surplus in the Swiss economy**

As a percentage of total net saving



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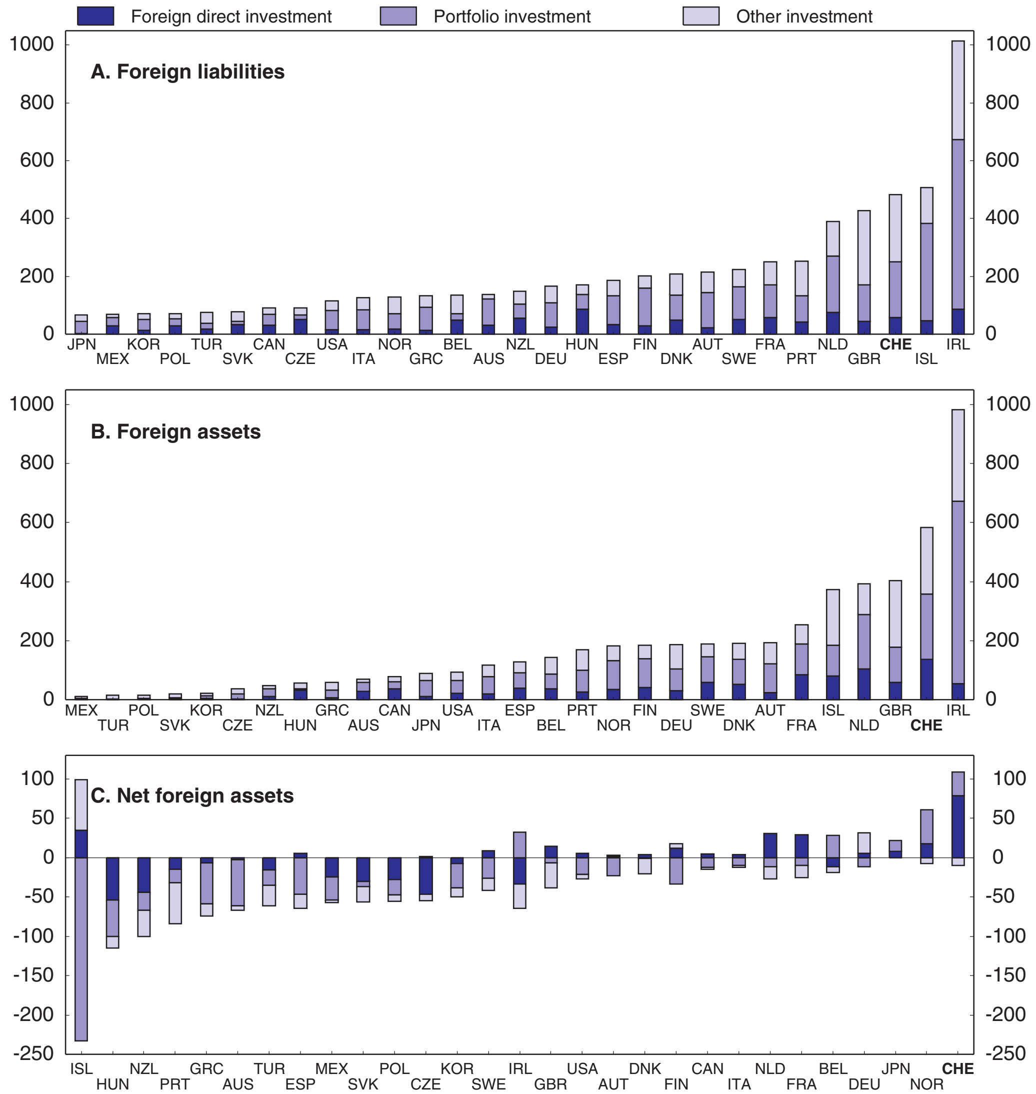
Source: Federal Statistical Office and OECD, Annual National Accounts database.

component. For their part, financial corporations have made a larger absolute contribution to the excess than their non-financial counterparts throughout the past decade. Indeed, in recent years they have overtaken households[8] and thereby taken the top position in terms of responsibility for the savings surplus.[9] Most of the action lies on the saving side of the ledger: corporations have been raising the share of their income saved since the last recession (as they have done in most OECD countries), as manifest in surging profitability. Combined with fairly steady investment rates, the result has been a declining share of corporate savings that is invested, especially in net terms. Firms have preferred to distribute dividends or to strengthen their balance sheets by paying down debt. In so doing they may have made themselves attractive targets for future foreign takeovers, particularly by private equity firms, and especially as the currency has fallen so much against the euro.

Because Switzerland has run such persistent surpluses on its current account, offset by capital outflows, it has accumulated a huge net international investment position (about CHF 520 billion or 114% of GDP at end-2005, the highest ratio to GDP in the OECD).[10] For that matter it has extremely large positions on both gross assets[11] and liabilities by OECD standards, surpassed as a share of GDP only by Ireland (Figure 2.4). These positions generate the significant investment income flows described above. According to the Swiss National Bank (SNB), which compiles the balance of payments and the investment position statistics, the largest share of gross assets is held in the form of loans and other foreign assets (40%), followed by portfolio investment (36%), direct investment (21%) and finally reserve assets (3%). As to liabilities, nearly one half are bank and other company loans. Once the net position is calculated, Switzerland finds itself mainly holding positions in direct investment (65%) and portfolio investment (31%). However, the latter is an unbalanced mix comprising debt securities (77%), partly offset by a negative position in equity securities (–45%). A breakdown by currency[12] shows that a plurality of assets is held in US dollar form, followed fairly closely by those in euros. A majority of liabilities is held in Swiss francs, with both dollars and euros well behind. Finally, only a limited disaggregation by institutional sector is available, but it shows that one-sixth of the net foreign assets belong to Swiss banks, just slightly more than what is owned by the SNB. Noteworthy is the steady increase in the government's net foreign liability position in recent years: it rose

Figure 2.4. **International investment positions**

Per cent of GDP, 2006 or latest available year[1]



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1. 2005 for Austria, Ireland, Netherlands, Norway, Poland, Sweden, Turkey; 2003 for Slovak Republic.

Source: IMF, International Financial Statistics database and OECD calculations from Economic Outlook 82 database (forthcoming).

from around CHF 10 billion at end-2001 to nearly CHF 50 billion at end 2005, despite the improvement in the fiscal balance (see Chapter 3).

But easily the most puzzling feature of these accounts is the fact that these large and persistent current-account surpluses have failed to lead to corresponding increases in Switzerland's net asset position (Stoffels and Tille, 2007). This "disconnect" began at the turn of the millennium: since 1999 – and only until 2005 – cumulative net financial outflows represent 81.3% of 2005 GDP, but SNB estimates of net foreign assets have risen by a meagre 2.1% of that GDP. The discrepancy amounts to more than CHF 300 billion. For example, in 2005 alone, when the financial account recorded an outflow of CHF 84 billion

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and the current account a surplus of CHF 63 billion the SNB shows that the net investment position shrank by CHF 15 billion.

A number of possible explanations come to mind:

- *Valuation changes*. Changing exchange rates clearly prevent the change in the stocks from equalling the flows. Since most assets are in foreign currency and most liabilities in francs, it is clear that if the franc appreciates the value of Swiss holdings will suffer the consequences. From 1999 to 2005 an increase of the exchange rate by 13% (trade weighted) was observed. Secondly, and this may be the major explanation for the outcome in 2005, there are valuation gains and losses on foreign holdings of equity in Switzerland and on Swiss holdings of equity abroad. In a longer term perspective, according to Stoffels and Tille (2007), such valuation effects can explain only a part (around 30%) of the discrepancy on the net position (with 23% and 7% attributable to exchange rates and asset prices fluctuations, respectively). With direct investment at estimated market values (and not at book values as in international investment position statistics), their calculations show that valuation effects are somewhat more successful, accounting for almost exactly half of the total to be explained.
- *Measurement problems*. One obvious distortion is that official Swiss data are calculated using only book value estimates for foreign direct investment. However, Stoffels and Tille (2007) attempt an approximation to a market-value adjustment and find that the correction would go the wrong way: the net position would actually *worsen* by 33.8% of 2005 GDP, rather than the small improvement in the official data, leaving the "discrepancy" at 112% of 2005 GDP.[13] Other methodological questions arise from the SNB's periodic improvements to their procedures. For example, the survey used to estimate direct investment positions was broadened in 2004, resulting in a CHF 11.3 billion reduction in net foreign assets (some 2.5 % of 2005 GDP), without any corresponding change in the financial flows (Stoffels and Tille, 2007, footnote 24).[14] Similarly, the flow data might have missed certain items, such as the repayment of principal on foreign bonds at maturity. This would be consistent with the sizeable positive errors and omissions in the balance of payments (an excess of net financial outflows over the current-account surplus, abstracting from capital transfers).

Taking the valuation effects year by year it appears that exchange-rate changes played a fairly important role in 2001-04, but franc depreciation in 2005 goes in the wrong direction. Broad indexes of asset prices point to underperformance for Swiss investors abroad relative to foreigners in Switzerland mainly in 2000 and 2005. But it is the unexplained portion of the total valuation effect that has consistently served to reduce the value of Swiss net foreign assets since the end of 1999, whereas the opposite had been the norm in the preceding years. Notice, however, that prior to 1998 the financial flows on some holdings were essentially computed as the change in positions (Stoffels and Tille, 2007).

The next question to be considered arising from this disconnect is what are the implications for the returns that the nation is earning. These returns comprise the straightforward yields, as measured in the investment income accounts, plus the valuation changes. Stoffels and Tille (2007) show that taking the most recent six years (2000 to 2005) yields alone were higher on Swiss assets than on its liabilities by more than a full percentage point,[15] much as it has been for the United States (Jarrett, 2005). However, once just measured valuation gains and losses are brought into the picture, the gap becomes – 0.8 percentage points. Hence, if these figures are to be believed, Swiss investors who placed money abroad for portfolio diversification and rate of return considerations fared much worse than foreign investors who bet on the Swiss market, even though the latter heavily reflects returns in the already mature and capital-intensive Swiss economy

What could be causing this huge surplus?

Since the current-account surplus is such a long-standing feature of the Swiss external accounts, whatever is causing it cannot be entirely a recent phenomenon. But until the last 15 years or so it averaged less than 4% of GDP, a figure that is frequently seen in many other OECD countries. It is truly the upsurge since the early 1990s that is unusual and demanding of interpretation. As seen above, the nation's saving rate increased from 1992 to 2000, then plunged before rebounding. But it is – at some 36% of GDP in 2005 – amongst the highest in the OECD (along with Norway and Korea), some three times as high as those near the bottom of the scale (though the official Swiss figure is probably biased up by the aforementioned measurement error). To what might this be attributed? Unlike Norway, whose current income level is undoubtedly in excess of long-term levels thanks to its oil revenues, it would not normally make sense to seek a "permanent income" view of the surplus. Theoretically, differential demographics could help to explain some of the gap, but the evidence is fairly clear that the speed of future ageing pressures is no more rapid in Switzerland than elsewhere in the OECD, arguably less so (OECD, 2006a).

There are some more promising lines of reasoning, however. *First*, it is well known that Switzerland has a well developed system of mandatory second-pillar retirement saving (see Chapter 3). Such saving represents half of overall household saving and about 15% of gross national saving, though its share was much greater in the 1990s. These pension funds (along with life insurance investments) held assets worth more than 150% of GDP already in 2004, the highest GDP share in the OECD. Around 44% of those assets were held abroad at that point, the majority of which in foreign currencies. There is no need as yet to disburse the earnings on these holdings, and – it would be difficult to find attractive investment opportunities for them on domestic markets. *Second*, there is a multiplicative component to the first, as the corresponding tax burden is shifted forward in time: the typical regime in Switzerland for taxing retirement saving is EET (*i.e.* contributions, accrued returns and ultimate pension payments are exempt, exempt and taxable, respectively), which is generous but not unusual (and this generosity might not have much effect on *national* saving, since the tax advantage might merely shift the saving from the public to the private sector[16]). But even an unremarkable regime may be unusual when combined with a large mandatory component (see Chapter 3). Furthermore, pension savings are not subject to estate duties (OECD, 1999, Box 1). And because there is no capital gains tax on portfolio investment by households and pension funds,[17] saving is treated more generously than in countries having such a tax. *Third*, since most foreign assets are denominated in foreign currencies, whose emitters have traditionally had higher interest rates than Switzerland (in order to compensate investors for their higher average inflation rates), and, conversely, most liabilities are in Swiss francs, part of the net inflow of interest income (and the higher national saving that is its counterpart) is merely what amounts to a return of capital to Swiss lenders. According to unpublished central-bank estimates, this could be as much as CHF 20 billion per year (4.4% of GDP, nearly one quarter of the total). On the other hand, however, when the saving does not involve foreign assets, it is to expected real domestic interest rates and returns that saving responds. While *ex ante* rates are difficult to observe, *ex post* real rates in Switzerland have traditionally been low by

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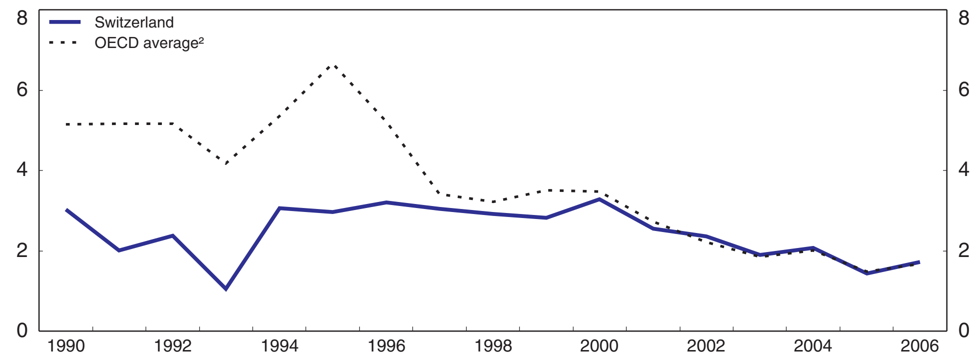
OECD standards, but that gap, at least for long-term government bonds, fell sharply about a decade ago, and local rates are now virtually indistinguishable from the OECD average when measured – even if crudely – using only a single period's inflation rate (Figure 2.5).[18] Hence, perhaps there has been some increase in relative incentives to save, resulting from a reduced willingness of foreigners to hold Swiss assets at lower expected real rates of return. *Finally*, saving can include a precautionary motive, in which case it should respond positively to income volatility. An admittedly imperfect proxy for that would be the volatility of real GDP growth. Using the standard deviation of real growth (Figure 2.6), it can be seen that Switzerland's economy is less volatile than the average but that its advantage has been diminishing steadily and has effectively disappeared during the past year. Even that measure is not uniquely identified, however, as the standard deviation suffers from a scaling problem: using the coefficient of variation instead, Switzerland's volatility has in fact been mostly greater than in the average OECD country.

In a longer-term perspective, the modest level of Switzerland's investment rate also looks worthy of interest: the investment share of GDP fell sharply during the early-1990s recession (by about 8 percentage points of GDP), remained fairly steady during the subsequent

Figure 2.5. **Real long-term interest rate**[1]

Per cent



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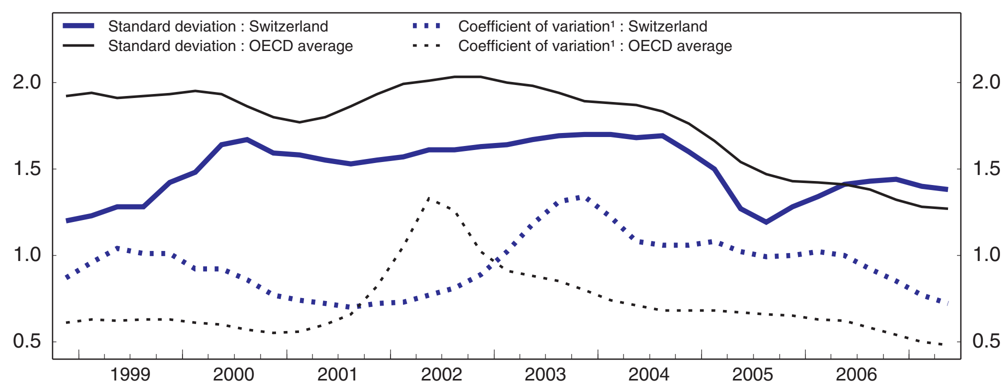
1. Defined as the yield on 10-year government bond minus the lagged percentage increase in the GDP deflator.
2. Czech Republic, Greece, Hungary, Luxembourg, Poland, Slovak Republic and Switzerland excluded.

Figure 2.6. **Volatility in real GDP growth**

Four quarterly growth



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1. The standard deviation divided by the mean.

upswing and then declined again in the most recent downturn, reaching a level little more than 20% of GDP. The average OECD country followed a similar pattern, but its declines were far more modest and the rebounds sharper. Thus, Switzerland shifted from being a higher-than-average investor to a sub-par investor initially in 1999 and then more emphatically from 2003. By 2004-05 its shortfall from the simple average of OECD countries was more than a full percentage point of GDP, a switch of 6 percentage points since 1990.

In many quarters in Switzerland it is believed that the low investment rate is explained by the country's maturity and income level: it is argued that the prospective returns on capital are likely to be lower in Switzerland than in many other parts of the world because the existing capital stock is already high in relation to output levels. However, the evidence linking investment rates and income levels is moderate, though Switzerland does not appear to be an outlier.[19] Also, while official statistical agencies make different methodological assumptions to generate aggregate national capital stock series,[20] and hence substantial caution in making international comparisons is called for, it can be seen that indeed capital intensity seems rather high in Switzerland.[21] The question that remains is why a mature economy cannot exploit its central location and well educated labour force, along with well developed financial markets to sustain fairly high rates of investment. Low investment at home may be attributable more to a lack of effective competition (in economists' terms: "the quiet life" for incumbents, who try to reduce supply so as to raise prices) – which may or may not be linked to weak or even negative capital productivity growth – and poor prospects for new entrants in existing industries (network industries in particular – see Chapter 4), as well as in innovative sunrise sectors (Alesina *et al.*, 2003; OECD, 2006b). However, it may also be explained in part by: *i*) lower risk premia abroad, owing primarily to successful disinflation, that has led to some diversion of global capital flows away from Switzerland; and *ii*) the high price level, which encourages serving the Swiss market by exports from abroad rather than inward direct investment, thus limiting gross fixed capital formation (see Chapter 1).

Another approach in trying to explain the enormity of the surplus is to look at its components and of absorption in particular. As seen in Chapter 1 and above here, the growing size of Switzerland's current-account surplus is only to a small extent attributable to its goods and non-factor services accounts, on which surpluses have grown due to slower Swiss GDP growth than in major trading partners as well as a trend improvement in Swiss competitiveness. Export performance was very strong until 1985, but thereafter it weakened steadily. In effect the gains in competitiveness due to the steadily lower rate of inflation were offset by increases in the Swiss franc's exchange rate. The franc appreciated at an average rate of some 4% per year from 1970 to 2003, but most of that was offset by the favourable CPI inflation differential, leaving an average annual real rise of some 1¼ per cent. However, beginning around 2002-03 the trend appreciation came to an end, and the deterioration in export performance did likewise a year or two later.[22] Since the franc's peak in early 2003 it has fallen cumulatively by around 8% in nominal effective terms and by 12% in real (CPI) effective terms. The result is that there are now claims that the franc is somewhat undervalued: the IMF (2007), for example, believes that it may be up to 20% undervalued, even if its equilibrium may have fallen because it may no longer be seen as a safe-haven currency and it clearly is little used any more as an official reserve currency.[23]

The "carry trade" is the label given to the transactions that involve (often leveraged) borrowing of low-yielding currencies like the franc and more particularly the yen in favour of assets denominated in high-return currencies such as the New Zealand dollar but also those

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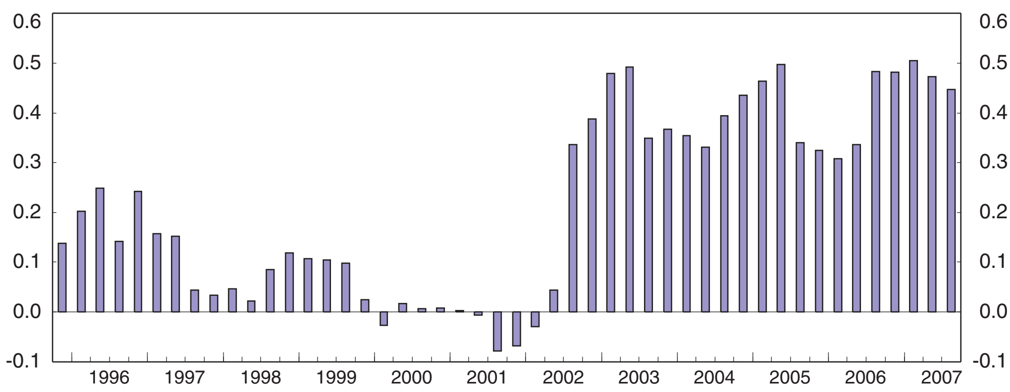
from emerging markets. Of course, normally low-yielding currencies are expected to appreciate, else nobody would willingly hold them, but in recent years various classes of investors have been willing to take on the currency risk and undertake such trading without hedging.[24] Indeed, the common element between trading in the yen and the franc can be demonstrated by looking at daily exchange-rate changes for the two monies: for the past five years these have become significantly positively correlated, whereas previously there had been no such relationship (Figure 2.7). The result of the increase in carry trading is that the stock of outstanding bank lending in francs to foreign non-bank private borrowers is estimated to have reached some $138 billion at end-September 2006, up from a steady $35 to $40 billion during the decade ending in 1998. Of course at some point risk appetites may change, but even though most analysts have been predicting a return to form for the franc for quite some time – in part because the SNB has been busily putting up its official rates and is expected to continue to do so – so far the temptation to maintain the heretofore profitable strategy has been sufficient to sustain it. And in recent months franc weakness has begun to worry SNB senior officials who have taken note of its direct impact on Switzerland's import prices and its indirect effect on tradeables prices more generally (McCormick, 2007). While in Japan's case, the purchased assets are to be found around the world, it seems that most of the franc borrowing has ended up in mortgage and other private lending in Central and Eastern Europe, especially in Austria,[25] Hungary, Croatia and Poland. Most of this has been undertaken by Austrian banks; Swiss banks are believed to have limited direct exposure. But apparently franc-denominated lending has even become popular in Denmark, with outstanding loans reaching DKR 20 billion (nearly 3 billion euros) in 2006 (Bernstein, 2007). In any case, it could be argued that transactions involving borrowing by residents of a high interest-rate country in a low-yielding currency like the franc to purchase domestic assets are qualitatively different from leveraged activities by financial players typically involving derivative contracts, if only because the investments are not likely to be unwound quickly (BIS, 2007).

Figure 2.7. **The yen and Swiss franc have moved together in the past five years**[1]



StatLink http://dx.doi.org/10.1787/140038180680

1. Correlation coefficient between daily exchange-rate changes of the dollar/yen and dollar/Swiss franc in a rolling one-year window ending in the quarter in question.

The implications for public policy

To sum up to this point: Switzerland has an unusually large current-account surplus, which, even though it implies a possible disequilibrium, is clearly not something that elicits sustainability concerns, since there is no limit to a nation's acquisition of net foreign assets. If there are indeed fundamental drivers such as differences in rates of time preference between Swiss and foreigners, then policy-makers should look no further. However, even though no evidence is available on this question, it would be unwise to rely entirely on the existence of such differences. It is more likely that it is long-standing differences in Swiss policy-settings and institutions that have created the favourable conditions for saving, if not the reluctance in recent years to engage in investment. So long as these settings are deemed appropriate once carefully examined, then there is no *separate* reason to change policy or to take specific measures to bring the current surplus down. If it declines because policy improvements generate faster trend growth, which stimulates both investment and imports, then that is all well and good. Yet it must be recognised that the potential to achieve lasting changes in external balances through structural reforms is probably fairly limited (Kennedy and Sløk, 2005).

One angle that justifies explicit thinking about the surplus is its role in determining the real exchange rate. A higher surplus would normally lead to a stronger currency to ensure long-run balance of payments equilibrium. But the carry trade has driven down the value of the franc, possibly to an unsustainable level.[26] If at some point Swiss holders of its huge foreign assets decide to repatriate them or foreign investors choose to unwind their carry-trade positions – possibly because of a sudden drop in risk appetite and increase in volatility[27] or because the SNB moves more aggressively to raise interest rates – then the franc exchange rate would appreciate and could even spike higher, as happened to the yen and the franc in the second half of 1998. This would of course call for quick action on the part of the monetary authorities to stabilise the economy, since such a shock would have important deflationary consequences. But the implications for some sectors could be serious, even if contractionary aggregate consequences were avoided. Blanchard (2007) has recently argued in a different context that, after several years of depressed output, producers of non-tradeables might have permanently lower productivity through hysteresis effects and might also lack the wherewithal (financial and other) to expand in response to the price signals. That might be taken as a justification for some redirected budgetary spending to non-tradeables sectors and to investment in particular.

Assuming the new, higher level of the franc was fairly rapidly seen as quasi-permanent, then the resulting drop in the demand for exports and import-competing goods and services would lead to pressures for restructuring. It is therefore crucial – so as to be as well prepared for such an outcome as possible – that Swiss markets be flexible and that factors be mobile both geographically and sectorally. Fortunately, available evidence points to a very high degree of economic resilience due to well developed and flexible financial markets and a moderate degree of labour- and product-market regulation (Duval *et al.*, 2007). Specific policy implications are as follows:

- In terms of labour markets, that implies: *first*, that employee protection rules and legislation be designed – as is the case – with a view to assisting individuals and not protecting jobs; *second*, that stamp duties on housing transactions not act as a barrier to the sale of a home that is necessitated by a shift in the owner's employment; *third*, that cantonal occupational licensing requirements be suppressed in favour of a mutual recognition/single passport approach; *fourth*, that immigration be recognised as especially valuable, since immigrants are more mobile within the country and admission is sensitive to the need for specific skills (see Chapter 5); and, *finally*, that added focus be placed on training and general (as opposed to firm-specific) skills in this context of shifting economic needs.

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- As to capital markets, policies should focus on encouraging financial-market participants to boost their funding of start-ups and other youthful firms, since it is through such entities that inter-sectoral shifts proceed the most smoothly. Similarly, bankruptcy customs and law should not be designed so as to hold resources in sectors exposed to negative long-term structural shifts.[28] In addition, tax and corporate governance rules should likewise not discourage exit or redeployment: in that regard the classical treatment of dividends in the tax law (see Chapter 2) probably acts to hold resources within firms and thus, at the margin, within existing industries. Bringing in a ceiling on the tax deductibility of second-pillar saving (to the lowest statutory rate) might help to treat saving in low-risk assets in a less favourable fashion. But the temptation to use tax policy to directly stimulate investment should be resisted, especially if the support were aimed squarely at housing, where many OECD countries are overly generous.
- In product markets it is crucial for firms to be able to enter new markets, and hence the competition authorities must be vigilant to the creation or maintenance of artificial barriers to entry by incumbents, which can significantly restrict investment (Alesina *et al.*, 2003). In regulated sectors, especially network industries, sectoral regulators must also keep a watchful eye. As mentioned in Chapter 4 below, anything that holds output in a given sector, such as inheritance rules applied to farmers or the aforementioned double taxation of dividends, is an especially harmful idea.

Notes

1. Preliminary data for the first quarter of 2007 show the surplus edged up to 17.8% of GDP, even though net investment income shrank: a shrinking deficit on current transfers as well as rising surpluses on goods and services (no doubt related to improved competitiveness) lie behind the increase.
2. The 2006 surplus on non-factor services account of CHF 33 billion was dominated by net earnings of CHF 13 billion on financial services, attributable to the strength of Swiss financial institutions, especially the banks.
3. Labour income is in deficit because of the heavy proportion of frontier workers among the workforce and the resulting cross-border salary payments.
4. Another similar distortion comes through net direct investment income earned by foreign controlled finance and holding companies: they earn income from foreign subsidiaries and pay it to foreign parents, with what has turned out to be a small but increasing impact on Switzerland's aggregate current account – an average of CHF 3 billion from 2000 to 2004, but nearly CHF 14 billion in 2005.
5. Such figures comprise the fact that the ratio of Swiss portfolio investment in foreign shares to foreign investment in Swiss shares (CHF 747 billion) is one-third; that foreign companies have a higher dividend payout ratio than Swiss companies (assumed here to be one-half, rather than one-third); and that the proportion of earnings of Swiss companies that are attributable to foreign shareholders is CHF 19.5 billion.
6. Indeed, the net outflow of direct investment dried up entirely in the final quarter and was likewise minimal in the first quarter of 2007.
7. Total pension fund assets and life insurance investments were already over 150% of GDP in 2004, the highest ratio in the OECD. The Federal Office of Social Security sets some ceilings on the share of pension fund assets that can be invested offshore. For the system as a whole that share is currently around one half and rising.
8. Part of the reason for weakness in household saving in recent years is the decline in mandatory saving whose share of households' gross disposable income fell from over 10% in most of the 1990s to around 7% in 2002-04. Voluntary saving took up the slack in 2000-01, keeping the aggregate rate near 16% but has likewise fallen back since then, leaving the total rate around 14%.

9. The institutional shares in 2004 were: 44% for financial corporations, 34% for households, 29% for non-financial corporations and –7% for general government.
10. Such a large net asset position is nothing new for Switzerland: SNB officials believe it to have been around 100% of GDP also before World War I.
11. Assets of non-residents managed by banks in Switzerland are of course not included in its net international investment position. However, if non-Swiss high net-worth individuals move their economic centre of interest to Switzerland (as many have done to take advantage of attractive tax regimes), then their assets would, in principle, be considered as Swiss. Nevertheless, the SNB believes that such cases do not play a significant role in the evolution of the net foreign asset position, even if they could contribute to its level.
12. The share of foreign-currency assets rose from 62% in 1985 to 87% in 2005, while the share of liabilities in foreign currencies fell in the first decade and then rebounded in the last decade to 45% (SNB, 2007).
13. The Stoffels and Tille approach was to adjust assets and liabilities for valuation changes using braod share price indexes. For direct investment holdings by foreign investors the Swiss share price index was appropriately used. However, they used share price indexes of relevant destination countries for Swiss direct investments abroad, this during a period (1999-2005) when the latter fell while the former rose. It is debatable whether such indexes would have been an unbiased depiction of the underlying value of those holdings. It might even be argued that Swiss share prices might have been a better indicator of such price movements.
14. Since 1999, several other significant statistical revisions affecting Switzerland's international investment position have taken place. Also, sometimes funds are moved in and out of the country without corresponding financial flows; this too could help explain some of the discrepancy.
15. For the most recent five years SNB figures show that Swiss investors earned average annual returns of 4% on their foreign assets, but only 2.5% once direct investment (9.9%) is excluded.
16. The force of this argument may be less in the Swiss case, since its strong budget balance rules have arguably restrained any resulting public dis-saving.
17. Capital gains by households are hardly ever taxable when money is put into shares of companies listed on the stock exchange, as these companies may be considered as ever lasting. The situation becomes much more complicated in all other circumstances (see Chapter 3). In any case, all cantons have capital gains taxes on real estate.
18. There is a growing literature that has looked at the question of international equalisation of real rates of return on financial assets. It shows that such returns are indeed equalised for equities but not for fixed-income instruments nor deposits: those denominated in Swiss francs have earned significantly lower returns even in the long run (Kugler and Weder, 2003). This violation of real interest-rate parity is found to be due to a failure of uncovered interest rate parity even in the long run, rather than to deviations from purchasing power parity: the Swiss franc does not appreciate enough to offset the short-term interest rate differential. This is unique among major currencies (Kugler and Weder, 2005), even if other creditor countries also experience some degree of home bias. Global investors seem willing to pay a premium for possibly three reasons: *first*, because there has been less price-level uncertainty for Swiss assets, because the monetary authorities have kept inflation so low; *second*, because Swiss franc assets seem to provide unique diversification benefits (Kugler and Weder, 2004); and, third, so as to avoid the effects of very rare catastrophic events (such as a war) that they perceive would have an asymmetric impact on Swiss assets because of the nation's long-standing neutrality. Concretely, if such a shock were to transpire, the Swiss franc would be expected to appreciate, perhaps sharply. Another explanation – that the premium is attributable to Swiss banking secrecy – is less convincing, since the return anomaly is also present in Swiss franc Euro-deposits, which are beyond the reach of Swiss law. Finally, if the explanation were to lie with real structural factors such as higher capital intensity with decreasing marginal returns or productivity differences between the tradeables and non-tradeables sectors (Balassa-Samuelson-type effects), it would be purchasing power parity that would fail to hold, since the real exchange rate appreciation would be sufficient to explain the failure of uncovered interest parity. In any case, what has not yet been researched is to what extent the lower-returns phenomenon still holds: the data used by the cited authors to establish it covered the period 1980 to 2003, but the "carry trade" really got underway only at the very end of the sample period; the franc has been falling since 2003; and there has been a steady shorting of the franc in futures markets since 2005 (see footnote 24 below). The time since the last major global disruption continues to lengthen, and investors surely attribute an ever-declining probability of any recurrence.

19. Regressing the investment/GDP ratio in current prices on per capita GDP in purchasing-power parities across the 30 OECD member countries for the average values from 2000 to 2005 in either linear or log-linear form results in a marginally significant negative coefficient on per capita output with a t-ratio of close to 2 and a very small positive residual for Switzerland. Reverse causality may bias the coefficient estimate towards zero.
20. It would be even more dubious to try to compare *ex ante* rates of return to capital across countries.
21. An additional reason for caution here, however, is that the OECD has shifted away from the use of capital *stock* series in its modelling exercises in favour of a capital-services approach (Beffy *et al*., 2006). But no such data existed for Switzerland until very recently.
22. In fact, preliminary data for recent quarters show a steady improvement in export performance and in the goods export balance: in the most recent four-quarter period, the goods balance reached CHF 6.2 billion, more than double the 2005 outcome. On the other hand the investment income surplus has been edging down.
23. Recent work at the BIS (Cairns *et al*., 2007) shows that the franc remains the currency of choice (along with the euro) when volatility increases. Nevertheless, BIS figures show the franc's share of global reserve holdings had already fallen to negligible levels by the mid-1990s (Wooldridge, 2006).
24. Indeed, some investors go so far as to short low-yielding currencies to speculate that the carry trade will dominate longer-run fundamentals. Swiss franc futures contracts on the Chicago Mercantile Exchange (CME) have shown a substantial net non-commercial short position outstanding since the beginning of 2005. Indeed, the magnitude of that net position reached a record level of nearly 80 000 contracts on 19 June 2007, which, at a value of CHF 125 000 per contract, implied a bet of nearly CHF 10 billion against the franc. Higher CME short positions have tended to presage downward movements in the currency against the dollar.
25. Tzanninis (2005) points out that loans to Austrian households in foreign currencies have surged since the mid-1990s, reaching nearly 30 billion euros (30% of outstanding loans) by early 2005. Nearly all of these loans are in Swiss francs. Franc-denominated loans to all non-banks totalled more than 40 billion euros already at that point.
26. There has also probably been a reverse mechanism at work: by causing a depreciation, the carry trade has no doubt led to an increase in the size of the surplus itself, through a rise in net exports of goods and services associated with improved competitiveness and through higher net factor income.
27. For a useful, detailed look at the current state of the carry trade see Nordvig (2007). He argues that reduced global risk appetite could pose a challenge to carry-trading strategies, especially as the compensation for currency risk looks to have diminished to very unattractive levels for investments in G10 currencies, though not for those of emerging markets.
28. The authorities hope to reform the bankruptcy law during the next legislature.

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Chapter 3

Making fiscal policy more supportive of economic growth

Switzerland's fiscal institutions have been successful in keeping the overall level of taxation and spending at a moderate level, and the use of budget rules at different levels of government has improved the conduct of fiscal policy. However, in recent years the increase in spending, particularly on social programmes, has been considerable. Reform of these programmes is needed not only to guarantee budgetary sustainability, but also to free up public resources that can be put to better use in promoting growth. Retaining and reintegrating people with health problems in the workplace is called for in order to cope with the pressures on the labour supply that population ageing will create. The tax system could be simplified in order to reduce the administrative burden placed on firms, especially small- and medium-sized enterprises and start-ups. In addition, tax-induced distortions to labour and capital allocation decisions should be eliminated in order to increase productivity growth. This chapter examines the fiscal outlook and explores ways to improve the role of the government in establishing a firm basis for sustained growth.

Switzerland's overall level of public spending and taxation is average in comparison with other OECD countries. This can be attributed to the expenditure-limiting role of its distinct institutional framework, which is heavily reliant on direct democracy and fiscal federalism. The use of a "debt-brake" rule has been successful in restraining outlays at the federal level, but spending on entitlement programmes has continued to increase at a rapid rate and is likely to continue to do so in the longer run due to demographic developments. While the tax burden is comparable to the OECD average, there is considerable scope to reduce distortions to the labour/leisure and consumption/saving choices and factor allocation across sectors, as well as to reduce the complexity of the tax code. This chapter argues that reforms are needed to the fiscal framework, social insurance programmes and the tax system to ensure that public finances are kept on a sustainable path and to reinforce the foundations for sustainable growth.

The fiscal framework should steer public finances onto a sustainable path

The Swiss system is characterised by an extensive set of fiscal federal relationships with high budgetary autonomy at all government levels, by a system of direct democracy that includes the possibility of carrying out referenda concerning such issues at the sub-national levels, and by formal constraints at both the federal and cantonal levels that limit the accumulation of public debt. Regarding taxation, Switzerland is among the most decentralised countries in the OECD area. Cantons' sovereignty in designing their own direct taxation is limited by a federal harmonisation law that defines the tax base, but otherwise they are largely free to decide on tax deductions and allowances, and tax rate schedules.[1] The Confederation is largely constrained not to intervene in the budget policy of cantonal governments. However, there are numerous incentives for cantons to maintain sound finances, as they are bound by fiscal rules, important spending decisions are subject to optional or compulsory referenda, and no canton has ever been bailed-out.[2] These institutional characteristics have traditionally been seen as conducive to a sound fiscal policy, especially at the cantonal and local levels. Indeed, research suggests that cantons that have followed fiscal rules and that have made more use of fiscal referenda have significantly lower accumulated debt and deficits (Feld and Kirchgässner, 2001 and 2006), while fiscal decentralisation appears to have lowered revenues via more intense tax competition among cantons (Feld *et al.*, 2003). In recent years, however, these institutions have been under increasing stress to contain spending on existing social programmes at both levels of government.

