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**Product Market Competition
and Economic Performance
in Switzerland**

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Miguel Jimenez,
Philippe Gugler**

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ABSTRACT

PRODUCT MARKET COMPETITION AND ECONOMIC PERFORMANCE

The strength of product market competition plays an important role in ensuring dynamic economic growth. This paper examines product market competition and its link with economic performance in Switzerland whose growth has been weaker than in most OECD countries since 1980. It shows that substantial progress in reforming product markets can be made in many areas, which would contribute to reduce the excessive price differential *vis-à-vis* other countries and stimulate growth. These reforms should focus on the legal framework of competition, the network industries, the health sector, the revision of the Domestic Market Act, agriculture, the restriction on parallel imports and, more generally, the opening up of services to foreign competition.

Key words: Switzerland, competition, cartel, network industries, protection, aggregate productivity and growth, parallel imports, health, agriculture

JEL Codes: K21, L42, O47, Q18, L8, L9, J18

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PRODUCT MARKET COMPETITION AND ECONOMIC PERFORMANCE

By

Claude Giorno, Miguel Jimenez and Philippe Gugler¹

Introduction

1. The relatively poor performance of the Swiss economy over the past 20 years has mainly structural roots, with cyclical factors and negative shocks playing a lesser role. Human resources are well used and highly qualified, thanks to a flexible labour market and a good education system, which explains to a large extent the high living standard. However, several markets have not functioned well and the competition framework has not provided conditions conducive to greater dynamism. This has resulted in sluggish productivity growth which largely explains the lacklustre performance of the Swiss economy. While there is a long-standing tradition of maintaining a business-friendly climate, this often translates into a mild attitude towards anti-competitive behaviour. Since the early 1990s, reforms have aimed to improve the competition framework, although the range of problems addressed is sometimes narrow, the pace of reform is slow and initiatives are often taken in reaction to developments in neighbouring countries. Moreover, reform attempts have sometimes been blocked by popular vote, perhaps because the large potential benefits of liberalisation and their compatibility with legitimate security concerns are not well understood and need to be better explained. This paper will highlight the potential gains from reforms, pointing to key areas where efforts would be most beneficial.

2. The main links between stronger competition and macroeconomic performance are reviewed in the first section of this paper, while Section 2 lays out the competition policy framework and the recent revision of the cartel law. In Section 3, competitive conditions and recent reform initiatives are analysed for a wide range of sectors. Competition in several public markets, including the key areas of public procurement and health services, are discussed in Section 4, as well as the need for deeper reform of the agricultural sector. The last section provides a summary of the recommendations and a quantification of the likely impact of reforms on GDP growth.

Macroeconomic performance and competition in goods and services markets

3. Over the last two decades, Swiss output growth was among the weakest in the OECD due to slower productivity growth (**Table 1**). This largely reflects problems with the functioning of markets and a lack of competition, but the increase in the fiscal burden and in the cost of services offered by public provision or financed by compulsory payments is also to be mentioned. Other potential causes can to a

1. This paper was originally prepared for the *OECD Economic Survey of Switzerland 2003* published in January 2004 under the authority of the Economic and Development Review Committee of the OECD. Claude Giorno and Miguel Jiménez are economists in the OECD's Economics Department and Philippe Gugler is a professor of Economic and Social Policy at Freiburg University in Switzerland and acted as a consultant for the OECD. They are indebted to Peter Hoeller, Andrew Dean, Jorgen Elmeskov and Val Koromzay and other colleagues in the OECD Economics Department for useful comments. Special thanks to Isabelle Duong for excellent technical assistance and Miki Noguchi and Celia Rutkoski for assistance in preparing the document.

large extent be ruled out: workers have a high level of training, infrastructure is well developed and information and communication technologies are used widely. Moreover, despite the high living standard the level of productivity, calculated in 2001 PPP terms on an hourly basis, is lower in Switzerland than in the United States or comparable European countries, with the room for catch-up to the best performing countries still to be exploited. Another indication of a lack of competition can be gleaned from international price comparisons, though these indicators need to be interpreted with caution.¹ The Swiss overall price level is among the highest in the world, and the difference in the price level compared with the EU average has barely fallen since the early 1990s and stood at 40 per cent at the start of this decade. One of the reasons might be the high real exchange rate.² Part of the differential also appears to stem from a higher average profit ratio than in the majority of OECD countries (Salgado, 2002), whereas less than half of this price differential can be explained by the higher standard-of-living in Switzerland than in the other countries (**Figure 1**).³

Table 1. Output, employment and productivity

| | Switzerland | Austria | France | Germany | Italy | Japan | United States | |
|---|-------------|---------|--------|---------|-------|-------|---------------|-----|
| A. Growth decomposition, 1990-2001¹ | | | | | | | | |
| Average GDP growth | 1.1 | 2.4 | 2.0 | 1.5 | 1.6 | 1.7 | 2.8 | |
| of which: | | | | | | | | |
| Productivity | 0.4 | 1.9 | 1.2 | 1.4 | 1.4 | 1.3 | 1.5 | |
| Employment | 0.7 | 0.5 | 0.7 | 0.1 | 0.2 | 0.4 | 1.3 | |
| of which: | | | | | | | | |
| Unemployment ² | -0.2 | -0.1 | 0.1 | -0.2 | 0.1 | -0.2 | 0.0 | |
| Labour force | 0.8 | 0.6 | 0.7 | 0.3 | 0.2 | 0.6 | 1.3 | |
| B. Labour productivity growth, 1990-2001³ | | | | | | | | |
| | (90-96) | (97-01) | | | | | | |
| Agriculture | -1.2 | 3.8 | 5.3 | 3.7 | 7.2 | 5.3 | -0.1 | 2.2 |
| Mining and manufacturing | 4.4 | 1.7 | 3.8 | 3.5 | 2.4 | 2.0 | 2.4 | 3.4 |
| Electricity, gas and water | 7.3 | 1.6 | 3.0 | 2.6 | 5.4 | 3.7 | 2.2 | 1.1 |
| Construction | -1.4 | 0.0 | 1.9 | -0.1 | 0.0 | -0.1 | -3.1 | 0.2 |
| Financial services | 1.8 | -0.1 | 3.3 | -1.1 | 3.2 | 2.0 | 4.2 | 3.7 |
| Non-financial services | -0.2 | 1.1 | 0.4 | 0.4 | 1.0 | 0.6 | 0.8 | 1.4 |
| <i>Memorandum items:</i> | | | | | | | | |
| GDP per capita ⁴ | 85.1 | 80.3 | 76.6 | 74.9 | 75.2 | 75.6 | 100.0 | |
| GDP per hour worked ⁴ | 87.8 | 98.1 | 105.4 | 99.1 | 108.0 | 72.3 | 100.0 | |

1. 1992-2001 for Germany.

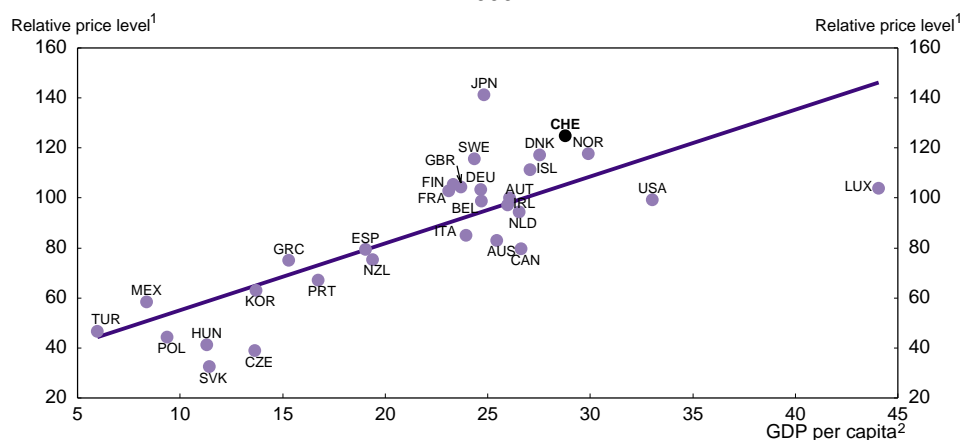
2. A positive sign indicates that unemployment has declined and contributed to boost output growth.

3. 1992-2001 for Germany and as indicated in the columns for Switzerland. For Switzerland, the sectoral productivity growth estimated in panel B is not comparable to the overall productivity growth of panel A because the production series by sector is affected by a break and the employment series used are different. The employment series used for the overall productivity is based on the number of jobs (SPA0: Employed labour force statistics) while the sectoral employment series are expressed in full-time equivalent terms and are derived from the employment data of the Entreprises' Survey.

4. 2001 levels, PPP-based. United States = 100.

Source: OFS and OECD.

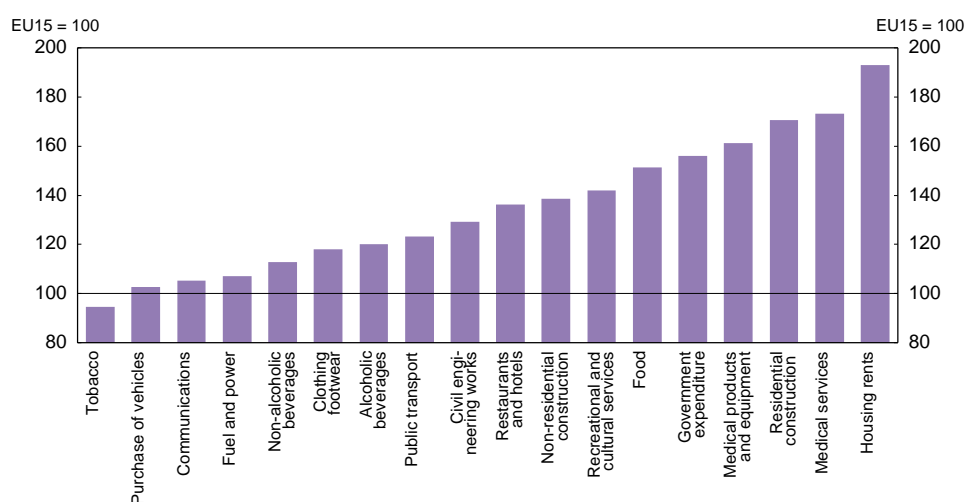
Figure 1. Relative price levels and GDP per capita
1999



1. Purchasing power parities divided by the exchange rate, OECD=100.
 2. In thousand USD, converted with the PPPs.
- Source: OECD.

4. Problems relating to competition and the functioning of product markets do not affect every sector to the same degree. Although identifying the most affected industries is complicated by the lack of detailed statistical information,⁴ the most acute problems seem to be concentrated in the sectors least exposed to foreign competition, where government intervention plays an important role. For example, the largest price differentials concern rents, health services and food (**Figure 2**). Also, as the sectoral differences in productivity growth show, efficiency gains were especially small in non-financial services and construction (**Table 1**). This latter sector has however experienced a fall in prices in the 1990s, which was at least partly explained by the adjustment following the boom in housing market at the end of the 1980s.

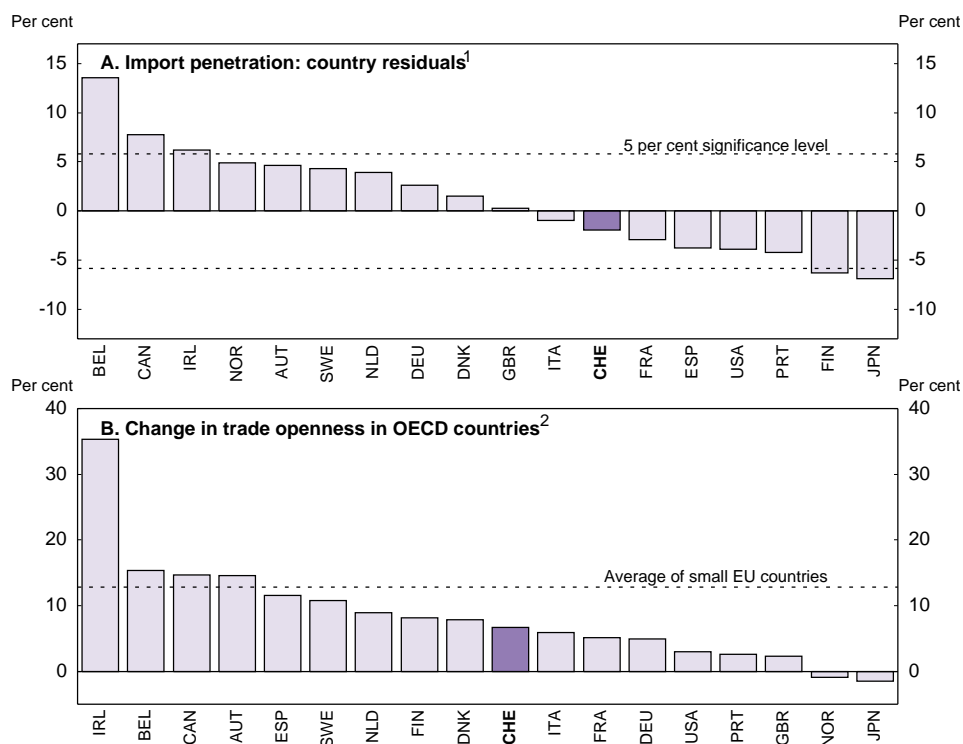
Figure 2. Price levels in Switzerland relative to the EU
2001



Source: Eurostat.

5. The strength of competitive pressures depends to a large extent on how exposed industries are to international competition. Situated at the crossroads of Western Europe, Switzerland has traditionally had a liberal foreign trade system. Tariff barriers are below the OECD average, while non-tariff barriers have remained limited as a result of efforts to lower technical hindrances to trade.⁵ External competitive pressure is further increased by the underlying real appreciation of the Swiss franc which, during the 1990s, served as a strong incentive for the industries most exposed to international trade to increase their efficiency (Gagales, 2002). However, although the average penetration rate of imports in manufacturing is similar to that of comparable economies, the degree of openness for goods and services as a whole is not particularly high when the size of the economy, the standard of living and transport costs are taken into consideration (**Figure 3**). Moreover, if the high real exchange rate were thought to account for the high price level, the low level of import penetration would appear even more surprising.⁶ Since the 1980s, openness to international trade has increased less rapidly than in the small EU countries, which might be partly the consequence of the negative 1992 referendum on membership in the European Economic Area.⁷ On the other hand, the degree of sectoral openness to foreign trade is no more heterogeneous than in other countries, although some industries are notable for having a particularly low rate of import penetration (**Table 2**). These include certain capital goods industries in which Switzerland is specialised, but also the textiles, food products, the beverage and tobacco industries, which suggests that there could be barriers to competition.

Figure 3. Indicators of trade openness



1. Residuals after control for effects of country size, GDP per capita and transportation costs.
 2. The change in trade openness for each country is defined as the difference between the average share of exports and imports to GDP in the early 2000s and the 1980s.
 Source: OECD.

Table 2. Import penetration by manufacturing industry¹
2000²

| | Switzerland | Small Eur. countries ³ | France | Germany | Italy | Japan | United States |
|--|-------------|--------------------------------------|--------|---------|-------|-------|------------------|
| Total manufacturing | 65.2 | 64.5 | 37.0 | 39.3 | 31.4 | 9.2 | 22.6 |
| Percentage difference with total manufacturing average | | | | | | | |
| Segmented, high R&D | | | | | | | |
| Chemicals and pharmaceuticals | 64.6 | -95.9 | 3.3 | 15.8 | 19.0 | 7.3 | -29.7 |
| Electrical and office machines | 13.7 | 141.7 | 91.3 | 37.8 | 50.5 | 61.9 | 143.8 |
| Communication equipment | 6.2 | 33.3 | 76.6 | 145.8 | 66.5 | 18.4 | 72.3 |
| Motor vehicles | 57.9 | 69.7 | 1.2 | -18.7 | 85.0 | -70.0 | 52.0 |
| Other transport equipment | 21.6 | 25.0 | 19.5 | 142.0 | 74.5 | 70.0 | 4.8 |
| Fragmented, high R&D | | | | | | | |
| Medical and optical instruments, watches and clocks | 9.1 | -29.1 | 16.7 | 48.8 | 89.8 | 226.4 | 5.5 |
| Machinery and equipment | 4.3 | 26.0 | 47.0 | -7.1 | 17.3 | -43.3 | 12.8 |
| Other manufacturing | 47.5 | -1.6 | -9.7 | -2.0 | -41.5 | -30.5 | 63.5 |
| Segmented, low R&D | | | | | | | |
| Basic metals | 138.5 | 14.4 | 26.3 | 20.5 | 38.0 | -27.0 | -4.0 |
| Rubber and plastic | -14.8 | 5.1 | -17.3 | -25.9 | -30.6 | 33.7 | -46.7 |
| Food, beverages and tobacco | -70.3 | -53.2 | -48.8 | -51.1 | -40.0 | 15.8 | -71.2 |
| Fragmented, low R&D | | | | | | | |
| Textile, wearing apparel and leather | 37.4 | 69.9 | 53.7 | 111.5 | -21.1 | 226.1 | 84.6 |
| Wood products | -70.4 | -45.0 | -38.9 | -47.7 | -45.1 | 154.0 | -45.6 |
| Paper products and publishing | -43.1 | -56.2 | -43.6 | -49.3 | -45.5 | -68.5 | -74.1 |
| Non-metallic products | -38.8 | -53.0 | -49.1 | -53.6 | -71.9 | -56.9 | -42.4 |
| Fabricated metal products | -59.9 | -50.8 | -61.8 | -62.0 | -76.3 | -66.9 | -61.6 |

1. The import penetration rate is defined as the share of imports in total demand (estimated as production minus exports plus imports).