The debt-brake rule has helped to consolidate federal finances…

The purpose of the debt-brake rule is to maintain a balanced structural budget at the federal level while taking into account cyclical developments. It sets a yearly ceiling for expenditure, which cannot surpass cyclically-adjusted revenue. While federal revenues fluctuate with the cycle, the rule prevents these fluctuations from being fully transmitted to expenditure (OECD, 2002). Effective deviations from the rule, arising either from errors in

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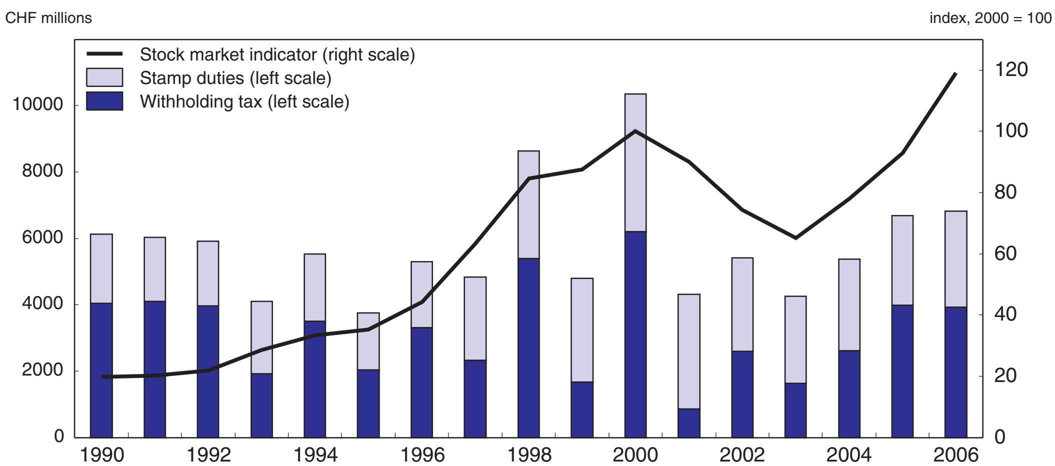
revenue forecasts or breaches of the spending limit, are computed *ex post*. A notional account keeps a cumulative record of these deviations, and the rule requires that negative balances be eliminated, but no time horizon is specified. Only if the negative balance of the account exceeds 6% of expenditures (around 0.6% of GDP) must the government bring it below that level within three years (Danninger, 2002). In 2008, the authorities will leave out from the debt brake a series of extraordinary outlays, amounting to about 1% of GDP. Such exclusions from the debt brake are permitted under certain circumstances and must be authorised by qualified majorities in both houses of Parliament. Due to the one-off nature of the outlays, removing them from the debt-brake avoids an unnecessary displacement of regular spending.

Although the application of the rule ran into unforeseen difficulties as soon as it entered into force in 2003 (OECD, 2006b), it has been an important element in the authorities' consolidation efforts. Indeed, it helped eliminate the structural deficit by 2006 – one year ahead of the original date set in the most recent consolidation plan. Establishing a formal link between permissible expenditure and expected revenue growth has significantly altered the dynamics of the budgeting process, which has made it easier to contain expenditure growth (see Chapter 1). Looking ahead, there is scope to refine the implementation of the rule. The fact that it was difficult to comply with it when economic growth was low and that the budget balance exceeded the target as soon as growth picked up in 2006 suggests that the cyclical impact on central government finances might not be sufficiently taken into account. In the event of a protracted recession, and given the high volatility of some tax items, notably capital income and financial transactions taxes (Figure 3.1), the need to reduce the accumulated spending overruns via expenditure cuts risks creating a pro-cyclical fiscal policy. Improving the cyclical correction of these tax receipts in order to adequately reflect their volatile nature would help to minimise this risk. To preserve credibility, such an adjustment would best be carried out at times of high revenue outturns, such as at present. In addition, the debt brake will not prevent the authorising of new outlays that are not sufficiently funded but have no immediate effect on the fiscal year. Moreover, budgetary rules applying to sub-national governments may hinder the functioning of the automatic stabilisers at other government levels. The

Figure 3.1. **Federal tax revenues and financial markets**



StatLink http://dx.doi.org/10.1787/140071582575

Source: Federal Tax Administration and Swiss Exchange.

stabilising role of the unemployment insurance may also be impacted by its financing rule, which requires automatic measures once its debt exceeds a certain threshold. In order to preserve the credibility of the rule, the authorities should also develop a framework to deal systematically with extraordinary spending like that authorised for 2008. If the spending flows cannot be accommodated within the ceiling of the rule when it materialises, then medium-term surpluses should be explicitly targeted to compensate for them.

… but more medium-term planning is needed

The structure of the Confederation's budget limits the scope for short-term adjustment. This is essentially due to the rising transfers to social security schemes, whose spending is dictated by mandatory benefit entitlements and thus cannot be easily adjusted in the short term. It is certain that social spending will face a substantial increase in the medium and long run (see below). In order to avoid either a crowding out of other expenditure items from the budget or an excessive increase of taxes in order to meet these demands, it is necessary to raise the public's awareness of these pressures through a clear presentation of the longer-term fiscal challenges. A report on the long-term sustainability of public finances is underway;[3] it will project expenditures and revenues at all government levels over a time horizon of 50 years. However, there is not only a need to improve the finances of the different social spending regimes, but also to complement the operation of the debt-brake rule with more medium-term budget planning, as the application of the debt brake links expenditure to projected revenues on a year-by-year basis. At the federal level, the Confederation is supplementing its main medium-term planning tool, the financial plan, with a review of its responsibilities (the Examination of Tasks Programme, ETP) in order to identify potential areas of savings and limit the increase in spending to the growth of nominal GDP until 2015.[4] While this would add a needed degree of medium-term planning to budget management and therefore complement the operation of the debt brake, its implementation has run into difficulties, and the authorities were not able to finalise it in time to implement it in 2008, as originally planned. Besides making sure that the results of the ETP lead to effective measures as early as possible, the setting of medium-term spending priorities should be made a recurrent exercise. In addition, the fiscal sustainability reports should be prepared regularly and complemented by scenario analysis to account for the impacts of different policy reform options.

The inter-cantonal equalisation scheme and the distribution of tasks are being reformed

After a lengthy approval process an ambitious reform of the financial equalisation system and the allocation of tasks between the Confederation and the cantons (*Réforme de la Péréquation Financière et de la Répartition des Tâches*, RPT) will enter into force in January 2008. The reform was designed along the following lines. *First*, the distribution of tasks between the Confederation and the cantons is being made clearer,[5] and co-operation between them will be increased with respect to the remaining shared tasks. The reassignment is being done on the basis of the principle of "fiscal equivalence", which requires that those who decide on expenditure should also fund it. For instance, the contributions of the various government levels to the financing of social spending programmes will be shifted entirely to the Confederation, which is responsible for administering the bulk of these programmes. *Second*, inter-cantonal co-operation will be increased with respect to cantonal tasks that might create spillover effects on other

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cantons. *Third*, a new financial equalisation system will be created. The cornerstone of the new system is a new indicator of financial capacity of the cantons, the "Aggregate Tax Base" (ATB), which will be largely based on the federal direct tax base.[6] Along with additional inter-cantonal equalisation mechanisms, under the RPT the effect of geographic and socio-demographic factors on the cost of providing public services will be compensated solely by the Confederation. It will also replace existing aid earmarked for specific purposes with block grants funded by the Confederation and wealthier cantons.

The reform will reduce areas of potential friction between the federal and cantonal governments and is expected to enhance inter-cantonal coordination. With the exception of central government transfers that will temporarily compensate poorer, adversely affected cantons, the change-over should have a neutral effect on the finances of the Confederation and the cantons as a whole. Individual cantons will, however, be affected to some moderate extent; this implies a need for a few of them to adjust via higher taxes and/or lower spending. However, these additional costs are likely to be more than offset by the gains to be reaped from a more efficient distribution of tasks.

As regards the goal of avoiding unnecessary complexity, it is noteworthy that while the Confederation is responsible for the legislation regarding the federal direct tax, cantons are directly in charge of collecting it. Although cantons can exert a certain degree of influence in the legislative process that determines federal tax regulations, this asymmetry is likely to reduce incentives for the federal government to simplify the system's design and the collection process, as it is not responsible for the administrative costs. The fact that cantons are responsible for tax collection, together with the functioning of the equalisation mechanism, might also reduce the efficiency of the tax collection process. However, the cantons receive 17% of the locally collected taxes. Moreover, the same tax base applies to both the cantonal and federal tax, and the cantonal tax revenues are larger than those of the federal tax. Even so, as the ATB depends positively on the federal tax base, cantons are likely to have reduced incentives to be diligent when collecting these taxes. However, the effective redistribution of revenues is relatively low. In sum, it should be ensured that administrative costs are minimised and tax collection remains as efficient as possible.

Increasing tax competition among cantons and with other countries has both risks and benefits

The substantial degree of autonomy regarding tax policies enjoyed by cantons is one of the main elements of Swiss federalism. The high mobility of the tax base (concerning both workers and firms) forces cantonal governments to compete via an attractive combination of public services and tax burdens. In the majority of Swiss cantons, tax cuts have been implemented in the last few years or are planned or under consideration. Over the last few months, issues related to tax competition among the cantons and *vis-à-vis* the European Union (EU) have been increasingly discussed. On the former, some larger cantons are becoming concerned that smaller neighbouring cantons are luring away wealthy individuals who nonetheless still consume services in their canton. Recently, the Swiss Federal Court has ruled against one canton's regressive tax system introduced in 2006. On the latter, the European Commission is urging Switzerland to amend certain cantonal tax provisions that it considers to offer unfair tax treatment of corporate profits generated abroad for firms located in the country. The Commission claims that the low tax rates are subsidies in disguise, and so they are incompatible with the proper functioning of its 1972 Free Trade Agreement (FTA) with Switzerland. The Swiss government rejects this claim, since the FTA concerns only the trade of manufactures between Switzerland and the EU. Furthermore, it perceives low tax rates as an integral part of the attractiveness of the Swiss economy. The Commission has received a mandate from the 27 member governments of the EU to find a negotiated settlement.

There are two main reasons for the recent increase in tax competition among cantons. *First*, the (extraordinary) distribution in 2005 of the proceeds from the gold sales by the Swiss National Bank led to an inflow of considerable funds at the cantonal level, which boosted the feasibility of tax cuts. *Second*, the reform of the inter-cantonal equalisation scheme modified incentives with respect to cantonal tax policy, as it no longer rewards a larger tax burden with additional transfer payments by the Confederation. Instead, transfers are determined according to the "resource potential" of a canton. Hence, cantonal tax cuts no longer directly affect the flow of transfer payments. Tax competition can in principle have three main advantages. *First*, it places a limit on the tax burden, as people and firms can shift to a more attractive location. *Second*, it can lead to the implementation of new and innovative policy designs, as administrations look for ways to more efficiently manage resources without resorting to increasing taxes. *Third*, it provides a standard by which to compare the performance of administrators. However, if there are spillover effects from the provision of public goods across cantons, unfettered tax competition can discourage their provision, especially from larger cantons. Further tax cuts should be monitored in order to reduce the risk that, if they are not successful in increasing revenues, the tax burden is shifted from top-bracket to middle-income tax payers, reducing their labour supply.

Social spending should be better contained

The growth in social spending – as measured by Eurostat (see footnote 8 in Chapter 1) –, which has been significantly faster than in GDP in the last decade (OECD, 2006b), underscores the urgency and scope of the reforms needed in this area. The share of such outlays in GDP, which rose to roughly 30% in 2003, is slightly above the European average and roughly 10 percentage points higher than in 1990. This is a much sharper rise than almost anywhere else in the OECD area.

Reducing spending on health care should not entail reducing the quality of care

Health-care quality is excellent…

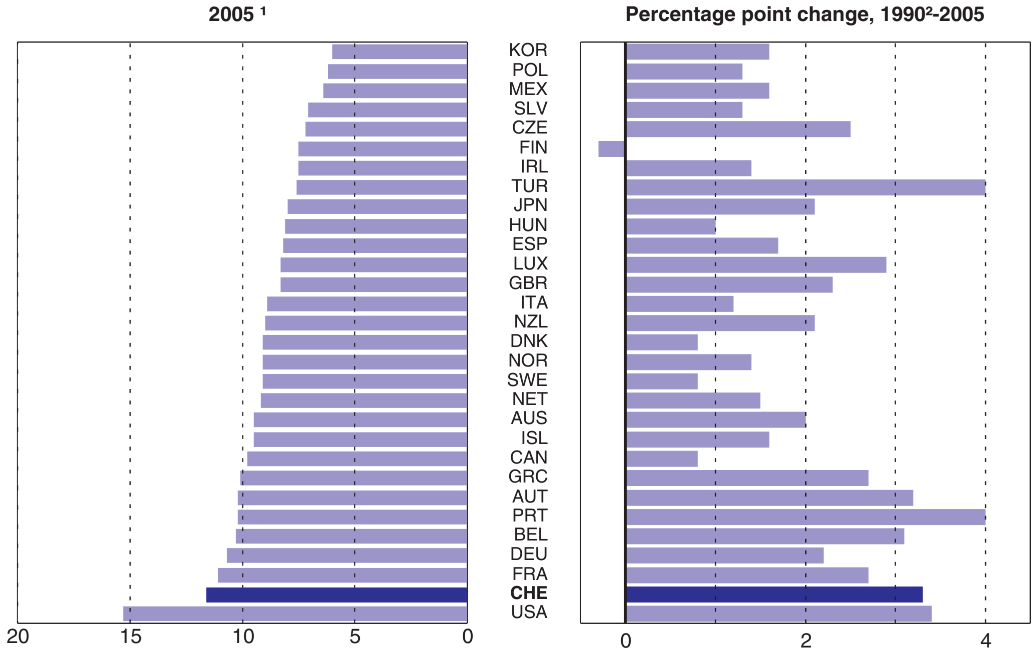
The Swiss health system was subject to a comprehensive review by the OECD and the World Health Organisation in 2006 (OECD, 2006d). Among other things, it found that the Swiss system has been extremely successful in providing high-quality health care with almost universal access and a substantial degree of solidarity among the insured. Self-reported health status is one of the highest among OECD countries, as is average life expectancy both at birth and at age 65. Switzerland has one of the lowest mortality rates from cardio-vascular diseases, and the cancer mortality rate for all cancers is well below the OECD average for both men and women.

… but costly, as spending on health care is amongst the highest in the world

However, this good performance has come at a price: in the OECD area, only the United States spends more on medical care than Switzerland's 11.6% of GDP (Figure 3.2). Such spending has increased by more than 3 percentage points of GDP in the last 15 years, around 1 percentage point more than the OECD average. Spending under the mandatory

Figure 3.2. **Health expenditure in OECD countries**

As per cent of GDP



StatLink http://dx.doi.org/10.1787/140105600008

1. 2004 for Australia, Hungary, Japan, Luxembourg and the Netherlands.
2. 1991 for Hungary; 1997 for Slovak Republic.

Source: OECD Health database 2007.

health-insurance system has been increasing even faster than total health-care spending (OECD, 2006d). These pressures have been reflected in a substantial increase in households' compulsory sickness insurance premiums – by an average of 5.1% per year in real terms between 1996 and 2006 (Office Fédéral de la Statistique, 2006a), although subsidies are provided to low-income households. While relying on individual premiums that are not related to earnings to finance the compulsory health insurance system has reduced the impact of the rise in expenditure on the public accounts and avoided the need for an increase in employers' social insurance contributions, it has nonetheless pushed up households' cost of living. This in turn has placed both the Confederation and cantons under increasing pressure to raise subsidies to poor households to reduce their premiums: the total amount of such subsidies more than doubled between 1996 and 2004 (Office Fédéral de la Statistique, 2006b).[7] The pressure on public finances has also risen because of substantial cantonal subsidies to hospitals and nursing homes, which in 2004 reached around CHF 6.3 billion (around 12% of total health spending), an increase of around 50% from the level in 1995, when the share of total costs was around 10.6% (Office Fédéral de la Statistique, 2006b). However, the public share of expenditure on health is still below the OECD average (Table 3.1). Looking ahead, OECD estimates suggest that the increase in public spending on health and long-term care as a result of population ageing alone could be between 2½ and 5 percentage points of GDP through 2050, which, although considerable, is lower than estimates for other OECD countries (Oliveira Martins *et al.*, 2005; OECD, 2006c).

Table 3.1. **Health expenditure by sources of funds**

As per cent of total expenditure on health, 2005 or latest available year

	Public expenditure on health			Private expenditure on health			
	Total	General government, excluding social security	Social security schemes	Total	Out-of-pocket payments	Private insurance	All other private funds
Switzerland[1]	**59.7**	**17.0**	**42.5**	**40.3**	**30.5**	**08.7**	**0.9**
Austria	75.7	29.7	46.0	24.3	16.4	5.2	2.7
Canada	70.3	68.8	01.5	29.7	14.5	12.9	2.4
Denmark	84.1	84.1	00.0	15.9	14.3	01.5	0.1
France	79.8	4.9	74.9	20.2	6.9	12.5	0.8
Italy	76.6	76.4	00.1	23.4	20.3	00.9	2.2
Netherlands	62.5	03.9	58.6	37.5	8.0	17.1	7.7
Norway	83.6	68.8	14.8	16.4	15.7	n.a.	0.8
OECD average[2]	72.1	42.4	31.4	27.9	20.2	06.5	2.3
Poland	69.3	11.4	57.9	30.6	26.1	00.6	4.0
Portugal	72.7	71.9	0.8	27.3	22.3	3.8	1.3
Spain	71.4	66.5	4.9	28.6	22.4	5.5	0.7
United States	45.1	32.1	12.9	54.9	13.1	36.6	5.2

n.a.: not available.

1. For Switzerland, Social insurance includes mandatory health insurance (LAMal), Accident insurance (LAA), Disability insurance (AVS-AI) and Military insurance (AM). The column on private insurance reflects voluntary health insurers, taken on top of the mandatory (LAMal) insurance.
2. Does not include Australia, Hungary, Japan, Luxembourg and the Netherlands, as data for these countries are not available.

Source: OECD Health database 2007.

In-patient care in Switzerland accounts for just under half of total health expenditure, a share well above the OECD average (Table 3.2). It has also grown slightly faster in real per capita terms than total health spending since 1985, and most of it is accounted for by long-term care (OECD, 2006d). Less than one-third of spending takes place in the out-patient care sector, roughly in line with the OECD average, and, although its share in total spending has remained broadly constant, it has been the fastest growing sector after long-term care. Finally, spending on medical goods, including pharmaceuticals, represents close to 13% of the total, well below the OECD average.

Reforms in several areas are being considered

An ambitious attempt at reform – the second revision to the mandatory health insurance law (LAMal) – was defeated by Parliament in winter 2003. This set of changes was intended mainly to foster more effective competition in the health-services market. Proposals included abolishing the obligation for insurers to contract with all providers on the same terms and reforming the system of hospital financing through the introduction of a single-payer mechanism to replace the joint financing of hospitals costs by both insurers and cantons. In response to this rejection, the Confederation has recently put several of these reforms together in the form of two legislative packages, to be debated separately. The main focus of these revisions is to more effectively control costs by better aligning economic incentives faced by various agents. While the programme of reform, which is rather comprehensive and ambitious, has already been the object of several years of discussion, most elements have not yet been approved or still await parliamentary discussion. To improve the system of premium subsidies for low-income individuals,

Table 3.2. **Distribution of expenditures on health care by type**

Per cent of total expenditure on health, 2005 or latest year available

	Collective health care	Personal health care						
		Total	In-patient	Out-patient	Home care	Ancilliary services	Medical goods	*Of which:* pharmaceutical and other medical non-durables
Switzerland	**6.9**	**93.1**	**46.3**	**28.6**	**2.1**	**3.5**	**12.6**	**10.4**
Australia	8.8	91.2	38.4	30.0	0.0	5.2	17.5	13.3
Austria	10.2	89.8	40.1	26.0	6.4	2.2	15.1	11.6
Canada	14.9	85.1	28.4	25.4	2.0	6.1	20.0	17.7
Denmark	8.0	92.0	29.8	24.8	21.3	3.0	13.1	8.9
France	12.0	88.0	42.4	20.0	1.2	3.5	20.9	16.4
Germany	12.7	87.3	34.8	22.0	5.9	4.5	19.4	15.2
Italy	5.3	94.7	44.3	30.3	n.a.	n.a.	20.1	20.1
Japan	6.6	93.4	39.4	31.9	0.5	0.8	20.1	19.0
Netherlands	15.6	84.4	37.6	21.8	3.5	2.3	16.7	11.5
Norway	9.1	90.9	40.7	18.3	8.5	6.4	13.5	9.1
United States	13.0	87.0	26.5	44.4	2.5	n.a.	13.6	12.4
OECD average[1]	9.8	90.2	33.7	27.8	4.8	4.4	20.4	17.4

n.a.: not available.

1. Average of countries where data are available.

Source: OECD Health database 2007 and OECD calculations.

several options for reform were discussed, and Parliament finally agreed to a measure whereby cantons should target a premium reduction of at least 50% for children and young people in training from middle- and low-income families, to be partly financed by an increase in federal subsidies. To implement better cost-control mechanisms and improve efficiency-related incentives in insurance and provider markets, several measures are planned. The Federal Council has proposed raising the co-payment rate to 20% (from the current 10%) along with the possibility of setting different rates for specific services. Changes to the obligation for insurers to contract with all providers on the same terms are also being discussed. Selective contracting aims at providing insurers with the tools needed to place greater pressure on providers to improve their quality and efficiency. Efforts to reform hospital funding have been aimed at removing some of the distortions of the current framework of joint financing by cantons and insurers, by eliminating block-grant transfers and switching to a so-called "dual-fix" financing of all recurrent and capital costs of the services provided (OECD, 2006d). In the medium term, the Federal Council still intends to put forward a proposal to replace the current joint financing with a mechanism that relies on a single set of payers.

More competition among health insurers and providers could strengthen incentives to reduce costs

The Swiss can freely choose among insurers offering the compulsory basic health insurance package, potentially generating incentives for insurers to lower administrative costs and to ensure cost-effectiveness of health-care services. However, the Swiss medical system does not offer adequate incentives for insurers to engage in competition on the quality and efficiency of health care.

First, payment arrangements need to be reformed. As has been found in other countries that have a fee-for-service reimbursement system, the number of practising doctors is likely to create upward pressures on total health spending. According to available studies (for example, Crivelli *et al.*, 2006), the density of physicians and acute-care beds, together with the age structure of the population, are the most important factors explaining the differences in health spending across cantons. Across cantons, the density of practitioners is positively correlated with the average insurance premium paid, which, as discussed above, reflects total health costs (OECD, 2006d). This density is amongst the highest in the OECD area – 3.8 per 1 000 population (Table 3.3). The relatively high supply of practitioners could be responsible for creating conditions for excessive delivery of services. In response to this, in July 2002 the authorities implemented a freeze in the number of doctors (through the so-called *clause du besoin*), with the aim of slowing down the rise in health expenditures. This has generated a significant amount of controversy among stakeholders and has had little effect on ambulatory-care costs thus far (OECD, 2006d), although more recent evidence suggests that its effectiveness may have improved with time. The freeze was in fact introduced as a temporary measure (it expires in mid-2008) until a different policy – the removal of the obligation for insurers to contract with all providers – is adopted.

Health insurers collectively negotiate fee-for-service payments for ambulatory services with associations of doctors.[8] To reduce pressures on demand for health-care services resulting from fee-for-service payments, health insurers can propose alternative funding mechanisms to doctors who enrol in managed care programmes for ambulatory services, such as gate-keeping schemes[9] with elements of capitation.[10] However, take-up of such schemes is low (OECD, 2006b). Collectively negotiated tariffs are likely to discourage

Table 3.3. **Resources available in the health-delivery system**

2005 or latest available year

	Health employment				Acute-care hospitals			
	Practising physicians per 1 000 population		Total employment in hospitals per 1 000 population		Beds per 1 000 population		Average length of stay (in days)	
	2005	Change 1997-2005	2005	Change 1997-2005	2005	Change 1997-2005	2005 level	Change 1997-2005
Switzerland	**3.8**	**0.5**	**16.9**	**1.2**	**3.6**	**–1.3**	**8.5**	**–2.0**
Australia	2.7	0.3	12.8	1.1	3.6	–0.2	6.1	–0.1
Austria	3.5	0.6	15.3	–0.1	6.1	–0.5	5.9	–1.9
Canada	2.2	0.1	13.0	n.a.	2.9	–0.8	7.3	0.3
Denmark	3.6	0.5	n.a.	n.a.	3.1	–0.6	3.5	–0.5
France	3.4	0.1	n.a.	n.a.	3.7	–0.7	5.4	–0.5
Germany	3.4	0.3	10.8	–0.8	6.4	–0.7	8.6	–1.8
Italy	3.8	–0.2	12.3	0.7	3.3	–1.9	6.8	–0.5
Japan	2.0	0.1	13.1	0.6	8.2	–3.3	19.8	–11.6
Netherlands	3.7	0.8	11.0	0.0	3.1	–0.2	6.8	n.a.
Norway	3.7	n.a.	20.9	n.a.	3.0	–0.3	5.2	–1.2
United Kingdom	2.4	0.5	n.a.	n.a.	3.1	–0.3	6.1	n.a.
United States	2.4	0.1	16.1	0.2	2.7	–0.5	5.6	–0.5
OECD average[1]	3.1	0.4	14.2	1.2	4.1	–0.5	6.9	–1.4

n.a.: not available.

1. The average excludes countries with breaks in the series.

Source: OECD Health database 2007.

doctors from participating in managed-care programmes. Since health insurers bargain jointly with health-care providers, health insurers do not have incentives to compete with each other by putting pressure on health-care providers to lower costs. Patients have also been reluctant to forego the free choice of health-care provider that would result from participation in a managed-care programme. While insurees enrolling in managed-care programmes can benefit from reductions of insurance premia, these reductions are limited to 20%. Incentives for insurees to enrol in managed-care programmes could be strengthened further, for example, by allowing insurers to apply lower co-payments for such coverage. Selective contracting between single health insurers and health-care providers should be allowed on a larger scale. The government has introduced draft legislation in parliament allowing selective contracting. The benefits of selective contracting would be enhanced by removing cantonal barriers in the choice of health-care provider. Indeed, cantons restrict, with few exceptions, reimbursements under the compulsory part of health insurance plans to the use of health services within patients' canton of residence, which reduces the scope for health insurers to exert pressure on providers through selective contracting.

Second, the risk-equalisation system needs to be refined. To remove incentives for insurers to engage in cream-skimming a risk-equalisation scheme is in place which transfers revenues from insurers whose client population has a relatively low morbidity risk to those with a high-risk client population.[11] However, morbidity risk is assessed only on the basis of age and gender, leaving significant room for health insurers to engage in the selection of risks on the basis of diagnostic information. In addition to adverse effects on horizontal equity in the provision of health insurance, the narrow base of the risk equalisation mechanism allows insurance companies to compete for clients with the most favourable risk characteristics, rather than by lowering costs and improving service (OECD, 2006b).

To more effectively avoid cream-skimming and strengthen incentives for health insurers to reduce costs, other OECD countries have introduced risk-equalisation mechanisms that take into account diagnostic data. In the Netherlands, in particular, the risk-equalisation mechanism defines compensation payments for insurees according to diagnostic groups, and in Germany public health insurers receive financial compensation for insurees enrolling in chronic disease programmes. The need to reform the risk-equalisation mechanism has also been recognised in Switzerland. However, current plans foresee the inclusion only of past hospitalisation of insurees as an additional criterion. This criterion may still be too weak to eliminate cream-skimming incentives. Moreover, it is likely to dull efforts on the part of health-insurance companies to avoid unnecessary shifting of patients from ambulatory to hospital care when the former is more appropriate and cost-effective, exacerbating existing incentives to shift patients to hospital care that are inherent in mixed hospital funding. The risk compensation mechanism should be reformed so as to include diagnostic information for the determination of risk-compensation payments among health insurers. Such a reform would also increase the benefits from introducing selective bargaining between insurers and providers. In the absence of comprehensive risk-equalisation, insurers could use selective contracting as a tool to engage in cream-skimming, for example, by offering less advantageous contracts to providers treating high-cost patients, impairing incentives of health insurers to compete by encouraging cost-effectiveness in service provision. Shortcomings in the transparency of billing of health insurance contribute to low propensities to switch health insurer. In particular, insurees purchasing voluntary, additional coverage in addition to the compulsory health insurance from the same provider are not always billed separately.

Hospital financing should be reformed to rationalise the supply of hospital care

As hospitals are jointly funded by the insurers and by the cantons, neither has strong incentives to rationalise the supply of hospital care, cut costs and increase recourse to ambulatory care, in cases in which it is less costly but as effective as hospital treatment. Replacing the current mixed hospital financing system with one relying only on the health insurance companies would encourage insurers to take full responsibility as purchasers of hospital services. The current system of *per diem* payments is likely to encourage longer lengths of stay. While the average length of stay decreased from 10.5 days in 1997 to 8.5 days in 2005, it remains well above the OECD average of 7 days. Although a move towards diagnosis-related groups (DRGs) is currently under discussion, it is not clear whether, in the absence of reductions in hospital capacity, this will effectively decrease the total cost of an average hospital stay, as the decrease in length could still be offset by an increase in admission rates. The introduction of DRGs also reinforces the need for provider performance assessments to prevent incentives to lower quality of service that could arise from DRGs.

The prices for health services, especially pharmaceuticals, can be better contained

Available data suggest that prices for health services are high in international comparison. Differences across cantons remain large, even though insurers have been able to successfully negotiate reductions in prices in some of the higher-cost cantons. Data on doctor remuneration suggest that Swiss physicians have higher incomes than those in other, similar OECD countries (OECD, 2006d). Although price comparisons in pharmaceuticals are plagued with difficulties, several studies (Ess *et al.*, 2003; IMS Consulting, 2003) have suggested that prices were high relative to many European countries in the last decade and that, although the differentials have been declining, they are still significant. Recent measures taken by the authorities envisage more frequent revisions of drug prices and a greater use of generics – through a higher co-payment on brand-name drugs when a cheaper generic equivalent is available. However, there is still scope to more fully exploit the potential for improved cost-effectiveness in the sector. In particular, the pharmaceutical market continues to be sheltered from competitive pressures, and proposals to allow the parallel import of pharmaceuticals (under patent) from neighbouring countries have been rejected on various occasions. In addition, doctors might still have insufficient incentives to prescribe generics, especially since some cantons still allow practicing doctors in independent practice to dispense and sell drugs, creating conflicts of interest that might result in low generic market share.

In order to reduce spending on pharmaceuticals, the higher levels of cost-sharing for reimbursed drugs when a cheaper generic equivalent is available is a welcome measure. However, the incentives for price competition should be further strengthened by requiring that patients pay the difference in price out of pocket, unless the physician explicitly prohibits substitution. To foster the use of generics, the obligation for pharmacists to inform the prescribing doctor whenever a branded product is replaced by a lower-priced generic should be removed. As well, no doctors should be allowed to dispense drugs, as this is likely to create incentives for them to prescribe excessively, especially the more expensive branded remedies.Although there is a case for revising the current pattern of cost-sharing, further increases in the aggregate share of out-of-pocket spending should be avoided, as it is already amongst the highest of any OECD country.

Reforming the pension system should be a high priority

Without reform, demographic pressures will soon plunge the basic old-age insurance system into deficit

Population ageing, expected to be less pronounced than in other OECD countries, will nevertheless create significant financial pressures on the first-pillar pension system (AVS). The ratio of contributors to pensioners is expected to be halved from 1970 to 2035 (when it will reach 2.3)[12] for two reasons. *First*, life expectancy, already the second-highest in the OECD area, will continue to increase. Life expectancy at 65 for males has increased from 13.3 years in 1970 to 16.9 years in 2002; it is projected to increase to 18 years by 2035. For women, the increase by 2035 may be around 1.3 years, to 22.2. *Second*, the fertility rate has decreased steadily since 1970, to around 1.4 births per female, and, although a slight pick up is likely, it will still lie significantly below replacement levels. The financial impact on the first-pillar system is likely to be significant. Official estimates suggest that, under the baseline scenario considered on real wage growth and demographic developments, the AVS system will be in deficit already in 2015. This shortfall will thereafter increase steadily in real terms, reaching around CHF 15 billion by 2040. These estimates are consistent with earlier work that projected an additional increase in AVS financing requirements of roughly 1½-2% of GDP between 2020 and 2040 (Schluep, 2003). In the absence of reforms, the deficit will consume the balance of the reserve fund by around 2025.

The authorities are following a two-step strategy for reform

While the authorities remain fully aware of the financial problems of the first-pillar AVS system, the rejection of the original 11th revision in 2004 prompted the Federal Council to follow a two-stage strategy to reform the system. In the first step, a new, less ambitious version of the 11th revision would focus on solving the short-term financial situation of the AVS through measures that include, among others, increasing the retirement age of women from 64 to 65 (in line with the retirement age of men) and abandoning the biannual, automatic updating of pensions[13] in favour of an adjustment that is triggered only if the balance of the AVS reserve fund lies above a certain level.[14] The estimated net savings from these measures are modest, an average of 340 million francs per year (less than 0.1% of GDP) in part because of the expansion of early retirement options for older workers with dim prospects of returning to the labour market.

The second step would involve a more ambitious overhaul of the system to ensure its financial health in the longer term. The main aspects of the revision are still under discussion, but features likely to be included are measures to prolong working lives, a comprehensive review of pension indexation mechanisms, and the adoption of additional sources of financing. Such adjustments can hardly be avoided, given the financial pressures the system will face, but gaining approval for them is likely to be difficult, especially in light of the earlier rejection of the 11th revision, which included several proposals along these lines. Better pedagogical efforts will be needed in order to convince the population of the need to reform, on the options available and on their different costs and benefits, in terms of equity, efficiency and financial impact.

Further efforts must be wide-ranging in order to guarantee both efficiency and fairness

Although the modified 11th revision contains steps in the right direction to curb expenditures, more ambitious measures will be needed to guarantee the system's financial sustainability. The authorities' strategy to implement the necessary reforms in two steps might allow them to push forward the less ambitious changes quickly. However, it risks wasting valuable time and generating reform fatigue among the population, perhaps hindering their chances to pass more sweeping reform as the median age of voters increases. Indeed, it is important not to underestimate the time it will take to implement pension reforms, given the difficult measures that may be required, and to which insured people will need time to adapt. Even under the current political constraints, there are several avenues for reform, and their acceptability will be enhanced if the costs of adjustment are shared fairly throughout the population and across generations. A cut in benefits or an increase in the average number of years worked would shift the costs of reforms to older workers, while higher taxes or contributions would not only shift the burden towards the young, but would probably have a stronger negative effect on growth via its effects on private saving and the labour supply. The fact that a majority of the population seems to oppose raising the minimum retirement age, as shown by recent calls for more flexibility in this regard, as well as the rejection in the 2004 referendum of an earmarked one percentage point increase in the VAT, imply that any such measure will be met with scepticism. This discussion suggests that, in order to strike a balance between fairness and efficiency that guarantees political support for the reforms, a package involving changes in taxes, contributions, benefits and years of contributions might be the most advisable course of action. This could include a total or partial indexation of the retirement age on life expectancy trends, which would significantly reduce the increase in the old-age "system" dependency ratio induced by population ageing. OECD estimates (OECD, 2006b) suggest that a full indexation would slow the increase in the ratio from around 25% in 2005 to 31% in 2040; without that adjustment, it would reach 40%.

The financial situation of the occupational pension funds has improved

The financial situation of most second-pillar pension funds,[15] which had been jeopardised by the slump in financial markets at the beginning of the decade, has improved steadily in recent years. The combined impact of the stock-market downturn, the protracted decline in bond rates, and the earlier appreciation of the Swiss franc, which reduced the returns from investments in foreign currencies, resulted in large losses at that time. This significantly weakened the balance sheets of pension funds, as well as their investment income, which has traditionally been an important source of financing. Between 1997 and 2002, the average funding ratio (that is, the ratio of assets to the present value of future commitments) fell from more than 120% to around 95%, below the legal requirement. However, their financial position has improved sharply in recent years: in 2005, the average return across pension funds[16] was more than 11%, the accumulated return over the last six years reached 16% (an average of 2.5% per annum) and the average funding ratio had returned to 115% by mid-2006. The share of funds with a funding ratio of less than 100% fell to 3.4%. Likely reflecting the fact that public-sector funds benefit from a guarantee by the respective local government and thus are not legally required to be fully funded, it is estimated that almost half of them have average funding ratios below 100%. This funding problem is not likely to have significant consequences in terms of near-term solvency, since at the system's present state of maturity most institutions' revenues are higher than their current expenditures. It poses a more serious concern in the long term, however, as higher life expectancy (which, as discussed above, will in all likelihood continue to grow) will increase the expected outlays of annuity payments once contributors retire. As the value of the annual payment from the accumulated assets in the compulsory second-pillar system is set by a pre-determined conversion rate, the risk of higher-than-predicted life expectancy falls squarely on pension funds. Funds are registered in the canton where the major part of the business of the employer is conducted, and they are under the supervision of authorities set up by cantons (some cantons have set up regional authorities). As a result, even though they are bound by federal regulation, the supervision of pension funds is fragmented and uneven among cantons (IMF, 2006).

And new measures have been taken

In order to offset the increasing costs as life expectancy increases, the minimum conversion rate of accumulated assets for people insured under the compulsory second-pillar scheme will be progressively reduced from 7.2 to 6.8% as part of the most recent revision of the Occupational Benefits Act (LPP) in 2005. However, it quickly became evident that a further reduction was necessary in order to allow pension funds to meet their commitments. In early 2006, the Federal Council proposed a decrease in the rate to 6.4%[17] by 2011, but this was rejected by Parliament in a first reading; it is still possible that the measure will be adopted in a second reading. In response to the past financial difficulties, the minimum guaranteed interest rate on contributions, which had remained unchanged at 4.5% since 1985, was reduced to 3¼ per cent in 2003 and further to 2½ per cent in 2004. The minimum rate of return, which is revised periodically by the government taking into account average market returns, in particular government bond rates, remained at 2.5% in 2005-07, but will increase to 2¾ per cent in 2008. While reforms to the regulatory and supervisory framework of pension funds are in an advanced stage, changes to the administrative setting of the system's technical parameters are, if anything, at an early stage of discussion.