2. Or latest available year.

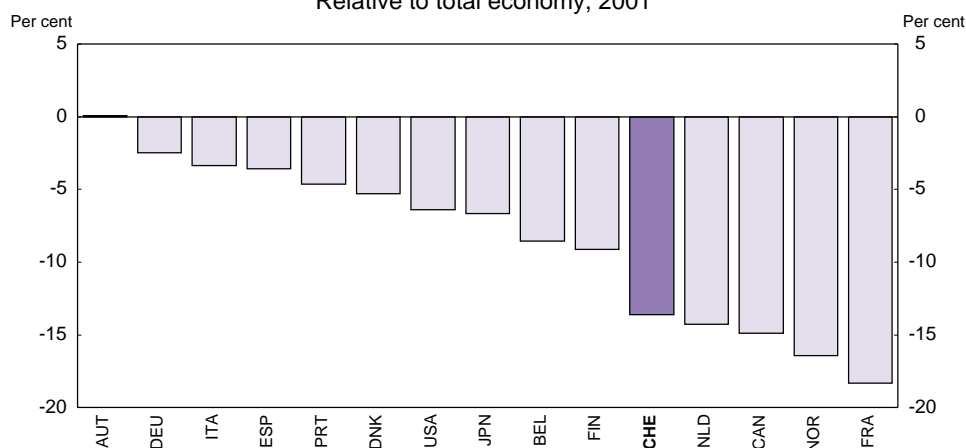
3. Non-weighted average of Austria, Belgium, Denmark, Finland, Netherlands, Norway and Sweden.

Source: OECD, Bilateral Trade database.

6. Imports are not always capable of enhancing competition in every sector: agricultural support programmes result in strong tariff⁸ and non-tariff protection, so that domestic food products are insulated from international price competition; conditions of access to certain services such as life insurance are more exacting than in the EU countries; and patented products (such as pharmaceuticals) are protected against parallel imports.⁹ Moreover, numerous products are still imported via exclusive networks that have long been protected by vertical agreements, which restrict direct imports and perpetuate price differentials with other countries.¹⁰ All in all, the degree of integration in the European market is limited by the existence of a significant border effect (de Serres *et al.*, 2001), resulting in prices that are appreciably higher than in other European countries – this border effect also applies to tradable goods that are not much protected by trade barriers.

7. Coupled with the relative isolation of some markets is the segmentation of the domestic market in a large number of sectors, which is partly due to Switzerland's federal organisation and to its linguistic disparities. While competition policy is the Confederation's domain, the cantons do have extensive powers to intervene in markets, and often control the supply and the pricing of electricity, water, gas and regional transport, resulting in large disparities between public utility prices. Cantons also have a marked influence on industries such as construction and professional services with very diverse regulations that *de facto* constitute entry barriers. The effect of a bias in public procurement in favour of local firms is enhanced by the large share of outlays decided by the cantons and municipalities. The lack of a level regulatory playing field in the domestic market deprives firms of economies of scale and reduces productivity in private non-financial services and construction, thus accentuating the dichotomy between the sheltered and the exposed sectors (**Figure 4**). Given this segmentation of domestic markets, the average concentration of firms, measured on the basis of employment data, does not seem particularly high compared with other economies of similar size, such as Austria (**Figure 5**). Switzerland's economic fabric is characterised by a relatively large number of big multinational firms, but also comprises many SMEs (**Table 3**).

Figure 4. Productivity in the construction and private non-financial service sector¹
Relative to total economy, 2001²



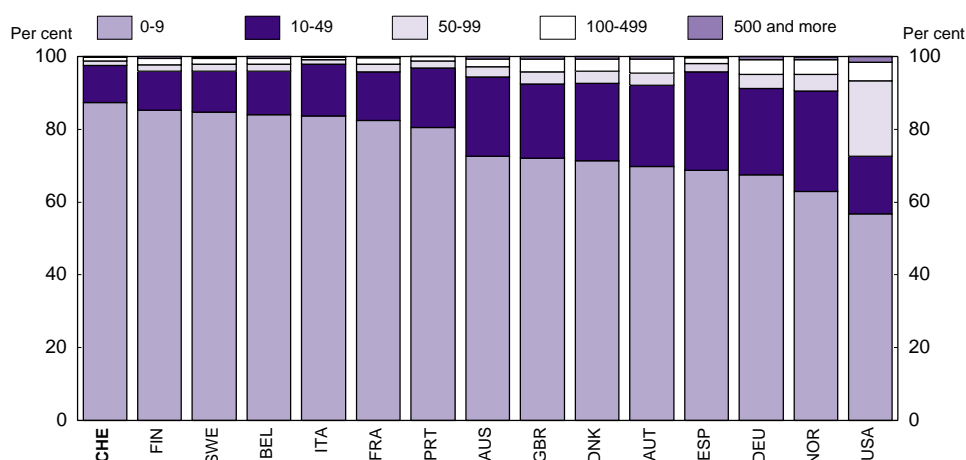
1. Construction and non-financial services excluding public administration and defence.

2. Or latest available year.

Source: OFS and OECD, STAN database.

Figure 5. Distribution of enterprises by class size

Total economy, 1999 or nearest year



Source: OFS and OECD, Statistics on Enterprises by Class Size (SEC) database.

Table 3. Hirschmann-Herfindahl indices of industry concentration

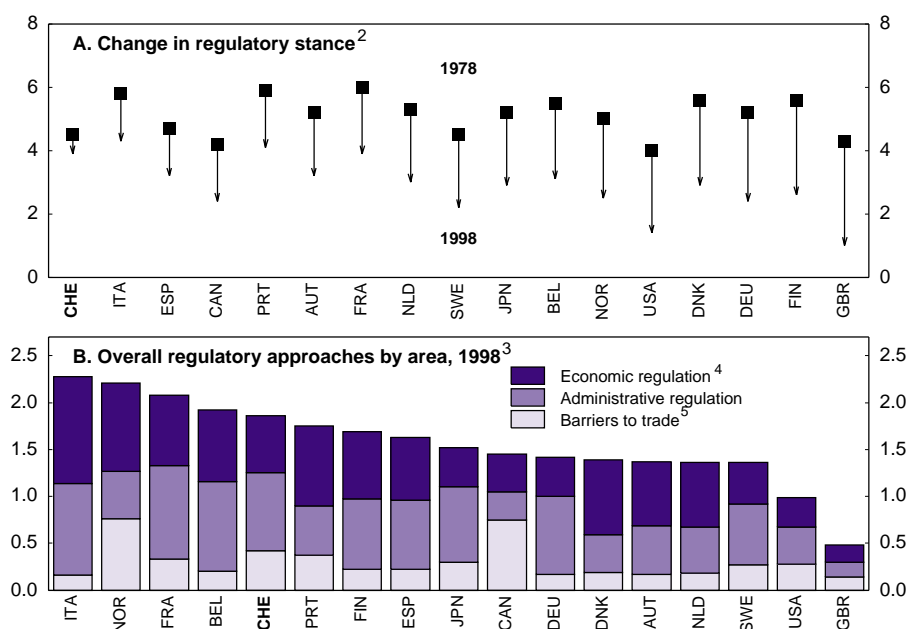
Based on employment

| | Switzerland | | Austria | France | Italy |
|---|-------------|---------|---------|---------|---------|
| | 1991 | 2001 | 1999 | 1999 | 1999 |
| Manufacturing industry | | | | | |
| <i>Segmented, high R&D</i> | | | | | |
| Chemical products | 347.0 | 179.4 | 297.1 | 33.5 | 33.6 |
| Office & computing machinery | 306.5 | 2 341.5 | -- | 1 006.2 | 700.2 |
| Electrical machinery | 137.0 | 207.2 | 161.3 | 72.2 | 16.9 |
| Radio, TV and communication equipment | 485.5 | 396.2 | 737.6 | 172.2 | 120.6 |
| Motor vehicles | 421.7 | 380.2 | 554.8 | 198.3 | 168.5 |
| Other transport equipment | 1 000.6 | 1 098.1 | 882.9 | 207.4 | 247.4 |
| <i>Fragmented, high R&D</i> | | | | | |
| Medical appliances, optical instruments, watches and clocks | 65.1 | 71.8 | 118.9 | 28.7 | 15.1 |
| Machinery and equipment | 68.4 | 45.4 | 41.8 | 17.4 | 7.1 |
| Furniture and other manufacturing | 34.1 | 32.5 | 51.4 | 31.6 | 2.1 |
| <i>Segmented, low R&D</i> | | | | | |
| Coke and petroleum products | 3 392.7 | 2 737.9 | -- | 532.2 | 678.9 |
| Basic metals | 375.0 | 262.8 | 419.0 | 117.9 | 59.9 |
| Plastic and rubber products | 85.1 | 86.7 | 88.7 | 43.6 | 17.0 |
| Food and beverages | 77.3 | 101.5 | 23.0 | 6.4 | 5.2 |
| Tobacco products | 1 920.1 | 3 088.1 | -- | -- | 2 211.7 |
| <i>Fragmented, low R&D</i> | | | | | |
| Textiles | 58.3 | 92.8 | 136.5 | 22.5 | 5.3 |
| Wearing apparel | 129.1 | 285.6 | 224.0 | 14.6 | 3.2 |
| Leather and footwear | 758.8 | 259.6 | 454.0 | 45.5 | 3.4 |
| Wood products | 9.1 | 14.6 | 49.6 | 10.4 | 1.4 |
| Paper and pulp products | 191.2 | 165.9 | 252.8 | 48.7 | 41.8 |
| Publishing and printing | 43.5 | 44.1 | 57.4 | 10.3 | 15.3 |
| Non-metallic products | 58.1 | 82.1 | 158.8 | 43.9 | 10.2 |
| Fabricated metal products | 13.1 | 10.3 | 29.8 | 4.7 | 0.8 |
| Non-manufacturing industry | | | | | |
| Electricity and gas | 220.7 | 221.4 | 359.6 | 1 377.4 | 398.7 |
| Water | 3 033.1 | 1 064.5 | 572.0 | 711.5 | 255.9 |
| Construction | 3.3 | 3.9 | 9.1 | 1.1 | 0.3 |
| Land transport | 283.6 | 243.5 | 140.5 | 103.9 | 122.7 |
| Water transport | 393.4 | 470.5 | 645.8 | 428.7 | -- |
| Air transport | 3 431.0 | 3 029.3 | -- | 1 323.3 | -- |
| Post and telecommunications | 4 782.1 | 1 741.4 | -- | 1 116.2 | 796.1 |
| Sale and repair of motor vehicles | 11.0 | 17.4 | 26.0 | 4.3 | -- |
| Wholesale trade | 10.7 | 10.6 | 16.6 | 2.3 | -- |
| Retail trade | 24.3 | 49.0 | 31.3 | 8.2 | -- |
| Hotels and restaurants | 7.7 | 7.4 | 2.5 | 5.5 | 157.1 |

Source: OFS and OECD, Statistics on enterprises by size class (SEC database).

8. International comparisons indicate the restrictive nature of Switzerland's product market regulations in the late 1990s and the limited progress of reforms in this area - compared with other countries – over the last two decades (**Figure 6**). These rigidities limit the benefits that Switzerland can derive from the globalisation process. The degree of regulation and segmentation of the domestic product market, combined with the relative isolation of some markets from foreign competition for some product categories, has the effect of reducing the expected returns on investment, which in turn curbs direct investment inflows which are not low, but concentrated in the financial sector.¹¹ That trend is reinforced by the high price level, which is keeping wages higher than in other countries even though productivity calculated over all sectors appears barely greater than elsewhere.¹²

Figure 6. Indicators of product market regulation¹



1. The regulatory stance is measured by a synthetic indicator ranging between 0 (least restrictive) and 6 (most restrictive).
2. Reports changes in the regulatory stance in seven non-manufacturing industries (gas, electricity, post, telecommunications, passenger air transport, railways and road freight) between 1978 and 1998.
3. Indicator of economy-wide product market regulations.
4. Includes barriers to competition and state control.
5. Includes trade and FDI restrictions.

Source: Nicoletti *et al.* (2001), "Product and Labour Market Interactions in OECD countries", *OECD Economics Department Working Paper*, No. 312, OECD, Paris .

9. With high labour costs, a highly skilled labour force and the trend appreciation of the currency, the Swiss economy tends to specialise in niche activities with high value added and moderate or low price elasticity, such as pharmaceuticals, precision instruments and the financial sector (**Table 4**). In manufacturing, this specialisation is based on dynamic research activity financed mainly by business. It is a strategy which allows new markets to be won thanks to quality improvements that can be protected by patents and other barriers to entry, limiting price competition. The number of patents per head is by far the highest in the OECD, while R&D expenditure as a proportion of GDP is also high, especially in the industrial sectors exposed to international competition (Table 4). However, firms often relocate their production facilities abroad to take advantage of economies of scale and gain better access to larger markets and lower production costs.¹³ Between 1995 and 2000, the average ratio of corporate investment to GDP was 1½ percentage points below the OECD average, despite interest rates being lower than in other countries. Capital outflows, which accelerated in the 1990s, were doubtless also stimulated by the attraction of the EU area for companies following the rejection of EEA membership in the 1992 referendum. All told, outward direct investment is relatively high and the difference between direct investment in Switzerland and abroad, which on average represented one-third of annual corporate investment in Switzerland between 1990 and 2000, is more unbalanced than in other countries (**Figure 7**). These outflows, which may in some cases have represented a substitute for exports, have increased the balance on investment income, which reached 7¼ per cent of GDP on average between 1998 and 2002, helping to raise Swiss national income. However, annual average GNP growth, despite exceeding that of GDP by about ¼ of a percentage point between 1990 and 2002, does not make up for the growth differential with the OECD country average, which reached about 1½ percentage points during this period.¹⁴

Table 4. Specialisation patterns and indicators of innovation in selected countries

| | Switzerland | Austria | France | Germany | Italy | EU ¹ | Japan | USA |
|--|-------------|---------|--------|---------|-------|-----------------|-------------------|------|
| Industrial structure, 2000 | | | | | | | | |
| (Per cent of total value added) | | | | | | | | |
| Agriculture | 1.2 | 2.2 | 2.8 | 1.2 | 2.8 | 2.5 | 1.3 | 1.4 |
| Mining and manufacturing | 17.9 | 21.1 | 18.0 | 22.4 | 21.1 | 19.9 | 21.2 | 16.8 |
| <i>of which:</i> | | | | | | | | |
| Chemical, rubber, plastics and fuel products | 3.4 | 3.0 | 3.5 | 3.5 | 2.8 | 3.1 | 3.2 | 2.7 |
| Machinery and equipment | 6.2 | 4.9 | 3.5 | 6.6 | 4.4 | 4.5 | 6.3 | 4.1 |
| Electricity, gas and water | 2.4 | 2.3 | 2.0 | 1.8 | 2.1 | 2.2 | 3.6 | 2.2 |
| Construction | 5.2 | 7.8 | 4.6 | 5.1 | 4.8 | 5.5 | 7.1 | 4.7 |
| Business sector services | 46.8 | 46.6 | 49.5 | 48.2 | 50.1 | 48.0 | 45.2 | 55.0 |
| Distribution | 12.5 | 12.8 | 10.2 | 11.3 | 13.1 | 11.5 | 13.2 | 17.4 |
| Restaurants and hotels | 2.7 | 4.1 | 2.8 | 1.3 | 3.6 | 2.9 | n.a. ⁵ | 0.9 |
| Finance and insurance | 16.1 | 6.8 | 5.0 | 4.5 | 6.2 | 5.2 | 5.9 | 8.7 |
| Other business services | 15.4 | 16.1 | 25.3 | 25.1 | 19.9 | 21.7 | 20.0 | 21.3 |
| Community services | 20.7 | 20.0 | 23.1 | 21.3 | 19.1 | 21.6 | 21.6 | 21.3 |
| Indicators of innovation activity | | | | | | | | |
| Investment in knowledge, ² 1998 | 4.8 | 3.5 | 4.1 | 4.2 | 2.1 | 3.8 | 4.7 | 6.0 |
| Business sector R&D: | | | | | | | | |
| Expenditure, 2000 ³ | 2.0 | 1.1 | 1.4 | 1.8 | 0.5 | 1.2 | 2.1 | 2.0 |
| Share of total R&D spending, 2000 ⁴ | 69.1 | 40.2 | 52.5 | 65.8 | 43.0 | 55.8 | 72.4 | 69.3 |
| Number of patents per million population, 1998 | 112.9 | 32.7 | 36.2 | 68.4 | 12.0 | 35.3 | 79.3 | 52.7 |
| Per cent of ICT patents in all patents, 1998 | 7.3 | 6.2 | 14.8 | 9.8 | 6.0 | 13.1 | 21.3 | 19.3 |

1. The industrial structure pertains to the euro area, excluding Ireland and Luxembourg; 1999 data

2. Total investment in higher tertiary education, R&D and software. Per cent of GDP.

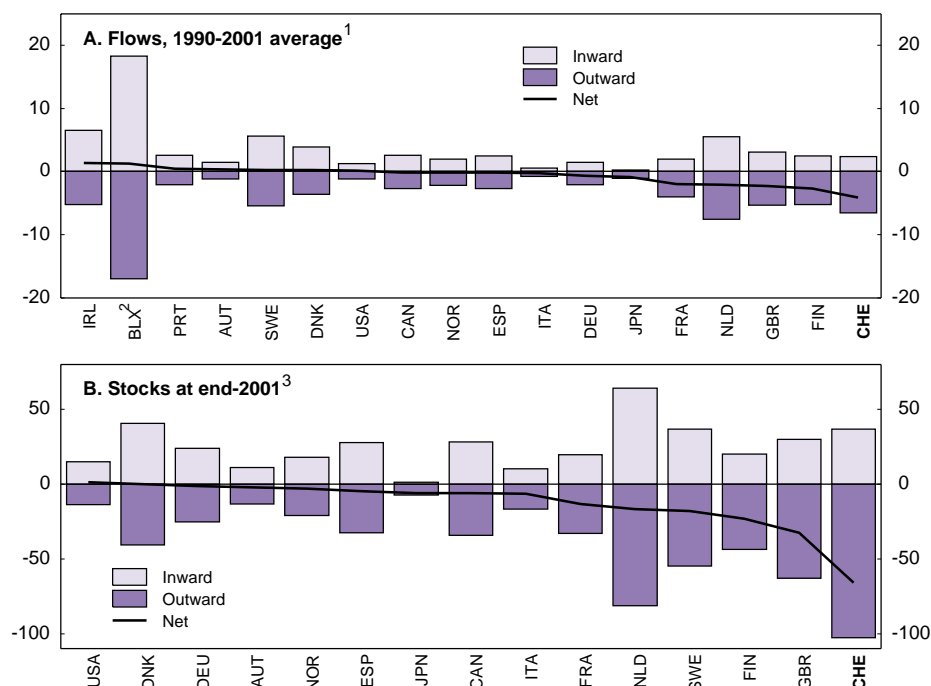
3. Business R&D expenditure as a percentage of GDP; 1998 data for Austria.

4. 1996 data for Italy

5. Include in distribution.

Source: OFS; OECD, *OECD Science, Technology and Industry Outlook*, 2002 and STAN database.

Figure 7. Foreign direct investment in OECD countries
As a percentage of GDP



1. 1998-2001 for the outward flows of Ireland.

2. Belgium-Luxembourg.

3. Or latest available year.

Source: OECD, *International Direct Investment Statistics*.

Legislation and implementation

The competition law has been reformed...

10. Legislation on competition is recent in comparison with other countries, the main texts being adopted in the mid-1990s in the context of the economic “revitalisation programme”. The texts mainly concern the Federal Act on Cartels and other Restraints of Competition (LCart), adopted in 1995; the Regulation on Business Merger Control (1996); the Domestic Market Act (1995) and the Act on Technical Hindrances to Trade (1996). LCart, which was the first legislation to give the competition authorities decision-making powers,¹⁵ was amended in June 2003 and these should enter into force in April 2004. The main amendments concerned the introduction of direct sanctions and a leniency programme, which will considerably reinforce the measures available to combat anti-competitive behaviour. Prior to this reform, sanctions could only be imposed in the event of repeated offences, which never occurred. Competition law has thus moved closer to EU law and to that of other OECD countries.

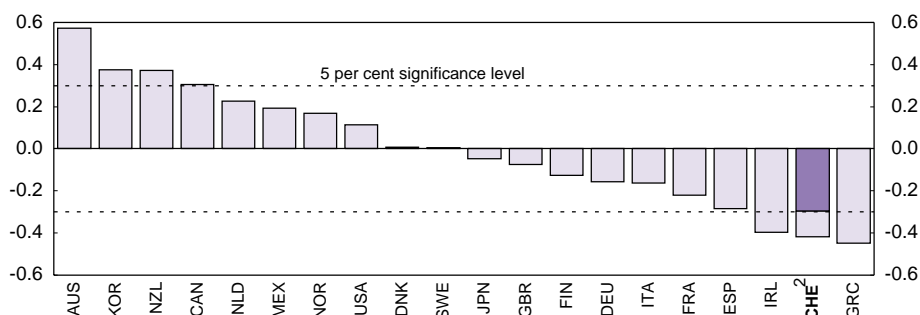
11. The competition authority, which comprises the Competition Commission (or COMCO, the decision-making body) and its Secretariat (investigation body), is responsible for applying LCart which consists mainly of rendering decisions on antitrust and merger cases. Comco can also make recommendations to the political authorities and formulate opinions on general questions relating to competition. COMCO is also empowered to ensure that the Confederation, cantons, communes and other bodies with public responsibilities comply with the provisions of the Domestic Market Act (DMA). It can, under this heading, make recommendations to them concerning legislation that is under consideration or already exists, and carry out enquiries.

12. There are bodies other than COMCO that may intervene on competition matters, notably in connection with appeals procedures.¹⁶ Amongst these bodies, the Price Surveillance Authority has particular responsibility for monitoring price trends and intervening in sectors where there are exemptions with respect to the direct application of LCart and where there is little or no competition, because prices are controlled or set by powerful companies in the absence of effective competition (the health sector is an example). The objective is to prevent excessive prices from increasing or being maintained.

13. COMCO currently has fifteen members, including six representatives of interest groups appointed by the Federal Council. All can have other appointments, so that they can, for example, sit on company boards, as some of them do. LCart stipulates that a COMCO member has to decline to give an opinion if he is liable to face a conflict of interest, but despite this provision, it seems that the independence of COMCO's decision-making is insufficiently guaranteed (Neven and Von Ungern-Sternberg, 1998),¹⁷ and the problem is going to become more acute with the application of direct sanctions and the leniency programme. With regard to being on company boards, no measures were taken as part of the 2003 revision of LCart other than to introduce a provision requiring members of COMCO to declare their interests in advance.¹⁸

14. In view of the scale of the tasks outlined by the law, the resources available to the competition authorities are limited, particularly since the latter have also to oversee compliance with the DMA. The COMCO Secretariat numbers some 45 full-time staff, which is low in international comparison even when taking into account the 15 additional posts, which should be created (**Figure 8**). Combining the resources and functions entrusted to COMCO and the Price Surveillance Authority could make for better utilisation of available resources.

Figure 8. Staff resources of competition authorities¹



1. The effect of the size of the economy on staff/GDP ratios has been estimated by the following equation:

$$\log(\text{staff}/\text{GDP}) = 0.513173 - 0.38325 \cdot \log(\text{GDP})$$

(1.5)
(-3.2)

(t-statistics in parentheses) S.E.: 0.30 R²: 0.36

The chart shows the residuals after control for effects of country size.

2. The darker colour represents the Swiss position if the staff of the competition agency is increased to 60 instead of the current 45 persons.

Source: OECD.

...but still differs from that of other countries

15. Competition law does not include any general rule on sectoral exemptions (like in the European Union) and it applies to private and public companies and events whose effects are felt in Switzerland, even if they take place abroad. However, many areas, which are subject to regulations, such as imposing a state pricing system or granting special entitlements to certain companies for carrying out public tasks, are excluded from the scope of LCart. Notable amongst the sectors at least partially exempt from competition law are agriculture, health – including pharmaceuticals - and also some of the network industries which are subject to specific regulations. In addition, the law does not apply to the effects on competition that stem solely from the legislation on intellectual property. However, the 2003 revision of LCart does limit the above exemption, noting that “import restrictions based on intellectual property rights are assessed according to the provisions of the present law”.

16. Unlike law in most other countries, where agreements are concerned, LCart is based on the abuse rather than the prohibition principle. This principle slows COMCO’s decision making process with respect to hard core cartels.¹⁹ Agreements concerning competition are only declared unlawful when they have a marked impact on competition in the market for certain goods and services and are not justified for reasons of economic efficiency or when they rule out effective competition. LCart contains a presumption of unlawfulness for horizontal price, quantity and market-sharing agreements, which brings it closer – for this type of cartel – to legislation based on the prohibition principle (Gugler and Zurkinden, 2002). The 2003 revision of LCart introduced a new presumption of unlawfulness concerning vertical agreements which impose a minimum sale price or a fixed sale price, and also regional distribution contracts when sales by other suppliers are excluded.

17. The control of business mergers rests on a system that requires the competition authority to be notified before such mergers take place. Notification is mandatory above certain thresholds²⁰ and, even if the thresholds are not reached, when COMCO has previously established that a participating firm had a dominant position on the market concerned or a neighbouring market. COMCO can prohibit the merger, or authorise it subject to certain obligations and conditions when the merger creates or reinforces a dominant position capable of eliminating effective competition and does not improve competition on another market, the beneficial effects of which outweigh the disadvantages of the dominant position. All told, Switzerland’s merger control system is more “permissive” than European law or the law of other OECD countries as only mergers liable to eliminate – and not strongly affect – competition can be prohibited or made subject to certain obligations and conditions (Venturi, 2002). However this additional criterion of eliminating effective competition has never been applied by COMCO.

The law needs to be implemented with vigour

18. As a Parliamentary report observes, the criteria and methods employed by COMCO and its Secretariat to decide whether competition in a particular market is effective have been subject to criticism (OPCA, 2000a). Under particular attack were the competences of the Secretariat and the shortcomings of the indicators on which COMCO’s decisions are based.²¹ Where, however, they have been confirmed by independent experts, these criticisms have been taken into account by the competition authorities, which have improved their methods of analysis, as a report commissioned by the Federal Department of Economy confirms (Weizsäcker, 2000).

19. Since LCart came into force in 1996, COMCO has handed down relatively few decisions concerning cartels and abuses of dominant position. However these decisions may have had a preventive impact on the behaviour of some business associations. Although some instances of anti-competitive behaviour did cease during the course of COMCO's investigations and do not therefore appear in the statistics, the "ponderous pace" feared by the OECD in 1999 has persisted (OECD, 1999).²² The wait-and-see policy regarding vertical restrictions does seem, nevertheless, to have come to an end in 2002 with the adoption of a guideline concerning the appraisal of vertical agreements, followed by a more specific one concerning these agreements in the area of motor vehicle marketing (**Annex 1**). The two guidelines signal an increased determination to combat harmful vertical agreements (Meinhardt and Merkt, 2002). The future will show whether COMCO has actually changed tack and is applying the law strictly with respect to both horizontal cartels and vertical agreements.

20. When LCart was adopted, it was not foreseen that there would be so many merger operations requiring notification.²³ And with some of the Secretariat's resources being earmarked for merger control operations, this may also be an explanation for the relatively limited results on the antitrust front. To date, COMCO has not formally banned any company merger. However in pre-notification contacts, some companies abandoned their merger plans after the authorities expressed serious doubts. Some were authorised under obligations and conditions (UBS, for example). Company merger authorisations in relatively concentrated sectors such as the press, food and distribution have raised doubts in some circles as to the actual role of merger control procedures in Switzerland (von Ungern-Sternberg, 1999.)

21. So far, the deterrent effect of the competition law was limited, reflecting the limitations of the law in force until 2003. Prior to then, COMCO could only impose direct administrative sanctions in the cases of mergers (if a company failed to make known an operation or did not comply with a ban) and breaches of the obligation to inform the authorities.²⁴ In the other cases, the sanction was indirect. In other words, when an infringement of competition was discovered, COMCO could do no more than issue a decision stating the unlawfulness of the behaviour (which can be used for claiming civil damages). The company could be sanctioned only if it did not comply with the decision once it came into force, meaning that the first infringement was not sanctioned. The 2003 revision of LCart introduced direct administrative sanctions for breaches of the law orchestrated by horizontal price, quantity and market-sharing cartels, certain types of vertical agreements and abuses of a dominant position. The amount of the fine can be up to 10 per cent of turnover in Switzerland over the previous three financial years. Along with direct administrative sanctions, a leniency programme was also introduced. These changes are welcome and signal an important step towards increasing the credibility of Swiss competition law, even though, because of the constitutional roots of the principle of abuse, it has not been possible to impose direct sanctions in every instance of the law being breached.

22. Where promoting competition is concerned, COMCO has submitted around ten recommendations, most of them to the Federal Council, but the majority have not been taken up by the authorities. Some of these recommendations relate to important issues such as the liberalisation of the non-life insurance sector, reimbursement by the sickness insurance system of drugs purchased abroad or parallel imports for products protected by patent rights. However, COMCO could have made more use of its authority to make recommendations in the key areas that have marked the economic and social policy debate in Switzerland in recent years (e.g. health, air and rail transport, energy).

23. LCart does not provide for any international legal co-operation or consultation and exchange of information system with foreign competition authorities.²⁵ Moreover, Switzerland has, to date, signed no international agreements on judicial assistance or legal co-operation with respect to competition. Contacts with foreign competition authorities are purely informal in nature. Despite their efforts and their presence at international meetings such, for example, as those of the OECD's Competition Law and Policy Committee, the Swiss competition authorities are somewhat isolated (*e.g.* no participation in European Competition Network). This does not facilitate the work of the Swiss competition authority.²⁶

Regulatory policy

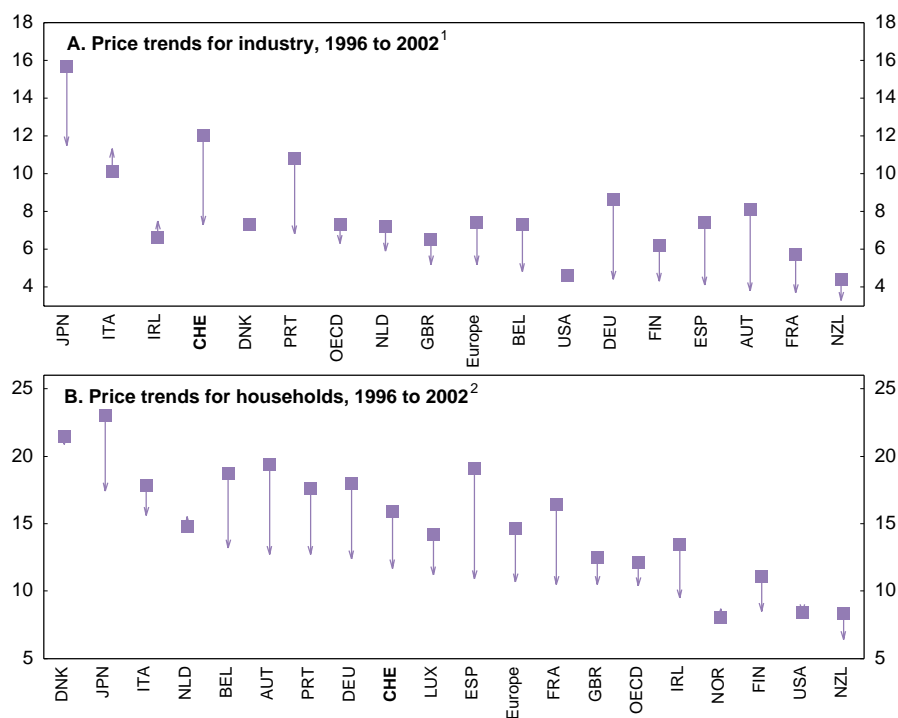
24. This section looks at those sectors which are subject to widespread regulation, including network industries like electricity and gas, telecommunications, railways and postal services, where liberalisation measures are currently being implemented, albeit more slowly than in neighbouring countries. Competition in service sectors is also analysed, in particular distribution sectors including parallel imports, and professional services, where the main challenge is to develop a true internal market.

Reform in network industries should be accelerated

New plans for electricity reform must be adopted rapidly

25. The electricity sector is composed of four vertically integrated companies that control the long-distance transmission network, and a myriad of small ones, most of them public firms owned by cantons or municipalities. Distributors enjoy *de facto* monopoly rights for regional or local areas, and set the price for electricity transmission through their networks. Their accounts are often not separated from those of local governments, and distribution is sometimes operated together with other utilities (gas and water distribution), which results in tariff structures that are not fully transparent. Revenues from electricity distribution, together with taxes on generation and transmission, which are set by cantons, are used to cross-subsidise other regional or local activities. They constitute a sizeable source of revenues for these governments (CHF 700 million a year or 0.2 per cent of GDP). The current market structure creates inefficiencies which result in electricity prices being above the OECD average (**Figure 9**), despite the fact that a large part of electricity is hydro-powered (60 per cent), and in a wide variation of prices across different types of consumers and across regions. Large firms can obtain favourable conditions from electricity generators, with average discounts of close to 30 per cent with respect to SMEs, while households pay on average 55 per cent more than businesses. Price differences across cantons can also be large, with some cantons paying for electricity four times more than others (*Surveillant de prix*, 2002).