A better regulatory framework and more reliance on the market to set key parameters are desirable

While the recent measures taken will help to consolidate the financial situation of the pension funds, there is scope for more ambitious reform along two main lines. *First*, the current regulatory framework should be modified. A more centralised approach to prudential regulation and supervision should be adopted, in which a central, nation-wide body would be responsible for the design of the regulatory framework and the issuance of directives to ensure the standardisation of regulations and supervisory practices throughout the country, while the cantons would remain responsible for the actual supervision of the pension funds. A framework along these lines would not only result in a more uniform supervision, but would also avoid duplication of tasks and permit economies of scale to be exploited more fully. In this respect, the amendments proposed to the LPP in summer 2007 that reinforce the central supervisor's attributes go in the right direction. In a longer-term perspective, greater transparency and surveillance of pension-plan administration is still needed to boost public confidence in the system, especially in light of the recent scandals in the sector, which have hampered workers' confidence in fund administrators. The proposed reform to the LPP also includes additional transparency requirements for fund managers, a welcome development. *Second*, the administrative setting of the key parameters of the system should be made more flexible and rely more on market information. Currently, the authorities are responsible for setting, among other parameters, both the minimum interest rate (2.5% *per annum*) and the conversion rate of accumulated assets into yearly payments at the time of retirement, and modifications must go through a lengthy political debate. In the case of the minimum rate of return on accumulated assets, it could either be abolished, or, if this is not possible, it could be indexed in a formal way to a market interest rate. Regarding the conversion rate, it would be advisable to allow the Federal Council to modify it without parliamentary approval if allowing it to be freely determined is not politically feasible. An additional element to consider when assessing the cost of pension provision is the budgetary cost of the tax incentives that are offered to encourage contributions to private pension plans. As previously recommended, the authorities should reassess these tax incentives (OECD, 2006b), especially as they may be contributing to the outsized current-account surplus (see Chapter 2). In Switzerland, as is the case in many other countries, occupational schemes enjoy favourable tax treatment, as contributions and the income generated by invested assets are tax exempt. The budgetary cost of these incentives, according to OECD estimates, are high, especially as participation in an occupational scheme is mandatory (Yoo and de Serres, 2004). The favourable tax treatment may encourage household retirement savings. However, this incentive applies only, to some extent, to the voluntary component of occupational pensions.

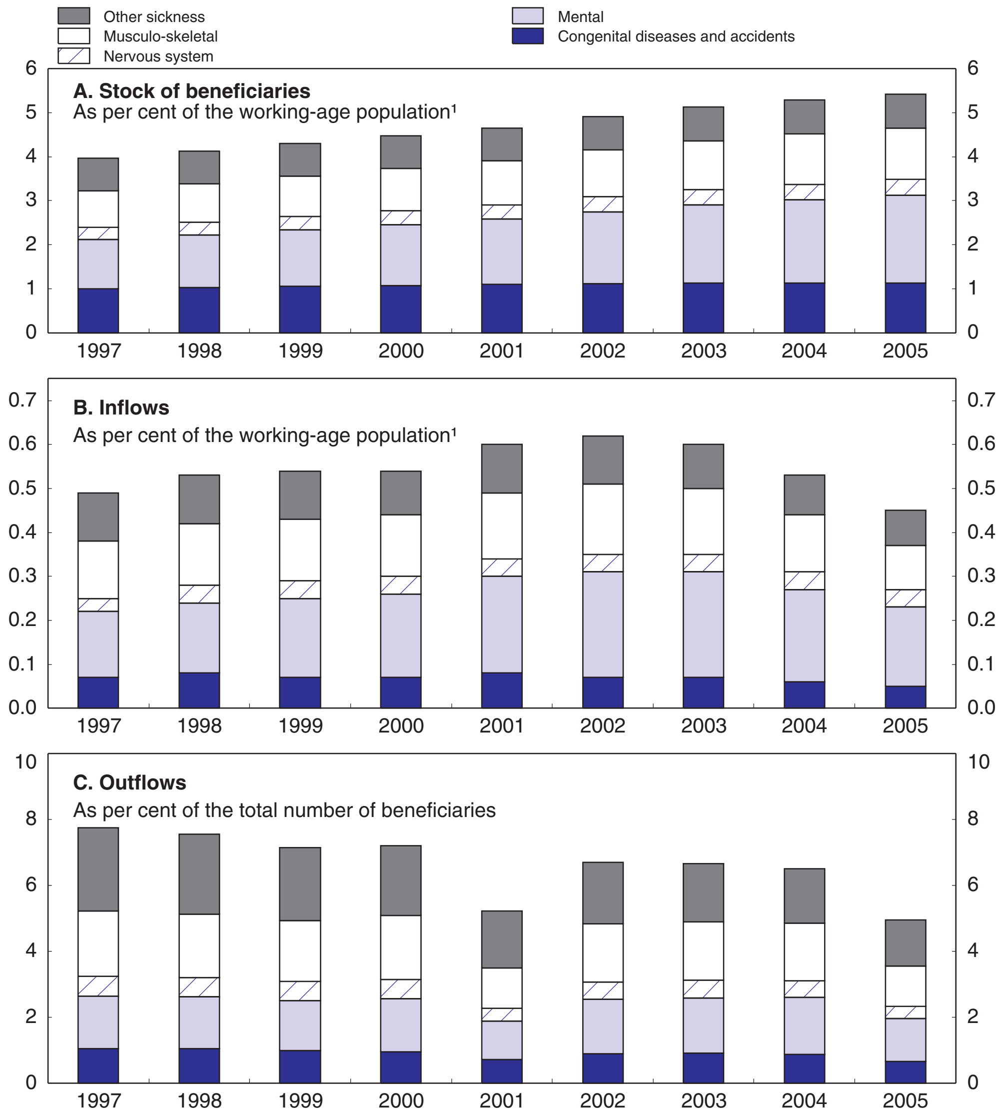
Actions are needed to restore financial balance to the disability insurance system

Reforms to the disability insurance system (AI) are needed in order to correct the persistent deficit in its accounts, which in 2005 reached around 0.4% of GDP (almost CHF 1.7 billion) and drove the accumulated debt to almost 2% of GDP (around CHF 9 billion) by the end of 2006. The deterioration in the disability insurance system's accounts is not new. Up to 1990, progressive increases in the contribution rate (from 0.4% in 1960 to 1.2% in 1987) were enough to offset the trend increases in expenditures. Starting in 1991, however, the deterioration in the financial situation became more acute and persistent, and neither a further increase in the contribution rate (to 1.4% in 1995) nor capital transfers from general revenues[18] were enough to reverse the negative trend and restore financial balance. Without reforms, the system will remain in deficit for the foreseeable future; even with the fifth revision of the system in place, which does not include modifications to the financing of the system, the difference between revenues and expenditures is likely to remain close to CHF 1.6 billion per year. It is also important to ensure that the AI system does not constitute an obstacle to increasing labour force participation rates in the future.

The stock of beneficiaries continues to increase

Although the disability benefit recipiency rate in Switzerland is close to that in other OECD countries (OECD, 2006e), at around 5½ per cent of the working-age population, it has increased steadily at an average annual rate of 4.7% since 1990 (Figure 3.3, Panel A). The inflow rate of new beneficiaries peaked only in 2002 (Panel B). The rise in the beneficiary rate has been highest among prime-age workers (those aged 35-49). The share of all inactive people who are not looking for work primarily because of illness and disability has doubled in the last decade, reaching 18.5%, significantly above the average in Europe of 13%. Substantially more men (34%) than women (12%) stop looking for work for health reasons. The instances where mental diseases are cited as a reason for take-up of disability

Figure 3.3. **Inflows, outflows and stocks of new beneficiaries, by type of disability**



StatLink http://dx.doi.org/10.1787/140122823175

1. Working-age population is defined as those between 20 and 65.

Source: Federal Social Insurance Office.

of benefits have increased to substantial levels, over 40% in 2004, even higher than in the rest of the European countries, where the increase has also been significant. In the same year, the number of new beneficiaries diagnosed with mental diseases rose by around 6.3%, while the increase due to other causes was only 1.1%. Apart from the financial impact on the accounts of the disability insurance system, the economy is losing potentially valuable human capital and the labour force is being reduced as workers exit the labour market and move onto the disability rolls.

Among the *exogenous* factors that explain the trend increase in beneficiary stocks, one possibility lies in a worsening of the general health status of the population. However, the evidence does not seem to support this, as the self-assessed disability prevalence rate has remained broadly stable in recent decades (OECD, 2006d). In addition, as already mentioned, objective measures of health status actually suggest that this has steadily improved in recent decades.[19] An additional explanation could be the ageing population, as incapacitating illnesses and accidents are likely to be more common in older workers. Although it has been estimated that around one-fifth of the annual growth in expenditures for disability pensions over the past decade was due to changes in the age structure of the population (Office Fédéral des Assurances Sociales, 2005), future beneficiary rates are likely to increase only slightly due to the ageing process (OECD, 2006e). Among the *endogenous* factors, incentives to claim benefits seem rather high, as the replacement rate is above international standards (OECD, 2006e), due largely to both the benefits from the second-pillar occupational disability insurance system and an attractive tax treatment of benefits.[20] In any case, data and research on the behaviour of replacement rates in Switzerland are scarce, and a new research programme on the subject, financed by the Federal Social Insurance Office, is a welcome idea.

Few people ever leave the system and re-enter the labour market

Inflow rates have fallen back moderately since the 2002 peak. However, the stock has continued to rise, as annual outflow rates have decreased fairly sharply over the last 15 years, from around 9% in 1992 to 5% in 2005. After excluding outflows into retirement and deaths, the estimated annual outflow rate is slashed to only 1.1% (OECD, 2006e). Thus, once people enter the social insurance system via disability insurance benefits, they are unlikely to leave it and return to work. One reason behind this low rate of outflows is that the average effective tax rates for taking up work can be excessively high, for example, about 80% for single people returning to average-earning jobs, and close to 100% for those with children (OECD, 2006e).[21] Some of these benefit traps are addressed by measures embedded in the fifth revision of the system. But there has clearly been too little effort made to get recipients back into jobs, and current support measures for take-up of vocational rehabilitation and training seem insufficient. Not only has the stock increased, but it is likely that the average expected cost per beneficiary in the system has risen permanently following the shift towards mental disorders in the structure of beneficiaries. In general, people suffering from a mental ailment tend to be relatively young, have a higher life expectancy than people suffering from other debilitating diseases (Andlin-Sobocki, 2005), have a lower probability of finding employment (Autor and Duggan, 2003; Baumgartner *et al.*, 2004) and are more likely to receive a full pension (OECD, 2006e).

A new revision of the system focuses on decreasing the number of new beneficiaries

The fourth revision of the disability insurance system, adopted in 2004 but fully effective only in 2006, focused on improving its medical tools through two new elements: the introduction of regional medical services to provide more uniform and quantitative better assessments; and the upgrading of active job-placement services. It also added a new three-quarter benefit in order to reduce the number of people improperly diagnosed with a full disability. Lastly, it reduced the dispersion between cantons in the benefits awarded (OECD, 2006b). In response to the continuing deteriorating of the AI accounts, the authorities have gone forward with a new proposal to reform the system, proceeding, as in the case of the basic pension system, in two stages. The first step, the fifth revision of the system,[22] has four main goals. *First*, it aims to reduce the inflow of new beneficiaries by 30%, from its 2003 level[23] through, among other measures, early identification of potential work incapacity to prevent disability, early intervention to avoid job loss, new reintegration measures and strengthening the obligation to co-operate (including new sanctions). *Second*, it intends to remove the negative incentives with respect to rehabilitation and taking up work, although this is done in a vague manner. *Third*, it is designed to curb expenditure growth through more stringent austerity measures.[24] These measures are expected to result in average yearly savings of around CHF 600 million francs, or around 30% of the expected deficit. Therefore, revenue-side measures will still be necessary in order to guarantee the sustainability of the system, and they are currently under parliamentary discussion. Among others, the financing measures now under discussion will include an increase in the contribution rate from 1.4% to 1.5% and a targeted increase of 0.8 percentage point in the VAT.

More efforts to return people to the workplace are needed

The cost containment measures of the fifth revision are welcome, but strengthening the screening process to reduce the number of new beneficiaries should not be implemented with such zeal as to deny benefits to people who really deserve them.[25] As early intervention and identification in cases of people with potentially incapacitating conditions is widely considered to be crucial, the measures in the fifth revision are a step in the right direction (OECD, 2006e). Not only should early-intervention measures be offered, but workers should have the necessary incentives to take them up. In some cases, this will imply that those who do not co-operate should face some sort of sanction, as will be the case after the fifth revision.

Once benefits are granted, monitoring and re-testing should be made at regular intervals in order to determine whether the person's work capacity has changed. Mandatory testing in the initial period after benefits are granted (for example, by testing each new beneficiary every six months for the first two years), coupled with occasional random checks afterwards (as is already done, for example, in Austria, Belgium, France and Italy) could be a cost-efficient measure. As it is likely that the rise in mental illness as a cause of disability has caused a lasting composition effect on the disability rolls, more intensive efforts directed towards the reintroduction of such beneficiaries into the labour force would seem to be called for. One way to proceed would be to increase the participation of people with mental conditions in the rehabilitation and vocational-training systems. Currently, while four out of ten people entering the system are diagnosed with a mental disability, this group accounts only for around 25% of all participants in rehabilitation. A smoother phase-out of disability benefits with increasing wages, as well as introducing in-work benefit elements where disability benefits are suspended altogether would reduce negative incentives for beneficiaries to take up work. Other benefit supplements currently provided, such as the child supplement within the first pillar, should be reformed so as to avoid creating benefit traps that further impair beneficiaries' work incentives (OECD, 2006e). In addition, it is important to make benefit rules as flexible as possible so that people can explore going back to work without the fear that their benefits will be cancelled automatically, as is done in Sweden and the United Kingdom, where a disability benefit can be put on hold for up to two years (Rae, 2005; OECD, 2007c). Besides the financial benefits to the AI accounts, there is evidence that there are health improvements upon leaving the disability rolls that are associated with work itself.

Public labour-market institutions can be improved

The financial situation of the unemployment insurance system has also worsened in recent years. The unemployment insurance law (LACI) requires that if, at the end of the year, the accumulated debt reaches or exceeds 2.5% of the insured wage bill, the Federal Council must present, within a year, a revision of the law that guarantees the system's financing. This limit is close to being reached, and the Federal Council has already started work on a reform proposal. A committee of experts was created to study measures available to assure the long-term financing of the system. It concluded that, under the current law, adjustments could not be avoided, even when the economy is projected to be in the declining phase of the cycle. It recommended increasing the contribution rate from 2 to 2.3% (on a permanent basis), which would provide an increase in revenues of almost CHF 700 million per year, as well as several measures on the expenditure side that would translate into additional annual savings of around CHF 450 million. These measures are expected to progressively reduce the accumulated debt in less than a decade.

As unemployment insurance replacement rates are high in international comparison (OECD, 2007a), successful activation policies are important in order to reduce the lengthy duration of unemployment spells. Currently, funding and spending responsibilities with regard to active labour market policies (ALMPs) are assigned across different levels of government. The Confederation is responsible for funding these cantonal policies, and it does so through transfers to the cantonal public employment services, calculated on the basis of lump-sum payments per registered job-seeker residing in the canton. The separation of funding from spending responsibilities and the link between the level of transfers and the number of unemployed are likely to blur incentives for making the most effective use of ALMPs. As unemployment benefits are also paid by the federal unemployment insurance, the incentives to use funds to move the unemployed into jobs are further reduced. Some cantons have implemented and funded ALMPs available to recipients whose unemployment benefits have expired so they can re-qualify for unemployment insurance benefits. There is evidence that they often do so (Département federal de l'économie, 2007), instead of being reintegrated into the labour market. However, countervailing incentives also exist for the cantons to place their unemployed and thus mitigate this problem. *First*, the performance of regional placement offices is assessed and benchmarked annually. As these results are published, low-performing cantons are placed under political pressure to improve their performance. *Second*, cantonal or communal social assistance is available for unemployed persons whose spells have exceeded the maximum benefit entitlement period. However, there is still a need to further strengthen the incentives for the cantons to place the unemployed rapidly and durably. Thus, the possibilities for participants in some activation policies to re-qualify for unemployment benefit receipt should be reduced. The Confederation has already signalled its intention to take steps in this direction. In order to better align incentives to contain spending and increase the efficiency of public employment services, the disbursement of federal funds should rely more strongly on performance-related elements.

The tax system should be modified to safeguard competitiveness and reduce distortions

With good reason, Switzerland is commonly regarded as an attractive location from a fiscal perspective, as shown by the moderate average tax burden and corporate tax rates. However, problems of equity, efficiency and complexity have become evident. The

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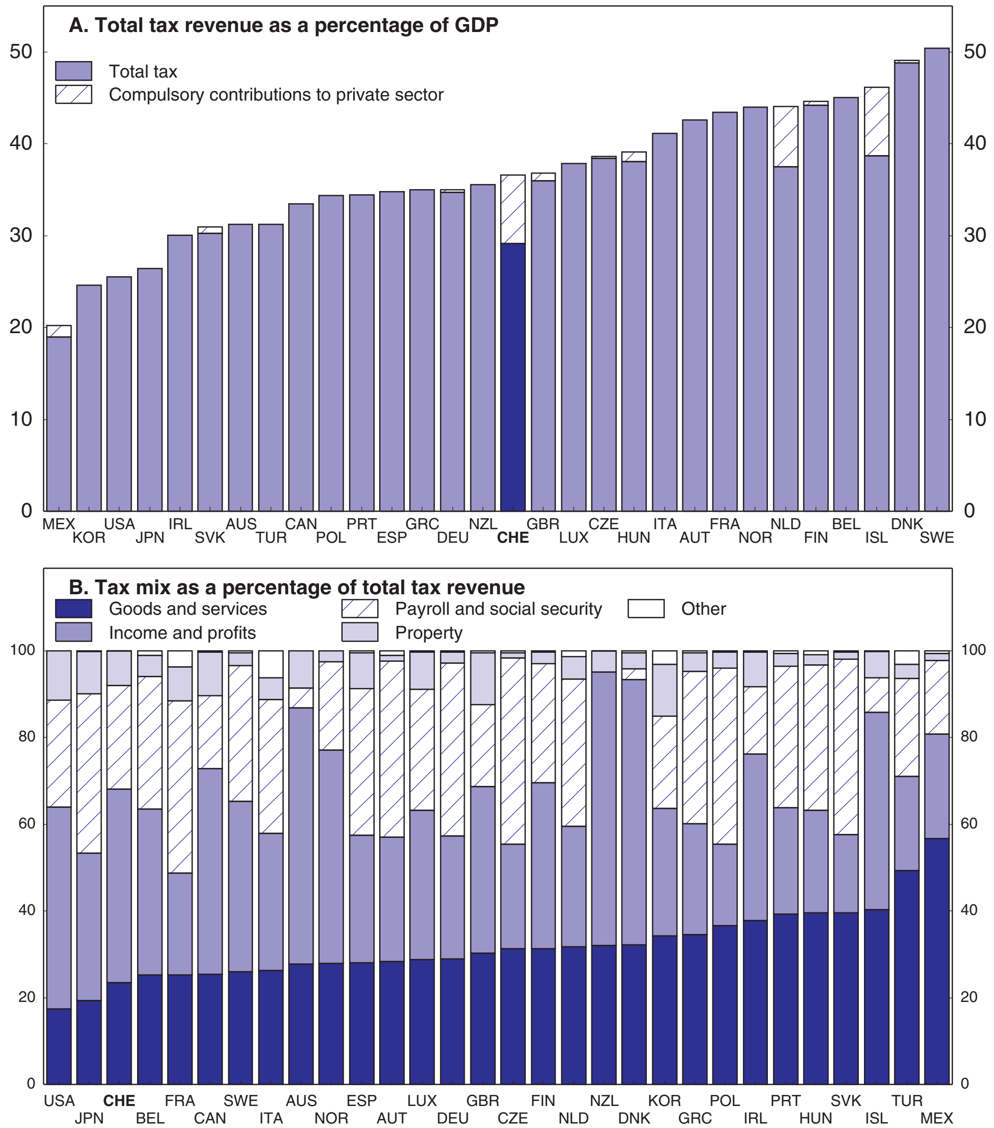
authorities are embarking on a series of reforms in this direction. In a longer-term perspective, they are also studying options for fundamental reform with the goal of achieving a simple and effective system that is able to finance public expenditure in an equitable fashion without discouraging economic growth.

International comparisons show that, although tax revenues in Switzerland, as a share of GDP, are among the lowest in the OECD area, once compulsory social contributions to private sector accounts are included, the total tax burden is close to the OECD average (Figure 3.4). It has, in addition, increased steadily since the beginning of the last decade. Total revenues from indirect taxation are amongst the lowest in the OECD area, likely due to the low VAT rate. There is wide agreement that the complexity of the Swiss tax system

Figure 3.4. **Tax revenue**

Per cent, 2005



StatLink http://dx.doi.org/10.1787/140223551416

Source: OECD (2007), *Revenue Statistics 1966-2006*, 2007 Edition, OECD, Paris.

results in significant compliance costs, as well as making reform efforts more difficult (Feld and Frey, 2006). As the tax burden has grown in recent years, it is likely that households' and firms' avoidance efforts have also done so. The complexity of the tax system has also meant that it has become more costly to administer. Complexity is at least partly due to the federal nature of the country, as there are a number of taxes where there are significant regional differences. For instance, the tax on profits is proportional for the Confederation but progressive in a number of cantons.

A comprehensive VAT overhaul is planned

The VAT is a relatively new tax that was established in 1995, later than in most developed countries. The current standard rate is among the lowest in the OECD area: only Canada and Japan have lower rates than Switzerland (OECD, 2006a), and the rate is almost 10 percentage points lower than the (unweighted) OECD average. However, in assessing differences in VAT, the existence of lower rates on a subset of goods and services, including zero-rating and exemptions, should also be considered. Almost all OECD countries have reduced rates and/or exemptions.[26] Likewise, Switzerland has two reduced rates, a zero rate and 25 exemptions (Table 3.4). However, Switzerland has one of the broadest bases among OECD countries, as measured by the C-efficiency ratio (OECD, 2006a),[27] likely reflecting a high degree of compliance and an efficient collection process.

The differentiated rates structure, particularly the lower rate applied to food and other basic goods, was designed with equity considerations in mind. However, using the VAT to meet social objectives is not likely be the most efficient way of ensuring that those who need assistance actually receive it, given the distortions to consumer choice and deadweight losses that result. The availability of more effective redistributive instruments

Table 3.4. **VAT/GST rates in selected OECD countries**

	Year of implementation	Standard rate	Reduced rates	Domestic zero rate[1]	Different rate applied within specific regions
Japan	1989	05.0	–	No	No
Canada	1991	06.0	–	Yes	Yes
Switzerland	**1995**	**07.6**	**2.4 and 3.6**	**Yes**	**No**
Luxembourg	1970	15.0	3.0, 6.0 and 12.0	No	No
Germany	1968	19.0	7	No	No
Spain	1986	16.0	4.0 and 7.0	No	Yes
United Kingdom	1973	17.5	5	Yes	No
Greece	1987	19.0	4.5 and 9.0	No	Yes
Slovak Republic	1993	19.0	–	No	No
France	1968	19.6	2.0 and 5.5	No	Yes
Austria	1973	20.0	10.0 and 12.0	No	Yes
Hungary	1988	20.0	5 and 15	No	No
Italy	1973	20.0	4.0 and 10.0	Yes	No
Ireland	1972	21.0	4.8 and 13.5	Yes	No
Portugal	1986	21.0	5.0 and 12.0	No	Yes
Poland	1993	22.0	7	Yes	No
Denmark	1967	25.0	–	Yes	No
Sweden	1969	25.0	6.0 and 12.0	Yes	No
OECD average		17.6		17 out of 30	7 out of 30

1. "Domestic zero rate" means tax is applied at a rate of zero to certain domestic sales. It does not include zero rated exports.

Source: OECD Tax database.

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such as progressive income tax rates and targeted expenditure policies (*e.g.* in the areas of health and education) also weakens the case for rate differentiation. It is also likely to have higher administrative and compliance costs and can lead to legal uncertainty and distort relative prices of goods. Exemptions are especially costly in terms of efficiency, since outputs are untaxed, but the tax paid on inputs cannot be deducted. Unlike reduced rates, exemptions break the VAT chain. VAT exemptions thus lead to the taxation of goods that are used as inputs, thereby destroying the neutrality of the VAT with respect to inputs, creating distortions down the production chain as the (non-deductible) tax on inputs is embedded in the subsequent selling price. The importance of this cascading effect depends on where in the supply chain the exemption occurs. If it occurs immediately before the final sale, there is no cascading effect, and the consequence is simply a loss of revenue. Moreover, it also creates incentives to vertically integrate in order to avoid the tax and discourages outsourcing as firms have an incentive to supply taxable items to themselves. This is likely to lead to economic inefficiencies by distorting the structure of the supply chain. In sum, the economic, administrative and compliance burdens call for scepticism when assessing the impact of exemptions.

In early 2006, the Federal Council agreed to go forward with a complete revision of the VAT. Three options are under discussion that would cut the number of exemptions and of reduced rates significantly and lower the standard rate.[28] All options under consideration are intended to be revenue neutral and aim at removing current distortions, increasing efficiency, and reducing compliance and administrative costs. The reform project is expected to be discussed in Parliament sometime in 2008 and is unlikely to enter into force before 2011. If implemented, it would be a step in the right direction. The authorities intend to offset the reform's small negative distributional effects[29] via a social compensation package. Eliminating most of the existing numerous exemptions is likely to increase the tax base. A shift from income to consumption taxation in a revenue-neutral manner seems to be an interesting avenue to explore, as such a move would likely increase the efficiency of the tax system by improving dynamic efficiency.

A reform of capital income taxation can reduce distortions without budgetary cost

International comparisons of tax rates suggest that Swiss corporate taxes, which are levied both at the federal and the cantonal levels, are moderate. However, distributed profits are taxed twice, first at the firm level and subsequently at the shareholder level. The resulting combined rate on dividends is significantly above both the average for OECD countries and that for countries with so-called classical systems (Table 3.5), and its elevated level appears to be driven mainly by the high statutory top personal income tax rates on dividend income in Switzerland.

The high tax rate on dividends might be creating opportunities for tax evasion as households are able to shift their savings abroad where domestic personal income tax is more difficult to enforce. Moreover, the double taxation of distributed profits can, in principle, affect the investment and financing behaviour of firms. However, in the presence of capital mobility, such adverse effects are limited to firms that do not have access to international equity capital markets. For such firms, the high taxation of dividends can distort corporate financing decisions, since under the Swiss code retained earnings are taxed only once, at the firm level, as capital gains are in most cases tax-free at the investor level.[30] This differential treatment lowers the relative cost of internal financing. Indeed, the marginal effective cost of new equity financing is substantially higher than that of

Table 3.5. **Overall statutory tax rates on dividend income**[1]

	Corporate tax rate	Top personal income tax rate on dividend income	Overall rate	Imputation rate
Switzerland	**21.3**	**40.4**	**53.1**	
OECD average	28.4	30.5	43.8	
	Average OECD values under different systems			
Classical	24.1	25.9	44.0	
Modified classical	31.5	21.9	46.9	
Full imputation	30.7	38.2	38.2	30.7
Partial imputation	32.2	40.6	49.3	20.5
Partial inclusion	31.5	39.9	46.0	

Note: Under a classical system, dividend income is taxed at the shareholder level in the same way as other types of capital income (*e.g.* interest income). Countries with this system include, as of 2006, Austria, Belgium, the Czech Republic, Iceland, Ireland, the Netherlands, Sweden and Switzerland). Under a modified classical system, dividend income taxed at preferential rates (*e.g.* compared to interest income) at the shareholder level and is applied in Denmark, Japan, Poland and the United States. A full imputation provides a dividend tax credit at the shareholder level for underlying corporate profits tax, as used in Australia, Mexico and New Zealand. Similarly, partial imputation provides a dividend tax credit at shareholder level for only part of underlying corporate profits tax, as in Canada, Korea, Spain and the United Kingdom. Under partial inclusion, a part of received dividends is included as taxable income at the shareholder level and is current in Finland, France, Germany, Italy, Luxembourg, Portugal and Turkey. In Greece and the Slovak Republic, there is no shareholder taxation of dividends (no other tax than the tax on corporate profits). In Hungary distributed dividends that exceed a threshold equal to 30% of the value of the share are taxed at the shareholder level at a personal income tax rate of 35%. For dividends below this threshold, the rate is 25%. Finally, in Norway, at the shareholder level dividends equal to (or less than) the risk-free market interest rate times the cost price of the share are exempted.

1. This table reports effective statutory tax rates on distributions of domestic source income to a resident individual shareholder, taking account of corporate income tax, personal income tax and any type of integration or relief to reduce the effects of double taxation.

Source: OECD Tax database.

internal financing (Keuschnigg, 2004), and at least part of this difference can be attributed to the differential tax treatment. The high taxation of dividends can also affect the company's legal form, as profits from non-incorporated entities are subject only to personal income taxes (Heady and Brys, 2006), including social security contributions. However, some taxation of dividends needs to be maintained to offset the difference between personal income tax rates, which apply to non-incorporated companies, and corporate tax rates, which are usually lower. In addition, a large share of increases in firms' net worth accrue to their owners not in the form of dividends but rather as capital gains, mitigating the negative effect of dividend taxation on financing costs.

The Federal Council has proposed to subject only between 50% and 60% of dividends to the personal income tax (Département fédérale des finances, 2006).[31] In order to reduce the budgetary cost of the reform, this relief will be available only to investors who hold at least 10% of the company. Cantons will be free to set their own level of deduction under the Fiscal Harmonisation Act. The dividend tax relief should reduce the Confederation's revenue by no more than CHF 56 million in the short term and could have a slightly positive impact in the long term if the reform succeeds in fostering growth.

Stamp duty is levied on, among other financial transactions,[32] the sale and issuance of equities (including those of foreign corporations in the former). It is levied at a rate of 1% on equity issues and capital increases in excess of CHF 250 000. No stamp duty is levied on the first CHF 250 000 of equity capital, regardless of the amount and timing of the investment. In the case of the sale of Swiss and foreign equities, they are taxed at 0.15% and 0.3%, respectively.

The Federal Council has recently put forward a modest proposal to increase the exemption of stamp duties on equity offerings of co-operative companies up to CHF 1 million. In addition, stamp duty is levied on house sales, which may restrict regional labour mobility.

The proposal to reduce the double taxation of dividends is likely to result in a more neutral treatment of internal and external finance and reduce the cost of capital for firms which do not have access to international equity markets, which could stimulate firm creation and investment. Providing special treatment to investors with a stake of more than 10% in the firm could create negative incentives for small firms to accept outside equity investors, thereby restricting opportunities for growth; corporate governance may well also be distorted.[33] The budgetary cost of the reform can be contained by calibrating the magnitude of the exemption, avoiding the need to treat small investors differently. Moreover, a proportional tax rate applying to all dividend income might be more effective in reducing tax evasion than subjecting dividends to progressive income taxation. As buyers and sellers are increasingly able to avoid stamp duties by carrying out financial transactions abroad, the existence of stamp duties is likely to undermine the competitiveness of Swiss financial markets. Hence, the feasibility of removing them should be considered. A moderate capital gains tax could be introduced as part of a more general reform to offset revenue losses from the partial relief of dividend taxation and the elimination of stamp duties in order for the total reform to be revenue neutral.[34]

The taxation of married couples should increase incentives for partners to take up work

Another weakness of Switzerland's tax regime is the personal tax treatment of couples and families. Besides being unfair to married couples (and thus violating the Constitution), it can also discourage married women from taking up paid employment by raising their effective marginal tax rate on labour income (OECD, 2004). The Federal Council has proposed immediate relief to married couples through an increased deduction available to the second earners and a standard deduction for married families which together will significantly reduce the disincentives to take up work.[35] This change will come at a cost[36] to the Confederation and cantons of around CHF 540 and 110 million, respectively. The authorities have committed to offset the budgetary effects of this fall in revenues. Immediate measures to encourage currently unemployed spouses to take up paid employment should translate, in the medium term, into an increase in revenues of around CHF 50 million, according to government estimates. The remaining balance will be compensated by a reduction in expenditures resulting from the re-examination of the Confederation's tasks.

In addition, discussions are underway on a more far-reaching reform. Different options, involving a shift to individual taxation or the introduction of a splitting system are being considered. The different ways to tax married couples can in theory have widely different effects on the marginal tax rates faced by the couple. For instance, if the potential wages of the two partners are significantly different, under a full-splitting model, the partner taking up paid work would face a higher marginal rate than under individual taxation. Conversely, the partner already working would face a lower marginal rate. Thus, the effects of the models under consideration on marginal tax rates should be carefully analysed in order to ensure that the gap in marginal tax rates between main and secondary earners is reduced. Besides differences in work and family-formation incentives, the options are likely to differ in the amount of extra complexity and administrative costs that they would create. Cantons have expressed concerns about excessive increases in complexity and administrative costs. Indeed, cantonal tax offices estimate that their administrative costs might increase between 30 and 50% from current levels, depending on the model chosen. The budgetary cost for the Confederation and the cantons of the reform will of course depend on the adjustment chosen, but the loss in revenues could be considerable, up to about CHF 3 billion per year at the federal level. In addition, discussions also took place on the feasibility of creating an earned-income tax credit to reduce poverty and provide better incentives to take up paid work, but an expert group commissioned by the government decided that the introduction of such a scheme would be too costly. However, the group recommended that the existing assistance schemes be improved, especially with a view to improve incentives to take up paid work.

Taxes and environmental policy

Switzerland's commitment, stemming from its ratification of the Kyoto treaty, to reduce CO_2 emissions from energy use by 10% by 2010, was laid down in the CO_2 law of 1999. The first stage of implementation of the CO_2 law gave priority to voluntary actions to lower fossil-fuel consumption, with around 1 600 companies taking such steps. Projections made in 2004 indicated that measures then in effect, which were in large part voluntary, would not be sufficient to meet the agreed targets. In 2005, the Federal Council proposed to tax CO_2 emissions from heating and process fuels at a rate that would progressively increase until reaching CHF 35 per tonne, which would reduce emissions by 0.7 million tonnes by 2010. The revenues, estimated at CHF 650 million per year, would be redistributed on a per capita basis to households through the private health-insurance system and to firms in proportion to their total wage bill. Energy-intensive and high-emitting industries will be exempted from the tax, provided they enter into legally binding reduction commitments. Based on the agreed reduction targets, companies exempted from the tax can take part in a tradeable permit system set up by the government. Companies would receive emission rights, based on negotiated CO_2 caps, which they could sell or carry forward as credits against a future period.[37] This scheme is expected to eventually cover nearly 40% of industrial emissions (OECD, 2007b). With respect to traffic-related measures, a proposed tax on road fuel was abandoned in favour of a voluntary "climate cent" on road fuel. Retailers collect a surcharge of CHF 0.015 per litre and pay the revenues into a fund for financing mitigation projects, both in Switzerland and abroad. If measures undertaken under the climate cent scheme do not appear likely to meet the goals, an extension of the CO_2 tax to road fuel is possible. Various additional measures have also been adopted or proposed to promote renewable energy sources, such as tax incentives to promote the production of certain types of bioethanol in order for it to achieve a targeted market share of 5.8% in 2020.

While the government is taking clear steps to reduce CO_2 emissions, some of the measures could be improved upon. Exempting energy-intensive business from the CO_2 tax is likely to hamper the effect of the tax on abatement efforts, especially if individual CO_2 reduction targets are not stringent enough. In order not to reduce firms' international competitiveness, the tax should be extended to firms in energy-intensive industries in a gradual manner, so as to allow them to adjust their capital stock and technology accordingly. It would be desirable for the assignment of emission permits to those companies who choose to take part in the permit trading system instead of paying the CO_2 tax to be made through an auction, and not grandfathered as is currently foreseen, in order to avoid creating incentives to increase emissions in the short run.

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Box 3.1. **Policy recommendations for making fiscal policy more supportive of economic growth**

Improve the functioning of the fiscal framework

- Make the setting of medium-term spending priorities a recurrent exercise. Step-up effort to complete the Examination of Tasks Programme. Prepare fiscal sustainability reports as an input into longer-term budgeting, and complement them by developing alternative scenarios reflecting the impact of possible policy measures.
- Develop a framework to deal systematically with extraordinary spending that is placed outside of the debt brake.
- Make sure that further cantonal cuts in top statutory rates do not result in shifting the overall tax burden from high- to middle-income individuals.

Step up efforts to contain social spending

- Do away with the mixed hospital funding system, assigning the entire role of collective coverage to the insurance companies but offsetting the negative redistributional effects through appropriate flanking measures.
- Reduce spending on pharmaceuticals by: *i*) removing the obligation for pharmacists to inform the prescribing doctor whenever a branded product is replaced by a lower-priced generic; *ii*) requiring that patients pay out-of-pocket the difference in the price of a branded product and lower-priced generic; and *iii*) eliminating cantonal policies that allow practicing doctors to dispense drugs.
- Make sure scope for lowering costs and improving quality through competition among health insurers and health care providers is utilised by: *i*) reforming the risk compensation mechanism so as to include diagnostic information for the determination of risk-compensation payments among health insurers; *ii*) improving incentives for insurees to enrol in managed-care programmes, for example, by allowing insurers to apply lower co-payments for such coverage; and *iii*) allowing greater freedom for insurers to contract with providers, including across cantonal borders.
- Consider indexing the retirement age in the first-pillar system to changes in average life expectancy. Deal with any remaining lack of sustainability through a combination of taxes, benefits and required years of contributions.
- Adopt a more centralised approach to the regulation of private pension fund administrators, and increase their freedom to set the conversion rate for occupational pensions. Index the minimum interest rate to a measure of realised market returns. Reassess whether tax incentives for the occupational schemes need to be so generous.
- Make greater efforts to reintegrate a higher share of disability insurance beneficiaries into the labour market, by: *i*) reducing their marginal effective tax rates on labour income; *ii*) regular testing of all beneficiaries' work capacities during the first few years of receipt, and by random testing thereafter; and *iii*) considering the introduction of in-work benefits for people with disabilities. Increase the participation of people with mental conditions in rehabilitation and vocational training systems.
- Strengthen the incentives for the cantons to successfully place the unemployed into unsubsidised jobs, by: *i*) reducing the possibilities for participants in some activation policies to re-qualify for unemployment benefit receipt; and *iii*) reinforcing performance-related elements in the disbursement of federal funds.

Box 3.1. **Policy recommendations for making fiscal policy more supportive of economic growth** *(cont.)*

Increase the efficiency of the tax system

- Reduce the double taxation of dividends, but avoid treating small investors differently.
- Eliminate stamp duties on financial - and housing - market transactions; if it is not possible for budgetary reasons to eliminate them completely, give priority to eliminating duties on new equity offerings. If necessary, fund the reform by a moderate capital-gains tax.
- Make sure that the forthcoming reform of the taxation of married couples further improves work incentives for married women.
- Implement the plans to simplify and increase the efficiency of the VAT by reducing the number and breadth of exemptions and reduced rates.
- Remove the exemption from the CO_2 tax on energy-intensive firms in a gradual manner. Allocate emission permits to firms via an auction, instead of grandfathering them.

Notes

1. Cantons' freedom is restricted only by a prohibition on double taxation and measures that would impede the internal free movement of goods, limits on tax rebates, and the attribution of indirect taxation exclusively to the federal level. The harmonisation law places limits on the definition of the tax base, tax deductions and tax allowances.
2. The fiscal plans of cantons are not formally harmonised either. Not every canton has a fiscal plan, and it is not possible to ensure comparability of different financial plans, because of differences in classification of expenditures.
3. The first report is due to appear in early 2008. The authorities plan to update it approximately every four years.
4. The Examination of Tasks Programme was designed to reduce total expenditures by CHF 700 million in 2008, CHF 950 million in 2009 and CHF 1.2 billion in 2010.
5. The Confederation will be exclusively responsible for seven functions, the cantons for 13 functions, and both will be jointly responsible for an additional 12 functions. In addition, nine functions will be inter-cantonal responsibilities (Dafflon, 2004).
6. This new measure will be computed using each canton's aggregate taxable personal income and wealth (adjusted by a "normal" rate of return) and corporate profits.
7. Reflecting the increased concern with rising health costs, a group of consumer protection entities proposed to replace the current system with a single-payer system. It was subject to a referendum vote in March 2007 and rejected by a wide margin.
8. An element of selective contracting results from provisions that enable insurers to exclude doctors from reimbursement under the collective bargaining agreements if their health care provision is costlier than comparable services supplied by other doctors.
9. In gate-keeping schemes patients are required to consult a general practitioner whose referral is needed for the patient to use specialist services.
10. Capitation payments reward doctors for the number of patients registered at their practice.
11. Cream-skimming incentives result from the obligation of each insurer to charge the same premium to all its clients. Insurers are also barred from refusing any person from enrolling.
12. This ratio was 4.6 in 1970 and 3.6 in 2002 (Conseil Fédéral, 2005).
13. Most high-income OECD countries adjust pensions for changes in the cost of living, in order to maintain the purchasing power of benefits. Some other countries adjust pensions for wage increases, so as to keep the relative position of pensioners *vis-à-vis* wage earners constant. Switzerland has a weighted indexation every two years, with half of the adjustment reflecting prices and the other half wages.

14. More concretely, if the reserve fund falls below 70% of yearly expenditures, pensions will be adjusted only when the increase of the reference index exceeds 4%. If the fund's balance drops below 40%, pensions will not be updated.

15. Made compulsory in 1985, the second-pillar pension system is fully-funded, mandatory, and occupational based. Total assets under management in this employer-based system exceed 100% of GDP.

16. As measured by the PICTET LPP Index 93, available at *www.pictet.com/en/home/finance/indices/lpp93.html*.

17. The Federal Council used the following assumptions to arrive at the 6.4% conversion rate: a technical interest rate of 3.35%, a yearly return of 3.85% and demographic trends reflecting the most recent population scenarios.

18. In addition, currently the Confederation and the cantons finance between them half of the total expenditures of the system.

19. For instance, the potential years of life lost, a summary measure of premature mortality, has decreased by about one-third since 1980 (OECD, Health Data 2006).

20. OECD estimates show that, at average savings the net replacement rate of 69% in 2004 was almost 10 percentage points above the gross replacement rate (OECD, 2006e).

21. It should be noted that another possible reason for comparatively lower outflow rates in Switzerland is the possibility of combining partial benefits with part-time work. Disabled persons taking up work while keeping their partial benefit are not counted as "outflow into employment".

22. The fifth revision was adopted by Parliament in October 2006 and approved by referendum in June 2007.

23. This amounts to a reduction of about 8 100 beneficiaries. However, by 2005 the number of inflows had already fallen by around 6 1000, leaving little further progress needed to achieve this target.

24. These measures include: *i*) waiving the career supplement for new disability benefit recipients under the age of 40; *ii*) shifting medical rehabilitation without a work perspective to the health insurance system; and *iii*) the abolition of supplements for spouses of all current benefit recipients (*i.e.* not only for new cases, as under the fourth revision).

25. In the United States, more stringent screening and monitoring procedures implemented in the 1980s, which were successful in reducing the number of new beneficiaries, were met with growing opposition from both the general public and Congress. The political backlash was such that the new procedures were overturned and more lenient ones were put in place, which has resulted in a significant increase in the disability rolls of the system (Autor and Duggan, 2006).

26. Zero-rating means that VAT is not levied on goods and services consumed within the country, but the deduction of VAT paid on inputs is allowed (OECD, 2006a). In contrast, in the case of exemptions taxes paid previously in the production chain cannot be deducted.

27. The C-efficiency ratio is computed in the aggregate as the ratio of VAT revenues to consumption divided by the standard rate, expressed as a percentage. In the absence of differentiated rates and exemptions, the index should be close to 100 (OECD, 2006a).

28. Three basic options are being considered. The first, called the *Loi fiscale*, would focus on simplifying the law and improving the legal security of taxpayers. The other two options are more far reaching: both would eliminate 20 out of the current 25 exemptions (only the five items where significant technical difficulties remain would remain exempt: banking and insurance services, housing, agricultural goods and some public services). In the *moduletaux unique*, a uniform rate of 6% would be applied to all goods and services (a variant of this proposal would keep the exemption on health care spending and apply a standard rate of 6.4%), while the *module deux taux*, would keep the current rate of 7.6% but apply a reduced rate of 3.4% to a variety of goods and services.

29. Official estimates suggest that under a single rate and assuming unchanged consumption patterns, the expenditure of an average low-income household would increase by around 0.07% of gross monthly income (Fischer and Spicher, 2007).

30. Capital gains realised by households from shares of companies listed on the stock market are hardly ever taxable, as these companies may be considered as infinitely lived. The situation is more complex in other circumstances. Earnings on shares in other companies that are owned by an incorporated company or held as part of the assets of an agent who is not incorporated are taxed as corporate gains or personal income. Also, in the event of the liquidation of a privately

owned company, any amount paid out to the owner above his initial investment as capital is subject to personal income tax. All cantons have capital-gains taxes on real estate transactions.

31. The exemption would amount to 40% if held as private assets and 50% if held as corporate assets.

32. The issuance of bonds is taxed at between 0.06% and 0.12% per year to maturity. Certain insurance premiums are also taxed at a standard rate of 5% of the premium, although life insurance premiums – when liable – are taxed at 2.5%.

33. However, it will now become more attractive to acquire larger shares of companies. To the extent that larger shareholders engage in more monitoring of managerial behaviour, the negative effect on corporate governance might be mitigated.

34. Such a tax would not distort investment and financing decisions to the extent that capital is internationally mobile (although savings decisions would be affected). To the extent that the provision of equity capital is not internationally mobile, and given the taxation of dividends, a capital gains tax can reduce the difference in the tax treatment of distributed and non-distributed profits, thereby also reducing tax advantages of corporations which retain their earnings *vis-à-vis* non-incorporated firms. On the other hand, a capital gains tax generates incentives to postpone realisations of such gains.

35. Currently, co-habitees can each deduct CHF 7 600 from their annual taxable income while married couples can claim this deduction only once. This will be replaced by a deduction of 50% of the second income (the lowest of the two), with a minimum of CHF 7 600 and a ceiling of CHF 12 500. On top of this, married couples will be able to claim a CHF 2 500 deduction. This implies that the annual deduction for married couples will lie, depending on the second earner's income, between CHF 10 000 and CHF 15 000.

36. The Parliament approved the bill during the autumn session of 2006, and it will enter into force on 1 January 2008, though the decrease in revenues will occur only in 2010.

37. In the event of non-compliance by firms, the CO_2 tax would be applied retroactively on total emissions.

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Chapter 4

Deficiencies in the regulation of goods and services markets remain

Measures to make the regulation of product markets more conducive to competition play a prominent role in the government's "growth package" of measures to stimulate economic growth which are in the process of being implemented. This chapter discusses these measures und suggests further improvements. Notwithstanding significant reforms in recent years, competition law and its enforcement are still weaker than in other OECD countries. Scope for making regulation of product markets more competition-friendly is large in the network industries. While sector-specific regulators have been introduced, their independence needs to be strengthened. The reform of the electricity supply law provides the main building blocks opening the industry to competition, but vertical separation requirements of the electricity grid from electricity generation and trading activities need to be strengthened. In telecommunications, restrictions in access of competitors to the local loop limit the scope for lowering prices and improving quality of service in broadband connections. Measures still need to be taken to prevent discrimination against market entrants in the railway passenger services market and much scope exists to widen competition in postal services. Progress in lowering the degree of protection in the proposed legislation on agricultural policy 2007-11 is modest. Trade barriers can also be lowered for manufactured goods through the adoption of the Cassis de Dijon principle.

Reforms in product market regulation can make a significant contribution to raising productivity growth and lowering high prices in sectors where exposure to international competition is limited, both through improving regulation applying across all sectors of the economy – such as competition law – as well as through sector-specific regulation, notably in the network industries. As argued in Chapter 1, removing sector-specific barriers to competition would have benefits beyond the sectors concerned, through the reallocation of resources and the lowering of the costs of intermediate goods and services. Furthermore, more intense competition can generate dynamic gains through more innovation, especially in countries and sectors which are close to the technological edge as is the case in Switzerland in a number of manufacturing industries.

Recent reform in competition law and competition law enforcement needs to be followed up

A competition law amendment, which came fully into force in April 2005, has considerably strengthened the scope for fighting collusive behaviour by introducing direct sanctions for hard-core cartels and for abuse of dominant market position, as well as instituting a leniency programme and more wide-ranging investigative powers for the competition law enforcement agency (the Competition Commission, *ComCo*). *ComCo* has also been given new responsibilities in enforcing the Domestic Market Act, in force since July 2006, which requires cantons to remove barriers to the flow of services across cantonal borders (see the 2005 *Economic Survey*).[1]

These changes have been reflected in competition law enforcement, with *ComCo* imposing its first direct sanction on an airport operator for abuse of a dominant market position. *ComCo* has also investigated excessive termination charges in mobile networks and predatory pricing for ADSL services by the incumbent operator as well as collusive behaviour in public construction procurement and has taken action against recommended price schedules in professional services, such as lawyers' services. However, no investigations of breaches of the Domestic Market Act have yet been concluded, although *ComCo* expects that such investigations will be necessary.

The scope for improvement in competition law and enforcement remains significant. Competition law still requires proof of abuse for action to be taken against hard-core cartels in some cases, slowing down decision-making. The prohibition principle should be applied to all hard-core cartels. Moreover, representatives of the employers' association, trade unions and farmers continue to be appointed to *ComCo*, which compromises its independence. Staffing levels remain modest. The increase in its staff in 2006 was limited to about half the increase considered necessary initially to allow *ComCo* to fulfil its new wider role. Moreover, reforms in sector-specific regulatory frameworks would go a long way in facilitating *ComCo's* task in detecting non-competitive practices. For example, opaque public procurement rules and the absence of an *ex ante* regulatory framework in telecommunications bind substantial staff resources. Reforms in these policy areas, as

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detailed below, would therefore also have benefits for the effectiveness of general competition law enforcement.

Technical barriers to trade can still be lowered

Barriers to trade result from administrative and technical regulations deviating from those of trading partners. With EU countries supplying about 80% of Swiss imports, removing such barriers *vis-à-vis* EU countries would have particularly large benefits. In recognising this, the government has opened the public consultation process on a draft law, in which it proposes unilaterally to apply the so-called *Cassis de Dijon* principle (which has been adopted by EU countries), whereby products fulfilling product-specific technical requirements in the country of origin are accepted by the importing country, for those in which such requirements are not already harmonised. The draft law foresees exemptions from this principle in a narrowly defined range of goods, mostly to impose stricter environmental and health standards. However, pressures against limiting exemptions only to a few goods may be significant. The government has delayed the timetable of adoption in view of numerous requests for exemptions. The principle of "*Cassis de Dijon*" should be applied with as narrow a list of exemptions as possible.

Scope remains for reducing the prices of imported goods by allowing parallel imports of products patented in Switzerland. At present, producers of goods patented in Switzerland can in general prevent imports of the same good marketed abroad, although on a case-by-case basis *ComCo* has powers to intervene if import restrictions based on intellectual property rights amount to an illicit vertical agreement or an abuse of a dominant market position. The government renewed its rejection of the principle of "international and regional exhaustion" – which would allow imports world-wide or from EU countries, respectively – in April 2007. Adoption of the principle of "international exhaustion" would have the largest impact on pharmaceuticals, lowering their prices in Switzerland by between 8 and 18%, according to government estimates, while the impact on research and development is likely to be limited, given the small size of the Swiss market relative to world markets and the availability of patent protection in other major markets. Moreover, reimbursement of pharmaceuticals by health insurance systems throughout OECD countries provides a strong boost to their sales, possibly beyond the level at which marginal benefits and marginal costs are equalised, further suggesting that aligning Swiss prices of pharmaceuticals with world prices would not unduly harm research incentives. Prices for reimbursement by health insurers in Switzerland are administered and changes in reimbursement rules have contributed to moderate insurance spending in pharmaceuticals in 2006. However, administered prices remain considerably higher than in other European countries, although this difference is, in part, due to larger regulated retail margins. Further efforts to more effectively align Swiss reimbursement prices on those of some other industrialised nations are underway (see also Chapter 3). Nonetheless the government is of the opinion that modification of patent protection along the lines suggested above would give a deleterious signal for the research effort of the industry.

The scope to intensify competition in network industries is still large

Over the last decade, regulatory reform in network industries has been substantial across OECD countries. Many countries have established independent, sector-specific regulators in telecommunications, energy, and, in some countries, the railways, with significant powers to ensure new entrants have access to networks (including *ex ante* regulation), allowing competition to develop. Postal services have also increasingly been opened to competition. These reforms have in many countries been accompanied by privatisation of incumbent enterprises. For example, regulation that is conducive to competition in telecommunications has contributed to falling prices for telecommunications services (*e.g.* Hoj *et al.*, 2007) and to productivity gains in electricity generation (see, for example, Hunt, 2002). Some empirical evidence also suggests that sequential reforms in the railway industry have improved efficiency (Friebel *et al.,* 2004), although there is no consensus yet as to what extent vertical separation should be pursued in this industry and how network access is best regulated (OECD, 2006b). Full opening of postal services in Sweden, introduced in 1993, has been assessed to have made a positive contribution to economic growth (Trinkner and Jaag, 2007, and references therein). Moreover, a competition-friendly stance of regulatory policies in network industries entails productivity gains in sectors using outputs of such industries as intermediate inputs. Indeed, empirical evidence suggests that the regulatory stance in network industries has a substantial impact on the degree to which economies are able to catch up with the productivity performance of the technologically leading country across all sectors of the economy (Conway *et al.*, 2006[2]).

The pace of reform in this policy area has been relatively slow in Switzerland. While sector-specific regulators have been introduced for the telecommunications, the postal services and the railways, and a regulator for the electricity sector will take up its functions in 2008, their independence from the government is generally relatively weak. The terms of office of senior regulatory appointees are typically limited to four years, and reappointments are possible (OECD, 2006a), limiting their independence. The powers of the regulators are less well developed than in other OECD countries, making it more difficult to prevent market incumbents from using their market power to restrict entry. For example, the postal regulator *PostReg* cannot fine companies for breaches of regulatory decisions, and its decisions concerning price regulation have to be approved by the Department of Energy, Transport, the Environment and Communications (DETEC). The new electricity market regulator's powers to prevent non-price discrimination are also limited in some respects, which interacts adversely with ample incentives and scope for discrimination against market entrants by vertically integrated operators, given the limited separation requirements imposed on the industry (see below). For example, no rules are in place limiting the reasons for which network operators can cancel contracts with market entrants wishing to use the network for trading or retailing activities, while the staffing levels of the regulator are modest in international comparison (OECD, 2006a).

Strengthening the independence and providing sufficient powers for network regulators can help ensure that potential market entrants perceive regulation to be neutral and predictable, facilitating their entry and making it more credible. This in turn, will discipline price-setting behaviour by incumbents. The independence of sectoral regulators should be strengthened. The terms of office of senior staff in the regulatory authorities should be lengthened and the possibility of reappointment removed. Sector regulators should have powers to fine market participants breaching their regulatory decisions, and government departments should not be able to intervene in those decisions.

Government ownership in network industries is still substantial (Box 4.1), with adverse effects on competition and efficiency. *First*, government ownership gives rise to perceptions of conflicts of interest. On the one hand, the government needs to make sure

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Box 4.1. **Government ownership in network industries**

Government ownership is substantial in all network industries:

- The government retains a share of 58.4% in the telecommunications incumbent *Swisscom*. The Federation is bound by law to retain a share of at least 50% in the incumbent.
- The postal services incumbent *La Poste Suisse* is fully government-owned.
- The main railways operators – cantonal railway companies and the Federal Railways company – are fully government-owned.
- The electricity sector is characterised by a high degree of government ownership at all stages of the value added chain. Most electricity generation and transmission is in the hands of companies fully or majority-owned by cantons and municipalities. Electricity distribution and retailing companies are largely owned by municipalities.

that the framework conditions are in place to ensure a level playing field between incumbents and market entrants. On the other hand, access of private-sector enterprises to the network may reduce the profits of the state-owned incumbents. For example, such conflicts of interest arise from the cantonal ownership of electricity generation assets, as cantons are responsible for granting permission for the construction of new power plants. *Second*, privatisation – notably of the electricity generation assets owned by cantons and municipalities – can in some cases be useful to achieve a more effective vertical separation of network activities from others in which competition can be established (see below). *Third*, as public enterprises are likely to be less guided by the profit motive than their privately owned counterparts, efficiency of service provision may be compromised. Moreover, because publicly owned enterprises are more likely to be willing to use profits from monopoly lines of business to provide services in competitive market segments at prices below marginal cost, this can result in prices which poorly reflect costs in both market segments. The government should privatise its stakes in network industries, notably the incumbents in postal and telecommunications services. Sub-national governments should be encouraged to privatise their stakes in potentially competitive market segments of the electricity sector, notably in generation.

The new regulatory framework for the electricity market marks a significant step towards competition

Electricity prices remain above average in the OECD, notwithstanding the abundance of low-cost hydroelectric as well as nuclear power, which have made Swiss electricity prices less sensitive than elsewhere to increases in oil and gas prices in recent years. Prices are particularly high for small and medium-sized enterprises with little bargaining power in the market (OECD, 2006a). The regulatory framework has thus far not supported competition. Enforcement of the rights of competing suppliers to gain access to the networks of incumbents has had to rely on provisions against abuse of dominance in general competition law. This framework has allowed only large business customers to choose suppliers. Retail service to small customers is subject to universal service obligations, obliging suppliers to provide electricity at regulated prices.

Reforming the regulatory framework of the electricity industry has ranked high in the government's strategy to strengthen long-term economic growth prospects. After the first attempt to introduce a sector-specific regulatory framework in 2002 failed in a referendum, a new regulatory framework was approved by parliament and will come into force in October 2008. It provides for the creation of an independent, sector-specific regulator, rules on vertical separation of network activities from those in which competition is possible, notably electricity generation, wholesale and retail trade. The new legislation gives all large business customers the legal right to choose their electricity supplier from the outset, while households and small businesses will be given such choice in 2013.

The new energy regulation framework constitutes a major step forward, introducing the major institutional arrangements for competition in electricity generation and for electricity trading. Indeed, experience across OECD countries shows that an effective regulatory framework is needed to achieve sustained competition following liberalisation in electricity markets. Economic benefits have proven most significant in electricity generation, whereas electricity retailing activities appear to have offered limited scope for cost reduction and quality improvements.

Scope still exists, however, to improve the regulation of network access prices. The legislation foresees rate-of-return regulation, which sets prices according to *ex post* observed costs, until 2013. Price-cap regulation may be adopted thereafter, whereby price caps would be set for several years in advance. Price-cap regulation provides better incentives to save costs, and experience with price cap regulation in the United Kingdom, for example suggests that cost savings can be significant. Price cap regulation should be introduced as soon as possible. However, price-cap regulation involves a trade-off between static and dynamic efficiency, as a longer price cap improves incentives to reduce costs but generates efficiency losses through more pronounced deviations of prices from marginal cost. The trade-off can be improved through benchmark-regulation, according to which regulated prices are set on the basis of costs of other network operators, allowing separation of regulated prices from each operator's own costs (see Weyman-Jones *et al.*, 2006 for a description of benchmark regulation practices). Moreover, owing to this disconnect, benchmark regulation avoids incentives to misreport costs (Shleifer, 1985), which can impair price cap regulation. A combination of price cap and benchmark regulation is used in Germany. In Switzerland, owing to the large number of regional and local network operators, the scope for benchmark regulation is large. Benchmark regulation should be introduced in the regulation of network access prices.

Vertical separation rules need to be strengthened

Effective rules concerning vertical separation are critical for sustained competition in electricity markets to occur. This is especially true in Switzerland, where the ownership structure in the industry is characterised by a high degree of vertical integration, which gives network owners incentives to discriminate against competitors wishing to gain access to their networks (see Box 4.2). Moreover, the legislation has opted for a light regulatory regime, with modest staffing levels and restricted powers to intervene. Such a light regulatory framework requires that incentives and scope for incumbents to discriminate against competitors be limited through stringent vertical separation requirements, thereby alleviating the need for the regulator to intervene.

The new regulatory framework requires legal, managerial and accounting separation of electricity generation from transmission operations as well as accounting separation of retail trading from distribution. In order to put managerial separation of electricity transmission from generation into practice a transmission systems operator was set up (Box 4.3).

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Box 4.2. **The Swiss electricity market**

The electricity generation market is characterised by a high degree of concentration with a group of five incumbent companies (the *Überlandwerke*) controlling 80% of electricity generation. International interconnection is ample, creating scope for foreign electricity generators to compete on the Swiss market. However, the emergence of competition from foreign suppliers still depends on effective rules to prevent discrimination resulting from vertical integration (see Box 4.3 below). Vertical integration is also strong, with the *Überlandwerke* owning the Swiss transmission network. The *Überlandwerke* also own stakes in local electricity utilities and are active in electricity retailing. Of the five *Überlandwerke*, three are fully owned by cantons and municipalities, one is majority-owned by a canton and one has majority private ownership. The electricity distribution network is owned by a multitude of local electricity utilities mostly owned by municipalities (see OECD, 2003 and 2006 for detailed descriptions of the market structure).

Box 4.3. **Vertical separation of electricity generation and transmission**

A new corporation, *Swissgrid,* was set up in 2006 to manage electricity transmission network operations. The five *Überlandwerke* own the electricity transmission network as well as *Swissgrid*. They are expected to transfer their transmission assets to *Swissgrid* by 2012, retaining commensurate shares in it. Since the *Überlandwerke* are owned mostly by the cantons *Swissgrid* is largely in public ownership. The *Überlandwerke* are represented on the board of *Swissgrid*, although they are required not to intervene in its operations, and members of its board are not allowed to hold managerial positions in the *Überlandwerke*. However, as a corporation *Swissgrid* would need to act in the interests of its owners, whose profits would benefit from discrimination against new market entrants. *Swissgrid's* board also includes representatives of the cantons that own significant stakes in electricity generation, further weakening its independence.

Two models have emerged in OECD countries to achieve ownership separation between electricity generation and transmission operations (IEA, 2001). According to the first model, transmission system operators own the transmission network but are not allowed to own electricity generation assets (practiced in the United Kingdom and the Nordic countries, for example). According to the second model, ownership of generation and transmission assets remains integrated, but the transmission system operator has no ownership ties with the integrated companies owning electricity generation and transmission assets. This model has for example been followed by some states in the United States. The first model is preferable, as unifying transmission system operations with transmission asset ownership helps ensure that efficient decisions are taken with respect to investment decisions concerning the transmission network. The second option may, however, be preferred if ownership separation of transmission and generation assets is judged to be too difficult to achieve.

In the current Swiss context, implementing the preferred model of vertical separation of electricity generation from transmission would require the *Überlandwerke* to divest electricity generation assets. This step would ensure that incentives to discriminate against competing electricity generators would be eliminated, while transmission asset ownership and transmission operations would be unified. The preponderance of public ownership in the *Überlandwerke* might make this option politically viable, although it would require the co-operation of cantons and municipalities, which are fully autonomous in this respect. Alternatively, the *Überlandwerke* could retain ownership of their electricity generation assets. In this case, in order to ensure incentives to discriminate against market entrants are avoided, *Swissgrid* should not be owned by the *Überlandwerke*. In either case, cantons should be allowed to be involved in *Swissgrid* only if they divest their generation assets.

Legal, managerial and accounting separation can be effective in preventing discrimination against market entrants by incumbents if the regulator is able to observe and take action against discriminatory behaviour. However, experience across OECD countries shows that regulators are not able to detect and stop discrimination against competing electricity generators seeking access to the electricity transmission network because the transmission network needs to be actively managed in real time.[3] Therefore, legal, managerial and accounting separation between the transmission system operator and generators is not sufficient. Incentives to discriminate need to be eliminated through ownership separation of electricity generation from transmission operations (see, for example, Hunt, 2002; IEA, 2001). Indeed, without such ownership separation, the potential benefits of the new regulatory framework may well not be realised. Ownership separation between electricity generation and transmission operations should be introduced.

The effectiveness of accounting separation depends on the introduction of cost accounting rules that are adapted to the information needs of the regulator. Indeed, since accounting separation is the only unbundling requirement imposed on distribution networks, it is particularly important that it be effectively implemented. However, the new legislation does not introduce regulatory cost accounting rules. Cost accounting for company financial accounts is not well adapted for regulatory purposes (OECD, 2006a).

Ownership of stakes in local utilities by the *Überlandwerke* generates risks for the independence of the demand side from the supply side of the market. Local utilities will be in a key position when it comes to putting competition among electricity suppliers into practice, especially in the transition period up to 2013, when households cannot yet freely choose their supplier. The weak vertical separation requirements on the distribution networks would generate further scope for the large incumbent electricity generation companies to discriminate against competitors with an adverse impact on market entry as well as on the scope of foreign electricity generators to compete. In Germany, for example, deepening vertical integration following market liberalisation contributed to weak competition, as reflected in low customer switching rates, and to rising prices (OECD, 2006d). The acquisition of further stakes in electricity distribution networks by the *Überlandwerke* should be prevented.

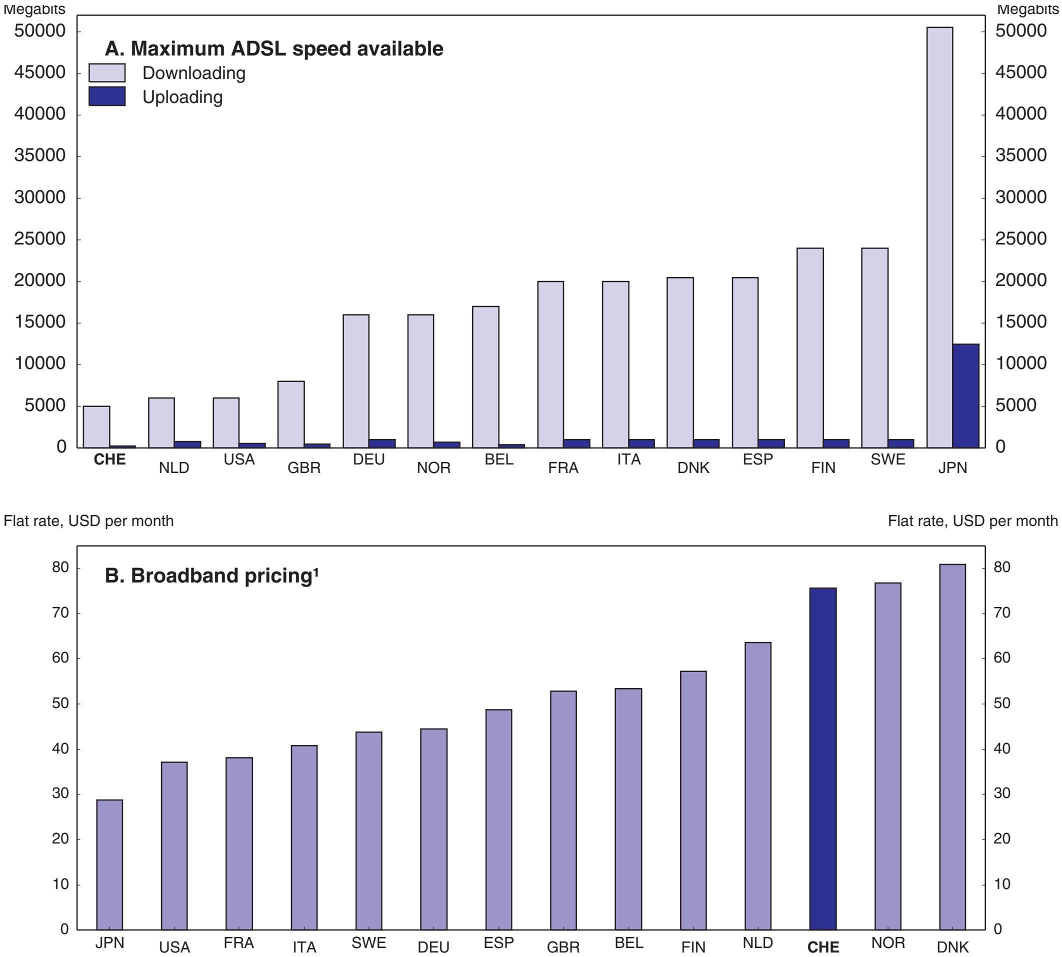
Lack of competition lowers quality and raises prices in telecommunications services

Access to broadband is more wide spread in Switzerland than in most OECD countries. To some extent, high broadband penetration is likely to reflect relatively high income levels in Switzerland. Moreover, wide access to cable TV networks, to which almost all Swiss households are connected, provides a platform through which broadband services can be offered without relying on the fixed telephone line network. However, prices for broadband services are high in comparison with other OECD countries, while the speed of data transmission is considerably lower (Figure 4.1).

While telecommunications markets were opened to competition already in 1998, market entrants have, until recently, not been given access to the unbundled local loop on the telephone network. The absence of regulated access to the local loop allowed *Swisscom,* the incumbent operator that owns the fixed-line telephone network, to retain a market share of almost 100% in the wholesale market for ADSL connections.[4] While competing broadband services can be provided through the cable TV network, scope for competition is limited, as only half of all cable TV connections have been equipped for voice services (Economiesuisse, 2005), and the share of broadband connections provided through cable has fallen to less than a third (Communications Commission, 2006). Moreover, the market

Figure 4.1. **ADSL speed and prices in international comparison**

October 2006



StatLink http://dx.doi.org/10.1787/140226325131

1. Cheapest offer for maximum speed available in Switzerland, or faster.

Source: OECD (2007), *Communication Outlook*, 2007 Edition, OECD, Paris.

for cable TV connections is dominated by one firm, *Cablecom*, limiting competition to, at most, a duopoly. Broadband offers through cable TV have been very similar to *Swisscom*'s ADSL offers in terms of speed and prices (OECD, 2007a). Other broadband technologies are not yet well enough established to offer adequate scope for competition.

In response to unsatisfactory access for competitors to the local loop, parliament passed legislation granting competitors access to the unbundled local loop as from 1 April 2007. Although these access rights have been granted with considerable delay relative to other OECD countries, they are subject to significant constraints. In particular, limits have been imposed on access modes which require limited investment of competitors in equipment of their own. Line sharing[5] has not been made available, and a time limit of four years has been imposed on bitstream access.[6] Bitstream access and line-sharing have played an important role in many countries in fostering competition for high-speed access to the internet (OECD, 2005). In addition, the narrow definition of access rights will prevent competitors from gaining access to fibre networks, should the incumbent decide to replace copper telephone networks by fibre, as noted by the Communications Commission (*ComCom,* 2006). Moreover, *ComCom* noted that the conditions under which competitors can obtain physical access to local switches (co-location) were not spelled out in a transparent manner (Communications Commission, 2006). While the incumbent published a co-location offer when the new unbundling rules came into force, which introduced transparency, the regulator does not at present have powers to ensure the transparency of access. Legal restrictions on the access of competitors to the local loop should be eliminated. Bitstream access should not be subject to time limitations. Line-sharing should be offered to competing service providers. The regulator should be obliged to ensure co-location on transparent terms.

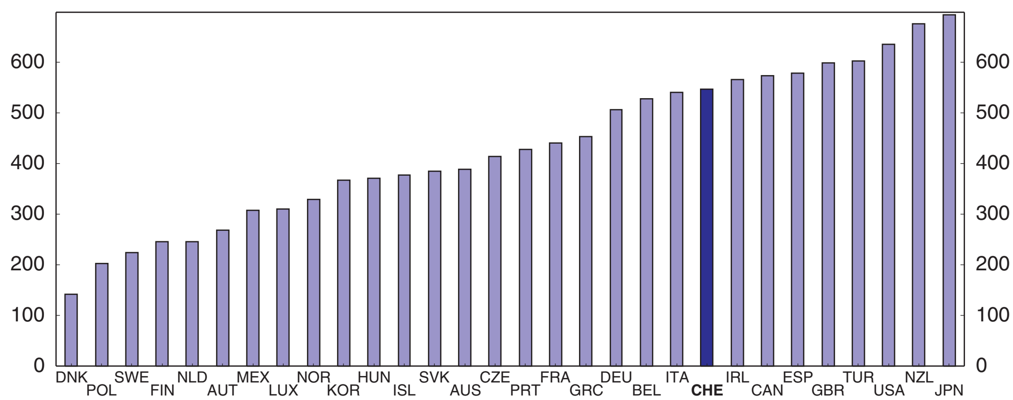
Ex post regulation is cementing market power

Access prices to the local loop remain subject to *ex post* rather than *ex ante* regulation unlike in most OECD countries. In particular, the *ComCom* can impose regulatory remedies only if a market player issues a complaint, in which case the sector regulator has to agree with the Competition Commission that a dominant market position is observed in the relevant market. Since the outcome of this procedure is difficult to predict, *ex post* regulation has increased the degree of uncertainty among potential market entrants and has led to delays with significant welfare losses, especially in this sector, where technological developments occur at a quick pace. The absence of *ex ante* regulation in the provision of access to the fixed-line telephone network is thus likely to mitigate the price and availability benefits that arise from local-loop unbundling. Moreover, the current regime of *ex post* regulation may weaken incentives for regulated firms to reduce costs, as their prices are based on current costs, whereas the use of price caps in *ex ante* regulation for a predetermined period would allow firms to appropriate part of the gains from cost savings.

While call-termination charges have been subject to *ex ante* regulation in many countries for several years on the grounds that each mobile operator's network constitutes a natural monopoly, regulatory remedies against high termination charges were delayed in Switzerland, because it was not in the interest of mobile operators to issue a complaint about other network operators' high termination charges. Costly charges have contributed to relatively high prices in mobile telephony (Figure 4.2), although the operators agreed to

Figure 4.2. **Mobile telephone prices in international comparison**

Yearly expenditure on medium user basket, VAT included, USD, May 2007



StatLink http://dx.doi.org/10.1787/140238586284

Source: OECD, Telecommunication database.

lower termination charges gradually between 2005 and 2009 following an investigation by the Competition Commission. The regime of *ex post* regulation also delayed reductions in interconnection charges in fixed-line telephony (Copenhagen Economics, 2005). Indeed, the case for regulating interconnection *ex ante* is particularly strong in view of the fact that interconnection fosters the development of competing networks, encouraging investment and innovation.[7] *Ex ante* regulation should be introduced for access conditions to the local loop as well as for interconnection charges.

The planned reform to allow more competition in rail passenger transport needs to be well anchored

The railways network was first opened to competing service operators in 1999. Some competition has emerged in freight transport, with competitors attaining a market share of 25% in 2007, more than in most other OECD countries. In this market segment competition has been supported by the fact that one private Swiss company owns infrastructure, albeit on a limited scale, which is likely to have strengthened its bargaining position to obtain access to the network of the dominant incumbent.

Decisions concerning network access of competitors are taken by a company (*Trasse Schweiz AG*) mostly owned by the incumbent vertically integrated railway companies,[8] although its decisions are bound by the legal obligation to provide non-discriminatory access, while network access prices are set by the government. Some restrictions remain on the access of foreign firms to the network. Foreign firms can offer domestic freight transport services only if they create a subsidiary in Switzerland, following an agreement with the EU in 2002. Foreign firms need to join with a Swiss partner company in order to offer unlimited cross-border passenger and freight rail transport services.[9] Competition in the market for national passenger transport is absent in interurban passenger transport, and competition through tendering of services in regional passenger transport is limited.