Figure 9. Electricity prices for industry and households
In US cents/kWh



1. 2001 for Germany, Netherlands and Spain; 2000 for Austria, Belgium, OECD Europe and OECD total.

2. 2001 for Germany and Spain; 2000 for Belgium, OECD Europe and OECD total.

Source: IEA, *Energy Prices & Taxes, 3rd quarter 2003*, IEA/OECD, Paris.

26. In December 2000 the Swiss Parliament approved a reform that follows the broad principles of the EU reforms: accounting and operating separation of transmission from generation and distribution, freedom of access at transparent prices to the transmission network, which would be managed by an independent company, enforceable priorities for using the grid and clear rules for determining distribution prices. The government also prepared a regulation on the methodology to determine these prices. In parallel, several companies started merger negotiations. However, the reform was rejected by the people in September 2002. The main concerns of opponents to the reform were to maintain public service obligations and especially security of supply. Once the law was rejected, merger initiatives that might have helped to consolidate the sector were halted. A new commission (OSEL) has been set up to prepare a new reform law that should be discussed by Parliament by 2005 and enter into force by 2007, the date of complete liberalisation in the European Union.²⁷

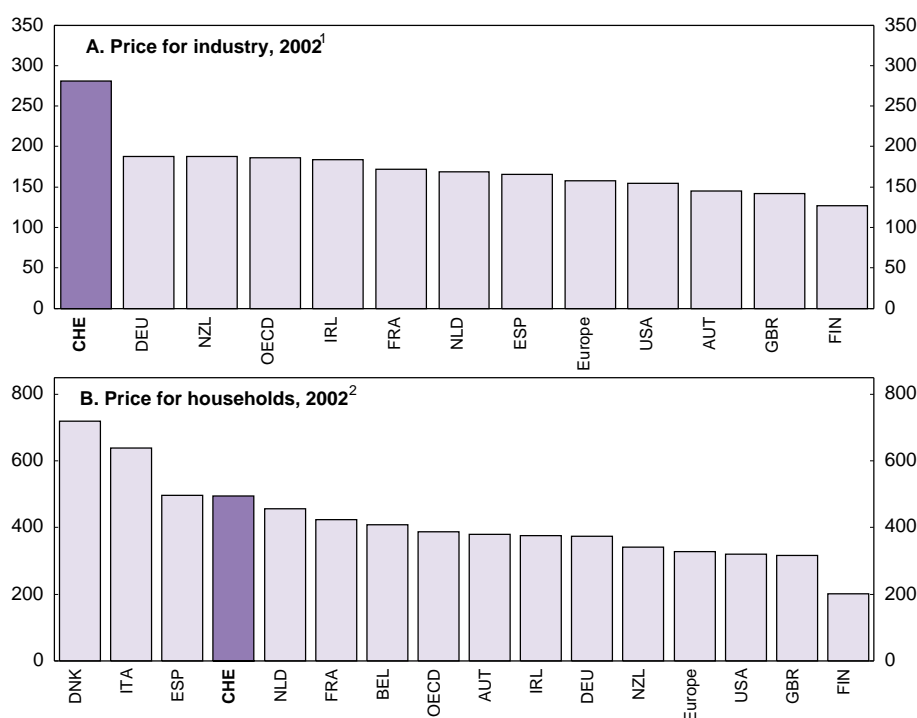
27. The new law is bound to include the backbone of the previous reform initiative, which was not controversial, including the setting up of a wholesale electricity market, the separation of transmission from generation and distribution and access pricing to the network. This should help to reduce geographical price differences, although cantons and communes will still be able to tax the electricity sector in various ways (as foreseen in the rejected reform law). The reform is also necessary to allow an EU compatible pricing regime for electricity transmission, which would benefit companies that trade electricity with neighbouring countries. Being at the centre of Europe, the business of exporting and importing electricity is very important in Switzerland, which has a well developed

transmission network (26 500 MW installed cross-border capacity) and feeds large electricity demands from other countries, especially Italy. For the time being, private arrangements are negotiated with foreign companies, but the perspective of an integrated EU electricity market requires a transparent pricing for international transmission of electricity. Some other demands of those opposing the reform during the referendum debate, which should be taken into account when drafting the new reform, should in principle not interfere with an efficient working of the market. Indeed, a strong regulator is a necessary requirement for liberalisation of a natural monopoly, while the recourse to more clean energy sources should be adopted separately with targets based on a cost-benefit analysis and could be implemented through a green certificate market applied to all renewables.²⁸ Finally, securing electricity supply is fully compatible with electricity reform, given the high degree of interconnection with other countries and the rejection of the nuclear moratorium in May 2003. The reform should go ahead quickly, not only because further delays prolong the period of higher prices faced by business consumers and households,²⁹ but also because a few cantonal governments are on the way to approve or have already adopted laws that reinforce the monopolistic power of current distributors.³⁰

The gas sector should be reformed in parallel to the electricity sector

28. The share of natural gas as primary energy source (9.3 per cent) is well below that of other countries, gas being used for industrial and domestic needs but barely for electricity generation. As in the case of electricity, a large number of companies exist in the gas industry, many of them public with management and accounts not clearly separated from those of local governments. Natural gas is imported by Swissgas, which is owned by other gas companies. The industry is vertically integrated and works in the form of local monopolies. Third party access to the high pressure network is possible since 1963, although it has only been demanded in 2001 for the first time to transport gas from the North of Europe to Italy. Gas prices are well above the OECD average (**Figure 10**).

Figure 10. Natural gas prices for industry and households
In USD per 10 millions kcal



1. 2001 for OECD total; 2000 for Germany and OECD Europe; 1999 for Austria.

2. 2001 for OECD total; 2000 for Belgium, Germany and OECD Europe; 1999 for Italy.

Source: IEA, *Energy Prices & Taxes*, 3rd quarter 2003, IEA/OECD, Paris.

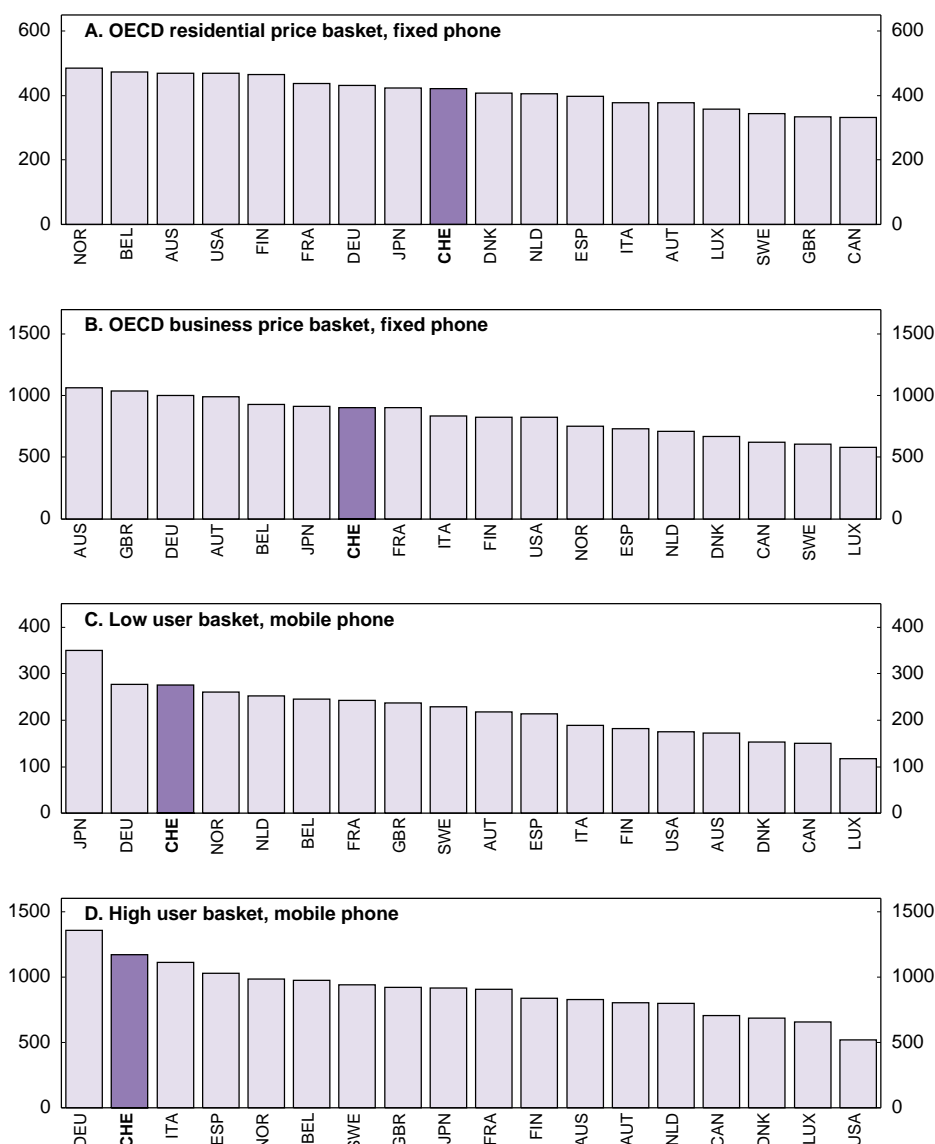
29. Liberalisation of the gas sector was being prepared prior to the September 2002 referendum on electricity reform, similar to the EU reforms, *i.e.* with regulated third party access of the gas network controlled by an independent regulator, and progressive opening of the market for large consumers first, and subsequently for small consumers and households. The idea was to implement it after the electricity reform was approved; however, the rejection of the electricity reform has halted liberalization plans for the gas sector. As an alternative, a partial opening of the market is being launched by gas operators with a series of agreements to set clear rules for determining prices for third party access to the network. However, though it is welcome, it is not sufficient to create a regulatory framework comparable to that of the EU countries. *First*, the agreement implies only a partial liberalisation of the market, since it would affect only large consumers; *second*, it does not make compulsory the separation of different activities (transport and distribution); *third*, it does not provide for an independent regulator for the sector; and fourth, it could be in conflict with anti-trust law.

30. Reform initiatives should be taken up again by the government in parallel to those in the electricity sector, so as to avoid delaying potential gains from liberalisation.³¹ Moreover, two of the main concerns of opponents to electricity reforms - the need to ensure long-term energy supplies, and providing incentives to use renewables - would be better dealt with by matching both reform processes, which would also allow the consideration of the large potential of natural gas as a primary source for electricity production.

The unbundling of the local loop is a priority in telecommunications

31. Liberalisation of the telecommunications sector started in 1998 when the new telecommunications law came into effect. The old post and telecommunication operator was divided into the public post company and an enterprise holding the telephone monopoly. This latter became Swisscom and was subsequently partially privatised.³² As in the rest of the OECD, new competitors have appeared in fixed telephony which, together with technological advances, has resulted in a price reduction of fixed telephony services over the past five years and in prices close to the OECD average (**Figure 11**). The market regulator is the Communication Commission (ComCom), which is operationally independent from the government, but depends on it for its budget.

Figure 11. Telephone prices
Total charges in USD, August 2003



Source: OECD, Communications Outlook database.

32. In fixed telephony and up to 2002, Swisscom's market share shrank from 100 per cent to 84 per cent for local calls, 66 per cent for national calls and 47 per cent for international calls. However, a major competition issue to be solved is the lack of unbundling of the local loop of Swisscom, as it was not explicitly included in the liberalisation law, contrary to most other OECD countries. This gives Swisscom a clear competitive advantage, since physical access of competitors to the last mile would allow them to make offers to their customers on an equal footing with the incumbent. The Federal Council, which is in favour of unbundling, has included unbundling in the interconnection regime via a decree, rather than a law. This implies that the ComCom, which has the competence to impose interconnection prices, can also impose unbundling at a given price.³³ However, Swisscom is not recognising these powers of the ComCom and has threatened to appeal to the court if the ComCom, in the context of an interconnection complaint, take a decision solely based on the

decree. The Federal Tribunal might take two years to come to a decision and may conclude that a new law is needed to introduce unbundling.³⁴ The Federal Council is attempting a new reform of the Telecommunications Act, which might also take some time to be implemented and has still to be drafted and debated in the Parliament.

33. The unbundling of the local loop is not only key for fixed telephony, but also for competition in the business high volume data transmission market segment, which is of special relevance for the development of cheap internet services. In particular, unbundling would favour effective competition from other companies in providing DSL services to consumers at low prices. Bandwidth transmission is also provided by cable networks, which is dominated by Cablecom. Cablecom was separated from Swisscom by the government through its sale to a foreign company in order to reduce its dominant position, and offers voice and high speed transmission services at competitive prices, posing some competitive pressure on Swisscom.³⁵ However, even though cable infrastructure is well developed, Cablecom is unlikely to rapidly expand its telephony services to the whole population, which would require large investments.³⁶ In any case, even if Cablecom would provide telephony services in the whole country, a quasi-duopoly led by Swisscom and Cablecom would emerge, with other telephone companies using the Swisscom network without locally installing their own infrastructure. This would probably not ensure a rapid transmission of efficiency gains into lower final prices.

34. Three firms provide mobile telephony services. They include the subsidiary of Swisscom, with a higher market share (63 per cent as estimated by the Federal Communications Office) than incumbent operators in other countries due to the relatively late start of liberalization, which gave a “first mover” advantage to Swisscom.³⁷ Mobile telephony prices have also declined since liberalisation started, although prices have barely changed in the last two years. Indeed, the COMCO is currently examining a case of possible horizontal price agreements between these companies.³⁸ By the end of 2004, three companies providing UMTS mobile telecommunications should operate, covering 50 per cent of the country, which might also raise competitive pressure in the high volume data transmission market.

Reforms in the railway sector could be more ambitious

35. Being at the crossroads of Europe, a large amount of land traffic passes through Switzerland. Partly for environmental reasons, and after a referendum in 1992, the Swiss Constitution incorporates a mandate to move land transport from roads to railways. The first pillar of this strategy is a large investment programme in the railway networks. The second pillar is a tax on heavy trucks, which was negotiated with the European Union in a bilateral agreement since it affects a large number of European trucks crossing the country. The third pillar aims at the liberalisation of railway transport to raise competition and thus make the switch from road transport to railways as cost efficient as possible.

36. A first reform entered into effect in 1999, including the incorporation of the main public company, CFF, which previously was an agency depending on government, and the accounting and operation separation of the network from the transport business to avoid cross subsidisation.³⁹ The reform also dealt with market access conditions. Merchandise transport was opened to competition, while scheduled interurban passenger transport remained a reserved domain of CFF. In regional passenger transport, the so called “principle of command” was implemented, whereby railway companies are only obliged to cover profitable lines or those lines for which they receive a “command” (and the corresponding subsidy) from a public administration (usually the canton, which is financially supported by the Confederation).⁴⁰ In principle, this should lead to more transparency, since subsidies will only be paid in advance for well defined services, instead of merely covering *ex post* deficits as in the past.

37. Since the reform, competition has improved, but full liberalisation is still a long way off, and there remain some obstacles to raise competition further. The major problem in *merchandise transport* concerns the slots for using the network, which are allocated by a body controlled by the largest two companies, CFF and BLS.⁴¹ The new reform does not foresee to change the system fundamentally, but the arbitration commission will receive more competences.⁴² On *international freight traffic*, a bilateral agreement with the European Union has introduced partial liberalisation of international freight transport on a reciprocal basis, allowing foreign companies to provide links with Switzerland as well as transit through Switzerland, but in some cases only in partnership with a local company. Currently, a second reform is in preparation, in parallel to that of the EU, which would withdraw this latter requirement and would allow free entry of foreign companies. In *regional passenger transport*, traditionally, more than 30 companies have provided services in the internal market, although most were tiny firms, many of them owned by cantons, while CFF had around 80 per cent of the market. The main problem in this market segment concerns the tendering of regional passenger lines. Currently cantons are not obliged to tender these lines, which are often awarded directly to specific companies, usually with public ownership (Confederation, cantons and some townships). The new reform does foresee to oblige public administrations to auction lines if the performance is notoriously inefficient. In addition, the reform also deals with the payment of subsidies whenever they go to profit making companies. Today, this is not possible since it is considered that public money paying for a universal service cannot go to “profits”, benefiting private shareholders. But this is likely to prevent competition, since it eliminates the possibility of private companies to make any “normal” profit derived from their activity, and *de facto* eliminates any incentives for private providers to make offers for tendered lines, thus reserving this part of the market to publicly owned ones. The new reform is expected to change this situation and allow for subsidies being paid to private companies.

The postal service is being opened to competition

38. Switzerland is among the OECD countries with a very dense postal network, with one office for every 2 128 inhabitants.⁴³ Some of these offices are little used, with only 25 per cent of them making a profit, resulting in an operating loss of CHF 500 million according to La Poste’s calculations, the loss being covered by profitable business in the reserved area. Prices of postal services are also amongst the highest, at current exchange rates, in the OECD. After the separation of La Poste from Swiss Telecom in 1998 and the partial liberalisation of the market, new participants raised their market share to over 25 per cent. Liberalisation continues gradually, in parallel to a reform of La Poste to reduce costs. Reform plans, which are inspired by those of the European Union, have been laid out in a white paper (“Vue d’ensemble de l’évolution future du marché postal en Suisse”), which served as background to new legislation for reforming La Poste, recently adopted by Parliament. In the debate, alternative proposals have also been presented by defenders of a strong public postal service with a wide definition of universal service, making the reform of the sector a hot issue of public debate.⁴⁴

39. For regulatory purposes, postal services are separated into three different market segments with different degrees of liberalisation. One area, which at present includes letters and parcels up to 2 kg, is reserved to La Poste. Under current reform plans competition will be extended in 2004 to all parcels, and by 2006 to letters of more than 100 g, although this second step of liberalisation has been made contingent on the result of analyses of reform processes in Switzerland and in the European Union, and on the condition that the universal service can be financed. The second area, which includes parcels of up to 20 kg, is open to competition, but universal service obligations apply to La Poste (but not to other competitors), implying that it is obliged to provide these services in the whole country at the same price. The third market segment is for parcels of more than 20 kg, which is completely liberalised, with no obligation for La Poste to provide it everywhere. Liberalisation for the first segment proceeds at a slower pace than in the EU, which at present reserves the monopoly to the

incumbent firm in each country to letters up to 100 g and will lower this limit to 50 g by 2006. By 2009, the EU is expected to completely liberalise the market for letters (OECD, 2003b).⁴⁵

40. These reforms will be complemented by a new concession regime for private postal firms. It will improve the supervision of the postal market and offer the possibility to finance, under certain provisions, the universal service. In particular, providers with more than CHF 100 000 of annual turnover should pay a charge proportional to their sales in order to compensate La Poste for providing universal service. The precise rates of this charge will be determined by the ministry, the maximum rate having been set at 3 per cent of turnover. Only if these firms extend their services to all the national territory would they be exempted. This way of financing the universal service is conditional on the accounts of La Poste, *i.e.* it would only be paid in case the public company would incur losses in the provision of the universal service in spite of operating efficiently. In order to determine this, and to avoid that La Poste cross-subsidises other segments of its activity subject to competition with the revenues received to pay universal service, a careful separation of the accounts of La Poste is needed, and must be strictly controlled by an independent regulator. Such a regulator should also ensure that automatic financing for La Poste's universal service does not result in moral hazard, eliminating the incentives for providing such service in a cost-efficient way. Before a concession charge for financing the universal service will be introduced, new business opportunities within and beyond the reserved area will have to be exploited by La Poste, and savings from restructuring the company will have to be realised. In this respect, the number of post offices has already been reduced from 3 390 to 2 951 at the end of 2002 by partly substituting unprofitable ones in remote areas by mobile offices and other reorganisations of the collection of mail. An alternative and more transparent framework for providing the universal service would be that the government calculates the net costs of universal service (including direct costs but also benefits from having nationwide delivery), and pays compensation via fiscal transfers. Such a system has been implemented, for instance, in New Zealand or Sweden. However, after an examination of different alternatives the Parliament has decided that the financing of universal service has to be funded by the sector.

Barriers to entry are restricting competition and efficiency in the food distribution business

41. The retail and wholesale distribution sector, which accounted for 13 per cent of value added and 17 per cent of total employment in 2000, is similar in size to the average for other countries. It is a sector that, in principle, lends itself to intense competition, especially as regards food even if economies of scale and of scope do foster concentration (Boylaud, 2000). In international comparison concentration is high in Switzerland, with two companies sharing over 75 per cent of the food distribution market. A fair amount of rivalry exists between the two firms, one of which is vertically highly integrated and mainly distributes its own products, while the other plays a key role in the distribution of branded goods. Productivity in retailing, indicators of which need to be interpreted with caution, does seem higher than the EU average (**Table 5**).⁴⁶ The efficiency of this sector grew more slowly than in most other countries during the 1990s (**Figure 12**). Although it is highly concentrated and many shops are grouped in networks, the food distribution business is still notable for the proportionately rather large number of small outlets, with slightly more employees than in other countries. Few hypermarkets have been built, and even they are relatively small.⁴⁷

Table 5. Key structural features of the retail sales sector
2001¹

| | Outlet density ² | Employees per enterprise | Total VA per employed person ³ | Concentration in food retail ⁴ |
|---|-----------------------------|--------------------------|---|---|
| Switzerland | 53.3 | 8.6 | 121.4 | 81.0 |
| Austria | 45.6 | 7.6 | 107.9 | 45.0 |
| Belgium | 73.8 | 3.8 | 107.0 | 48.0 |
| Denmark | 46.1 | 8.0 | 89.9 | 52.0 |
| Finland | 44.7 | 5.2 | 123.0 | 69.0 |
| France | 64.3 | 4.3 | 128.3 | 31.0 |
| Germany | 34.2 | 9.2 | 109.3 | 30.0 |
| Ireland | 44.1 | 7.8 | 97.4 | 52.0 |
| Italy | 128.8 | 2.3 | 97.1 | 9.0 |
| Netherlands | 53.6 | 8.5 | 81.2 | 41.0 |
| Portugal | 136.6 | 2.6 | 63.2 | 46.0 |
| Spain | 130.0 | 2.9 | 88.7 | 23.0 |
| Sweden | 63.9 | 4.3 | 103.5 | 60.0 |
| United Kingdom | 35.9 | 14.9 | 84.8 | 41.0 |
| Norway | 67.7 | 6.0 | 87.7 | 86.0 |
| European Union ⁵ | 70.3 | 6.1 | 100.0 | 10.0 |
| EU excl. Italy, Portugal and Spain ⁶ | 52.2 | 7.1 | 104.6 | |

1. Or latest available data.

2. Number of enterprises per 10 000 inhabitants.

3. VA expressed in USD PPP terms, European Union = 100, 1999 data.

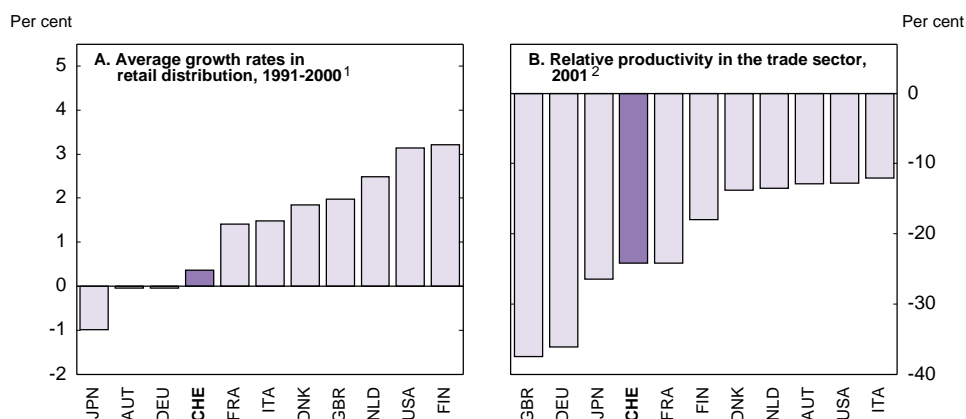
4. Market shares of the first three firms based on sales, 1996 data.

5. Non-weighted average of EU15 excluding Greece for the first three columns and including Greece but excluding Luxembourg for the fourth column.

6. Non-weighted average of EU15 excluding Greece, Italy, Portugal, and Spain.

Source: O. Boylaud and G. Nicoletti (2001), Regulatory Reform in Retail Distribution, *OECD Economic Studies*, No. 32, 2001/1; OECD and Eurostat.

Figure 12. Productivity in the trade sector



1. Austria: 1996-2000; France and Japan: 1991-98; Germany: 1992-98; Switzerland: 1991-2001.

2. Productivity in the trade sector relative to total economy, in per cent. Trade sector includes wholesale, retail trade and repairs for all countries except for Japan and the United Kingdom for which restaurants and hotels are also included.

Source: OFS; Statistics Austria; OECD, Services Statistics on value added and employment and STAN database.

42. The smallness of shops means that the range of products available is more restricted than in other countries, whereas prices are higher because of agricultural protection.⁴⁸ A number of factors hinder the opening of supermarkets, which limits scale economies and creates barriers to entry for new competitors. As in other countries, environmental protection and land-use planning regulations mean that qualified local authority approval is needed to build an outlet of over 3 000 m². Above all, however, it is the whole range of appeal procedures that is the most serious obstacle. It can delay the building of a hypermarket by between 10 and 15 years. In fact the entry of new competitors in this market segment tends to happen as a result of businesses being taken over, but that does not appear to raise competition much.⁴⁹ Another factor limiting competition is the very high cost of setting up a shop in the centre of a town. In addition, the co-operative structure of the two main distributors results in an asymmetric setup, making it very difficult to take them over, whereas both firms have been continuously buying up other companies in recent years.⁵⁰ According to Kalirajan (2000), foreign firms encounter greater impediments to market entry than domestic firms. Since 1997, however, some of the obstacles to foreign firms' purchasing land have been lifted, although there are still restrictions as to the nationality and place of residence of the members of company boards. All in all, growing concentration around a food distribution duopoly and barriers to entry are hardly conducive to efficiency as it jeopardises competition.

Vertical agreements are prejudicial to competition in non-food distribution

43. Regulations concerning shop-opening hours also affect competition. They vary from canton to canton. In many regions regulations are quite strict compared with other countries, though in some, such as Zurich, opening hours have been liberalised or are not regulated anymore.⁵¹ Moreover, some non-food outlets show fairly homogeneous prices, which would not seem related to strong competition but could rather result from producers making excessive use of recommended prices.⁵² COMCO monitors pricing, particularly in the area of consumer electronics. The most serious distribution problem, however, relates to the high prices practised by importers and wholesalers (BAK, 2001). Vertical agreements can sometimes be used by foreign producers to segment the Swiss market from foreign markets. In these agreements, Swiss distributors and consumers are forced to purchase their goods at higher prices from approved dealers since they cannot contract directly with foreign distributors with lower prices (Zäch, 2002). This contributes to consumer tourism in border regions.

44. COMCO regulations, which since February 2002 have restricted the legality of vertical agreements in general, and those in the automobile sector more specifically, are designed to stop price discrimination. Since November 2002, for example, the competition principles applicable to automobile sales are based on the new European regulations in this area (EC 1400/2002). Whereas under the previous regime, suppliers could select dealers and allow them exclusive rights for a given region, the new regulations oblige the automobile industry to authorise parallel imports from the EEA. They also make it obligatory to choose between a selective and an exclusive distribution system, permit multiple brand selling and separate sales from after-sales service.⁵³ Although the regulations could have been changed more radically, given the existing limitations prevailing at the EU level, the recent reform is a step in the right direction. A transition period for the existing agreements is scheduled up to 2005. The regulation, by encouraging imports, should reduce prices of new cars, which are generally higher than in the rest of Europe even though VAT is lower (Figure 2). After publishing a communication on vertical agreements COMCO announced that it was carrying out numerous investigations in various sectors such as car distribution, farm tractors, cosmetics and electronic goods (Flückiger, 2003). In some cases, it has been possible to reach an amicable agreement with companies, eliminating the contentious clauses. However, cartel-like behaviour does seem to persist in some sectors, for instance in the book market, which is largely supplied by imports and where two distributors hold a dominant position respectively in the French-speaking and German-speaking part of the country and can impose prices between 15 to 30 per cent higher than in Germany and France.⁵⁴

45. The possibility to block parallel imports of products protected by patents is one of the reasons for price differentials.⁵⁵ A potential for arbitrage mainly exists with regard to pharmaceuticals and certain consumer durables (computers, household appliances and consumer electronics, watches and vehicles).⁵⁶ Shifting to the international exhaustion regime for patent law, such that patent law could no longer be invoked to block parallel imports has been the subject of a lot of controversy for several years. (**Box 1**). Recently, however, the Federal Council did reject such a change. This decision was based on the results of two studies ordered by the authorities to guide their decision (Federal Council, 2002). These studies show, *first*, that liberalising parallel imports would have positive economic effects on Switzerland. However, the empirical results suggest that the gains would not exceed 0.1 per cent of GDP, despite the prices of parallel imports falling by between 14 and 32 per cent in the case of drugs and between 4 and 8 per cent for consumer goods. According to the Government's report to Parliament, this was considered a small gain. *Second*, it is also noted that introducing international exhaustion could cause difficulties in the drugs market regarding the preservation of medical safety standards. *Third*, lifting the ban on parallel imports of patent protected products would lead to competition between different countries' regulations, thereby calling into question the choices that countries make with regard to the provision of pharmaceuticals. On the other hand, keeping a national exhaustion system makes it possible, in principle, to reduce the cost of drugs going to poor countries – as the Swiss authorities want – without harming the pharmaceuticals industry in the case of re-exports to the developed countries. *Last*, the Government's reports to Parliament argue that authorising parallel imports would mean that less attention is paid to protecting patents, which could discourage research-intensive firms from setting up in Switzerland. That said, the Federal Council advocated using the law on cartels as a corrective if the patent holder makes improper use of the right to control imports. According to the Federal Court, this is the case if there are big price differences when a product is first put in circulation between Switzerland and other countries of similar economic and legal conditions. As COMCO observes, however, this particular legal framework only allows enforcing parallel imports on a case-by-case basis. Moreover, several years may elapse between the time when a complaint is received and the entry into force of a decision, with the result that the corrective instruments contained in the law on cartels are limited by comparison with the adoption of the principle of international exhaustion of patents (COMCO, 2003).

Box 1. Advantages and drawbacks of applying the international exhaustion principle to patent law

OECD countries have adopted different policies with respect to parallel imports: the United States applies the national exhaustion rule, while the EU, as a customs union, allows parallel imports between member countries, but not from third countries ("regional exhaustion"). A few countries such as New Zealand have adopted the international exhaustion principle while countries like Japan apply still another solution ("implied licence"), with some similarities with the international exhaustion principle.¹ As was observed in a recent report addressed by the Federal Council to Parliament (Federal Council, 2002), the question of the authorisation of parallel imports and the exhaustion of patent rights is complex since it affects competition and innovation policy, and also has to take account of the international context.

Economic theory is inconclusive concerning the welfare impact of bans on parallel imports, but it is admitted that, under certain assumptions, price discrimination may have positive economic effects. For instance, Malueg and Schwartz (1994) argue for a banning of parallel imports on the grounds that perfect price discrimination would result in net global output expansion and raise global welfare; it would notably ensure that low-price markets are provided with goods. This includes notably developing countries' markets, which in case of application of international exhaustion would possibly not be delivered anymore. Second, as long as producers maintain or are obliged to maintain price differentiation if parallel imports are authorised, parallel importers are exploiting the arbitrage opportunity and free-ride on the costs of research and development that patent holders incur. Third, high entry costs together with rapidly decreasing margins from parallel imports due to country size are likely to limit the number of parallel importers in a small country; the resulting oligopolistic market structure could leave little benefit for the customer.² Finally, any change in the intellectual property right system on a larger scale has to take the overall regulatory framework into consideration, in particular the balance between innovation and technology diffusion. The introduction of the international exhaustion principle carries the danger of shifting the attention of producers away from competing with innovations.

This assessment does, however, prompt a number of comments. *First*, since economic theory is inconclusive concerning the macroeconomic effects of authorising parallel imports, it is important to consider pertinent empirical work. A number of empirical studies do indicate that liberalising parallel imports has a positive impact, as suggested by the recent study ordered by the Federal Council concerning Switzerland. However, this positive macroeconomic impact seems bound to be small, as is true of any measure affecting competition only in a small part of the economy. Yet to reject this type of measure on the basis of a case-by-case evaluation runs counter to an overall strategy of stepping up competition, which is what Switzerland needs. *Second*, the main factors that make Switzerland attractive for research activity (the availability of skilled labour and quality infrastructure) would not be affected by opening up to parallel imports. Moreover, the latter would have only a very limited impact on the activity of firms carrying out their research in Switzerland, the bulk of them operating in the world market.³ *Third*, it is the drugs market regulations that appear to be responsible for most of the big drug price differentials with other countries. Ensuring competition between these regulations could prompt reforms aimed at reducing their undesirable effects in terms of economic efficiency. *Finally*, as noted in the report ordered by the Federal Council, authorising parallel imports could be compatible with low-price selling of patented drugs to poor countries thanks to the introduction of vertical agreements including, if necessary, specific labelling of drugs to prevent them being re-exported to developed countries.