The government has drafted legislation that would align Swiss regulation of the railways industry with its EU equivalent.[10] The new legislation, if passed, will improve network access conditions for market entrants, strengthening the powers of the regulator (see OECD, 2006a for details). Moreover, the tendering of public service obligations for regional passenger services would be encouraged by making it compulsory in cases where benchmarking indicates poor performance. Experience from other OECD countries suggests that tendering of rail passenger transport services can be successful in generating competition and cost-savings if service providers competing with the incumbent can obtain access to rolling stock. Since incumbents typically have an effective monopoly over rolling stock,[11] access requires enforcing non-discriminatory access. Ensuring access of competitors to rolling stock is not part of the regulator's responsibilities. Non-discriminatory access to rolling stock should be ensured. To this end the railways regulator should oblige the incumbent operator to rent out rolling stock with non-discriminatory conditions. An alternative would be to separate ownership of rolling stock from the incumbent services operator, as has been done in the United Kingdom. Moreover, limiting tendering to cases where the costs of the incumbent provider exceed those of other incumbents entails the risk that entry of a company offering service at costs below all incumbents' costs is impeded. Making the tendering of regional passenger services compulsory in all cases should be considered.

Competition resulting from the tendering of regional passenger transport service could also be undermined if the railways incumbent SBB (*Schweizerische Bundesbahnen*), through its infrastructure subsidiary, were to carry out less investment in the rail infrastructure when a service contract is awarded to a competitor. Such concerns arose, for example, in Germany when competitive tendering was introduced (OECD, 2006d). At present, SBB receives a fixed budget to undertake small-scale and maintenance investment at its discretion. This arrangement could generate scope for the incumbent to invest less in railway lines on which competitors have been granted passenger transport services. Measures should be taken to prevent discrimination against competing service operators in investment decisions. To this end, competing service operators should be given a right to propose investment projects. In any case, the costs and benefits of all investment projects should be evaluated independently.

Postal services are still largely closed to competition

As other European countries, Switzerland has engaged in a gradual process of allowing new firms to provide postal services thus far reserved for the incumbent operator *La Poste Suisse*. The range of services in which it retains a legal monopoly is, however, still relatively large, comprising all letters below 100 g, which make up the bulk of the letter-posting business. Furthermore in services in which the incumbent is subject to competition – notably parcel delivery – the market share of *La Poste Suisse* is high, exceeding 80%. The incumbent is subject to universal service obligations in the letter business in which it is protected by monopoly as well as in a range of market services in which it is exposed to competition.[12] It is by law not allowed to cross-subsidise services that are not subject to universal service obligations with revenues obtained from services that are subject to universal service obligations, leaving room for cross-subsidisation among such services. Indeed, prices for parcel delivery – which is subject to a universal service obligation but in which market entry of competitors is allowed – are among the lowest in Europe, while prices for some postal services protected by monopoly are relatively high, especially in the market segment of letters below 20 g. The weight limit up to which the incumbent's letter delivery business is protected by a legal monopoly is higher than in other European countries, suggesting that competition could be extended to more letter services. The government is considering reforming the relevant regulatory framework.

Funding arrangements for universal service obligations need to be reformed

La Poste Suisse can use profits from monopoly services to fund costs resulting from universal service obligations, in particular the costs of maintaining postal outlets in which revenues do not cover costs. It has also been granted a number of cost advantages *vis-à-vis* its competitors. It is subject to less costly border controls and benefits from exemption from the prohibition on lorry transport at night. Moreover, the government provides equity to the Post Office without requiring a return or having profits transferred to the budget. The cost advantages granted to the incumbent for universal service bear little relationship with the costs of each service and lack transparency, making it more difficult to assess whether activities in competitive market segments are cross-subsidised. As a result, competition with market entrants does not take place on a level playing field. Cost advantages of the incumbent operator *vis-à-vis* competitors should be removed. As a step in this direction, the government has announced its intention to require a return from *La Poste Suisse* from 2008 onwards. However, the risk of an implicit subsidy resulting from the provision of capital by the government could most effectively be avoided by privatising of the post office. Such a step could also diminish incentives for cross-subsidisation (see above).

Narrowing the market segment benefiting from monopoly protection raises the question as to how universal service obligations should be financed. In a number of OECD countries – such as Sweden and Finland – universal service obligations in postal services were judged not to impose significant costs on incumbent suppliers (Hoj *et al.,* 2007). The Swedish postal services operator receives subsidies to compensate for additional costs only for universal service obligations in payments services and for selected services in rural areas. *La Poste Suisse* asserts that it is subject to relatively stringent universal service obligations as to the density of its network of post offices which is likely to keep their cost high. Funding the costs of universal service obligations through the budget would provide a transparent mechanism to cover their costs.[13] An independent valuation of the net cost should be undertaken.

Employment regulation distorts competition

La Poste Suisse is subject to restrictions on its commercial operations that competitors do not face. For example, it is bound by personnel rules applying to government-sector workers and is subject to the obligation to offer jobs throughout the country. To effectively introduce competition these regulatory burdens on the incumbent need to be lifted.

Market entrants in postal services are required to offer employment contracts on the same terms as those customarily offered on the market. Given the market-dominating position of the incumbent, this rule effectively obliges market entrants to offer the same wages as the incumbent, which may result in the loss of potential benefits from competition in terms of higher employment and lower prices. Even if wages of postal workers may fall if this regulation is liberalised, the purchasing power of wages in other sectors would rise as a result of lower prices for postal services, provided policies are pursued that ensure that the market is effectively open to market entrants. Moreover, imposing employment conditions on competing service providers can reduce incentives for competitors to use new, cost-reducing technologies, for example, if such new technologies reduce training needs for workers or improve job amenities (for example, through increased safety), which would allow competitors to reduce wage costs in the absence of the restrictive regulation on employment conditions that is specific to postal services. Regulation regarding the fixing of pay and working conditions that is specific to the sector should be abolished.

Regulation of prices can be improved

All services in which *La Poste Suisse* has a legally guaranteed monopoly are subject to price regulation. However, since market entry for competitors may be difficult in some market segments in which market entry is allowed by law, for example, because of increasing returns to scale, the current scope of price regulation may be too narrow. Therefore, all services in which the incumbent has a dominant market position should require regulatory intervention. Moreover, the practice of limiting price regulation to requests for price increases by the incumbent leaves some scope to improve consumer welfare unexploited. Indeed, if productivity growth in the provision of regulated services is stronger than in other sectors of the economy,[14] scope for price reductions would not be utilised, leaving monopoly profits to the incumbent. On the other hand, if potential gains in productivity are relatively small, so that nominal price increases are necessary, the incumbent operator would not have any incentive to reduce costs, given that the regulatory decision is based on actual cost. *Ex ante* price-cap regulation could avoid these shortcomings, by fixing prices several years in advance. Price caps should be used to regulate the prices of those services in which *La Poste Suisse* has a dominant market position. Moreover, an independent body should be charged with the enforecement of price regulation.

Public procurement markets continue to be geographically fragmented

With public procurement accounting for 9% of GDP and 26% of government expenditure, competition in government procurement is critical for avoiding waste in government spending and can make an important contribution to fostering productivity growth. Eighty per cent of goods and services purchased by government are bought by the cantonal and municipal levels, with different procurement rules applying in each canton. Local firms are awarded 90% of all contracts awarded by sub-national administrations, suggesting that the fragmentation of procurement law leads to significant protection of local firms. Limiting potential suppliers to local firms also facilitates collusive behaviour. Moreover, 60% of the value of procurement contracts are awarded without a tendering notice or with tendering limited to pre-selected firms deemed to fulfil technical requirements.[15] Accountability in the procurement process is weakened because procuring authorities are not obliged to publish the criteria according to which suppliers are chosen nor to document their procedures in those purchases which are not subjected to public tendering. The Competition Commission is in charge of evaluating competition in public procurement. However, no nation-wide statistical information is available that would allow the benchmarking of costs. Procurement rules across cantons should be harmonised, threshold values for public tendering should be lowered, and the accountability of procurement actions should be improved. Public procurement costs at lower levels of government should be benchmarked.

Agricultural policy generates high costs for the economy

Policies to protect farming in Switzerland have a high welfare cost. Consumer prices of raw agricultural products are on average about 2 times higher than world prices (OECD, 2006e) and about 65% higher than in EU countries. In addition, very high subsidy payments to agriculture – amounting to 1.3% of GDP or 63% of gross farm receipts – maintain inefficient farming structures and thus generate further welfare losses in their own right. Agricultural subsidies have fallen by 0.3 percentage point of GDP (by 17% in nominal terms) since 2000, and most of the subsidies are disbursed depending on inputs used or output produced, although some shift towards income support has occurred (Table 4.1).

The high prices largely reflect the impact of tariff and non-tariff trade barriers. High wages and difficult geographic conditions, which depress productivity, could be seen as further important contributing factors. However, given that agricultural products are internationally tradable, the dismantling of trade barriers would induce farmers to limit agricultural production to those sub-sectors and geographic areas that are viable even if high wages are paid, freeing resources for more productive use, with prices falling to levels observed in other countries. Moreover, the high degree of protection interacts with regulation allowing collusive practices among producers – such as recommended price schedules issued by producers' associations, raising prices further. Indeed, the high level of protection and subsidies results in low productivity levels,[16] relative to manufacturing, in international comparison (Figure 4.3). While policies have been adopted to shift some subsidy payments towards less distortionary income support, most of the subsidy payments are still linked to the use of inputs, outputs or prices (Table 4.1 and OECD, 2006e).

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Table 4.1. **Agricultural support estimations**

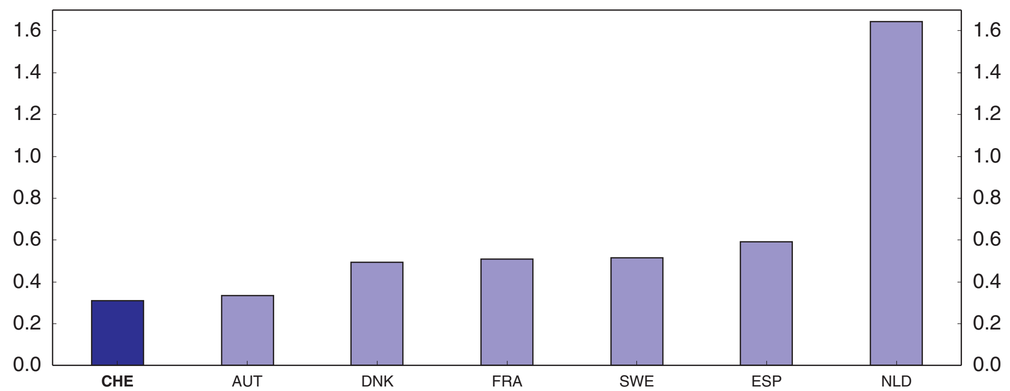
Millions of CHF

	1999	2000	2001	2002	2003	2004	2005	2006
Producer Support Estimate	7 656	7 439	7 076	7 032	7 032	7 221	6 958	6 280
of which payments based on:								
Commodity outputs	5 045	4 758	4 276	4 570	4 113	4 292	4 013	3 325
of which : Market Price Support	4 784	4 427	3 896	4 206	3 763	3 960	3 683	2 983
Input use	203	213	237	250	220	224	223	226
Area planted/animal numbers, production required	893	920	881	957	977	983	992	998
Historic area planted/animal numbers, production not required	1 163	1 187	1 304	1 316	1 318	1 318	1 320	1 320
Memorandum item:								
Producer support as a percentage of GDP	1.9	1.8	1.6	1.7	1.6	1.6	1.5	1.3

Source: OECD, PSE/CSW database.

Figure 4.3. **Relative labour productivity level in agriculture in selected countries**

Nominal value added per hour worked relative to manufacturing, 2003 or latest available year[1]



StatLink http://dx.doi.org/10.1787/140245526237

1. Per full-time worker equivalent for Austria, France and Spain; 2004 for Switzerland, 2002 for France.

Source: OECD, STAN database.

The pace of reform remains slow

Legislation passed in June 2007 makes further progress in gradually exposing the agricultural sector to more competition. It foresees further cuts in price support, notably for milk and cereals, the termination of the remaining subsidies for downstream processing industries and of most export subsidies. Nonetheless, the nominal budgetary outlays for subsidies are expected to remain broadly constant until 2011, with some shift from price support to other forms of subsidies, including income support. The expected reductions in the margins between Swiss producer prices and producer prices prevailing in unsubsidised markets are modest. Indeed, the new legislation provides for limited reductions in tariffs and non-tariff protection.[17] To take reform further, the government also intends to propose a free-trade agreement on agricultural products to the EU to be implemented by 2015. It would aim at the removal of tariffs, quotas and other non-tariff trade barriers.

Slow progress in lowering the protection given to farming in Switzerland will continue to entail a large burden for the government budget and high prices for consumers. The favourable conditions in the Swiss labour market at present would provide a favourable backdrop for accelerating the withdrawal of protection to the sector. A free trade agreement on agricultural goods with the European Union would generate large welfare benefits resulting from a considerable reduction of consumer prices. It would accelerate structural change, with farming revenues estimated to decline significantly as a result, according to federal government estimates. However, the welfare gains resulting from lower consumer prices could to some extent be offset by the wedge that would be driven between the import prices of agricultural products imported from EU countries and non-EU countries, where the costs of producing agricultural goods is in many cases lower than in both Switzerland and the EU. For example, the elimination of trade barriers *vis-à-vis* EU countries could lead to a substitution away from agricultural imports from low-cost countries in favour of imports from EU countries where costs might be higher.[18]

Impediments to structural change need to be removed

Prospects for reductions in trade protection which may result from the envisaged free trade agreement with the EU or from progress in multilateral trade negotiations, to which Switzerland is fully committed, make the removal of barriers to structural change in agriculture especially important, as such barriers could strengthen calls for increased subsidies to offset the impact of lower trade barriers on farming income. A number of provisions in the regulation of agricultural land slow down structural change. Current inheritance rules for agricultural land and fixed assets stipulate that an heir wishing to maintain a farming business is given preference over other heirs and can compensate them for relinquishing their share of the inheritance on the basis of a valuation of land and fixed assets below the market price. Moreover, price controls on agricultural land prevent farmers from selling land at market prices. The inheritance provisions bias heirs' decisions towards remaining in the farming business, locking in resources in non-viable farming in the long term. Price controls on agricultural land have a similar lock–in effect on resources. In addition, both the inheritance provisions and the price controls lead to wealth loss among farming households, aggravating income losses which may result from the downsizing of agricultural production.

In the recently approved legislation, the scope for the special inheritance rules concerning farming land were reduced by raising the employment threshold above which these rules apply from 0.75 to 1 full-time worker. The price controls on agricultural land were relaxed. Impediments to structural change in land law should be removed. In particular, inheritance rules favouring the passing on of farms between generations should be abolished and price controls ended. Structural change could also be facilitated by accelerating the replacement of subsidies linked to production activities by direct income support and by tying income support to individual incumbent farmers, rather than farming businesses, so as to avoid subsidies biasing decisions by the heirs of farms towards maintaining non-viable operations.

Box 4.4. **Recommendations to make regulation of product markets more conducive to competition**

Improve the enforcement of general competition law and of sector-specific regulation

- The prohibition principle should be applied to all hard-core cartels. The independence of *ComCo* should be ensured by excluding members that represent economic interests. Its resources should be raised.
- The independence of sector regulators should be strengthened. The terms of office of senior staff in regulators should be lengthened and the possibility of reappointment removed. All sector regulators should have powers to fine market participants breaching its regulatory decisions. Government departments should not be able to intervene in regulatory decisions.
- The federal government-owned stakes in network industries, notably in the incumbents in postal and telecommunications services, should be privatised. Sub-national governments should privatise their stakes in potentially competitive market segments of the electricity sector, notably in generation.

Remove geographic barriers to competition within Switzerland and internationally

- Procurement rules across cantons should be harmonised, threshold values for public tendering lowered and the accountability of procurement actions improved. Public procurement costs at lower levels of government should be benchmarked.
- The Internal Market Act should be enforced.
- The "*Cassis de Dijon*" principle should be applied with as narrow a list of exemptions as possible.

Follow up on the reform of the regulatory framework for the electricity industry

- Vertical separation requirements need to be improved. Ownership separation between electricity generation and transmission operations should be introduced. The acquisition of further stakes in electricity distribution networks by the *Überlandwerke* should be prevented. Regulatory cost accounting should be introduced.
- The powers of the electricity market regulator to prevent non-price discrimination should be strengthened, notably by setting rules limiting network operators' scope to cancel network access contracts and by raising its staff level.
- Price caps and benchmark regulation for the determination of network access prices should be introduced as soon as possible.

Continue improving the regulatory framework in the telecommunications industry

- Legal restrictions on the access of competitors to the local loop should be eliminated. Bitstream access should not be subject to time limitations. Line-sharing should be offered to competing service providers. The regulator should be obliged to ensure collocation on transparent terms.
- *Ex ante* regulation should be introduced for access conditions to the local loop as well as for interconnection charges.

Take measures to prevent discrimination against market entrants in the railways industry

- Making the tendering of regional passenger services compulsory should be considered.
- Non-discriminatory access to rolling stock should be ensured. To this end the railways regulator should oblige the incumbent operator to rent out rolling stock with non-discriminatory conditions.
- Competing service operators should be given a right to propose investment projects. Investment decisions should be based on an assessment of costs and benefits that is independent from the incumbent.

Box 4.4. **Recommendations to make regulation of product markets more conducive to competition** *(cont.)*

Create the conditions for sustained competition in postal services

- The net cost of universal service obligations should be assessed independently from the incumbent. If necessary, costs from universal service obligations should be funded through the budget.
- A level playing field for competition between incumbent and market entrants should be created. Restrictive personnel rules applying to the incumbent, such as the obligation to offer jobs throughout the country, should be lifted. Administrative privileges for the incumbent should be eliminated.
- Regulation regarding the fixing of pay and working conditions that is specific to the sector should be abolished as part of a strategy to open the market to competition.
- All services in which *La Poste Suisse* has a dominant market position should be subject to price regulation by an independent regulator. Price caps should be used to regulate the prices of these services.

Accelerate reform in agriculture

- Impediments to structural change in land law should be removed. In particular, inheritance rules favouring the passing on of farms between generations should be abolished and price controls ended.
- The replacement of subsidies linked to production activities by direct income support should be accelerated and income support be tied to individual incumbent farmers, rather than farming businesses.
- Collusive actions among agricultural producers, such as recommended price schedules, should be eliminated.

Notes

1. The Domestic Market Act has adopted the "origin principle" in the trade of services across cantonal borders, whereby firms or individuals complying with all legal prerequisites to offer services in one canton may offer the same services also in other cantons without requiring an additional permission. See the 2005 *Economic Survey*.
2. This study investigates the impact of a synthetic indicator of regulation in telecommunications, energy, railways, postal services, air and road transport.
3. For example, to ensure that electricity supply and demand are equalised.
4. While competing operators obtained a market share of about a third on the retail market, the absence of local loop unbundling restricted competitors to the incumbent's resale offers, which also remained unregulated.
5. In line-sharing, the incumbent continues to provide telephony service, while the new entrant delivers high-speed data services over that same local loop.
6. Bitstream access provides wholesale access to ADSL lines of the incumbent to competitors with some scope for the competitors to influence quality of service. Access refers to the situation where the incumbent installs a high-speed access link to the customer premises and then makes this access link available to third parties.
7. Shelanski (2007) emphasises the risks inherent in the use of *ex ante* regulation to correct inefficiencies related to market power but emphasises the need for *ex ante* regulation of interconnection.
8. Apart from SBB, these include the operator BLS (which co-operates with Deutsche Bahn) and *Südostbahn* (SOB), an operator mostly owned by jurisdictions at all three levels of government. The

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association of Swiss public transport companies, which does not own network infrastructure, owns 25% of *Trasse Schweiz AG*, as do the other three owners of *Trasse Schweiz AG*.

9. In combined road-rail transport service cross-border service can be offered by foreign companies by themselves.
10. A first proposal to introduce such legislation was rejected by Parliament in autumn 2005.
11. Technical requirements on rolling stock differ across countries, and tendered service contracts are relatively short-term, so that market entrants typically need to rent the incumbents' rolling stock. See Hoj *et al.,* (2007). In Switzerland this point is reinforced by the planned exclusion of rolling stock from the *Cassis de Dijon* principle.
12. Universal service obligations outside the legal monopoly on domestic letter delivery include foreign letter delivery, parcel delivery, newspaper delivery and payment services.
13. , Ninety per cent of the population must be able to reach a post office by foot or by public transport.
14. Strictly speaking, if productivity growth is stronger than productivity growth in other sectors plus trend inflation.
15. According to an analysis of the Competition Commission (2006) on the basis of data from 1999.
16. Since the productivity comparison is based on nominal value added, the high prices in Switzerland bias the Swiss productivity figures upwards.
17. Animal feed tariffs are to be lowered. This measure will, however, raise effective protection of meat products.
18. At present, such welfare losses would be modest, as Switzerland imports few agricultural goods from non-EU countries, in part reflecting EU subsidies for its agricultural exports. The welfare loss would consist of foregone tariff revenues.

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Chapter 5

The contribution of immigration to prosperity can be raised further

Situated in the centre of Europe, Switzerland is among the OECD countries with the largest proportion of foreigners in the population. This immigration, which is closely linked to the attractive economic situation of the country, has become more diversified over the past decades, with the entry for instance of nationals of the former Yugoslavia. These often low-skilled workers have nevertheless faced difficulties in entering the labour market and integrating into social life. The Swiss migration policy was reoriented in the last few years with the adoption of the Agreement on the Free Movement of Persons for EU/EFTA countries and the recruitment of nationals of third countries focussed on skilled persons. Some efforts are also underway to improve the integration of the existing stock of foreign workers living in the Confederation. This chapter, which analyses the economic impact of immigration in Switzerland, examines the recent actions taken and proposed avenues, in particular in the education and social domains, for taking better advantage of the potential of the foreign labour force.

Main characteristics of the trend in migration stocks and flows

Immigration flows have been large…

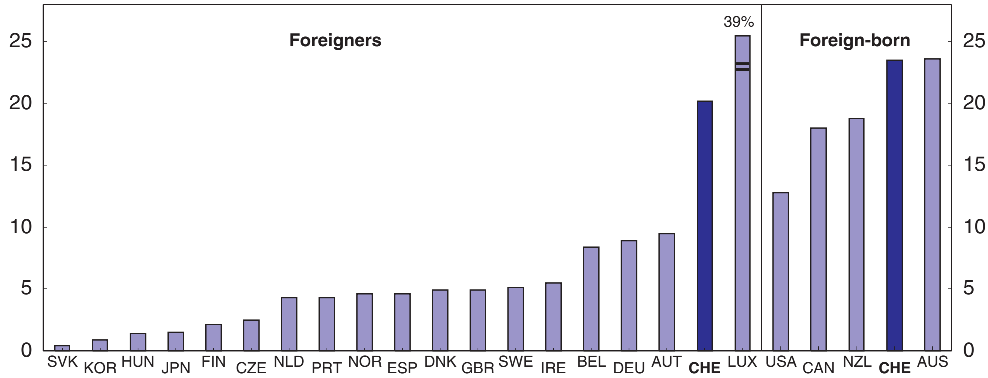
In 2004, Switzerland had just over 20% of its permanent resident population who were foreigners, some 1.5 million persons. As a proportion of the population, this was in second place in the OECD, behind only Luxembourg. Some 24% of the population were foreign born (some having been naturalised), roughly the same proportion as in Australia (Figure 5.1). In addition, those with short-term residence permits (less than one year) and border workers are not included in the permanent resident population. They accounted respectively for 0.9% and 2.4% of the total population and for 1.5 and 4.3% of the active population in 2005.

The large proportion of foreigners is the result of gross immigration flows on a substantial scale (Figure 5.2), which is due neither to settlement immigration nor to close ties with former colonies, as in other OECD countries. While many foreigners came to Switzerland in decades past, many also left after staying for varying periods of time, so that phases of immigration followed periods of emigration and return because of changes in the economic situation and the labour market. Since the end of the 1970s, the share of the foreign population has never stopped growing, however (Figure 5.3), and Switzerland has not been immune to the increase in migratory pressures recorded in the OECD area in recent years.

There are several reasons for the large number of foreigners in Switzerland. The Confederation offers the advantage of a pleasant living environment; it is a crossroads at the centre of Europe; and it has a multilingual tradition that favours personal mobility. That said, the scale of immigration is due above all to the overall economic situation which is notable for high wages and Swiss firms' recurrent manpower needs. As soon as World

Figure 5.1. **Stocks of foreign population in selected OECD countries**[1]

Per cent of total population, 2004



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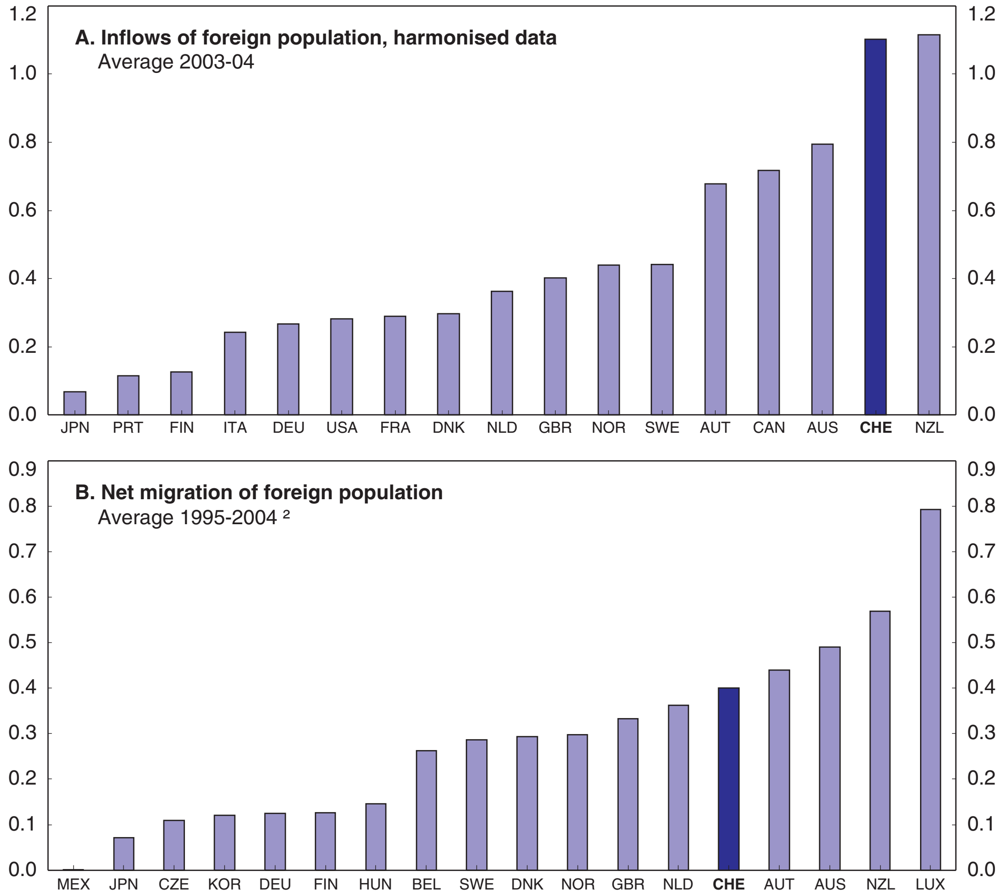
1. From population registers or from registers of foreigners except for Portugal (residence permits), Ireland and the United Kingdom (Labour Force Survey).

Source: OECD (2006), International migration data.

Figure 5.2. **Flows of foreign population in selected OECD countries**[1]
Per cent of total population



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1. Inflows and outflows data based on population registers for Austria, Belgium, Czech Republic, Denmark, Finland, Germany, Hungary, Japan, Luxembourg, Netherlands, Norway, Slovak Republic, Spain, Sweden and Switzerland. Inflows based on residence permits for the other countries.
2. Or latest available year.

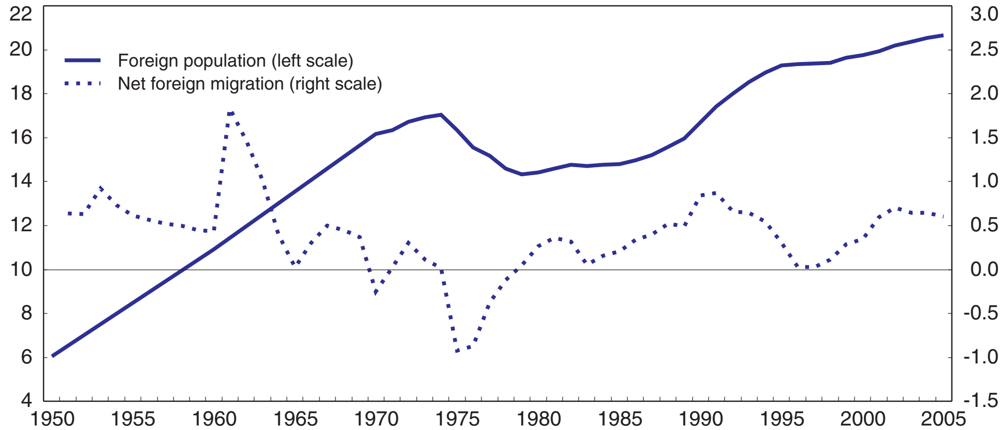
Source: OECD (2006), International Migration data and Main Economic Indicators database.

War II ended, Switzerland, whose productive system had been spared, was faced with labour shortages against a background of strong demand stimulated by reconstruction in Europe and, later, the Korean War. This prompted massive immigration, mainly from Italy in the 1950s and 1960s. The importance of these "pull factors", remained very strong during the following decades – witness, for example, the inversion of the migration balance during the recession caused by the first oil shock, with many foreigners returning to their countries of origin. Since the early 1980s there has continued to be a close correlation between the output gap and the migration balance (Figure 1.14), even if this link appears to have weakened since 2001.

Relatively restrictive rules on naturalisation are another factor which has encouraged a trend rise in the foreign population in the Confederation. Although it has been increasing appreciably in recent years, the naturalisation rate is still quite low by comparison with other countries (Figure 5.4). Neither marriage with a Swiss national nor being born on

Figure 5.3. **Foreign population development**

Per cent of total population



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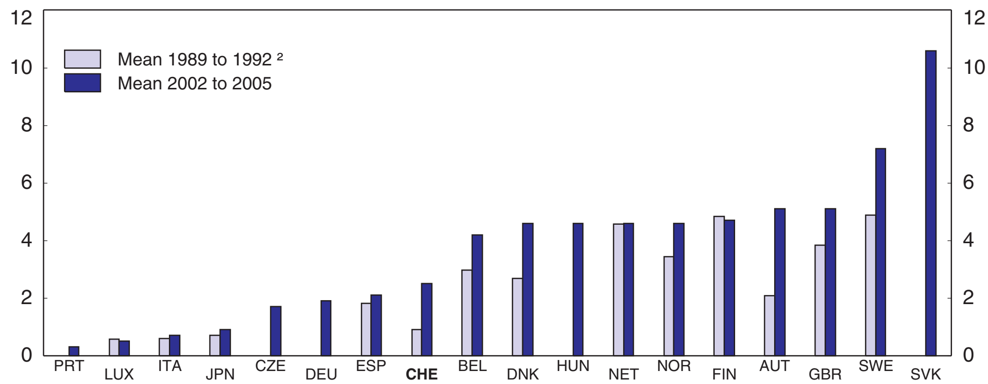
Source: Federal Statistical Office.

Figure 5.4. **Acquisition of nationality for selected OECD countries**[1]

Per cent of foreign population, per year



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1. For countries where the national/foreigner distinction is prevalent.
2. Or available years.

Source: OECD (2006), International Migration data.

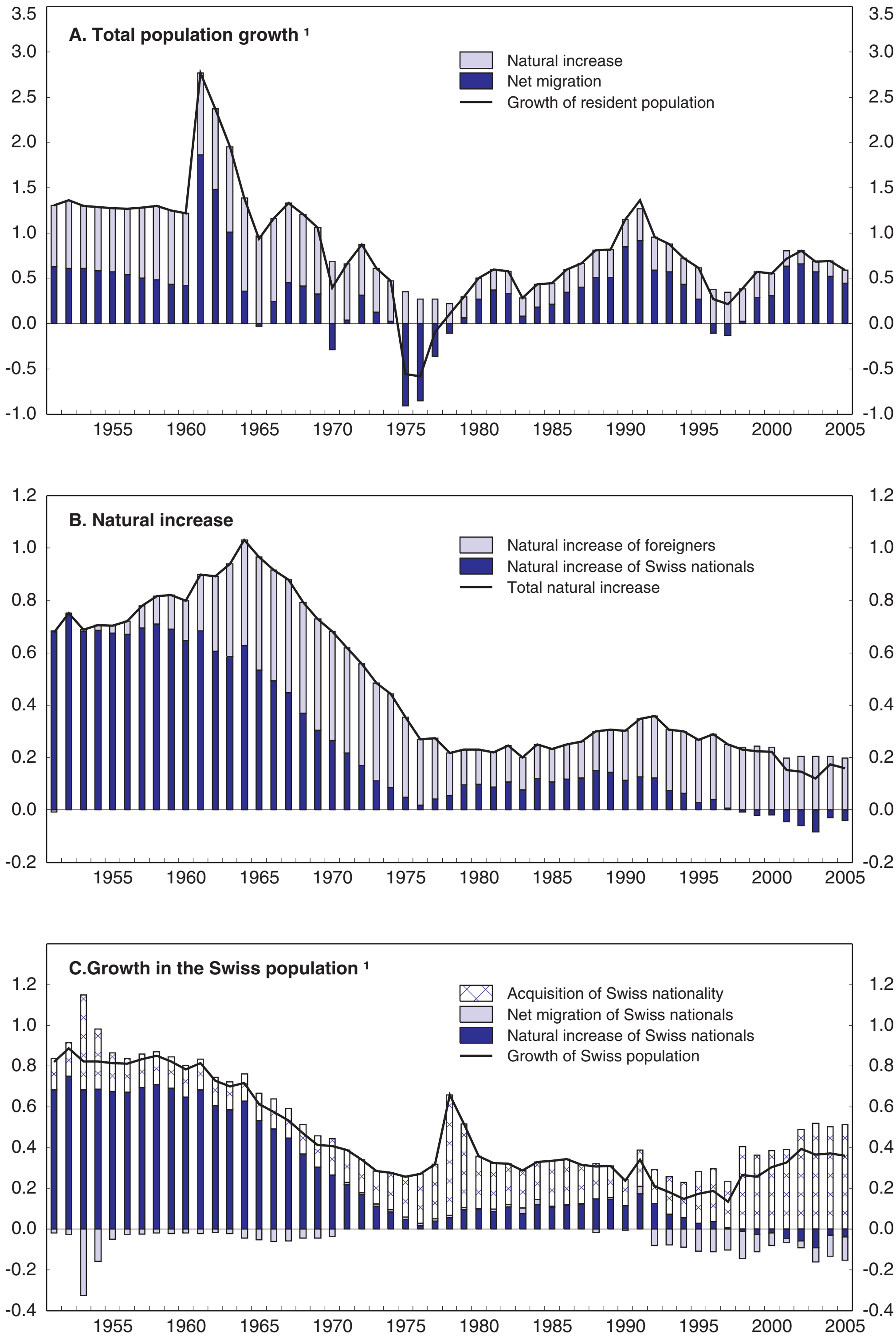
Swiss territory confers Swiss nationality. The usual way to obtain it is via a process demonstrating proper integration, which, in particular, implies being familiar with Swiss laws, customs and ways of life and also having at least 12 years of residence, although for spouses of Swiss nationals naturalisation procedures are simplified. Simulations show that a naturalisation system based on the place of birth, used by other countries, would increase the rate of naturalisation and lower the proportion of foreigners by some 5 percentage points to around 15% of the resident population (Piguet, 2005), which would still leave it much higher than almost all other OECD countries.

… and have had major consequences for the demographic composition of the population

Immigration has a considerable demographic impact, having played a more important role for population growth since the mid-1980s than has the natural increase in the population (Figure 5.5). What is more, while the natural increase has remained a factor in

Figure 5.5. **Impact of immigration on population growth**

As a percentage of the total resident population as of 1 January



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1. From 1991 onwards, the statistical residual has been divided between the different components.

Source: Federal Statistical Office.

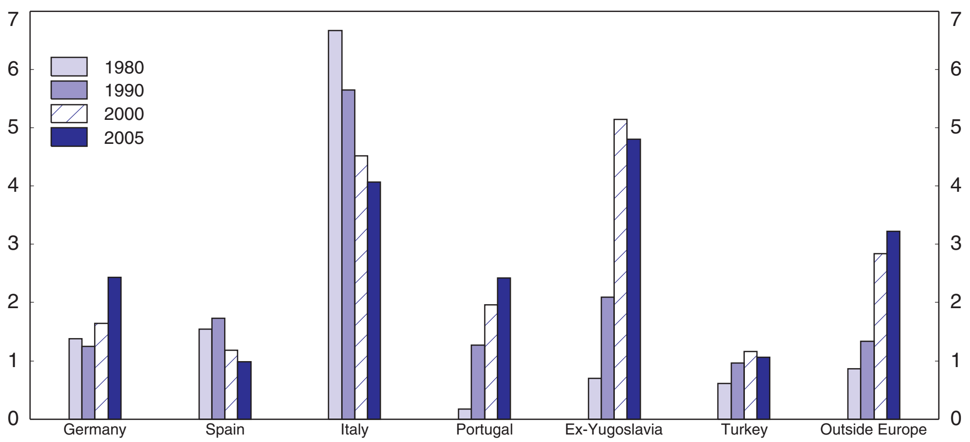
the total population growth, it now relies to a greater extent on the birth of foreign children, as the share of women of child-bearing age in the foreign population is substantially larger than in the case of Swiss women and their fertility rate higher (1.9 as opposed to 1.3 in 2004). In addition, since the early 1990s, the growth of the resident population of Swiss nationality is due to naturalisations offsetting a negative migration balance and the excess of deaths over births. Immigration also affects the age distribution of the population. Almost 40% of foreigners were aged between 20 and 39 in late 2005, compared to only 25% of nationals, while 70% of them were of working age – 10 percentage points more than in the case of nationals.