All told, if it were not possible to apply the international exhaustion principle for the reasons highlighted above, an interesting alternative that has also been suggested in the Federal Council's report would be to commence negotiations with the European Union with a view to adopting the EU principle of regional exhaustion.

1. For legal aspects, see Strauss and Katzenberger (2002).
2. This is confirmed by the case of the Swiss Trademark Law where the principle of international exhaustion applies but where the prices of many branded products are still comparatively very high
3. The turnover in Switzerland of the big Swiss pharmaceutical companies accounts for only about 1 per cent of their world sales.

The reform of professional services requires a bolder and more comprehensive approach

46. Regulation of professional services is widespread in OECD countries as a means to solve consumer protection concerns or ensure a high level of professional aptitude. Such intervention is sometimes explained by the need to correct market failures, which are mostly due to information and transaction costs (OECD, 2002c). Regulatory tools vary, and include, for instance, compulsory certificates to exercise an activity, special permits to work in a given area, fixed or recommended prices etc. In many cases, however, regulations are not clearly justified by market failures and are in practice entry barriers to new professionals that limit consumer choice and reduce competition, thus pushing up prices and impeding an efficient resource allocation. In Switzerland, regulations are not only widespread but they are also in many cases the competence of cantons, resulting in segmented markets for most professions and welfare losses due to the lack of a true internal market.

47. The DMA put in force in 1996 attempted to reduce this segmentation by imposing general guidelines for cantonal regulations affecting professional activities. Specifically, the Act ruled that cantonal regulations should not discriminate against professionals of other cantons, and provided a transitional period of two years to adapt cantonal legislation that might limit free market access. However, as recognised by a Parliamentary report in 2000 (OPCA, 2000b; SECO, 2002), the Act has barely improved the situation. Although some progress has been made in certificate recognition across cantons, authorisations to exercise are still widespread, and are sometimes subject to onerous additional conditions (solvency, insurance, etc.). The DMA is a framework law, which does not foresee sector specific actions to liberalise the internal market. And it does not provide for enforcement actions against cantons which do not adapt their laws to the new principles, as it relies on individuals appealing before the tribunals. The COMCO plays only an advisory role to cantons whenever they want to consult it for writing or modifying their laws. Up to now, however, consultations have taken place in very few cases. Moreover, the COMCO is not allowed to appeal to the tribunals *ex officio* against restrictions of market access, and there are few private complaints about cantonal regulations since procedures are slow and costly, with very uncertain results. Indeed, the Federal Tribunal has given a federalist interpretation of the DMA, defending cantonal regulations when they restrict competition on the grounds that the law allows them to do so when essential public interests must be preserved. In particular, the Federal Tribunal has not recognised explicitly the freedom of establishment in the definition of free market access, and it has validated cantonal decisions that rejected foreign certificates for exercising a profession in a given canton even if they were recognised by other cantonal governments.

48. All this is reflected in effective entry barriers in several professions. Improving competition in many of these would likely have a positive impact on aggregate productivity and potential GDP growth, especially because they often concern highly-skilled workers.⁵⁷ In the case of doctors, for instance, there are strong barriers for exercising the profession and tariffs are fixed and negotiated at the cantonal level, which results in a wide price dispersion across the cantons. Paramedical professions also suffer from strong market segmentation. In the case of access to the legal profession, harmonisation across cantons has been achieved for lawyers through a federal law that took effect in June 2002, but entry to the profession continues to be restricted through a period of practice required for exercising the profession on top of holding a degree. Notaries, on the other hand, escape the application of the DMA since they are public servants, but suffer nonetheless from a segmented market since cantons may follow one of three different methods to organise the profession. In the case of architects and engineers, recommended prices are published every year by the professional association (SIA), and segmentation is still prevalent, although harmonisation at the federal level is under discussion. Other sectors, like taxi transport and restaurants and hotels, are strongly segmented with authorisations often only valid in the cantonal area. For crafts and arts, a report of the SECO found that not one of the 15 different categories in this profession is harmonised across the 26 cantons.

49. Although some harmonisation is possible through special federal laws for some professions, like the one for lawyers, the pace of harmonisation is slow. Inter-cantonal agreements are also slow to emerge and only apply to those cantons which voluntarily adhere to them. The alternative would be to reform the DMA. Given its lack of results due to its broad scope and lack of effective instruments, a new and more ambitious law should be approved that can be applied to all professions, based on the principle of free market access, which should be clearly defined and explicitly include freedom of establishment. In order for the law to be effective, cantons should be obliged to adapt their legislation to the new DMA, and the COMCO (or a new institution especially created for this purpose) should be given a clear role to supervise its implementation. Specifically, it should be able to intervene in the tribunals when it considers that cantonal legislation does not comply with the DMA. Additionally, initiatives should be taken to identify and harmonise those technical regulations in different sectors that vary across cantons or municipalities and are not clearly justified by specific local conditions.

The service sector should be opened to greater foreign competition

50. The lack of competition in the service sector, stemming in part from the segmentation of the domestic market, is heightened by the weakness of external competitive pressures. It is essential that the service sector, which accounts for two-thirds of GDP, becomes more open so as to stimulate productivity and economic growth. Freedom to provide services is thwarted by restrictions on labour market access and measures that are discriminatory in relation to national treatment. These include requirements involving commercial representation, nationality and authorisation to do business. The bilateral agreements concluded with the European Union in 1999 improve the situation. The agreement on the free movement of persons, which entered into force in June 2002, has made it easier to recruit European foreign employees. It also provides for the liberalisation of cross-border services provided by persons for up to 90 days per year, thereby enabling a foreign firm to work in Switzerland with its employees for that amount of time. But liberalisation is still only partial. For example, the current regulations do not allow EU life insurers to be present in the Swiss market on the same terms as domestic companies (and vice versa), as they are required to have an office in Switzerland and make a deposit (COMCO, 2001). In contrast, within the European Union, member country life insurance companies enjoy freedom of establishment and may freely offer their services beyond their borders without having to set up a subsidiary or a branch. Discussions have been initiated in connection with the second round of bilateral negotiations with the European Union to extend these provisions to Switzerland and to authorise reciprocal and non-discriminatory access to service markets. However, difficulties are preventing these negotiations from moving forward. For the European Union, a liberalisation agreement on services that would give competitors equal treatment must include the adoption of back-up policies. For this, a number of problems remain unresolved, including, for example, the liberalisation of the electricity market, as well as changes to competition and company law. Given these circumstances, the chances of reaching a liberalisation agreement in the service sector any time soon look rather slim, although efforts should continue to be made to push policy in this direction.

Public sector issues

51. As mentioned above, competition pressures are lacking in key areas of the public sector. This section analyses competition issues in public procurement and in the health sector, which together account for 20 per cent GDP. It also looks at the agricultural sector, by far the most subsidised sector of the economy.

Competition for procurement contracts must be strengthened further

52. The procedures for awarding procurement contracts play an important role in competition. These contracts, more than 80 per cent of which are awarded by the cantons and communes, accounted for 25 per cent of public expenditure in 2000, *i.e.* about 10 per cent of GDP, which seems low by international comparison.⁵⁸ In the last few years, the authorities have made these contracts more open to competition. The legislation governing tender procedures has been brought in line with international law (WTO agreement and bilateral agreement with the European Union), thereby increasing transparency requirements. Since 1996, for example, the contracting authorities have not been able to award contracts above certain thresholds without submitting them to competition from firms outside the region or foreign firms. Efforts have also been made to avoid bid-rigging between local firms, which appears widespread according to the competition authorities because the present legislation on cartels is not much of a deterrent. COMCO has stepped up its surveillance and in late 2001, for the first time, banned a bidding cartel.

53. A lack of reliable statistics makes it difficult, however, to quantify the positive effect of these measures. Comparing identical tenders in the Confederation between 2000 and 2002 points to appreciable reductions in prices – of close to 25 per cent on average. The number of bidders at the cantonal level has also increased under the new legislation. That said, even though the mere threat of entry, rather than actual entry in the market, from firms outside the region or the country may stimulate competition, the procurement market seems to have remained fairly closed, especially at the regional and local level. Five years after the entry into force of the new legislation, over 80 per cent of the contracts awarded in the cantons of Geneva, Vaud and Graubünden, for example, were still going to local firms, with only few contracts awarded to foreign firms. In the case of the Confederation, the foreign penetration rate of government contracts, put at between 13 and 24 per cent depending on the source, also looks low (Zogg and Duperrut, 2002).

54. There are a number of reasons for contracts being insufficiently open. *First*, the bulk of contracts is awarded at below the threshold values for open public tenders. *Second*, procurement contract legislation is not harmonised, either between the Confederation and the cantons⁵⁹ or between the cantons themselves, despite the existence of inter-cantonal co-ordination, and is very complex, which makes it difficult to apply for both bidders and contracting authorities.⁶⁰ The interaction between and overlapping of the norms governing procurement contracts accentuate the legal uncertainty, which hardly encourages bidders to appeal in the event of a procedure being disputed.⁶¹ Yet proper application of the legislation rests largely on the right of appeal, the use of which is also curbed by the high costs of the legal procedures (Stöckli and Zufferey, 2002). *Third*, when international thresholds are not met, the lower thresholds above which competition applies at national level have hitherto appreciably differed across cantons. All in all, the differences in rules, thresholds and procedures have an adverse effect on the transparency required for effective competition.

55. The authorities have recently started to tackle the obstacles to competition stemming from the fragmented nature of public procurement legislation. The cantons and communes revised the Inter-cantonal Agreement on Public Procurement (AIMP) with the objective of harmonising thresholds and procedures with respect to contracts not subject to international treaties. The revised version of the AIMP was in force in only four cantons at the start of 2003, but should be introduced in the others by 2004. The Confederation, for its part, intends to clarify and simplify federal law on procurement contracts and bring it into line with cantonal legislation. Efforts are also in progress to improve the application of procurement procedures by the federal purchasing services (Vogt, 2002) and a database is being developed in order to enhance understanding of trends in procurement contracts and assess both requirements and the impact of future reforms. Clarification is also needed regarding the conditions in which state-owned companies tender for contracts without distorting competition. As in

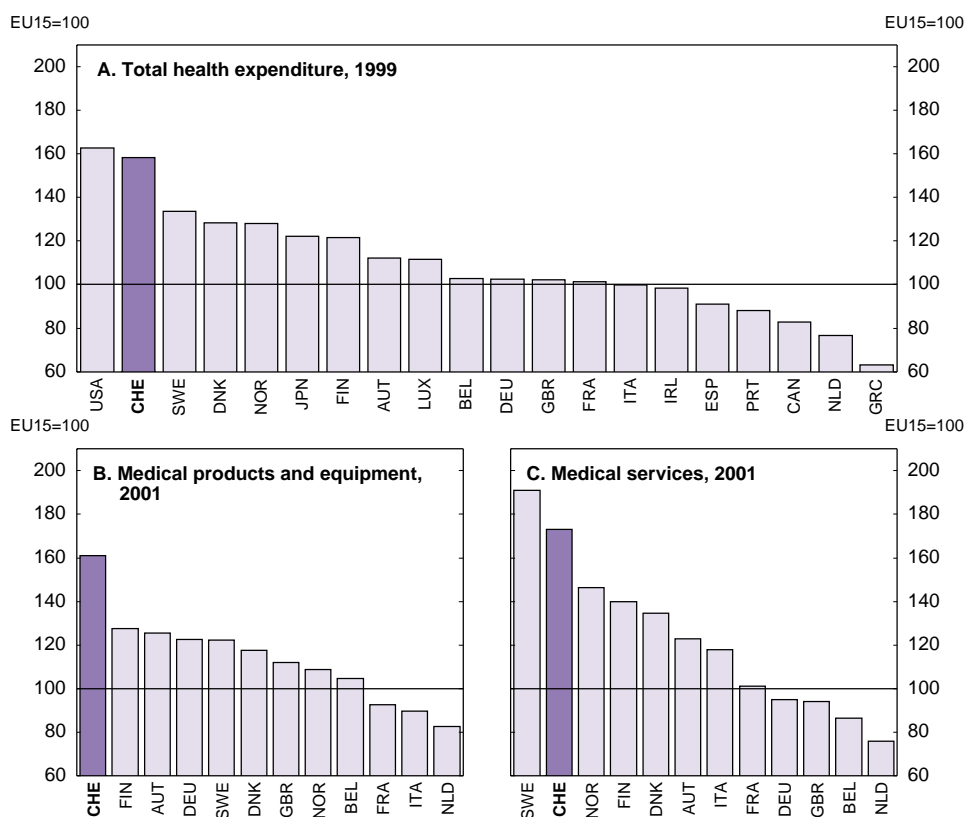
other countries, private firms are subject to taxation from which the public sector is exempt when it itself provides for its goods and services, which undermines sub-contracting and could well explain the lower share of procurement contracts than in other countries.

56. In late 2002, a “procurement contract” Internet portal was launched to pool the cantons’ and the Confederation’s calls for tender and to unify the bidding system. The site will help to increase the transparency of the market which has some 5 500 public contractors, over 98 per cent of whom operate at the cantonal and communal level. The system should encourage scale economies on standard procurement contracts and a reduction in the management costs of tendering, which should lead to lower threshold values. Rational use of public money requires that the thresholds be lowered as the transaction costs of public tendering decline. At present, many contracts fail to reach these thresholds, with the result that procurement takes place by mutual agreement or invitation. These procedures are moreover liable to be used more and more frequently by the cantons and communes because, although the AIMP has harmonised threshold values for contracts not subject to international treaties, the values have been substantially raised.⁶² Moreover, for construction, the AIMP now makes the choice of procedure dependent not on the value of all the contracts needed for the work, but on the value of each contract, with a distinction being made between the shell of a building and remaining building works (Zufferey *et al.* 2002). There is thus the risk of a splitting up of contracts limiting the application of competitive procedures. Yet it is important that safeguards be put in place against discrimination in favour of local firms. The latter are traditionally preferred by the cantonal and communal authorities on grounds of proximity, but sometimes on the basis of domicile too,⁶³ which accentuates the fragmentation of the domestic market.

The health sector is suffering from regulatory problems

57. The health sector, which accounted for almost 11 per cent of GDP in 2001, is notable for very high prices in international comparison and for being heavily regulated, even if it shares this latter feature with most other OECD countries (**Figure 13**). Demand for medical services is channelled through an insurance system that guarantees individual access to care, *i.e.* limits rationing and ensures solidarity between the insured. Restraining spending and efforts to improve efficiency therefore depend, on the one hand, on the possibilities and incentives of insurers to negotiate advantageous conditions and prices and, on the other, on the incentives that providers have to improve their efficiency. Neither prices nor supply are controlled in the current regulatory environment. In the case of drugs, for example, this is resulting in excessive growth of expenditure (**Annex 2**). As economic factors (salary, interest rate levels and hours worked) and the demographic and geographical features of the market account for no more than 3 percentage points of the price differential with Germany, the United Kingdom, France and the Netherlands, which ranges from 13 to 38 per cent (Infras/Basys, 2002), the remainder of the differential provides suppliers and distributors with a rent to the detriment of the insured.

Figure 13. Relative health price levels

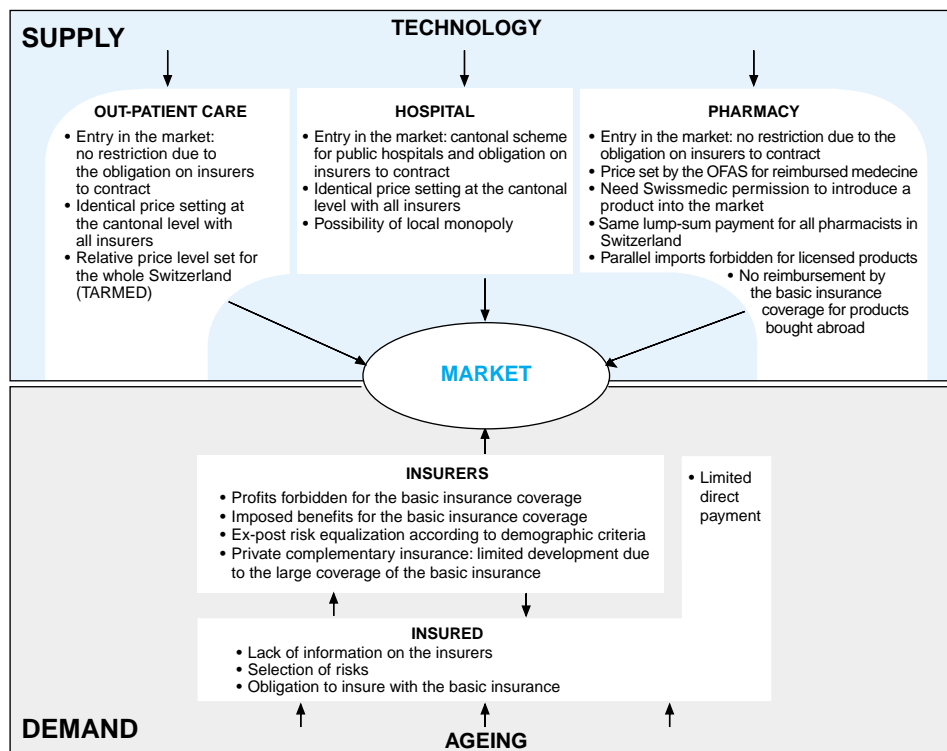


Source: Eurostat and OECD.