The geographical diversification of immigration source countries has increased

Migration flows have become much more geographically diversified over the past few decades. Whereas 75% of immigrants came from the Confederation's four main neighbours in 1970, that figure was down to 37% in 2005. Nationals of the countries of former Yugoslavia, whose numbers rose sharply between the late 1980s and mid-1990s and then stabilised, now make up the biggest group (Figure 5.6). The number of non-European foreigners has also greatly increased since 1990, while there has recently been a surge in immigration from Germany and Portugal due to opening up to the EU (see below) and the transitory weakening of those two economies. The combination of these different cohorts of migrants has increased the heterogeneity of the foreign population, a large proportion of which no longer has as its mother tongue one of the country's official languages: almost 38% of the said population were in that situation in 2000, compared to just 10.5% in 1960. There is, generally speaking, a marked contrast between the socio-economic characteristics of migrants from German, French and English-speaking countries and those from other countries (Wanner, 2004). Although the foreign population is unevenly settled across the territory, the pattern has remained fairly stable over time, foreigners being more numerous in the border and urban areas and in French and Italian-speaking Switzerland than in the German-speaking part of the country.[1]

Figure 5.6. **Foreign population trends by nationality**

As a percentage of total population



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Source: Federal Statistical Office.

Migration policy: in search of balance

The priorities of immigration policy have changed in historical perspective

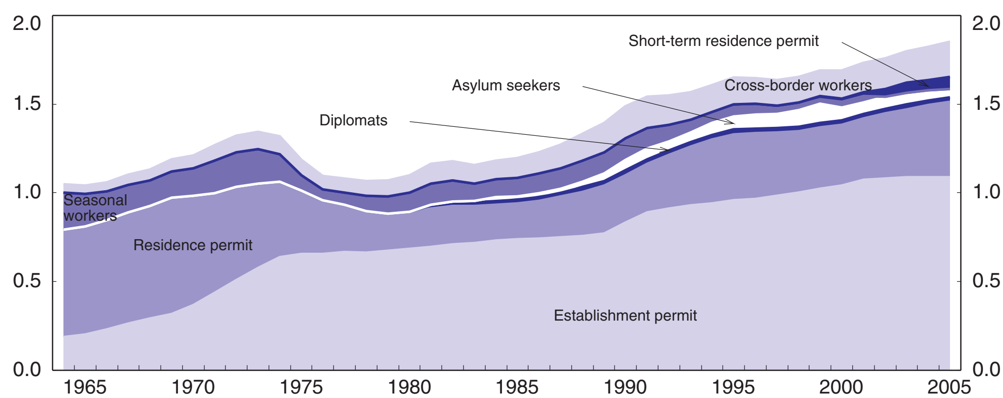
Since migration has a significant influence on society and the economy, any related issues naturally loom large in debates in Switzerland: witness the referenda held regularly on the subject. In the last few decades, changes in immigration policy have reflected a quest for equilibrium between three objectives which could sometimes be inconsistent, namely:

- Satisfying the requirements of the economy, which have evolved over time.
- Meeting the demands for improvements in the status of foreign workers, backed by their countries of origin.
- Coping with the concerns of that part of the population that deems the foreign presence to be excessive and difficult to integrate.

Broadly speaking, Swiss migration policy has been through four successive phases since the end of World War II. A feature of the first was a liberal policy in favour of temporary immigration for seasonal workers, with no quantitative restrictions, the object being to contend with the shortage of labour in the immediate post-war period. As a result, the number of immigrants rose sharply over the following two decades. However, this increase also generated growing political pressures aimed at stopping it. In a second phase, the authorities adopted a "policy for stabilising" the number of foreigners by means of a quota system introduced in 1970. Coupled with the temporary nature of immigration, this system initially achieved the stabilisation objective, against the background of an unfavourable economic situation, by ceasing to issue temporary permits to new applicants and by virtue of the non-renewal of the temporary permits of those who had lost their jobs. This policy became less effective, however, in subsequent years (De Wild, 1999). In the 1980s, only some 20% of new entrants were subject to quotas.[2] Owing to the rising share of foreigners with longer-term permits (residence and establishment permits, see below for a description of the different permit types and Figure 5.7), the ability of the authorities to adjust the stock of the foreign population during periods of rising unemployment gradually diminished since the late 1970s. The introduction of compulsory unemployment insurance also reduced incentives to remigrate in periods of economic slack.

Figure 5.7. **Resident population by type of residence permit**

Millions of persons at the end of December[1]



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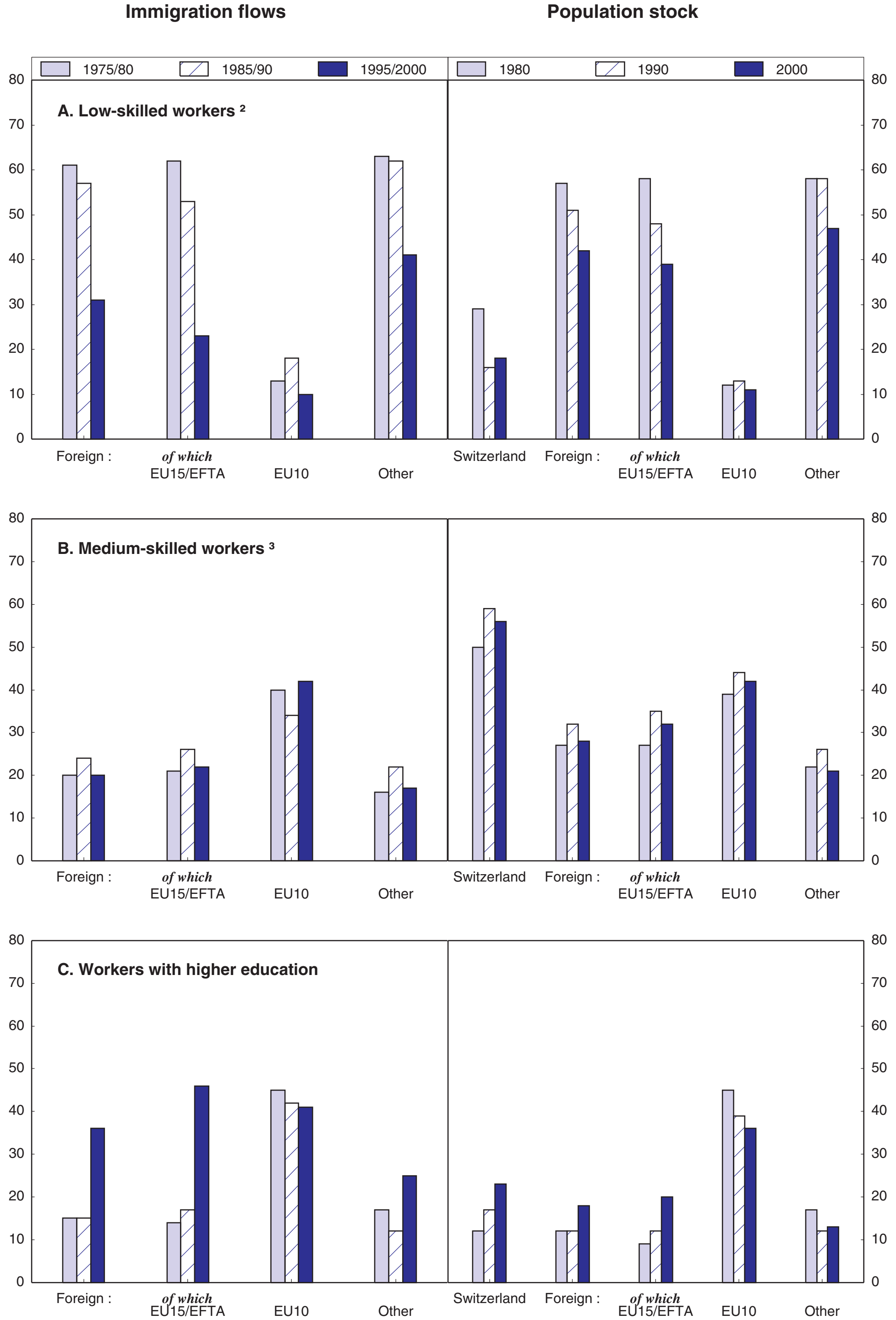
1. Figures for the month of August for seasonal workers and for cross-border workers prior to 1970.

Source: Federal Statistical Office.

Figure 5.8. **Working population by nationality and educational level**

As a percentage of the working population by nationality[1]



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1. For each nationality group, because the requisite data are not available, the breakdown of the working population into low-skilled, medium-skilled and highly-skilled workers only adds up to 100 for part of this population.
2. Lower secondary cycle or no education completed.
3. Upper secondary cycle.

Source: Federal Statistical Office.

In the late 1980s, concern to prevent Switzerland from being cut off from the process of European labour-market integration and to respond to the reticence of part of the population *vis-à-vis* a further increase in the number of foreigners who would be difficult to integrate paved the way for a third phase of migration policy. In 1991, the authorities hence decided to adopt a policy setting recruitment priorities based on geographic areas. The "three circles model" comprised a first circle encompassing the European Union (EU) and the European Free Trade Association (EFTA), the aim being to arrive ultimately at freedom of movement for this category. There then came a middle circle comprising the United States, Canada, Australia and New Zealand, and finally an outer circle covering the rest of the world. Nationals of this third circle, who were culturally not so close to the Swiss, could be admitted only on an exceptional basis. Also, the authorities gradually restricted the recruitment of nationals of third countries to skilled persons with the lowest exposure to the risk of unemployment, while seasonal permits were confined to EU/EFTA countries (Becker *et al.*, 2007). According to the 1980 census, 57% of foreign workers were unskilled and the figure was still 51% in 1990, whereas in the case of Swiss workers the proportion of unskilled workers fell from 29 to 16% during the same period (Figure 5.8, Panel A).

The model, which was criticized for being discriminatory, was replaced in 1998 by the "dual admissions" system, which differentiated only between EU/EFTA and third countries, and then by the Agreement on the Free Movement of Persons (AFMP) with the EU, after its approval by referendum in 2000. Implementation of the Agreement in June 2002 resulted in the beginning of the fourth major phase of migration policy with the progressive removal of quotas as well as the relaxation of controls on wages applicable to immigrant workers (Box 5.1). In addition to this came 2006 revisions to the Foreign Nationals Act, concerning third countries, and the Law on Asylum, which will be in force from 1 January 2008 onwards.

Recent reforms have favoured entry of EU nationals and highly skilled workers from other countries

Admissions and stays of immigrants come currently under two separate legal frameworks: the Agreement on the Free Movement of Persons (AFMP) for EU/EFTA countries and the Foreign Nationals Act for third countries. This policy, which is being implemented jointly by the Federal Office for Migration and the cantons, identifies several categories of permit, which differ mainly according to how long they are valid (Annex 5.A1). Short-term, border and residence permits are temporary but renewable. Residence permits allow for longer stays (above one year), Establishment permits are of indefinite duration. The latter can be issued only after five years of uninterrupted residence in Switzerland for EU/EFTA nationals (or ten years for nationals of third countries) who already have residence permits. All these permits give access to the job market under conditions specified for the respective status. This also applies to persons benefiting from family reunion, which is allowed under the majority of these permits.

Contrary to the previous approach, under the current policy citizens of the old member countries of the EU and EFTA are no longer be subject to quotas for work permits since June 2007. This provision, implemented at the end of a transitional period of five years, is to be gradually extended to the new EU States, but accompanying it are back-up measures designed to prevent wage and social dumping (Box 5.1). Also, the application of the AFMP resulted in 2002 in the abolition of the seasonal-worker category, which allowed for no more than nine consecutive months' stay.[3]

Box 5.1. **The Agreement on the Free Movement of Persons with the European Union**

The Agreement on the Free Movement of Persons (AFMP), which came into force in June 2002 with the EU15, contained a certain number of transitional measures. Up until June 2007, access to the labour market was restricted by quotas for work permits lasting more than four months. Up until 2004, moreover, the national preference rule and systematic controls on wages and working conditions remained in force.* Since these *ex ante* controls were abolished, accompanying measures have been introduced to prevent wage and social dumping, with *ex post* controls performed by tripartite commissions representing the public authorities, the unions and employers. The said measures require, for instance, workers seconded to perform a service in Switzerland by an employer whose head office is abroad to respect the Confederation's minimum required regulations regarding work and remuneration. In the event of marked and repeated failure to come up to the normal working conditions, the extension of collective labour agreements may be facilitated and, in the absence of such agreements, standard contracts imposing compulsory minimum wages could be adopted. The AFMP has also gradually liberalised the status of border workers; since 2002, all EU15/EFTA nationals have been able to settle in the border area of a neighbouring country, go and work in Switzerland and return home only once a week instead of every evening. They are free to change jobs within the entire Swiss territory and are free in their choice of economic activity, including self-employment, and, since June 2004, they have not been subject to the national preference rule, like the other EU15/EFTA workers. The AFMP might be challenged by a facultative referendum in the first half of 2009, provided opponents collect the quorum of 50 000 required signatures.

The extension of the AFMP to the ten States which joined the EU in 2004 was approved by referendum in September 2005 and came into force on April 1st 2006. It allows Switzerland to continue until May 2011 with gradually increasing quotas, the national preference rule and systematic monitoring of immigrants' wages and working conditions. As in the case of the old EU member countries, Switzerland is allowed to bring back quotas up until 31 May 2014 in the event of high demand for short-term and residence permits.. Negotiations on the extension of the AFMP to the two new members of the EU27 began in 2007.

* Also, since June 2004, persons coming to work in Switzerland for no more than 90 days have no longer needed a permit. They have simply to make themselves known to the competent authorities through online registration.

A quota system still applies to entries of nationals of third countries, who come under the Foreign Nationals Act. Only workers with good skill levels and the ability to integrate in Switzerland, and with employers willing to take them on, may immigrate. In fact, the recent revision of the law, which includes certain improvements to the status of foreigners aimed at encouraging their integration,[4] together with new provisions for combating illegal immigration (see below), has essentially institutionalised the management in force since 1991 and the shift to a selection system based on skills criteria. The latter are quite broadly defined and vary from one canton to another. They are not based solely on academic qualifications, nor do they depend on a points system, as in Australia and Canada. This leaves the cantons some margin of appraisal: they play an important role in granting residence permits and also have responsibility for issuing establishment permits that are not subject to quotas.[5]

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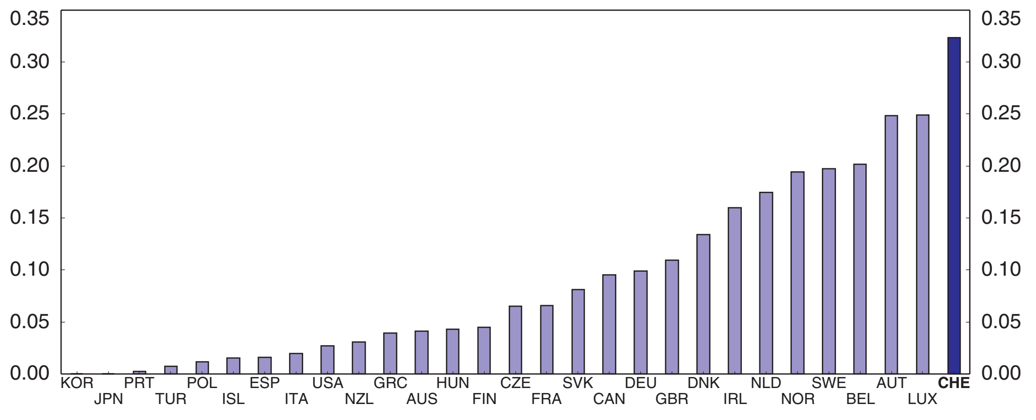
Another important aspect of migration management relates to asylum policy, since asylum applications are proportionately higher than in other OECD countries (Figure 5.9). Applications rose from 20% of total immigration in the mid-90s to over 35% during the Kosovo crisis in 1999, before falling to 10% in 2004-05. The average rate of recognition of refugee status has been a little over 10% of applications over the past ten years. However, some of those whose applications are refused remain in the Confederation under the heading of temporary admission, when it becomes illegal or impossible to send them back, the long-term result being that one-third of applicants remain in Switzerland. For a number of years now, one of the challenges facing asylum policy has been to make the system less liable to abuse, and this has resulted in the adoption of various restrictive measures.[6] This problem, encountered by numerous other OECD countries and which is partly due to the restrictions imposed on immigration from third countries, is the reason for the latest revision of the law adopted in 2006. The revision tightens up the conditions surrounding access to the asylum process and is designed to lessen the time involved in considering applications.[7] At the same time, measures to encourage the integration of refugees and persons admitted on a temporary basis have been strengthened, as have those concerning the expulsion of rejected applicants. The new law provides for immediate labour market access and family reunion after 3 years for persons admitted on a temporary basis, as well as the possibility of obtaining a residence permit after five years. However, it also steps up the enforcement measures and abolishes social assistance for rejected applicants whose expulsion orders are binding.

Figure 5.9. **Inflows of asylum seekers into OECD countries**

Per cent of total population, average 1995-2005 [1]



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1. 1995-2004 for Korea.

Source: OECD (2006), International Migration data and Main Economic Indicators database.

Measures have also been taken to step up the campaign against illegal immigration which, although intrinsically difficult to measure, does seem fairly limited. According to the most recent estimates (Longchamp *et al.*, 2005), between 80 000 and 100 000 immigrants without the proper papers were living in Switzerland in 2004, *i.e.* approximately 6% of the stock of foreigners with the requisite papers. Contrary to a view which is fairly widely held in Switzerland, this illegal immigration seems to be linked mainly to the job market and not to unlawful entry by rejected asylum seekers. People without the proper papers are usually doing paid work in precarious conditions in sectors such as hotels and catering, construction, domestic services and agriculture. Recent measures, set to come into force in early 2008, include tougher penalties under the Foreign Nationals Act, a simplification of the system for registering with social insurance and stricter controls on employers (De Coulon, 2006). Lastly, measures have been taken to improve co-ordination between the cantonal and federal agencies responsible for combating this phenomenon, while Switzerland's participation in the Dublin/Schengen agreements will also enhance the co-ordination of European efforts to combat the illegal entry of foreigners. The effectiveness of the measures to stop the illegal hiring of foreigners could no doubt be increased further if it implied penalties imposed asymmetrically, *i.e.* solely on employers but not on workers, if they denounced such practices.

The new immigration policy may raise immigration further in the medium term

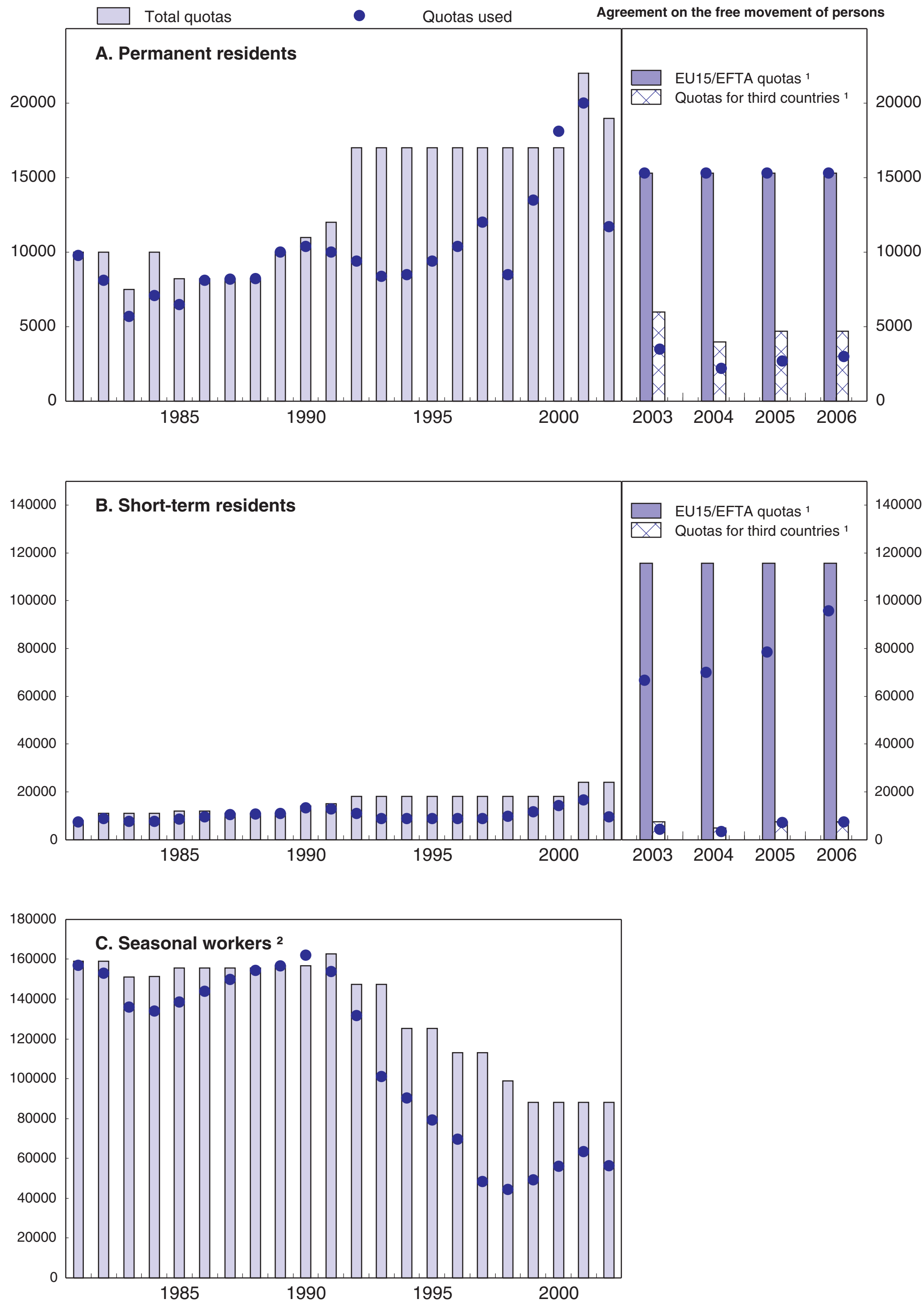
The increase in immigration since the application of the AFMP in 2002 has been consistent with government expectations. The agreement having been introduced during a period of sluggish economic activity, total net immigration has not been very strong even if, in light of past relations, the limited vigour of activity since 2002 could have weakened demand for foreign labour still more (see Figure 5.3). The quotas for long-term permits reserved for EU15/EFTA countries have been completely used up, and there has been something of a rise in the rate of utilisation of short-term stay quotas owing, in part, to unsatisfied demand for long-term permits being carried forward[8] (Figure 5.10). For third countries, the focus is set on highly qualified persons and the low level of quotas does not seem to have had a restrictive effect inasmuch as they have not been filled. At the same time, asylum applications have continued to decline in line with the general trend observed in developed countries and because of the restrictions introduced.

Application of the AFMP has also resulted in a rise in the proportion of EU15/EFTA nationals, especially from Germany[9] and Portugal. Whereas some 50% of immigrants came from the EU25/EFTA between 1996 and 2001, the figure was in excess of 60% in 2005. The AFMP, on the other hand, has not had a very marked impact on immigrants' skill levels – the skill level having increased already prior the AFMP took effect (see Figure 1.15). This agreement has also had little impact on the reasons for immigrating which, for over ten years now, have been increasingly closely linked to the search for work (Figure 5.11). That is the reason that accounted for nearly 40% of total immigration in 2005, and it plays a more important role than in the other OECD countries on average (OECD, 2006a). There are, however, differences between nationalities; the vast majority of EU immigrants come for work, whereas those from third countries tend to come for family reunion reasons.[10]

The new immigration policy, which is now no longer hindered by the quotas for EU15 and EFTA states and can be satisfied by EU workers or skilled immigrants from third countries, does however have a number of possible implications. Although quotas have been of only limited effectiveness in controlling foreign population stocks, they have played an important political role in ensuring the acceptance of migration management. The capacity of the new policy to smooth over the two conflicting objectives encountered in the past, namely meeting the needs of the economy and coping with opposition to excessive numbers of foreigners, is therefore going to depend on, among other factors, the impact of extending the AFMP to the new EU member countries and the effect of the removal of quotas on 1 June 2007.

Analyses quantifying the potential number of migrants from the new EU member countries to Switzerland show that their number could increase by between 4 000 and

Figure 5.10. **Quotas used by length of residency**



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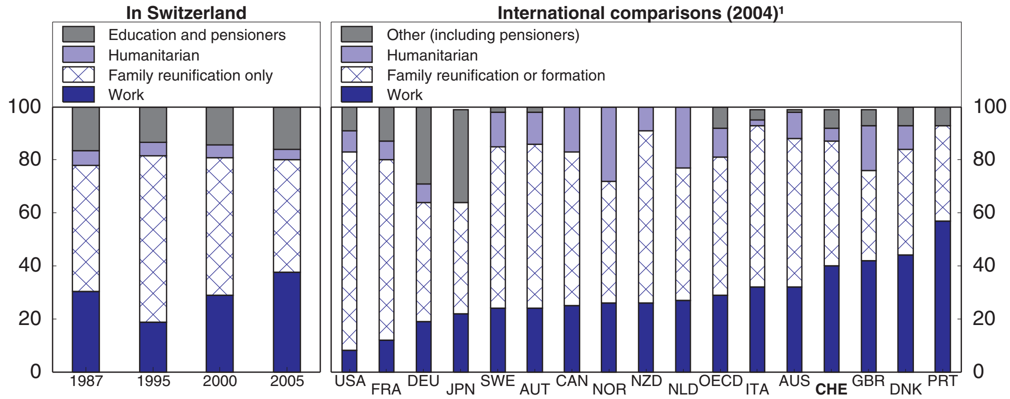
1. Since 2002, the quota period for EU15 workers has run from 1 June to 31 May; for other countries, it runs from 1 November to 31 October.
2. The category of seasonal worker was abolished in 2002.

Source: Federal Office for Migration.

Figure 5.11. **Immigration by category of entry**

Percentage of total



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1. Standardised statistics differ somewhat from the Swiss national definition (notably by excluding students).

Source: Federal Statistical Office and OECD (2006), International Migration data.

6 000 per year on average up until 2010 (Fluckiger *et al.*, 2005a). Flows such as these would not be sufficient to fill up the sum of short- and longer-term residence quotas, as scheduled under the temporary provisions.[11] Beyond 2010, analyses point to these flows easing off slightly, partly for demographic reasons. This is because the migration reservoir, which mainly concerns young people (aged between 20 and 34), is going to diminish – as is shown by the 3% expected fall (*i.e.* 500 000 persons) in the number of people in this age group in these countries between 2004 and 2011. Also, the available surveys suggest that the characteristics of immigrants from the new EU member countries will be much the same as for the rest of this zone in terms of skills, as is confirmed by the pattern of immigration from the latter countries in the late 1990s (see Figure 5.8).

The impact of the removal of quotas is likely to be influenced by several factors. In the short term, their abolition will probably result in increased demand for residence permits (valid for five years) because of the currently favourable economic situation. Such an increase could remain moderate, however; short-term permits, which have to some extent acted as substitutes for ordinary permits, have not been exhausted during the transitional period of application of the AFMP with the EU15.The demand for short-term permits is therefore likely to decrease as the quotas on long-term permits are removed. Apart from being more skilled, immigrants are also less likely to set up permanently in Switzerland and they do not so often have recourse to family reunion, as recent German immigration shows.[12]

By way of indication, the central scenario in the latest OFS (Federal Statistical Office) long-term demographic projections is based on foreign immigration gradually declining to 20 000 persons per year on average as of 2020 (Table 5.1). That figure, which is close to the average for the past 25 years, takes into account the effect of ageing in the EU countries and Switzerland's potential loss of attractiveness as a result of living standards in other countries gradually catching up. According to this scenario, the foreign (permanent resident) population should increase by nearly 200 000, *i.e.* by a little over 1 percentage point, to 21.7% of the population towards 2020, and then fall steadily to slightly less than 21% in 2050. This trend would be due to the decline in the migration balance and in the natural balance of the foreign population due to ageing, as well as to the continuing

Table 5.1. **Possible long-term population trends**

Thousands, unless otherwise indicated

	2005	2010	2015	2020	2030	2040	2050
Permanent resident population	7 466	7 682	7 883	8 003	8 143	8 151	8 061
Average annual increase (in %)[1]	0.7	0.5	0.4	0.2	0.1	–0.1	–0.2
of which:							
due to the migration balance	0.5	0.4	0.3	0.2	0.2	0.2	0.2
due to the surplus number of births	0.2	0.1	0.1	0.1	–0.1	–0.2	–0.3
Migration balance of foreigners (units)	45 666	41 300	32 200	20 000	20 000	20 000	20 000
Proportion of foreigners %)	20.7	21.2	21.7	21.6	21.1	20.9	20.8
Working-age population (15 to 64 year-olds)	5 077	5 211	5 268	5 257	5 051	4 845	4 785
Elderly dependency ratio (%)[2]	25.7	28.0	30.7	33.5	42.6	48.9	50.9

1. Rate of growth (for the years indicated).
2. Ratio of persons aged 65 and over to those aged between 20 and 64.

Source: OFS (Federal Statistical Office), Middle scenario.

relatively high level of naturalisations.[13] The total population would reach its maximum size in about 2035, while the working-age population would decline as of 2020 as a result of retirements becoming too numerous to be offset by net migration.

Economic aspects of migration

The positive impact of immigration on production and incomes is considerable

The scale of immigration is such that it has a large effect on economic activity in Switzerland, acting through a variety of channels. By means of an accounting breakdown it is possible, for example, to assess its direct influence on the growth of production and per capita income via its positive impact on the increase in the total population, the proportion of working-age people and the trend in the employment rate (Box 5.2). Through these channels, immigration can be estimated to be directly responsible for some 60% of the increase in output and per capita GDP between 1982 and 2005, and this contribution has tended to grow since 1990. However, this partial and mechanical calculation of the contribution made by foreign labour overstates the gains of output and per capita GDP as it does not take into account the productivity gap level between immigrants and natives nor of substitution or complementarity phenomena between foreign and local labour, which are analysed in greater detail below. Nor does it make any distinction between the per capita income gains accruing to nationals and to immigrants. From this point of view, there can be little doubt that the growth of per capita GDP associated with the increase in foreign employment has mainly benefited immigrants and border workers, part of whose income has been repatriated to their countries of origin, thereby reducing the current account surplus.[14] However, Swiss firms' continuing demand for foreign labour is also indicative of the beneficial effect that they derive from it.

Immigration is in fact likely to have a favourable effect on the living standards of the native population, even if this is not large and not necessarily evenly distributed. By stimulating the overall size of the economy, immigration tends to increase per capita income thanks, for example, to the existence of economies of scale stemming from the expansion of certain markets and affording, *inter alia*, reductions in margins and prices. Then again, immigration also tends to bring about a housing wealth effect to the advantage of existing owners who are very largely native Swiss. In the absence of immigration, low

Box 5.2. **Direct impact of immigration on the growth of activity and per capita income**

The direct impact of immigration on the growth of activity and per capita GDP can be calculated by means of an accounting approach. GDP growth can be broken down into the sum of a demographic effect and an income effect by means of the following identity:

$$Ln(Q) = Ln(POP) + Ln(Q/POP)$$

where Q is GDP and POP the total population.

Per capita GDP growth can also be calculated as the sum of three effects measuring productivity gains, the trend in the employment rate and in the population of working age relative to the total population (demographic composition effect):

$$Ln(Q/POP) = Ln(Q/ET) + Ln(ET/POPW) + Ln(POPW/POP)$$

where POPW is the working-age population and ET is total employment.

Knowing the scale of migration flows, the age structure and the rate of employment of foreign labour makes it possible, using these identities, to determine the direct contribution made by immigration to the growth of the total population, to that of the employment rate and to the demographic composition effect.* This breakdown, which is shown in Table 5.2, allows the following points to be highlighted:

- Between 1982 and 2005, immigration contributed positively to Swiss GDP growth by stimulating the increase in the resident population. That effect, equal to 0.4 of a percentage point, is greater than that due to the growth of the population of Swiss nationality. This estimate underestimates the impact of immigration, because it does not take account of naturalisations.
- The contribution made by foreign labour was also positive in terms of the increase in the average per capita income of persons resident in the Confederation. The increase was half due to productivity gains and half to the trend in the demographic composition by age and in the employment rate. This second effect is totally attributable to the contribution made by the foreign labour force of working age, who has a high employment rate. On the other hand, the impact made by the Swiss population from the point of view of demographic composition and the employment rate was slightly negative.
- All told, this breakdown shows that immigration accounts directly for 0.9 of a percentage point of the 1.5% average annual GDP growth between 1982 and 2005, and for 0.5 of a percentage point of average per capita GDP growth of 0.9% over the same period.

* The impact of foreign labour on productivity growth is harder to identify because it depends on the level and trend in the average efficiency of foreign as opposed to Swiss workers, and these parameters are not known.

demographic growth, as in Japan for example, would no doubt have a negative effect on property prices, which have risen only very moderately in Switzerland since 1995. It is interesting to note, in this connection, that countries that have benefited from large immigration flows since the early 1990s are also those where property prices have increased the most (Figure 5.12, Panel A). This wealth effect does not appear to have been linked to a rise in costs for tenants, of whom there are many in Switzerland (Figure 5.12, Panel B).

Box 5.2. **Direct impact of immigration on the growth of activity and per capita income** *(cont.)*

Table 5.2. **GDP and per capita growth decomposition**

Annual rates of growth

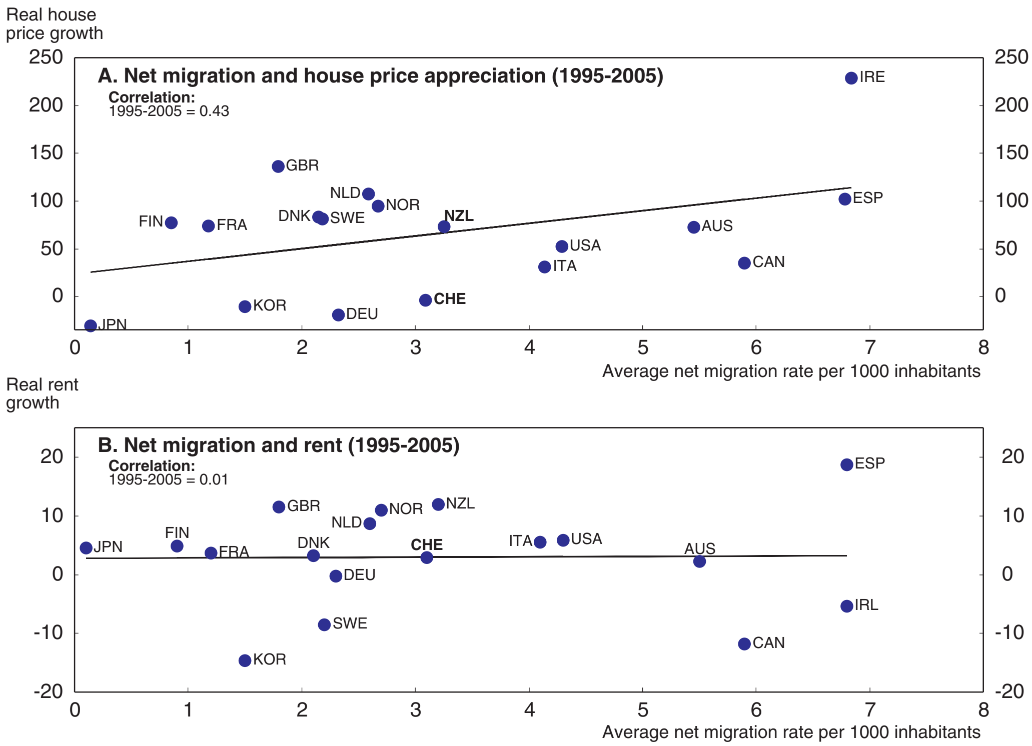
		1982-90	1991-2000	2001-05	1982-2005
GDP growth	(1) + (2)	**2.3**	**1.1**	**1.1**	**1.5**
of which:					
1. Population growth	(1a) + (1b)	**0.6**	**0.7**	**0.7**	**0.7**
of which:					
1a. Swiss		0.3	0.2	0.4	0.3
1b. Foreigners		*0.3*	*0.4*	*0.3*	*0.4*
2. Per capita GDP growth	(2.1) + (2.2) + (2.3)	**1.6**	**0.4**	**0.4**	**0.9**
of which:					
2.1. Productivity growth		0.7	0.1	0.6	0.4
2.2. Demographic composition effect	(2.2a) + (2.2b)	0.6	–0.1	0.2	0.2
of which:					
2.2a. Swiss		0.2	–0.4	–0.1	–0.1
2.2b.Foreigners		*0.4*	*0.3*	*0.3*	*0.3*
2.3.Employment rate growth	(2.3a) + (2.3b)	0.4	0.4	–0.4	0.2
of which:					
2.3a. Swiss		–0.1	0.3	–0.5	0.0
2.3b. Foreigners		*0.4*	*0.1*	*0.1*	*0.2*
Demographic and employment rate effects	(2.2) + (2.3)	0.9	0.3	–0.2	0.4
of which:					
Swiss	(2.2a) + (2.3a)	0.1	–0.1	–0.5	–0.1
Foreigners	(2.2b) + (2.3b)	*0.8*	*0.4*	*0.3*	*0.5*
Population, demographic and employment rate effects	(1) + (2.2) + (2.3)	1.6	0.9	0.5	1.1
of which:					
Swiss	(1a) + (2.2a) + (2.3a)	0.4	0.1	–0.2	0.2
Foreigners	(1b) + (2.2b) + (2.3b)	*1.1*	*0.8*	*0.7*	*0.9*

Source: OECD calculation based on Federal Statistical Office and OECD Analytical database statistics.

Another aspect to be taken into account when gauging the impact of immigration on production and income relates to its effect on productivity. Generally speaking, the average skill level among foreigners is lower than among the Swiss, and the same is no doubt true of their productivity insofar as this is reflected in their wage levels: on average, these were 18% below those of the native population in 2004. This gap, which also reflects probable discrimination (see below) and the concentration of foreign labour in low value-added sectors, lowers the average level of efficiency in the economy, and hence that of per capita GDP, via a composition effect. However, this effect only partly explains why hourly productivity in Switzerland is lower than in the euro area.[15] Nor does it allow one to deduce that the inflow of relatively low-skilled foreign workers has weighed directly on the native population's level or growth of productivity. If this sort of negative relationship does exist, it is necessarily indirect.