There is no effective competition in basic healthcare insurance...

58. Effective competition between insurers is important to increase their incentives to negotiate advantageous conditions and prices with health providers. However, the compulsory basic health care insurance market is affected by regulatory problems, partly due to the need to promote solidarity (**Figure 14**). Despite the large differences in premiums for the basic standard contracts proposed by numerous private insurance funds, few people change their insurer, which is hardly conducive to a reduction in the differences – in contrast with trends in Germany (OECD, 2003c). The weakness of market mechanisms is partly due to a problem of keeping the insured informed (Colombo, 2001), but it also reflects a tendency for insurers to select risks. It would seem that bad risks have difficulty switching across funds because the latter can select them, for example by indirectly influencing their decisions to join or to leave an insurer.⁶⁴ The risk equalisation system designed to prevent such selection needs to be improved. Differences in the state of health of the insured are hard to measure on the basis of solely socio-demographic criteria currently used for equalisation. Moreover, the latter is retroactive, which hardly encourages efficiency since cost overruns in underperforming funds are partly passed on to other insurers (Spycher, 2002). The supply of products with lower cost, like healthcare networks (HMOs), is also penalised by this system, while demand is limited because the reductions in premiums awarded to households for joining HMOs are capped (at 20 per cent for the first 5 years). Lastly, the fact that profits are not allowed to be made on basic insurance curbs incentives to be efficient and innovative. Given this context, risk selection is no doubt the best strategy for insurers if they are to attract the best customers as a way of increasing their gains on the complementary insurance market.

Figure 14. Main impediments to competition in the healthcare and insurance markets



...or between providers of medical goods and services

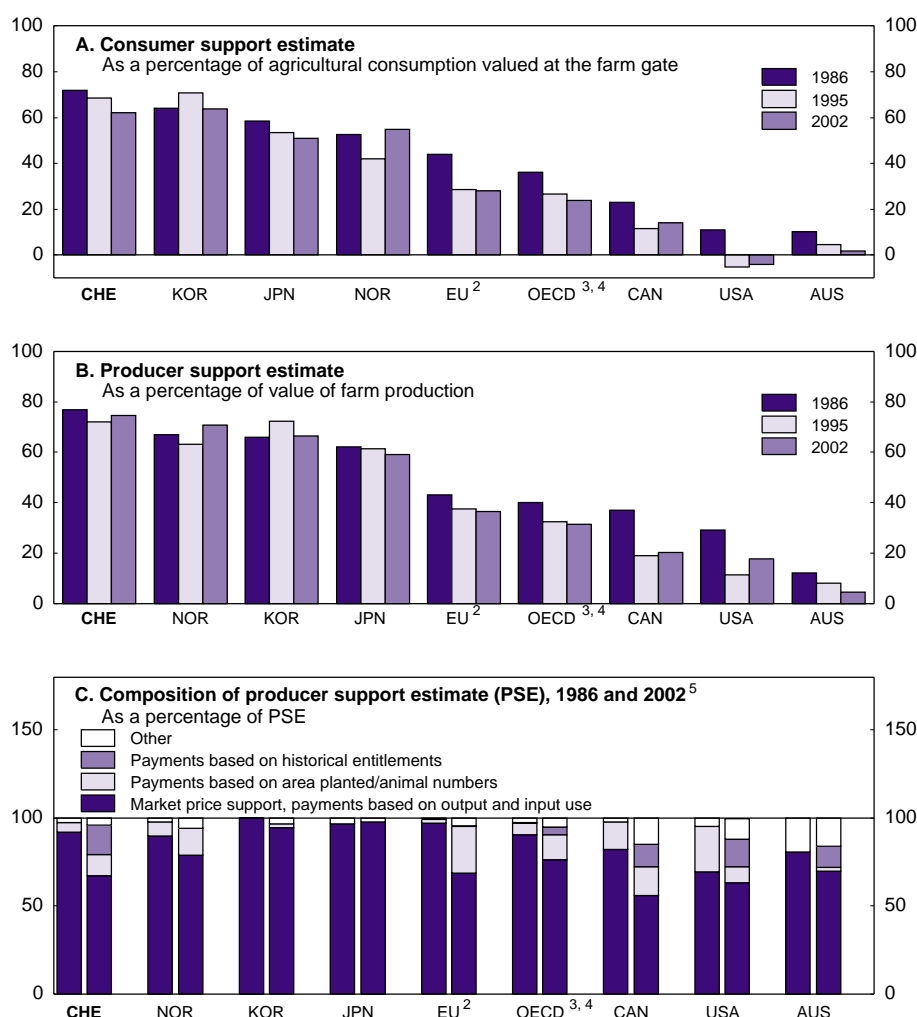
59. Competition between healthcare providers is almost non-existent because of the obligation on insurers to contract, which prevents any control over supply. All the insurers in a given canton have to accept fees from all the hospitals and private practitioners working for the basic insurance system. Moreover, the same prices, negotiated in each canton between associations of insurers and providers, apply *de facto* to all insurance funds. Since the 1996 reform, however, insurers and service providers have been legally able to sign agreements that differ from those concluded between their associations. Until now, though, very little use has been made of that possibility, with the result that price agreements are governed *de facto* by cartels (*Office fédéral des assurances sociales* or OFAS, 2001). Providers are thus not very interested in decentralised negotiations aimed, for example, at developing healthcare networks, while the cantons, which ultimately control hospital prices, seek to deal on an equal footing with the establishments that they subsidise. The end of the obligation to contract in the ambulatory sector could unblock the situation and introduce more competition by encouraging decentralised price negotiations. For that, this reform should affect in a similar way all health providers, those already in the market like those newly trained, who should be submitted to the same threat of no longer being able to practice, rather than favouring *de facto* the incumbents. In the ambulatory sector, increased price flexibility could be coupled with a reform of the pay system for doctors. They are at present being paid per item of treatment, which pushes supply. There should be more room for a system of standard payments per patient, in conjunction with the development of healthcare networks. This would help to prevent the new price system (*Tarmed*)⁶⁵ from becoming even more rigid. However, international experience shows that it is difficult to introduce real competition in the hospital sector (OECD, 2003c), the obstacles stemming in particular from the existence of local hospital monopolies and the difficulty for insurers to negotiate prices for medical treatment without having all the necessary information.

60. The drugs market is also regulated. The system for authorising the marketing of pharmaceuticals, which is state-controlled as in other countries, is complex (Annex 2). The number of authorised drugs seems limited by comparison with other countries, and only 3 per cent of them are generic.⁶⁶ The financial dependence of the authority responsible for marketing approval *vis-à-vis* pharmaceutical manufacturers has been reduced recently with the creation of *Swissmedic*. Nevertheless, such dependence could still be problematic from the competition point of view (Infras/Basys, 2002). The OFAS, the authority responsible for deciding on medicines reimbursed by the compulsory sickness insurance, which account for nearly 80 per cent of sales,⁶⁷ establishes the upper price limits for all service providers in Switzerland. It fixes these maximum prices on the basis of international and internal comparisons. Since the new Law on Sickness Insurance was introduced in 1996, some convergence towards the European price level has become apparent. On the one hand, the prices of reimbursed drugs, which can be re-evaluated after expiry of patents or after fifteen years, have been lowered by OFAS through a decree.⁶⁸ On the other hand, the rapid development of the generics market favours also downward pressures on prices.⁶⁹ However, drug prices remain often higher than in other countries, the differences being generally due to the past appreciation of the exchange rate. The considerable economic weight of the pharmaceutical industry,⁷⁰ which in addition has an advantage in terms of information, seems also to weigh on its position towards OFAS, given the existing obstacles preventing effective competition from imports in this sector. The first such obstacle is the ban on parallel imports for patent-protected products, which make up 60 per cent of the market. Since 2002, the new law on therapeutic products has however authorised imports of drugs whose patents have expired. In 2000, COMCO asked the Federal Council to authorise the reimbursement of drugs and medical products purchased abroad if they are cheaper than in Switzerland and do not pose any public health risk, which is currently not possible with basic insurance. There is no decision yet. The removal of these import barriers would encourage a fall in the prices of pharmaceuticals. The introduction of the principle of prescribing active substances rather than branded products would also make doctors more independent of the pressure exerted by the pharmaceuticals industry, and it would promote the prescription of generic drugs. To that end, it would also be necessary to suppress the possibility granted to doctors by some cantons to deliver directly medical products. Lastly, there is also room for further enhancing the new system of remunerating pharmacists based since July 2001 on a lump sum payment (rather than on margins) set at the same level throughout Switzerland. This new system contributed to diminish the price of drugs by 10 per cent on average. The lump sum payment, the introduction of which meant that pharmacists' incomes could be separated from the products prescribed, should be negotiated on a decentralised basis.

Support to agriculture remains very high

61. The agricultural sector, which accounts for roughly 1½ per cent of GDP and 3 per cent of employment, is heavily subsidised, while stiff foreign trade barriers hinder competition from abroad, pushing prices far above world levels and locking resources into a sector where Switzerland does often not have a comparative advantage. The producer support estimate (PSE), the OECD's standard measure for overall implicit and explicit subsidisation, was amongst the highest in the OECD at 73 per cent in 2000-02. It has decreased only slightly from 76 per cent since 1986-88 despite continuous reforms of agricultural policy (**Figure 15**). The PSE estimate includes transfers from consumers through higher prices (with an implicit tax of 62 per cent) and from the budget through direct payments and export subsidies. Instruments include target prices and quotas for milk, which is one of the most important products, deficiency payments for dairy farmers and direct payments for producers of oilseeds and sugar beet. Relatively high import tariffs affect several agro-food products while import quotas are used for products like milk, meat, potatoes, fruits, vegetables, bread grain and wine. Export subsidies support the selling of dairy products (of which more than 50 per cent is cheese), fruits and potatoes. While aid to agriculture has raised household incomes in rural areas, total income of farm households is less than 75 per cent of total income of all households, one of the lowest ratios in the OECD.

Figure 15. Producer and consumer support estimates for agriculture¹
Per cent



1. For detailed explanations, see Source.
 2. EU-12 for 1986, EU-15 from 1995.
 3. Austria, Finland and Sweden are included in the OECD totals for all years, and in the EU from 1995.
 4. OECD excludes the Czech Republic, Hungary, Poland and the Slovak Republic for 1986.
 5. The first bar represents 1986 and the second 2002.
 Source: OECD, *Agricultural Policies in OECD Countries - Monitoring and Evaluation*, 2003, OECD, Paris.

62. The current reform programme is laid out in the *Agricultural Policy 2002* initiative (AP 2002), which covers 2000-03 and underpins the agricultural policy objectives included in the Constitution that stress the multifunctional nature of the sector. According to the Constitution, agriculture shall contribute substantially, through sustainable and market-oriented production, to food security, to the conservation of natural resources and to a decentralised inhabitation of the country. The AP 2002 provides for the elimination of all guaranteed prices and guaranteed processing margins (already achieved) and a re-organisation of direct payments, now more linked to an environmentally-friendly agricultural management. *General Direct Payments*, which are mainly granted in the form of area and headage payments and of historical entitlements, are now attached to the condition of compliance with environmental farm-management practice requirements, while *Ecological Direct Payments* are based on input constraints and also conditioned on environmental standards. The

combined payments of all direct support amounted to CHF 2.45 billion in 2002 (0.6 per cent of GDP), 4.5 per cent more than in 2001. A new package of agricultural policy measures, *Agricultural Policy 2007*, has been approved, covering the period 2004-07 and including as key points the abolition of the milk quota system and measures to enhance rural development. Beef and pig meat import quotas should be also auctioned as from 2007.

63. These policy initiatives have contributed to shift support to more market friendly instruments. Since 1986-88, the combined share of market price support, output and input payments has been reduced from 91 per cent to 68 per cent of total support. This reduction in market protection has been reflected in a decrease of the price gap between world and domestic prices, although this gap stands still on average at around 200 per cent. The total level of support is still very high and has been reduced by little in recent years, while some types of direct payments have even increased in 2002. Even if the conditioning of aid to environmental goals has helped to improve environmental outcomes, continued support linked to the quantity of output or inputs encourage production and therefore delay the reallocation of resources to much more productive activities. In this respect, the process of decoupling of subsidies from production should be accelerated. The environmental benefits provided by agriculture as a public service, like a pleasing country side and the contribution to biodiversity, should be clearly identified and if possible quantified, and provided directly rather than through policies that stimulate output (OECD, 2002e). Similarly, income support in rural areas should be provided with instruments that concentrate on poorer households rather than general measures that apply to all farmers. In this sense, incentives to reallocate employment to alternative activities could help to raise incomes in rural areas and reduce future support.

General assessment and the need for further reforms

64. Realising the need to strengthen competition to stimulate economic growth, which has been sluggish, the authorities have launched a number of reforms. Liberalisation measures are scheduled in certain sectors, such as telecommunications and postal services. The recent revision of the Cartel Act, which provides for sanctions against anti-competitive behaviour without waiting for a second offence, crucially increases the deterrent effect of the legislation. This is an important step in the right direction. These enacted or planned reforms are, however, in many cases no more than a belated and partial catch-up on regulatory reforms in other countries, and further progress is essential. The limitation of sanctions to only certain types of illegal acts, while the most damaging ones, shows that there remains a potential to develop the Swiss competition culture further. A more broad-ranging and ambitious strategy of reform in the goods and services market is needed to give fresh impetus to the economy. It should be three-pronged and inspired by the recommendations in this report, which are spelt out in **Box 2**.

Box 2. Recommendations aimed at increasing competition in the goods and services markets

A number of reforms or draft reforms aimed at strengthening competition have been launched in the last few years. In many cases, however, they were no more than a belated and partial catch-up with other countries, and further progress is essential. As the analysis contained in this report suggests, an ambitious, three-pronged reform strategy should be implemented. It is important to ensure that competition law, which could be further strengthened, is strictly applied, that competitive pressure in the sheltered sectors will increase, while certain industries should become more exposed to foreign competition.

Reform and application of competition law

- Apply the Cartel Law in a rigorous, effective and comprehensive way.
- Ensure the economic and political independence of the COMCO by eliminating members that represent economic interests.
- Increase COMCO's financial resources and personnel.
- Envisage co-operating internationally in competition matters.
- Change the constitutional clauses that hinder the Cartel Law to apply the prohibition principle for cartels during the next revision of the Constitution.
- Consider introducing criminal sanctions as a means of punishing people responsible for the most serious anti-competitive behaviour.

Strengthening competition in the sheltered sector

Health sector

- Improve and centralise the information services about insurance funds; encourage a simpler and more homogeneous presentation of comparisons between premiums.
- Extend the risk equalisation system beyond 2005; perform the relevant calculations at least partly in a forward-looking manner and include in the system criteria linked to health risks.
- Consider allowing profits to be made in the basic insurance market.
- Abolish the obligation to contract in the ambulatory sector; increase price flexibility by means of decentralised negotiations between suppliers and insurers.
- Introduce a prescription system based on active substances rather than branded products, which should lead to greater competition on a more transparent basis.
- Remove the obstacles to effective foreign competition on the drugs market.
- Reduce the influence of the pharmaceuticals industry on authorisations for drugs to be placed on the market and on price setting with respect to reimbursed drugs. Review the way Swissmedic is financed. Include competition experts in price negotiations between OFAS and drugs manufacturers.

Procurement contracts

- Continue efforts to ensure that the existing regulations are better applied; use the potential of the new Internet site, sitemap.ch, to increase competition and lower the threshold values necessitating open public tenders.
- Limit the possibilities for splitting contracts and so avoiding competitive procedures.
- Improve the legal protection afforded by appeals against the use of non-competitive procedures to award procurement contracts.

Box 2. Recommendations aimed at increasing competition in the goods and services markets (cont.)

Revision of the Domestic Market Act

- Include a specific reference to freedom of establishment in all the cantons.
- Authorise COMCO to appeal to the courts in the event of restrictive practices.

Network industries

- In telecommunications, un-bundle local loops without further delay; take care to prevent any horizontal agreements in mobile telephony.
- In the rail industry, create a network regulator independent of the two main rail companies; introduce systematic tendering for running regional passenger lines, which receive public subsidies.
- Accelerate the pace at which the postal services are being opened up to competition; create an independent Post Office regulator to ensure that the financing of the universal service does not interfere with competition in other parts of the market.
- In the electricity and gas sectors, liberalise the markets - including for households - in a manner compatible with the reform in the European Union; launch the reform of the gas industry now in conjunction with that of the electricity industry; reduce political interference by cantonal and local authorities in the running of the public gas and electricity companies; create strong and independent regulators guaranteeing equitable access to the market; separate environmentally friendly measures in favour of renewable energy sources from the reform of the electricity sector.