There does in fact seem to be something of a consensus among Swiss experts that unskilled immigration slowed the modernisation of the economy in the past.[16] However, the capital/labour substitution effect associated with immigration which, by causing a

Figure 5.12. **Immigration and housing market**



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Source: Federal Statistical Office.

relative fall in wages and checking rationalisation investment, could explain this phenomenon, does not seem particularly significant (see below). A second and no doubt more important factor could be the complementarity between the development of high value-added sectors and skilled labour, the supply of which may have been restricted by the inflow of low-skilled foreign labour (Sheldon, 2003). It is certainly probable that a great many firms invested abroad in sectors where there was a shortage of skilled labour, as in the case of R&D activities (OECD, 2005a). That argument, however, has at least as much to do with education policy as with immigration policy. Nor, moreover, has the lack of skilled labour prevented Switzerland from being among the leading countries in the world in terms of developing and diffusing new technologies (OECD, 2005a).

The rare studies that quantify the impact of immigration on productivity growth point to there being a negative but very slight influence.[17] However, these analyses, which are quite old, do not take into account the shift in immigration policy in the early 1990s in favour of admitting skilled workers. Recent empirical studies indicate a distinct improvement in immigrants' skill levels in recent years, the latter now appearing to be on average equivalent or superior to those of the native population (see Figure 5.8). A growing proportion of these foreign workers have moreover been employed in knowledge-intensive sectors such as financial services, computing and education (Table 5.3), where demand for skilled labour has increased, including among the native population (Becker *et al.*, 2007). This sort of development should have had a positive effect on productivity gains, even if the latter have been small compared to other countries since the early 1980s. Other factors,

Table 5.3. **Foreign employment by sector of activity according to length of residence in Switzerland**[1]

Per cent, 2006

	Length of residence in Switzerland				
	More than 10 years	Less than 10 years	*of which:* 0-2 years	2-5 years	5-10 years
Sectors					
Agriculture, forestry	1.0	1.6	1.8	2.0	0.9
Manufacturing industries	22.2	15.7	14.8	13.7	18.6
Construction	12.5	7.2	8.5	8.5	4.7
Commerce; repairs	11.5	10.8	11.0	10.1	11.2
Hotels and restaurants	7.6	10.3	10.4	11.4	9.1
Transport et communication	4.7	3.3	2.7	2.9	4.3
Financial activities, insurances	2.3	6.0	6.4	5.3	6.5
Real estate, rentals, data processing; R&D	9.5	15.9	18.9	14.6	14.1
Public administration	3.5	2.8	2.9	2.1	3.5
Education	4.2	8.2	7.9	9.8	7.1
Health and social activities	13.8	10.6	7.6	12.2	11.9
Other services; private households	6.9	7.3	6.9	7.3	7.7
No indication/do not know	0.1	0.3	0.2	0.2	0.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

1. Foreign, economically active persons who immigrated as adults.

Source: Federal Statistical Office, *Enquête suisse sur la population active*, 2006.

such as insufficient competitive pressures in the sheltered sector of the economy, are undoubtedly more responsible than immigration for the weakness of these efficiency gains (OECD, 2003b and Chapter 4).

Immigration also influences the cyclical behaviour of the economy. Historically, the policy in favour of seasonal immigration put in place after World War II was designed to limit the impact of cyclical fluctuations on Swiss employment (Golder and Straubhaar, 2002). That objective was achieved during the first oil crisis, but the policy did cause a record fall in production, partly because of the absence of automatic stabilisers on the public expenditure side.[18] In particular, the absence of compulsory unemployment insurance induced many to return home even if they were not obliged to do so. The increasingly long-term nature of immigration since that time, with the creation of compulsory unemployment insurance in 1982, has gradually reduced the "stabilising" function of immigration during economic cycles. In recent decades, quota management appears to have been quite closely correlated with economic cycles,[19] although quotas have *de facto* played an asymmetric role – they have been binding during cyclical peaks and not at cyclical lows so as not to hinder recovery. Abolishing them for EU/EFTA nationals with effect from June 2007 could make it harder to predict supply-side conditions, and hence trends in the business cycle, which could rather complicate the management of macroeconomic, and particularly monetary policy.

The effects on the employment conditions of the native population seem limited

From the point of view of applying the AFMP, one of the issues most frequently debated has concerned the impact of immigration on the working conditions of the native population. The public began to be afraid of foreign workers displacing part of the native labour force from the job market and the jobless finding it more difficult to find another job against a background of increased competition once the priority given to local workers was ended (Crevoisier *et al.*, 2006). There is, however, not much risk of this happening. The danger is based on the assumption of a high level of substitutability between local and foreign labour, without any account being taken of the endogenous impact on wages caused by the arrival of new workers and consumers, the latter also having a positive influence on economic growth and labour demand.

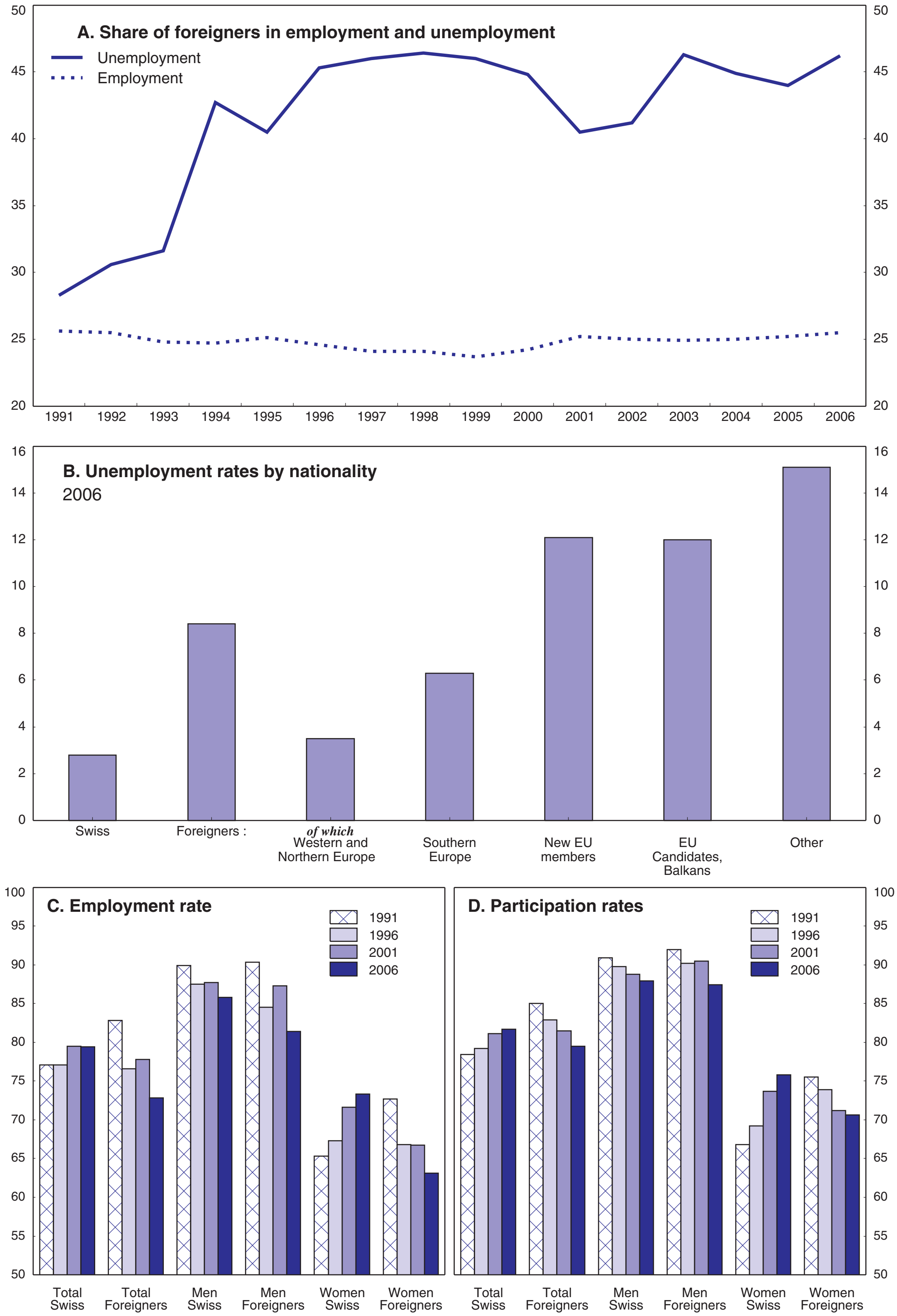
This is confirmed by empirical analyses conducted at both the international and the Swiss levels. Recent OECD studies suggest that immigration has little influence on native unemployment in member countries,[20] the effect being all the more insignificant in countries with flexible labour markets, such as Switzerland (OECD, 2006b). These findings match those arrived at for the Confederation by Flückiger *et al.* (2005b) for the period 1991-2003. This study, which takes account of the big disparities in immigration rates between regions and of the differing influence of waves of immigrants, whose levels of education have been improving for a number of years now, does not find any significant negative link between employment of foreign and native workers, once the endogenous reaction of immigration to cyclical trends in the labour market has been factored in.[21] An initial appraisal of the application of the AFMP would appear, moreover, to corroborate these findings, although as yet not enough time has elapsed for the consequences of the agreement to be properly assessed (Seco *et al.*, 2006). The implementation of this agreement seems to have neither altered the unemployment-rate differential between Swiss natives and foreigners (Figure 5.13, Panel A), nor generated a more marked rise in the number of job-seekers in branches where there is the most immigration. Nor, lastly, is it possible to detect a direct correlation between the increase in immigration and in unemployment at regional level.

With the employment of Swiss nationals appearing not to be much affected by the presence of foreign workers, studies have sought to determine the influence of immigration on their wages. In the short term, an increase in the supply of immigrant labour is likely to result in a decline in these wages, especially if accompanied by a fall in the capital/labour ratio. Empirical studies for Switzerland are unanimous, however, in concluding that this influence is very slight, which is in line with the results of international studies[22] (OECD, 2006b). To the extent that immigration has been a feature of the Swiss economy for many years, the limited impact it has on wages is hardly a surprise. Immigration depends very largely on firms' requirements and is therefore part and parcel of their investment decisions, which limits the risks of a fall in the capital/labour ratio. Also, foreign and local workers have often been complementary in the past because of their differing skill levels, though this phenomenon is becoming less marked. The strong concentration of immigrant labour in certain sectors deserted by local labour is evidence of this phenomenon (Figure 5.14). According to a study by Sheldon (2003) covering the period 1980-98, if substitution effects do exist – for example, in the case of border workers – they are very slight, since a 1 percentage point increase in the proportion of foreigners lowers the wages of locals by a maximum of 0.3%, with the figure more likely to be 0.1%. Similar findings are arrived at in the studies by Flückiger *et al.* (2005b), where it is estimated that a 1 percentage point increase in the ratio of foreigners or border workers by canton and sector reduces the level of individual wages by 0.2% on average. Küng (2005), on the other hand, does not identify the presence of immigrant workers as having any significant effect on the wages of Swiss nationals at the sectoral level.[23]

These analyses prompt questions about the role of the measures accompanying the AFMP aimed at preventing wage and social dumping. The virtual absence of any

Figure 5.13. **Employment, unemployment and participation rates for Swiss and foreigners**

Percentage



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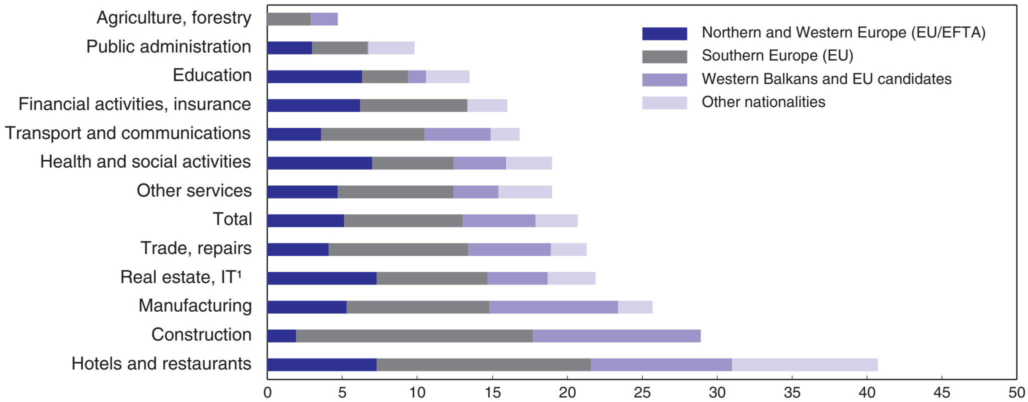
Source: Federal Statistical Office, Employment Statistics and Swiss Labour Force Survey.

Figure 5.14. **Jobs held by foreigners by sector**

As a percentage, 2006



StatLink http://dx.doi.org/10.1787/140374530021

1. Plus rentals and R&D.

Source: Federal Statistical Office, Swiss survey of the working population.

unfavourable overall impact on Swiss employment and wages does not, of course, rule out the possibility of immigration having a negative impact on certain segments of the market, so that adopting these measures was necessary in order to ensure that the Swiss population approved the AFMP. These provisions, which increase the possibility of extending collective agreements and using work contracts with a minimum wage, could make the labour market less flexible. However, this risk should be limited, thanks to the practical provisions and scope for interpretation attaching to the application of this mechanism.[24] In fact, up until mid-2006, no collective agreement had been extended under the provisions of the accompanying measures and just one standard work contract with a minimum wage had come into force in the domestic services sector in the canton of Geneva. The checks carried out, which show that minimum working conditions have been very largely respected,[25] could also be due to the accompanying measures having a preventive effect.

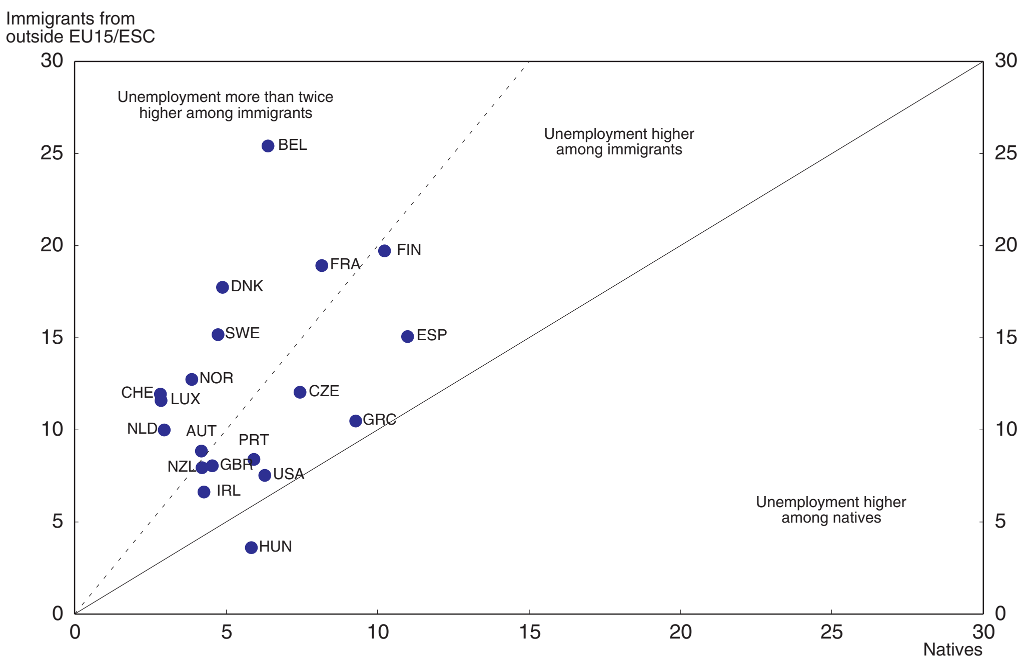
Certain barriers act as a brake on the entry of foreigners into the labour market

Various indicators bear witness to the problems that immigrants face in entering the labour market compared with native Swiss workers. Their rate of employment in the 14-64 year-old age-group, although high by international comparison (OECD, 2006a), has fallen sharply over the last 15 years or so to a level that is now well below that of the native population, even if their gross employment rates remain higher than natives because of their favourable demographic structure (see Figure 5.15). This trend partly reflects a decline in their participation rate, due in particular to diversification of the reasons for immigration as a result of the increase in family reunifications. However, over the past 10 years, foreigners have also had to contend with a sharp increase in the unemployment rate which since the early 2000s has been 2½ to 3 times higher in the foreign population than in the native population. All categories of people of foreign descent, including those that have been naturalised, have a higher rate of unemployment than native Swiss, albeit to varying degrees. There are also sharp differences in performance according to immigrants' country of origin. Unemployment among nationals of Northern and Western European countries is only slightly higher than among Swiss nationals, whereas the gap is wider with Southern European countries, new EU members or Balkan countries and, above all, third countries (see Figure 5.13, Panel B). The differences with regard to non-EU countries are large by international standards (Figure 5.15). This disparity in unemployment rates is also greater for women than it is for men, even in comparison with other countries (OECD, 2006a). Women, who in most cases are married and have immigrated in order to follow their spouses, are less prepared to enter the labour market (Wanner *et al.*, 2005). These difficulties in finding employment do not appear to be the result of a dysfunctional labour market, and the potential to improve the operation of regional employment offices to reduce unemployment among foreigners appears to be limited[26] (Spycher *et al.*, 2006).

A significant share of these differences in performance can be explained by observable differences reflecting the heterogeneity of individuals in educational, socio-demographic and professional terms. Foreigners are also more affected by cyclical variations in unemployment than Swiss nationals in that they often work in sectors that are more exposed to the conjuncture. However, most studies indicate that these individual disparities do not explain everything (Widmer, 2005; De Coulon *et al.*, 2003). There are major differences, for example, between the length of unemployment spells of Swiss and immigrant workers with homogeneous characteristics according to immigrants' country of origin: whereas the performance of EU15 nationals is comparable to that of Swiss nationals, immigrants from the new EU members remain unemployed for longer periods of

Figure 5.15. **Unemployment rate among non-EU/non-English speaking immigrants and among natives in OECD countries**[1]

Percentage, 2003



StatLink http://dx.doi.org/10.1787/140377022056

1. Solid line: unemployment among immigrants equal to unemployment among natives. Dotted line: unemployment among immigrants twice as high as unemployment among natives.

Source: OECD (2006), "Migration in OECD Countries: Labour market impact and integration issues", OECD Working Papers No. 562, Paris.

time, while Asian and African immigrants remain unemployed for the longest duration.[27] Other things being equal, foreign workers are also paid less than Swiss workers (Flückiger *et al.*, 2005b). The difference in terms of hourly wages amounted to 8% for seasonal workers and 4% for cross-border workers but is negligible for workers holding an ordinary or a permanent establishment permit. On the other hand, while the wages of nationals of EU25 countries – excluding traditional immigration source countries (Italy, Spain, Portugal) and Turkey and the former Yugoslavia – are not significantly different from those paid to Swiss nationals, those of workers from these traditional countries are on average are 7% lower, a shortfall that rises to 17% for Asian workers and 29% for African workers. These figures may be juxtaposed with the raw 18% gap mentioned above, showing that correction for "quality" is crucial in making the comparison.

While these unexplained differences in terms of unemployment and salaries between the native population and certain groups of foreigners undoubtedly reflect a variety of factors, including problems relating to the recognition of qualifications and/or language skills, they also reflect the effects of discrimination or lack of social capital. Furthermore, unlike EU citizens who enjoy full professional and geographical mobility, the nationals of third countries are subject to restrictions. Residence or permanent establishment permits are valid only in the canton where they are issued, and permission is often needed to change canton.[28] This principle also applies to refugees. In addition, holders of a one-year residence permit can change their occupation only under certain conditions, which depend upon the situation in the labour market and require serious grounds. For holders of short-term permits, geographical and professional mobility is restricted, since the permit is linked to a particular job, which is limited in time. This weakens their bargaining position in the labour market, particularly if they are also dependent on their employers for renewal of their permits. This undoubtedly also partly explains the more limited degree of geographical mobility within Switzerland of the nationals of third countries other than EU and EFTA countries, although it is also a reflection of differences in behaviour between first- and second-generation immigrants, or between skilled and low-skilled workers, who on average are less mobile (Table 5.4). The new Foreign Nationals Act, which will enter into force in 2008, will eliminate mobility barriers for workers holding annual residence or permanent establishment permits, which should contribute to a better integration of their country nationals on the Swiss labour market.

More importantly, the labour market places a higher value on an education acquired in Switzerland than on one achieved by immigrants in their countries of origin (De Coulon, 1998). The unexplained differences in salaries between Swiss-born and foreign workers would therefore appear to be partly related to the failure of employers to recognise or take full account of the qualifications held by foreigners. Once again, differences may be observed between nationalities in this respect, indicating that cultural distance is a barrier to the recognition of qualifications obtained in immigrants' countries of origin, which may reflect differences with Switzerland in terms of the quality and compatibility of the education received (De Coulon *et al.*, 2003). According to Flückiger *et al.* (2005c), an additional year of education increases the salary of Swiss nationals by 7.2%, compared with only 3.9% for traditional immigrants and 6.4% for immigrants from other countries. Although these disparities seem to have eased somewhat in recent years, policy should focus on the education of immigrants, including continuing education and the recognition of qualifications, particularly of workers from traditional source countries of immigration (see below).

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Table 5.4. **Internal migration, by nationality**

Gross migration rate in 2005[1]

	Inter-cantonal	Intra-cantonal	Total
Swiss	**15.0**	**37.3**	**52.3**
Foreigners	**16.5**	**49.9**	**66.4**
of which:			
UE25/AELE countries	18.7	51.3	70.0
Third countries	13.3	47.9	61.2
of which:			
European countries (non-UE25/AELE)	11.3	40.5	51.8
First generation foreigners[2]	16.4	48.8	65.2
Second generation foreigners[2]	13.3	45.9	59.2

1. Number of immigrants per 1 000 inhabitants in the middle of the year. The statistics record the number of migration movements.
2. Includes only annual and permanent residence permits.

Source: Federal Statistical Office.

The length of the period of residence in Switzerland appears to have a differentiated effect on the unemployment rate of first-generation immigrants according to their geographical origin. According to Widmer (2005), recent immigration reduces the risk of unemployment among EU nationals during their first five years of residence, in that such workers often arrive after they have obtained a work permit and are therefore affected by unemployment only at a later date. For other communities, the risk is higher the more recent the date of arrival. The impact of recent arrival on the probability of unemployment is more marked for women than for men. One reason might be that female immigrants often come to Switzerland for family reunion so their skill profiles are less likely to match labour demand. Length of residency in Switzerland does not seem to narrow differences in salary with Swiss-born workers either (Flückiger *et al.*, 2005c), unlike the situation in Australia or the United States (OECD, 1997 and 2003a). Non-recognition of qualifications by employers penalises immigrants irrespective of the number of years they have lived in the Confederation (De Coulon *et al.*, 2003). For workers from traditional source countries of immigration, the professional experience acquired both before and after immigration has no influence on salary differences, unlike other immigrants.[29] However, these analyses do not take account of cohort effects, or of the impact of the naturalisation of certain immigrants who form a relatively well-integrated group (Fibbi *et al.*, 2005), which could skew their results. Moreover, second-generation foreigners are better integrated in the labour market as a result of the education they have received in Switzerland. Accordingly, in the case of foreigners who were born in Switzerland, there is no significant difference in wages that cannot be explained in terms of differences in qualifications (De Coulon *et al.*, 2003). Their wages nonetheless remain on average lower than that of the Swiss population due to their lower level of educational attainment, which partly reflects the difficulties the education system has in ensuring equal opportunities for native Swiss and foreigners (see below).

Many studies also emphasise the important role played by the discrimination to which certain groups of immigrants are exposed to explain their difficulty in entering the labour market. This phenomenon, which is often revealed indirectly (Widmer, 2005; De Coulon, 1998; Flückiger *et al.*, 2005c and 2005d), has also been directly revealed by surveys of hiring (Fibbi *et al.*, 2003). This discrimination, which primarily affects non-EU foreigners, appears to be greater than in other OECD member countries, where similar surveys have been conducted.[30] It is also greater in German-speaking cantons than in French or Italian-speaking cantons.[31] This phenomenon, which economic theory ascribes to several possible causes, including a lack of information regarding the productivity levels of foreigners (Phelps, 1972), creates not only a problem of unfairness but also one of economic inefficiency; it induces problems of over-qualification (Pecoraro, 2005) and a declining return from investment in education for foreigners, including second-generation foreigners, which reduces their incentive to gain qualifications and, ultimately, their wages.

The current immigration policy favouring EU nationals or skilled workers should help to reduce the problems with the integration of foreigners in the labour market in the future. Alone, however, this policy would undoubtedly not be enough to completely resolve these difficulties. The possibility cannot be excluded that some EU workers will be low-skilled, as appears to be the case with recent Portuguese immigrants. Moreover, non-EU nationals will continue to account for a major share of the resident population stock in Switzerland. It would therefore seem that efforts need to be made to remove barriers to better integration of such foreigners in terms of mobility, education and, more generally, social life.

Integration policies can be improved

The need for a strategy to foster integration of immigrants has been recognised

Since immigration has long been viewed in Switzerland as a temporary phenomenon, migration policy has only recently turned its attention to the integration of foreigners, even though this issue has regularly been discussed over the past few decades. It is a fact that certain institutional rules regarding naturalisation or residence permits have not been particularly favourable to the long-term establishment of immigrants in the Confederation in the past. However, the growing stabilisation of the foreign population, together with the rise in unemployment among foreigners from the late 1980s onwards, has prompted the authorities to pay greater attention to the issue of integration, which is primarily the responsibility of the cantons and communes. Since the late 1990s, many cantons have enacted legislation or introduced regulations aimed at setting out and organising their actions with regard to integration, although the efforts made, also in policy terms, have varied from one region to another.[32] In 2003, integration delegates from the cantons and communes met to set up a Conference, that is to say a body given the task of evaluating and sharing the experience in this area. As far as the Confederation is concerned, integration has been a task for the State only since 1998, the year it acquired the legal basis on which to provide financial support for this policy.

More recently, the new Foreign Nationals Act for the first time provided a detailed account of the principles on which integration policy is based and set out the competencies of the Confederation.[33] This policy, which is viewed as a cross-cutting task involving all levels of government, must be managed within the framework of existing institutions such as schools, vocational-training facilities, the labour market and social-insurance agencies. The authorities wish to avoid creating specific structures for foreigners and are opposed to the principle of positive discrimination. Moreover, the new Act places the emphasis on the shared responsibility of foreigners and natives in the integration process. To forge a single policy approach towards integration issues and improve the effectiveness and efficiency of the actions undertaken, the task of co-ordinating efforts has been entrusted to the Federal Office for Migration (ODM), which is part of the Federal Department of Justice and Police. Against this background, a recent report for the first time offers a general overview of the conditions under which foreigners are integrated in Swiss society (ODM, 2006). This study, which provides a fairly positive overall assessment of the situation, emphasises that major room for improvement exists in several sectors. Besides problems relating to the entry of immigrants in the labour market (see above), improving integration into education systems, including vocational training, is identified as a priority. However, improving performance in these areas depends closely on a better knowledge of the local language and greater social integration.

Learning the official national languages could be better organised

Fluency in the local language plays a key role in integration in several areas: labour market, school, vocational training, clubs and societies. The proportion of foreigners who express themselves mainly in one of the national languages[34] increased from 57% to 62% between 1990 and 2000 and, as a general rule, second-generation immigrants are more fluent than their parents in national languages. However, major differences in language skills exist among nationalities and different language areas. The most serious problems concern immigrants from the second wave of immigration from the Balkans, Portugal and Turkey, who have a low socio-economic status. Approximately 45% of these immigrants used the language of their host region as their main language. Furthermore, only 60.6% of second-generation immigrants living in the German-speaking part of the country claim to express themselves mainly in German, whereas 79.7% claim to do so in French in French-speaking Switzerland and 67.2% in Italian in Italian-speaking Ticino.[35]

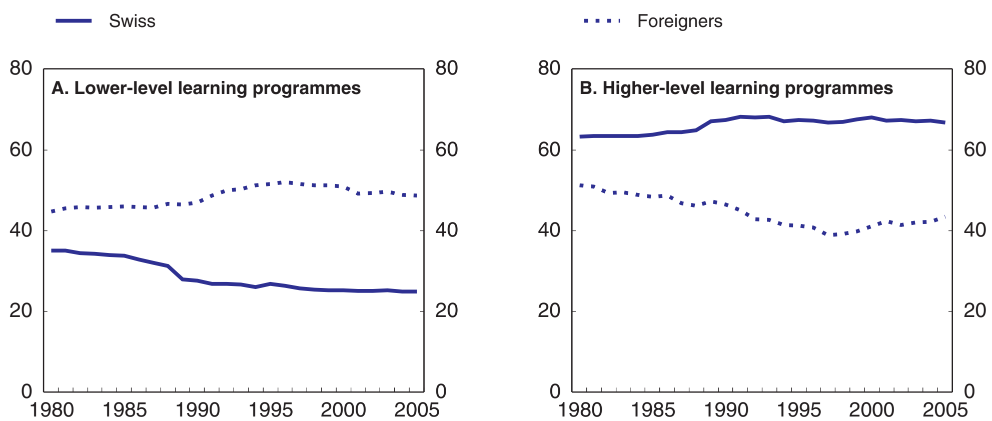
Several factors contribute to these difficulties in learning a national language. A low level of educational achievement and lack of learning skills are major factors for many foreigners. According to the *Adult Literacy and Lifeskills* international survey conducted in 2003, the reading, mathematical and problem-solving skills of adult immigrants are, on average, far worse than those of nationals, particularly in the case of Southern Slavs, Turks, Kurds and Portuguese who account for 55% of the foreigners in Switzerland[36] (OFS, 2006). In some cases, the poor ability of immigrants to learn a national language is also the result of their poor knowledge of their mother tongue (Grin *et al.*, 2003). Learning difficulties are also exacerbated in German-speaking Switzerland by the widespread use of dialect in a significant part of the oral teaching they receive tended to be in the local dialect. On the other hand, the public supply of language courses for the adult population, which is primarily the responsibility of the cantons, is inadequate. It is insufficient in rural areas and, despite being better in urban areas, is often poorly co-ordinated and does not always ensure that students reach an adequate level of fluency due to the lack of professional structures and of a standard system of certification (ODM, 2006). The Confederation has therefore had to promote language-learning programmes for target groups that are not covered by educational networks at the level of the canton, such as women arriving in Switzerland under the rules for family reunification (De Coulon, 2006). It would therefore seem necessary to improve the supply of courses of instruction in official languages by setting up framework projects at the level of the Confederation or the language regions. Useful support for such development might be provided by offering improved incentives to foreigners who wish to extend their residence permits to enrol on these language courses, for which provision is already made in the Foreign Nationals Act.

Major discrepancies remain between the education of foreign and native children

Although most (97%) immigrant children from the first or second generations have received all of their compulsory schooling in Switzerland, their results are on average poor compared with those of native children. They are often set or streamed into low-level learning programmes. As a result, a high and growing proportion of such children find themselves outside the standard educational system in special classes due to their learning difficulties. The share of immigrants in small support classes rose from 28% to 53% between 1980 and 2001, which amounts to, on average, 10% of all immigrants receiving compulsory education, although this figure varies substantially according to nationality and canton (CDIP, 2003). The selection made in the educational system at the end of the primary cycle has a similar effect. In 2005, almost 50% of foreign children were streamed into lower secondary cycle programmes with elementary requirements, that is to say twice the share of children of Swiss nationality (Figure 5.16). Furthermore, according to the 2003 PISA data, the shortfall between the results of immigrant children and those of native children at the end of their compulsory education was larger than in most other OECD countries (Table 5.5). This was apparent in all subject areas and applied to both children born outside Switzerland and those born in Switzerland (second-generation immigrants), even though the latter were relatively better. While second-generation children from the first wave of immigration have made progress since 1980, school childrenfrom the second wave of immigration (from Yugoslavia, Turkey and Portugal) are catching up more slowly, a feature which seems to be observed in other European countries.[37]

Figure 5.16. **Educational pathways of lower secondary cycle pupils according to nationality and type of programme**

Shares in per cent



StatLink http://dx.doi.org/10.1787/140377337362

Source: Federal Statistical Office, Statistics on pupils and students.

These mediocre results achieved by immigrant children appear to be partly attributable to their low pre-school attendance. There would appear to be fewer foreign children in childcare facilities than native children (Lanfranchi *et al.*, 2003).[38] This longitudinal analysis, like several other international studies, shows that children in childcare facilities outside the home have significantly improved cognitive, language and social skills. On the other hand, the poor results achieved by immigrant children during their compulsory schooling sharply reduce their future educational prospects. Three times the share of immigrant children leave school prematurely without receiving post-compulsory education

Table 5.5. **Basic skills of 15 year-olds according to their cultural background**

Students' average scores on the reading, mathematical and scientific literacy scales in 2003

	Reading			Mathematics			Sciences		
	Score	% differential compared to natives		Score	% differential compared to natives		Score	% differential compared to natives	
	Native-born students[1]	Second generation[2]	Foreign-born[3]	Native-born students[1]	Second generation[2]	Foreign-born[3]	Native-born students[1]	Second generation[2]	Foreign-born[3]
Switzerland	**515**	**–10.4**	**–18.1**	**543**	**–10.9**	**–16.5**	**531**	**–13.0**	**–19.3**
Germany	517	–18.6	–16.6	525	–17.8	–13.6	529	–22.1	–16.0
Australia	529	–0.7	–2.3	527	–0.9	–0.4	529	–1.8	–2.8
Austria	501	–14.7	–15.3	515	–10.9	–12.3	502	–13.5	–16.0
Canada	534	1.8	–3.5	537	1.1	–1.2	527	–1.5	–5.0
France	505	–9.4	–15.7	520	–9.2	–13.9	521	–10.8	–16.9
New Zealand	528	–4.1	–4.7	528	–6.1	–1.0	528	–8.3	–3.2
United States	503	–4.4	–9.9	490	–4.5	–7.4	499	–6.5	–7.3
Sweden	522	–3.8	–17.0	517	–6.6	–17.8	516	–9.6	–20.7
OECD average	514	–7.7	–11.3	523	–7.7	–9.3	515	–9.3	–11.4

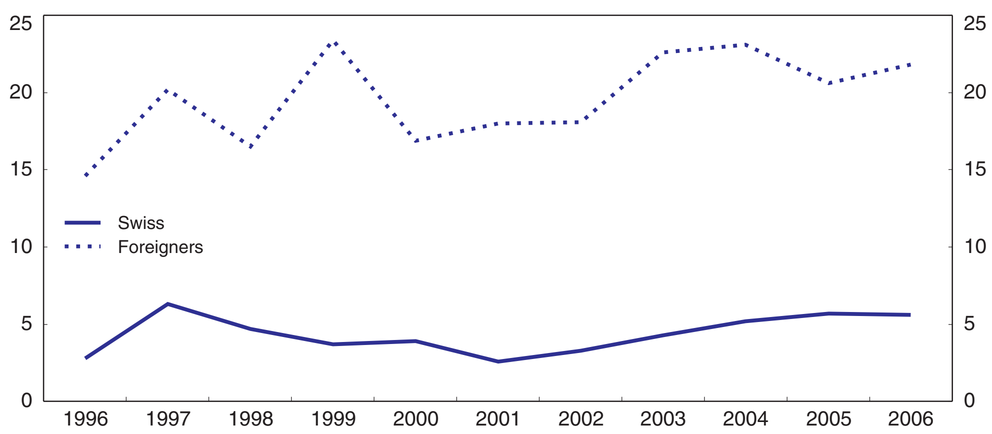
1. Native-born students: students born in Switzerland, as well as at least one of the parents.
2. Second generation: students born in Switzerland to foreign-born parents.
3. Foreign-born: students born outside Switzerland to foreign-born parents.

Source: OECD, PISA database 2003.

compared with Swiss children (Figure 5.17). In 2001, only 45% of children from Turkey, Portugal or the former Yugoslavia aged 16 to 20 years were enrolled in the upper secondary cycle, compared with 80% or above of children from Switzerland, Italy, Spain, Germany, France or Austria (CDIP, 2003). Young immigrants in particular are under-represented in vocational training programmes, which play a central role in the Swiss educational system. In contrast, they are over-represented in intermediate training programmes leading to lower-level qualifications (ODM, 2006).[39]

Figure 5.17. **Young persons who have left school early by nationality**

Percentage of young persons aged 18 to 24 years who have no post-compulsory schooling and who are no longer attending school



StatLink http://dx.doi.org/10.1787/140384765705

Source: Federal Statistical Office, Swiss survey of the working population.

Some aspects of the education system are detrimental to equal opportunities

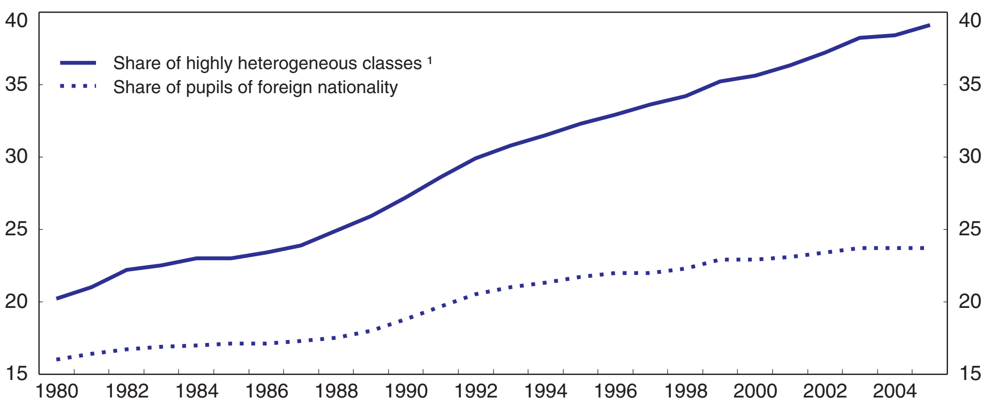
This situation is to a large extent the outcome of the large number of handicaps faced by many immigrant children. In many cases, they have to contend with a difficult socio-economic family background and parents with a low education who can offer only limited help with their children's schooling, due in part to their often inadequate knowledge of the language of the canton. Whereas 20 years ago one foreign child out of two was of Italian descent, in 2004 one out of three was from the former Yugoslavia, and the mother tongue of a large majority of such children was no longer one of Switzerland's national languages.

To resolve these difficulties, which are partly related to the influx of low-skilled workers up to the early 1980s, the school system reacted by introducing teaching support measures and by guiding children towards specific structures, as shown by the sharp increase in very heterogeneous classes (in which foreign children and children speaking a foreign language account for more than a third of the number of pupils) (Figure 5.18). This phenomenon, which above all affects the weakest streams, appears to be attributable not so much to an increased demographic concentration of immigrants in certain districts or areas as to the selectiveness of the Swiss educational system. On the other hand, the handicaps of immigrant children in socio-economic and cultural terms appear to be exacerbated by a system based on early selection. Immigrant students are also more likely to attend schools with poor disciplinary climates and lower average socio-economic status – two factors that are strongly linked with school outcomes. Indeed, pupils of foreign descent display an interest in learning, an essential pre-requisite for success at school and for their social integration (OECD, 2003c). Evidence from PISA 2003 also shows that both immigrant and native-born students report comparable schooling conditions nearing the end of compulsory schooling in terms of the quality of the physical infrastructure and educational resources in the schools they attend.

Streaming children who fail to meet the requirements of normal schools into special classes, as well as the practice of selecting pupils aged between 11 and 13 years at the end of the primary cycle by ability level (to meet elementary or advanced requirements), do not improve the education of children with learning difficulties, regardless of the quality of the

Figure 5.18. **Share of highly heterogeneous classes and share of pupils of foreign nationality in compulsory schooling**

As a percentage of total



StatLink http://dx.doi.org/10.1787/140441646373

1. Classes where children of immigrants comprise at least one third of the total.

Source: Federal Statistical Office, Statistics on pupils and students.

support provided in these classes (CDIP, 2003). It is possible to change streams by repeating a school year, but in practice the possibilities are limited (approximately 2% of established pupils do so). The past few decades have nonetheless seen the development of non-selective educational centres in the lower secondary cycle. In 2005, these models, which can co-exist alongside selective streams within the same canton, accounted for 10% of pupils compared with 2% in 1980. The PISA 2003 data show that systems catering for children with mixed levels of ability were better able to offset the effects of social inequalities than selective systems. Children need more than just good teaching. Their peers play an equally determining role, and this intermingling of children does not appear to damage the learning ability of the most able pupils (Hanushek and Wö²man, 2005). Entorf and Lauk (2007), who compared differences in the performance of immigrant children among several OECD member countries on the basis of the findings of the PISA study, show that the German and Austrian school systems, which give priority to early selection, exacerbate the impact of socio-economic and cultural factors that handicap immigrant children compared with the more "integrated" systems such as those found in Scandinavian countries.[40]

Indeed, the findings of some analyses reveal the lack of transparency in the selection of pupils for streaming into either ordinary or special classes and in that made at the end of the primary cycle. According to Kronig *et al.* (2000), who compared the performance of immigrant children in special classes with those in ordinary streams, this initial selection does not properly identify children with the greatest learning difficulties. The selection of children to be assigned to special classes, which varies substantially from one canton to another, does not appear to be non-discriminatory either (Lanfranchi, 2005).[41] Similarly, among pupils of equal ability levels, girls and boys of foreign descent had only 65% and 37% chances, respectively, of entering a lower secondary stream with extensive requirements compared with 83% and 70% for girls and boys of Swiss nationality (Haeberlin *et al.*, 2004).

According to Vellacott and Wolter (2004), this selection at a young age sends many foreign children into a downward spiral in which their options for later training and chances of a successful transition to post-compulsory education become progressively smaller. Children with given levels of ability completing a lower secondary cycle stream with elementary requirements have a lower likelihood of entering upper secondary cycle programmes[42] (Meyer 2003); and it is also harder for them to gain entry to the vocational training market. In the latter respect, foreigners suffer from an additional disadvantage arising from their lack of contact with firms that provide training as a result of the often limited social integration of their parents. Furthermore, studies have also revealed cases of discrimination in access to apprenticeships, whose number has been declining for the past few years (Haeberlin *et al.*, 2004). The probability of first- and second-generation immigrants with equivalent qualifications gaining one of the places is, respectively, less than one-quarter not far from one-half that for Swiss nationals (Table 5.6). These difficulties have an even more severe impact on young people granted temporary admission to the country with no guarantee of a residence permit (ODM, 2006).

Reforms of the educational system are desirable

The cantons and communes, which are responsible for funding and managing compulsory school programmes, have been implementing a number of reforms to improve the integration of immigrant children in the school system and to increase the proportion of those who pursue post-compulsory school studies. In light of the findings of PISA 2000,

Table 5.6. **Likelihood of finding an apprenticeship by national origin**

For students with the same credentials (school type, school marks)

Disadvantage group	Privileged group	Likelihood ratio of finding an apprenticeship between the privileged the disadvantage group
Young persons with one Swiss parent	Young persons with two Swiss parents	1.5
Second-generation young immigrants	Young persons with two Swiss parents	1.9
First-generation young immigrants	Young persons with two Swiss parents	4.4

Source: Haeberlin, U., Ch. Indorf and W. Kronig (2004), "Von der Schule in die Berufslehre. Untersuchungen zur Benachteiligung von ausländischen und von weiblichen Jugendlichen bei der Lehrstellensuche", Bern: Haupt, Bern.

in 2003 the cantons jointly adopted a series of recommendations aimed at: strengthening teaching in the official national languages, particularly for pupils with learning difficulties; stimulating early school admission for foreign children; increasing the supply of support services outside the family; and improving the transparency of the selection system. These measures, which appear to have been implemented almost in their entirety in most cantons (ODM, 2006), will be supplemented by the cross-cantonal harmonisation of compulsory schooling. A new inter-cantonal agreement (concordat), called "HarmoS", was concluded by the cantonal ministers of education in June 2007. This concordat provides for the start of compulsory schooling to be reduced to four years of age, the introduction of national educational standards and the monitoring of the educational system, which should also help to improve the integration of immigrant children in the school system (Box 5.3). This reform, which is in the process of ratification in the cantons, is expected to enter into force in 2009. From then on the cantons are given a maximum of six years to introduce all the changes.

Several measures for which the Confederation is mainly responsible have also been taken to improve the integration of immigrant children in the vocational training system. These measures are aimed at stimulating the supply of apprenticeships by developing networks of training firms by pooling the expenses and the risks run by SMEs in providing such training. Support measures for young people have also been introduced with a view to improving the information available to them or proposing individual coaching at the end of the compulsory curriculum. These measures supplement the supply of transitional solutions already in place with the introduction of a tenth year of education at the end of the compulsory schooling period for young people in difficulty and the creation of less demanding vocational courses for which a federal certificate of education is awarded.

These actions, which all move the system in the right direction, deserve to be accompanied by further reforms. For example, educational services for very young children (including below the age of 4) should be developed on a wider scale in order to provide a better response to demand. Education and care facilities for young children are weakly developed compared with other OECD countries (OECD, 2004).[43] The supply of such services, which are managed primarily at the municipal level, is too low, given the positive regional spillovers involved, because the benefits derived from their development is of very little benefit to the communes who pay for them. Reasonably priced childcare infrastructure would not only encourage the integration of immigrant children, it would also help women take up full-time work. In that respect, better co-ordination by the Confederation of the different levels of government involved would undoubtedly be useful (OECD, 2005a). The development of childcare facilities, which could benefit immigrant children, could usefully be linked with enhanced supply of language courses for their

Box 5.3. **The compulsory schooling harmonisation project at cantonal level**

The HarmoS project for the harmonisation of compulsory schooling at the level of the cantons, managed by the Conference of Public Education Directors, contains four main components:

- *First*, it provides for the creation of compulsory and free schooling for 4 year-olds, which will mean lowering the school entrance age and extending the period of compulsory schooling from 9 to 11 years. Under this new system, which consists of eight years of pre-school and primary school teaching without selection, the first years of schooling will be designed to be flexible and to take account of the development and maturity of each child by providing them, where necessary, with specific types of support.
- *Second*, efforts will also be made to improve the organisation of school hours and supply of childcare services outside normal school teaching hours (canteens, supervised homework, etc.) in order to provide a better match with parents' professional constraints.
- *Third*, the various areas covered by the basic educational programme will be harmonised throughout the Confederation.* National educational standards, setting new minimum requirements, will also be imposed at the end of the 4th, 8th and 11th year of schooling in four subjects: the local language, foreign languages (a second national language and English), mathematics and experimental sciences.
- *Fourth*, these standards will require national assessments aimed at improving the monitoring of the system on the basis of precise statistics on performance, the lack of which is currently limiting the scope of analyses (Wolter and Kull, 2007). These assessments will give schools and teachers more responsibility for achieving these educational standards. They will also help to improve the overall management of the school system with regard to the objectives set in terms of effectiveness, efficiency and fairness through historical comparisons and/or among cantons, on which a report will be published every four years.

* All pupils must be taught in five subject areas: languages (local national language, second national language and third foreign language); mathematics and natural sciences; human and social sciences; arts and creative activities; physical and health education.

mothers. It is also important to continue efforts to standardise programmes and improve the transparency of systems used to assign pupils to special classes, which need to be better integrated into the ordinary teaching system. More generally, it would be advisable to step up the current development of less selective teaching models, particularly at the end of primary school. The ability of teachers to teach mixed-ability classes and their collaboration with immigrant parents should be improved. The creation by some cantons of teams responsible for intercultural mediation between schools and immigrant families could also be encouraged (CDIP, 2003). Lastly, the support given to immigrant youths at the end of their studies in the form of coaching in order to expand their social networks and secure apprenticeships could be supplemented by actions of the same type involving assistance from immigrants' associations.

Another major area of reform to facilitate the integration of newly arrived immigrants consists of improving the recognition of qualifications and skills. The difficulty in transferring human capital is sometimes the result of the lack of formal recognition of foreign qualifications, as well as differences in the quality of education across countries or a lack of knowledge of Swiss national languages. Efforts have been made and are still being made to remove these obstacles. By signing the AFMP agreement on the free movement of persons, Switzerland has adopted the EU system of recognising qualifications between member States. This system applies to State-approved qualifications providing access to "regulated" professions, which ensures virtually automatic recognition of a small number of occupations (notably the medical profession and architects). In other cases, comparisons are made of training and professional experience and, if substantial differences are found to exist with regard to Swiss requirements, applicants can compensate for their shortcomings by taking exams or short courses.[44] To complement this system, a procedure for the assessment and recognition of foreign qualifications and certificates on request has also been developed since January 2007, for which fees are charged to cover the cost of the service. Lastly, the Federal government has also launched the Valida project – a system for validating acquired experience (OFFT, 2006). Its aim is to take better account of skills acquired informally by workers by allowing them access to federal qualifications without having to complete a traditional training programme in its entirety. This procedure, which will also help to make the most of the human capital of foreign workers whose skills have not been formally recognised, will make it easier to obtain Swiss qualifications by affording savings in terms of both financial and opportunity costs. These qualifications would be offered through complementary training programmes aimed solely at providing the skills that are lacking, in terms of language skills or general culture for example, once the existing skills of workers have been validated by means of a skills performance review. Testing of Valida, which was circulated for consultation in autumn 2006, will take place in the next two years.

The integration of foreigners into social life can be improved

Although foreigners live primarily in urban areas, there are no major problems with segregation or the emergence of "ghettoes" as in certain major cities in other OECD countries, which is a positive sign regarding the general conditions for integration. Since 1970, the concentration of immigrants has nonetheless increased in certain districts or communes, where there have been growing problems with unemployment, poor housing conditions and dependency on social assistance. Several communes have taken action to rehabilitate certain districts, with the help of the Confederation, to avoid the risk of unchecked downward spirals (ODM, 2006). While useful, such *ad hoc* actions may well prove insufficient to counter this phenomenon of concentration, whose root causes need to be remedied. A successful integration into social life can play a positive role in the cultural and economic integration of foreigners and of their children in their host country.

There would seem to be a need for further efforts to improve the integration of immigrants into social life and thereby help reduce the discrimination that hampers their entry into the labour market or access to vocational training. With this in mind, the Confederation supports projects aimed at opening up collective structures such as clubs and societies to the entire population. Private associations and organisations at the local level can play a useful role in facilitating integration. Efforts have also been made to improve the representation and participation of foreigners in Swiss society at three political levels (federation, cantons and communes) with, for example, the creation in 2000 of the Forum for the Integration of Male and Female Immigrants to act as an umbrella institution for immigrant associations. Another interesting initiative currently underway is aimed at strengthening collaboration between unemployment insurance schemes, invalidity benefits and social assistance in order to put in place a more effective and quicker overall strategy towards getting people with complex problems back into the

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labour market (CII-Mamac, 2007). This project, launched in 2005, could also make a positive contribution to the integration of foreigners. Alongside these actions, serious thought should be given to introducing stronger legal sanctions against discrimination; these appear to be less developed than in other European countries, the United States and Canada (OECD, 2006c). Even though the Federal Commission Against Racism plays a very active role in disseminating information about combating discrimination, the scope for legal redress of those unfairly discriminated against could be enhanced, possibly with the help of associations fighting against discrimination (ECRI, 2004). Besides launching campaigns against discrimination and promoting equality of opportunity, government agencies could also play a positive role and set an example by encouraging access by foreigners to jobs in the public sector where they are under-represented, even if there is hardly any regulatory obstacle to their hiring (OECD, 2006c). The effectiveness of these efforts could be supervised by the Conference of Cantonal Delegates for Integration established in 2003.

Another major component of integration policy relates to naturalisation, which concerns all three administrative levels in Switzerland. The Confederation lays down the minimum requirements for naturalisation, such as a minimum period of 12 years residency, but applicants must also possess the right to reside in a canton and commune to acquire Swiss nationality, which in practice means that they must meet conditions regarding suitability and residence that vary from one canton to another.[45] This complex procedure is severely selective, particularly at the level of the communes, as shown by the low rate of naturalisation, despite a significant increase since the early 1990s.[46] In the minds of Swiss law-makers, naturalisation is the final stage in a successful integration that must be validated by an act which has, as well as, the character of a political decision and an administrative certificate. This position, which was confirmed by referendum in 2004, with the rejection of a proposal aimed at facilitating the naturalisation of second- and third-generation foreigners, can be explained by the will to encourage immigrants to make an effort to integrate. It is a fact that naturalised citizens generally enjoy a better social position than foreign nationals within the same age bracket[47] (Mey *et al.*, 2005; Fibbi *et al.*, 2005). However, analyses have failed to determine whether this better integration is a cause or a consequence of naturalisation. On the other hand, the naturalisation process carries the risk of discrimination due to differing practices at the level of the communes (Helbling, 2003). To avoid such discrimination, a Federal court order handed down in July 2003 bans naturalisation by popular vote on the grounds that such a system does not ensure that all refusals are justified. This decision has been the subject of a fierce debate over the restriction placed by the legal executive on the democratic process. In addition, since 2006 restrictions have also been placed on the fees charged by the cantons and communes for naturalisation, which used to vary substantially. By the same token, it would be a good idea to harmonise the length of residency required by the cantons and communes, a suggestion that has also been made by the Federal Council (Federal Council, 2007). At present, some cantons and communes which impose lengthy periods of residence do not take account of periods spent in another canton or commune, which hardly helps to encourage the geographical mobility of immigrants seeking to acquire Swiss nationality.

A better understanding of the budgetary impact of immigration would be helpful

An important aspect influencing attitudes towards immigration relates to its impact on public finances. Very few analyses have been made of this subject, however, and the ones that have are all old. These studies, carried out using horizontal data dating back to 1990, indicate that immigration has a positive impact on the public accounts (Straubhaar and Weber, 1994 and 1996). The contribution made by immigrants to the social insurance accounts, and the pension system in particular, is apparently only partly offset by the impact of the net transfers received by foreigners through the supply of merit goods such as education. Although this finding is probably still correct, it should nonetheless be confirmed by carrying out complementary studies, particularly longitudinal studies, based for example on intergenerational accounts, to assess and compare the contributions and services received by immigrants with those of native Swiss nationals during their life cycle. The trend in the Swiss economy and in immigration since the early 1990s might also have had a significant impact on these results. Over the past 15 years or so, the increases in the rate of unemployment, the number of recipients of invalidity benefits or the number of poor workers, which has affected foreigners more than Swiss nationals, is likely to have reduced their net contribution to the budget.[48] On the other hand, the level of immigrants' qualifications has risen sharply compared to Swiss nationals, which tends to generate greater budgetary gains. The age structure of immigrants also suggests that many workers return to their country of origin when they retire. While their departure has no impact on the old age or invalidity pension accounts, it does, in contrast, reduce health insurance subsidies which tend to rise sharply with age.

These analyses, although hard to perform and based on assumptions that are sometimes uncertain, are likely to provide useful information for decision-makers, which would thereby avoid discussions based on partial or biased information. The distinctive way in which public finances are organised in Switzerland makes it difficult to extrapolate results obtained for other countries, particularly because these results vary according to the characteristics of immigration flows. One interesting aspect of economic policy in Switzerland that would be worth studying would be the potentially differentiated impact of immigration or the presence of cross-border workers on cantonal budgets.[49] The current reform of financial equalisation includes certain mechanisms, such as asset equalisation or cost compensation[50] to correct for differences in the income and expenditure of cantons relating to socio-demographic differences. Better information regarding the links between public finances and immigration would help to improve these balancing mechanisms.

Conclusions

Immigration is a major phenomenon in Switzerland whose positive economic impact must not be underestimated. Large-scale migratory flows and the structure of these flows, concentrated in cohorts of persons of working age with a high overall rate of employment (measured by reference to the total population), have major beneficial impacts in terms of both growth and per capita income. While foreigners clearly benefit, the inflow of this foreign labour also generates, on average, gains for Swiss nationals, without posing any major problems in terms of distribution. As in other OECD member countries, immigration has only a limited impact on the conditions of employment of native Swiss. Although the low average qualifications of foreign workers may have slowed down the modernisation of the economy and productivity gains in the past, this effect seems to have been limited. From this standpoint, current migration policy, which allows firms' demand for labour to be met through unconstrained access to EU labour and skilled labour from third countries, should enhance the positive effects of immigration by encouraging the entry of workers who are better trained and easier to integrate. This migration policy could also aid the

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emergence of a better balance between concerns of those parts of the population who feel that there are too many foreigners and the needs of the economy.

It is mainly with regard to the integration policies towards certain groups of foreigners that the authorities could make improvements. Reforms in the areas of national language teaching and the education and social integration of immigrants, such as those proposed in Box 5.4, would be desirable on the grounds of fairness and efficiency. A policy promoting

Box 5.4. **Recommendations regarding immigration policy**

Labour market

- Maintain the flexibility of the labour market, which requires cautious use of measures introduced to avoid social dumping.
- Call the employer's attention, also in the public sector, to the issue of discrimination, in order to improve the integration of foreign workers in the labour market.
- Harmonise the rules on the lengths of residency required by cantons and communes for naturalisation.
- Consider introducing asymmetric penalties for employers and illegal workers in order to enhance the effectiveness of the fight against the illegal employment of foreign workers.

Language teaching

- Improve the supply of language teaching of adults by making it more professional and by introducing a standard certification system
- Strengthen the incentives in the provisions of the Foreign Nationals Act for foreigners to enrol in these language learning courses.

Education

- Develop pre-school education services through better co-ordination of the provision of such services between different levels of government. Encourage and promote access by the foreign population to such services.
- Improve the standardisation and transparency of educational guidance systems assigning pupils to special classes and applied to pupils at the end of primary schooling.
- Step up the development of non-selective educational models in the lower secondary cycle..
- Encourage the creation of teams tasked with inter-cultural mediation between schools and foreign families. Improve the ability of teachers to teach heterogeneous classes. In the German-speaking part of the country, oblige teachers to use the standard language of instruction (German) and not the local dialect.
- Increase the involvement of immigrant associations in coaching programmes aimed at obtaining an apprenticeship for foreign children who have completed their studies.
- Continue efforts to improve the system for recognising qualifications, particularly with regard to traditional immigration countries outside the EU, and implement plans to validate skills acquired through experience.

Social integration

- Continue to promote the opening-up of clubs and societies to the population as a whole. Expand the armoury of legal measures against discrimination by improving the legal recourse available to those affected, possibly with the help of associations combating discrimination.
- Carry out longitudinal studies on the link between immigration and public finances, including the budgetary impact on cantons and communes.

greater equality of opportunities between native Swiss and foreigners with regard to education, vocational training and the labour market would improve the incentives for immigrants to invest in education as well as their chances of success. The set of proposed measures, some of which would directly help Swiss nationals, would make it possible to derive greater benefit from the input of immigrant labour whose human capital must be improved as it becomes increasingly important for the economic success of the country.

Notes

1. The proportion of foreigners ranges from 10% of the resident population in the cantons of central and eastern Switzerland to over 30% in Basle City and Vaud and nearly 40% in Geneva.
2. With the gradual improvement in their status, foreigners enjoyed enhanced opportunities for family reunion and the automatic conversion of seasonal permits into annual permits and of annual permits into establishment permits, which were not covered by the quota system. According to De Wild (1999), some 35% of low-skilled seasonal workers subsequently obtained annual permits, which is the first stage in the process of acquiring an establishment permit.
3. To offset the abolition of seasonal permits, quotas of short-term permits, applicable up until June 2007 for the EU/EFTA, were sharply increased.
4. The Foreign Nationals Act also set an outside limit of five years for family reunion involving nationals of third countries (which is not covered by quotas). The object here is to facilitate the integration of young children in the school system and prevent the system being misused to allow the children of older immigrants access to the labour market.
5. The Federal Office of Migration cannot oblige a canton to issue or refuse to issue an establishment permit. In contrast with Australia, where quotas relate solely to permanent residence permits (OECD, 2003a), in Switzerland they also apply to temporary permits, but not to their conversion into establishment permits.
6. In 1999, the decision to no longer allow asylum-seekers to work resulted in a pronounced fall in asylum applications. In April 2004, social assistance for those refused entry, awarded in respect of inappropriate or clearly unfounded requests, was abolished.
7. With effect from 2007, applicants will have to produce identity papers to avoid a decision to dismiss an application without entering into substance of the case. Furthermore, applicants have to pay costs in the event of an application for a second request to be examined. What is more, the safe country principle will also be applied. This principle enables the Federal Council to draw up a list of countries where, according to reports, there is no persecution, which avoids having to deal with asylum applications originating from these countries.
8. Increased use of short-term permits since 2002 is also a reflection of the improved economic situation and the simplification, since 2004, of the administrative procedures involved in stays of less than 90 days.
9. There are various reasons why net German immigration is increasing: *i)* a lot of border commuters are switching their domicile to Switzerland; *ii)* the economies of North East Switzerland and Southern Germany are becoming increasingly intertwined; *iii)* the German labour market has been in a difficult situation; and *iv)* there is no language barrier with German-speaking Switzerland.
10. Since the application of the AFMP, immigration by EU15/EFTA nationals for work-related reasons has risen slightly, reaching 52% of total immigration between 2002 and 2005, whereas family reunion has remained a minority reason at 31%. On the other hand, family reunion accounts for a growing share of immigration from third countries, amounting to 55% between 2002 and 2005, whereas work was a reason in only 8% of cases (Seco *et al.*, 2006).
11. Calculations of these flows take into account the limited network effects because of the reduced size of the communities deriving from these countries in Switzerland; wage and employment rate differentials between the countries of origin and Switzerland; knowledge of the language spoken in Switzerland by workers from EU10 countries and the geographical distance of these countries from Switzerland. The estimates, arrived at using this model, are consistent with the extrapolations carried out on the impact of applying the AFMP for the EU15 (Brunetti, 2004).

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12. According to Sheldon (2001), the less skilled workers are the more likely they are to set up permanently in Switzerland. The limited recourse of German immigrants to family reunion over the recent period in Switzerland could be a temporary phenomenon attributable, in part, to a cohort effect caused by the young age of these immigrants (20-34 year olds).

13. The central scenario in the latest long-term demographic projections is based on there continuing to be 38 000 naturalisations per year up until 2010 (*i.e.* the 2005 level). The latter are then expected to fall to around 28 000 per year by 2050.

14. According to the 2005 balance-of-payments figures, the total amount of funds transferred to other countries came to CHF 16.4 billion or 3.6% of GDP, while the current account surplus for the same year stood at 16.5% of GDP (see Chapter 3). Transfers by border workers accounted for CHF 12.5 billion and transfers by foreign residents for CHF 3.9 billion.

15. In 2004, the level of hourly productivity in Switzerland, measured on the basis of purchasing power parities, was 21% lower than in the United States and more than 9% lower than in the euro area. Assuming an average efficiency differential of 18% between the Swiss and immigrants, the productivity differential between native Swiss workers and their American and European counterparts falls by 4 percentage points.

16. See, for example, the articles by Sheldon (2001), Golder and Straubhaar (2002) and Gugler and Baumberger (2006).

17. Schwarz (1988) calculated that between 1962 and 1986, productivity growth, after reaching 1.9% per year on average, was reduced by 0.1 of a percentage point by immigration. According to that analysis, immigration curbed technological progress – a finding which matches that arrived at by Blattner and Sheldon (1989).

18. Between 1973 and 1977, employment among the native population fell by only 1%, compared to over 25% in the case of foreigners, large numbers of whom left the Confederation. However, the recession was also very deep: between 1973 and 1976, real GDP declined cumulatively by over 7%, the steepest fall of any OECD country, which, on average, recorded a cumulative increase of 8% over the same period.

19. The recession of the early 1990s was more pronounced in Switzerland than in the OECD average. The cumulated fall in Swiss output reached 1% between 1991 and 1993, but it was smaller than in Ireland, Sweden and Finland. Employment reduction was more marked for Swiss nationals than foreigners over this period (–2.2% for the natives against 1.1% for the foreigners between 1992 and 1994).

20. According to the OECD (2006b), immigration has an impact on unemployment at local level, *i.e.* for that segment of the native labour market with a level of education and experience similar to that of new immigrants, but also a more global impact on employment. At local level, the effect is slight but persistent, while it is rather more marked but temporary at the aggregate level. A one point rise, for example, in the share of immigrants in the labour force results in a short-term increase of 0.23 of a percentage point in the unemployment rate of native workers with similar characteristics, and of 0.44 of a point in the overall unemployment rate. After three years the overall impact disappears completely, whereas it eases slightly at local level.

21. If no account is taken of immigrants' reaction to changes in the employment situation, a small substitution effect can be detected between native and foreign employment where low-skilled labour is concerned, whereas there seems to be a relationship of complementarity in the case of skilled female jobs. The relationship is distorted, however, in that no account is taken of the fact that immigrants choose to locate where the probability of employment is greatest.

22. According to a recent analysis concerning California (Peri, 2007), the effect can even be positive if there is complementarity between foreign and native employment.

23. This study, like earlier ones, does not take account of the internal mobility caused by immigration, which tends to bias the estimated coefficients slightly towards zero. Nor does it take into account the naturalisation of a certain number of foreigners.

24. Tripartite commissions are responsible for overseeing the agreement, which guarantees that the accompanying measures are applied in a balanced manner. The notion of an actual wage to be adhered to in extending collective agreements is moreover rather vague. In the past, foreign workers' actual wages were lower than those of the Swiss.

25. The checks carried out targeted so-called sensitive industries (construction, agriculture…). Infringements were detected for 16% of the individuals checked and 6.7% of the firms. However, a

further survey conducted in the hotel and catering sector found the infringement rate to be only 1.8%.

26. According to Flückiger *et al.* (2005d), active labour market policies would have a negative impact on the probability of foreigners (and Swiss nationals) with *a priori* uniform characteristics finding a job. However, this effect might simply reflect the fact that those benefiting from such measures in reality faced greater difficulties (from unmeasured characteristics) in being re-employed than other unemployed workers.

27. The instantaneous probability of re-employment was 20% lower for nationals of new EU members than for Swiss nationals. This difference rose to 26% and 38%, respectively, for immigrants from Asia or Africa (Flückiger *et al.*, 2005c).

28. An immigrant may have the right to change canton if Switzerland has signed an establishment treaty with his/her country of origin.

29. This is perhaps partly due to the fact that traditional immigrants work in sectors that place little value on experience.

30. This discrimination was measured on the basis of fictitious applications to genuine job vacancies and a comparison of the replies received by Swiss applicants with those received by young people with a foreign surname. The percentage difference in favourable replies to either Swiss or foreign applicants is less than 10% for Portuguese immigrants, but varies from 24 to 59% for Turkish immigrants and the nationals of the former Yugoslavia according to region. In the Netherlands, Belgium, Spain and Germany, the rate of discrimination measured with regard to Moroccan and Turkish workers varied from 19 to 25% in the late 1990s and early 2000s (Fibbi *et al.*, 2003).

31. While the probability of unemployed Swiss workers finding work is lower in latin cantons than in those that are German-speaking, the reverse is observed for foreigners (Flückiger *et al.*, 2005b).

32. The efforts made by cantons to integrate foreigners also vary in policy terms. Voting rights, for example, have been granted to foreigners (in varying degrees) in only 6 out of 26 cantons.

33. The authorities decided not to provide a detailed definition in the law of the term "integration" in view of the way its meaning had changed. Article 4 of the new Foreign Nationals Act nonetheless provides four principles describing the aims of integration policy: *i*) the integration of foreigners is aimed at promoting the co-existence of the Swiss and foreign populations on the basis of constitutional values as well as respect and mutual tolerance; *ii*) it must allow foreigners legally resident on a long-term basis to participate in the economic, social and cultural life of the country; *iii*) integration is based on the premise that foreigners are willing to be integrated, on the one hand, and that the Swiss population shows openness towards them on the other; and *iv*) it is essential that foreigners familiarise themselves with Swiss society and the Swiss way of life and, in particular, that they learn a national language.

34. The languages spoken in everyday life differs, however, from the national language in the German-speaking part of the country because of the use of dialects.

35. Immigration from the Balkans and Turkey was mainly focussed on German-speaking Switzerland, while immigration from Portugal was more concentrated to the French-speaking part of Switzerland.

36. In Italian-speaking Switzerland, 80% of foreigners failed to score 2 on a scale of 5, which is insufficient to be at ease in modern society. In contrast, immigrants who have arrived since 1998, who in 60% of cases have studied up to tertiary level, score much higher than immigrants who have been established for a longer period of time in the Confederation and even better than nationals in some fields.

37. According to PISA 2003, there is a pronounced and similar shortfall in mathematics skills, for instance, for 15 year-old immigrant students from Turkey and the former Yugoslavia compared to native-born students in other European countries, including Austria, Belgium, Germany Denmark and Luxembourg.

38. According to this study conducted in Locarno, Neuchâtel and Winerthur, 70% of Swiss four year-olds attend childcare facilities outside the home compared with 50% of foreign children.

39. According to a longitudinal study conducted in 2000, two years after the end of their compulsory schooling 91% of native Swiss, 92% of young people from Northern and Western Europe, 90% of those from the first wave of immigration were enrolled in an upper secondary cycle programme. In the case of pupils from the second wave of immigration, this figure amounted to merely 79%. Approximately 13% were no longer in the educational system and 8% were in intermediate programmes, that is to say had opted for an additional year of schooling at the end of the

compulsory programme in order to improve their chances of obtaining an apprenticeship or of entering a post-compulsory schooling facility.

40. In an inter-cantonal comparison of the Swiss PISA results for 2003, cantons with non-selective school systems did not appear to have a lower proportion s of pupils with very low mathematics skills than cantons with early selection. However, selectivity was excluded as a factor that could potentially explain the share of weak performers on the basis of a univariate correlation without controlling for, for example, the simultaneous effect of socio-economic composition of the population on the share of poor performers. Such a univariate correlation is relatively vulnerable to bias, for example, if socio-economic composition also influences choice of selectivity (OFS, 2005).

41. In some cantons, the probability of an immigrant pupil being assigned to a special class is seven times higher than in other cantons. This is unrelated to the proportion of foreigners residing in the canton. The discriminatory effect was noted in the study by Lanfranchi (2005), in which school teachers and psychologists were asked to rule on fictitious cases in which only the surnames and occupation of the father were changed. The assignment to a specialised teaching stream was recommended three times as often for children from disadvantaged social classes and twice as often for foreign children.

42. For a given PISA score, the proportion of pupils entering the hardest second-cycle streams is from 60% to 200% higher for those who complete the extended-requirement programme of the first secondary cycle than those who complete the elementary-requirement stream.

43. On average only 7.2% of 3 years-old children and 31% of the 4 year-olds were participating in education and childcare facilities compared with 98% in New Zealand, 75% in Portugal and more than 80% in the United Kingdom and Sweden. Spending on early childhood education and care represented less than 0.2% of GDP in 2000 in Switzerland compared with 0.35% of GDP in New Zealand and Portugal, 0.4% in the United Kingdom, 1.1% in Finland and 2% in Sweden (OECD, 2004 and 2005b).

44. The provisions in the ACLP for the recognition of qualifications apply solely to persons wishing to enter the labour market. They cannot be invoked for the recognition of academic qualifications for the purpose of studying in Switzerland. Switzerland has signed separate agreements with its four main neighbours in that respect to facilitate the recognition of academic qualifications and is also a signatory of the Lisbon Convention. In cases where an occupation is unregulated in Switzerland (for example, hairdressers or cooks), such qualification-recognition procedures are not required, and it is therefore the employer who decides whether a foreign applicant is sufficiently skilled.

45. In practice there are two naturalisation procedures: *i)* ordinary (85% of cases), which falls mainly within the jurisdiction of the cantons and communes who set their own requirements in terms of residence and suitability; *ii)* facilitated (15% of cases, for example mixed marriages), which falls within the jurisdiction of the Confederation.

46. Two main factors explain the increase in naturalisations since the early 1990s: *i)* amendments in other countries Nationality Acts allow dual nationality, which has above all helped to increase applications from non-EU nationals; *ii)* changes in the population, with an increase in mixed marriages and an increase in the number of people meeting the minimum conditions for naturalisation.

47. Swiss-born naturalised citizens even do better at school than non-naturalised Swiss citizens, although they find it harder to capitalise on their education in the labour market, as shown by their higher rate of unemployment.

48. Between 1990 and 2002, the number of persons of foreign descent receiving an invalidity pension rose by 5.1% compared to 3.8% for Swiss nationals. In 2002-03, 26% of those receiving invalidity pensions and 43.7% of those receiving social assistance benefits were foreigners (ODM, 2006).

49. According to Kutzner *et al.* (2004), in 2001 the share of foreigners among poor workers amounted to 59% in Basel city and Fribourg but was less than 35% at the national level. Such large differences would potentially have a major impact on cantons' and communes' social assistance expenditure.

50. As a result of resource compensation, all cantons will have untied resources equal to at least 85% of the Swiss average. If immigrants are major/minor taxpayers, the balancing of resources reduces this effect. Cost compensation consists in compensating for excessive costs some cantons must bear due to their geographical location and topography, the existence of "hub towns" and their socio-demographic situation. The immigrant population is taken into account in the socio-demographic index.

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ANNEX 5.A1

The various types of immigration permits in Switzerland

	EU/EFTA countries	Other countries
Establishment permit		
C permit	Indefinite duration	Indefinite duration
	Can be issued by a canton after at least 5 years' lawful and uninterrupted stay	Can be issued by a canton after at least 10 years' lawful and uninterrupted stay or after 5 years if integration has succeeded.
	Family reunion possible	Family reunion possible within a maximum period of 5 years
	Unrestricted access to the labour market for beneficiaries of family reunion	Access to the labour market for beneficiaries of family reunion
	No quotas	No quotas
Residence permit		
B permit	Valid for 5 years if the work contract is for more than 1 year	Valid for 1 year
	Subject to quotas up until June 2007 for EU15/EFTA states, and beyond for Central and Eastern European states which joined the EU in 2004	Subject to quotas
	Renewable for 5 years without affecting quotas	Renewable every year without affecting quotas
	Family reunion possible without affecting quotas	Family reunion possible only within a period of 5 years, without affecting quotas
	Unrestricted access to the labour market for beneficiaries of family reunion	Access to the labour market for beneficiaries of family reunion
Short-term residence permit		
L permit	Period of validity based on work contract, up to 1 year	Period of validity based on work contract, up to 1 year
	Renewable once for 1 year; renewal does affect quotas	Can be extended up to a total of 24 months if the employer remains the same without affecting quotas
	Family reunion possible without affecting quotas	Family reunion possible only within a period of 5 years, without affecting quotas
	Subject to quotas if the stay exceeds 4 months, up until June 2007 for EU-15/EFTA and beyond for Central and Eastern European states which joined the EU in 2004 No permit required if stay is less than three months for nationals from the EU15/ EFTA nationals and for nationals from Central and Eastern Europe joining the EU in 2004 who provide services in some economic sectors	Subject to quotas if the stay exceeds 4 months Access to the labour market for beneficiaries of family reunion when the new Foreigners Act enters into force
Asylum seekers		
N and F permits		N permits: For asylum seekers), period of validity equal to the time taken to examine the application (6 months, can be extended)
		Possibility of being in gainful employment under certain circumstances
		F permits: For persons admitted on a temporary basis, period of validity 1 year, renewable
		Immediate access to the labour market
		Possibility of family reunion after 3 years
		Access to the labour market for beneficiaries of family reunion
		Possibility of obtaining a residence permit after 5 years
		No quotas

	EU/EFTA countries	Other countries
Border workers		
G permit	Valid for 5 years if the work contract is for more than 1 year; otherwise, period of validity equal to the length of the work contract	
	Must return home at least once a week	
	No quotas Professional and geographical mobility restricted and national preference rules applicable in transition period for nationals of states from Central and Eastern Europe which joined the EU in 2004	

Source: Office Fédéral des Étrangers (2002), "*Réglementation relative au séjour et procédures*", *Département fédéral de justice et de police*; De Coulon, C. (2006), Sopemi Report for Switzerland, OECD Directorate for Employment, Labour and Social Affairs.

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