Opening up to foreign competition

- Reduce the protection and excessive assistance enjoyed by agriculture and accelerate the de-linking of subsidies from production. Clearly identify the environmental objectives, which need to be pursued directly rather than using them as an excuse for persisting with very high aid to agriculture.
- Start negotiations with the European Union quickly aimed at adopting the principle of regional exhaustion of patent rights, as is in place in the Union.
- Speed up bilateral negotiations with the European Union concerning the opening up of the service sector to foreign competition.
- Remove the barriers that still make it difficult for foreign competitors to access distribution; reduce the obstacles to building hypermarkets.

65. The first part of the strategy should focus on the *competition law framework*. It is necessary to ensure that competition law is rigorously applied, given the new possibilities provided by the recent reform. Since 2002, the COMCO has provided clear signals that the competition law will be applied strictly, which contrasts with the earlier more timid approach, notably when it comes to vertical restrictions. The authorities should pursue this tough approach. To succeed and to boost competition significantly, it needs to be given adequate financial resources and personnel. Their investigative capacity will have to be reinforced, the independence of its members better guaranteed by moving away from a purely militia system towards a professional system allowing the members of the COMCO, in particular the presidency, to occupy their function on a full time basis. Criminal sanctions should also be introduced to broaden the range of instruments if the existing instruments do not deter enough. Moreover, a constitutional modification which would apply the prohibition principle for cartels, would send a strong and clear signal in favour of a pro-competition climate.

66. As part two of the strategy, measures should be taken to raise incentives for greater efficiency in the *sheltered sector*. Regulatory reform is especially necessary in the *health* sector, where abolition of the obligation on insurers to contract in the ambulatory and pharmaceutical sectors, plus the dismantling of healthcare price-setting cartels, would probably reduce the level of medical costs and keep a tighter rein on volume growth over the medium term. Competition in the drugs market would also be stimulated if doctors were to prescribe active substances rather than branded products and if policy with regard to bringing pharmaceuticals to the market were to be made less restrictive. The authorities also need to pursue their efforts to open *procurement contracts* up to competition, particularly at the cantonal and local level, by encouraging a reduction in the threshold values requiring an open public tender and by reducing the possibilities for splitting up contracts and so limiting the application of competitive procedures. Strengthening competition in the sheltered sector also means removing some of the divisions in the cantonal markets, which would be encouraged by a *reform of the Domestic Market Act*. It is important in this context to go much further than enacting a framework law. What Switzerland needs are the regulatory foundations that will provide a genuinely unified domestic market by liberalising the professional service markets, with enforcement of the freedom of establishment in all the cantons. Also the role of the COMCO needs to be strengthened so that it can appeal to the courts in the event of restrictive practices and, secondly, it should check systematically cantonal laws and insist that they are in line with the principles of the Domestic Market Act.

67. The reform underway in the *network industries*, which concerns only certain sectors, is heading in the right direction but does not go as far as reforms in other OECD countries. It also needs to be extended to other sectors. In telecommunications the unbundling of local loops scheduled by the federal authorities should be implemented without further delay. In the railway sector, a regulatory authority independent of the two main rail companies needs to be set up, while the obstacles to competition to run regional passenger lines – which are subsidised by the government – need to be removed. The rate at which postal services are being opened up to competition is still too slow and the creation of an independent regulator would help to ensure that universal service financing does not hamper competition. Rapid and complete liberalisation of the electricity and gas markets would also be beneficial. In the case of electricity, the reform should include the uncontroversial parts of the previous plan, such as the separation of electricity generation, transmission and distribution. Strong and independent regulators guaranteeing equitable access to the market are needed in both the electricity and the gas industries. Moreover, the management of public companies in these sectors ought not to be the subject of political interference by the cantonal and local authorities.

68. The third pillar of this reform strategy should focus on making certain industries more open to *foreign competition*. The first step must be to reduce the protection and excessive assistance enjoyed by *agriculture* and to speed up the de-linking of subsidies from production. Also steps to further facilitate *parallel imports* would be welcome, for instance in the area of patent-protected products, including drugs. In this connection, the new regulations authorising such imports in the automobile industry do constitute progress. Opening the *service sector* up to competition within the framework of a bilateral agreement with the European Union should also remain a priority and the negotiations now in progress should move on more quickly. These reforms, coupled with an effective campaign by COMCO against potentially damageable effects of vertical agreements, would strengthen the competition on the Swiss market. This is likely to result in lower prices in many areas. Such developments would also be helped by a reduction in the number of obstacles to the building of hypermarkets that constitute barriers to entry in the *distributive sector*.

69. Such reforms are difficult to adopt, however, because they arouse a lot of hostility in the industries that would be most affected. A further reason for hostility is the fear that the negative effects on employment due to restructuring might persist. Recent international studies (Nicoletti *et al.*, 2001) do show, however, that there is ultimately a positive link between regulatory reform and the rate of employment in the business sector. Even though the employment rate is relatively high in Switzerland, there is still room for further improvement notably for female employment. Moreover, the flexibility of the Swiss labour market encourages a rapid shift of employment to the most productive industries. The strengthening of competition, with the objective of eliminating the rents enjoyed by certain sectors to the detriment of consumers, is needed if the Swiss economy is to extricate itself from the trap in which it has been caught for a number of years. The lack of competition would appear to be largely responsible for the slow growth in the last decades, with inadequate efficiency gains in the sheltered sector and the excessively high cost of living and, consequently, wage costs encouraging investment to relocate abroad.

70. The positive effect of the proposed reforms should be felt in a number of ways. The strengthening of competition will help to cut prices, profits and reduce wage mark-ups in the industries least exposed to competition, which should increase demand. It will encourage firms to make better use of their factors of production, which will stimulate productivity gains. These static gains, resulting from a more efficient resource allocation, will in addition be boosted by dynamic gains stemming from more intense innovative activity and better use of new technologies, which should be encouraged by a more pro-competitive framework (OECD, 2002f). Because of the complexity of the mechanisms involved and the difficulty of measuring the specific impact of the proposed measures on profits, wages and productivity, it is hard to put a precise number on the gains from reforms. It is possible, though, to calculate an order of magnitude for these effects on the basis of international comparisons and assumptions concerning the efficiency gains and also the reductions in profits and wage mark-ups that could be achieved in certain industries. The OECD Secretariat has carried out such a calculation for agriculture, health care, telecommunications, gas and electricity, and the professional and distributive services, which together account for one-third of total output.

71. The results of these calculations, which are set out in **Table 6**, suggest that the strengthening of competition in these sectors could increase the level of output by some 8 per cent over 10 years, the bulk coming from an increase in potential output. That estimate, the details of which are given in **Annex 3**, rests on the assumption of productivity gains and of reduced profits and salaries allowing a fall in prices ranging between 3 and 17 per cent in the sectors analysed, which would narrow the price differential with other countries. On the basis of these assumptions, it is estimated by means of a static analysis that the overall general price decline could reach 6 per cent.⁷¹ The estimate takes into account the reductions in intermediate consumption brought about by the sectoral falls in prices, which are calculated by means of an input-output matrix. The increased competition, mainly expected in the sheltered sector, will indeed also reduce costs and strengthen the competitiveness of the exposed sector. The estimated impact of the reforms on production also takes into account the dynamic repercussions on the rest of the economy. For example, the positive effect of productivity gains on potential output will ultimately be accompanied by a rise in employment and in the stock of capital stemming from the permanent reduction in wage marks-up and corporate profits caused by increased competition. Lower prices and efficiency gains ought also to help trigger a virtuous spiral of falling costs in all sectors, higher real incomes and lower interest rates. These effects were estimated by means of a simulation carried out with the OECD's Interlink model. The impact on productivity of increased innovative activity and the use of new technologies was not taken into account, however, and nor were the more broad-ranging effects of an improved general competition policy, which should also have long-term beneficial effects on the economy.

Table 6. Assumptions and effects of sectoral deregulation

| | Total economy | Agriculture | Telecommunication | Electricity | Gas | Health | Professional Services ¹ | Trade | Other sectors |
|--|---------------|-------------|-------------------|-------------|-------|--------|------------------------------------|-------|---------------|
| Assumptions (% change): | | | | | | | | | |
| Costs of intermediate inputs | -5.3 | -12.5 | -3.5 | -6.2 | -3.1 | -6.5 | -6.5 | -8.0 | -4.5 |
| Labour costs: | | | | | | | | | |
| - Labour productivity | 4.8 | 30.0 | 5.0 | 20.0 | 20.0 | 10.0 | 15.0 | 15.0 | 0.0 |
| - Wages | -2.1 | -5.0 | 0.0 | -10.0 | -10.0 | -15.0 | -5.0 | 0.0 | 0.0 |
| Capital costs | -0.1 | 0.0 | 0.0 | -5.0 | -5.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Price mark-up ² | -6.5 | -20.0 | -5.0 | -20.0 | -20.0 | -25.0 | -10.0 | -20.0 | 0.0 |
| Sectoral static effects (in %): | | | | | | | | | |
| - Direct price effect | -5.9 | -16.6 | -3.2 | -11.0 | -9.4 | -16.4 | -10.6 | -11.6 | -2.3 |
| - Price-induced output effect ³ | 2.9 | 8.3 | 1.6 | 5.5 | 4.7 | 8.2 | 5.3 | 5.8 | 1.2 |
| - Employment effect ⁴ | -1.5 | -16.7 | -3.2 | -12.1 | -12.8 | -1.6 | -8.4 | -8.0 | 1.2 |
| Estimated long-run macroeconomic impact | | | | | | | | | |
| - Output | 8.0 | | | | | | | | |
| - Domestic demand | 6.7 | | | | | | | | |
| - Employment | 1.5 | | | | | | | | |
| - Real wages | 8.0 | | | | | | | | |
| - Inflation ⁵ | 0.0 | | | | | | | | |
| Memorandum items: | | | | | | | | | |
| - Sectoral value added as a share of tot | 100.0 | 3.1 | 2.5 | 1.2 | 0.0 | 10.7 | 3.8 | 12.5 | 66.2 |

1. Other business services.

2. Price mark-up is defined as gross operating balance minus depreciation divided by the sum of the cost of intermediate inputs, labour costs and depreciation.

3. Price-induced output effect is estimated on the basis of a price elasticity of demand of -0.5.

4. Sectoral employment effects include impacts of productivity growth and the price-induced output growth, but ignores the possible impact of lower wage premia.

5. Percentage points

Source: OECD estimates.

GLOSSARY OF ACRONYMS

| | |
|--------|--|
| AIMP | Inter-cantonal Agreement on Public Procurement |
| AP | Agricultural Policy |
| AVS | First pillar of the Old-age insurance |
| BAK | Conjuncture Institute of Basel |
| BLS | Bureau of Labour Statistics |
| CFR | Federal railway company |
| CHF | Swiss franc |
| ComCom | Federal Communications Commission |
| COMCO | Competition Commission |
| DMA | Domestic Market Act |
| EC | European Commission |
| EEA | European Economic Area |
| EU | European Union |
| g | gram |
| GDP | Gross Domestic Product |
| GNP | Gross National Product |
| HMO | Health Maintenance Offices (Health-care networks) |
| kg | kilogram |
| KWh | kilo watts per hour |
| MWh | mega-watts per hour |
| OFAS | <i>Office fédéral des affaires sociales</i> (Federal Social Insurance Office) |
| OFS | <i>Office fédéral de la statistique</i> (Federal Statistics Office) |
| OPCA | <i>Office parlementaire de contrôle de l'administration</i> (Parliamentary body) |
| OSEL | Organisation of the Electricity Sector |
| PPP | Purchasing Power Parity |
| R&D | Research and Development |
| SMEs | Small and medium-sized enterprises |
| UBS | Union Bank of Switzerland |
| UMTS | Universal Mobile Telephone System (third generation mobile telephone system) |
| USD | United States dollar |
| VAT | Value Added Tax |
| WTO | World Trade Organization |

NOTES

1. Price differentials provide only an indirect indication of the degree of competition. For example, a price difference in a given sector may not necessarily be due to a competition problem in the sector, but to the induced effect of high prices in other industries. Price comparisons are also biased by differences of indirect tax across countries. VAT rates are however lower in Switzerland than in most OECD countries.
2. Possible reasons for a high real exchange rate include the relatively strong productivity performance of the export sector and the increased demand for non-tradables.
3. On the basis of the estimated relationship between the levels of living standards and the levels of prices among OECD countries, on average Swiss prices should not exceed those of the EU by more than 15 per cent because of the difference in living standards between them.
4. The lack of long-run sectoral data makes it impossible, for example, to calculate margins, wage premia or concentration indices based on output by sector in a manner comparable with other countries.
5. After rejecting EEA membership in 1992, Switzerland found itself in the company of European partners that had to a large extent eliminated technical hindrances to trade amongst themselves. In the framework of the 1990s revitalisation programme, the Federal Council put in place a strategy designed to offset these negative effects. Under the provisions of a 1996 Federal Act, technical regulations have, as far as possible, to be made compatible with those of Switzerland's main trading partners. Harmonisation has fairly well progressed, but is still insufficient *e.g.* with respect to construction products as the reference system in the EU evolves slowly.
6. One possible explanation could be the high level of compulsory spending on non-tradables, for instance health care expenditure.
7. As mentioned in Seco (2002), the degree of exposure to international trade is now higher in Austria than in Switzerland, while the reverse was true ten years ago. During the 1990s, Austria has become a member of the European Union and joined the euro area.
8. According to OECD calculations (OECD, 2002a), the average tariff on imports of agricultural products was 218 per cent in 2000, *i.e.* 3.6 times the level for the EU and 7.7 times that for the United States.
9. Although 72 per cent of drugs are imported, their prices are, on average, appreciably higher than in other countries.
10. The legality of the vertical agreements protecting exclusive import networks was only called in question in February 2002 for the first time. Although the regulations have recently changed, numerous consumer and investment goods are still being imported via these exclusive networks because of the time it takes to put competing networks in place.
11. According to the OECD, aligning these regulations on those of the least restrictive countries would increase the stock of investment in Switzerland by nearly 35 per cent, *i.e.* three times more than the estimated rise in the OECD average (OECD, 2003a). This positive effect appears to be confirmed by

- the increase in direct investment in telecommunications in the late 1990s, following liberalisation in that sector.
12. According to the Bureau of Labor Statistics, in 2001 an industrial worker's average hourly wage in USD was higher in Switzerland than in any other OECD country with the exception of Norway and Germany. The difference to the European average was 20 per cent.
 13. This phenomenon seems to affect both big companies and SMEs. Examples include Nestlé, a multinational which does its research in Switzerland but has relocated the bulk of its production abroad, and Logitech, initially a SME producing computer products which has successfully adopted much the same strategy of internationalisation (Seco, 2002).
 14. A reservation regarding statistics is needed since Switzerland does not yet apply SNA 95. Moreover, the United States, the country with a comparable per capita income at the outset, applies also hedonic pricing in some sectors, with, possibly, a positive impact on overall growth rates. In addition, measuring growth in the service sector is increasingly difficult, and particularly so in the financial sector which in Switzerland – as a share of GDP – is considerably larger than in most other OECD countries.
 15. The Acts of 1962 and 1985 only allowed the Cartel Commission to make recommendations to the federal Department of Economy, which held the decision power.
 16. In addition to the Appeals Commission for Competition Matters, there are also the Federal Court, the Federal Council, and the cantonal civil courts; the Federal Communications Commission (ComCom) also acts as a sectoral regulator.
 17. Concerning the presence of interest group representatives, the report by the Parliamentary body responsible for control of the executive (OPCA) observes: "There is a risk that COMCO members appointed as representatives of specific interests may favour those interests to the detriment of the interests of maintaining competition" (OPCA, 2000a).
 18. Parliament did not adopt the government's initial proposal to strengthen COMCO's independence and professionalism by reducing the number of its members and removing interest group representatives.
 19. For example, a Federal Court Judgement of 14 August 2002 referring notably to the principle of abuse, annulled a COMCO decision banning a hard core cartel.
 20. COMCO must be notified of business mergers when, during the financial year immediately preceding the merger, the participating firms together had a minimum turnover of CHF 2 billion or a turnover in Switzerland of at least CHF 500 million, and at least two of the participating firms had an individual turnover in Switzerland of at least CHF 100 million. Where insurance undertakings are concerned, instead of turnover it is total gross annual premiums that are taken into account, and in the case of banks and other financial intermediaries, it is gross output.
 21. See, for example, Neven (1999) and Flückiger (1999).
 22. Between July 1996 and July 2003, COMCO banned 10 horizontal cartels and concluded 4 mutual agreements relating to horizontal cartels. It handed down 7 bans and concluded 2 mutual agreements relating to abuses of dominant position. Vertical restraints that have the effect of dividing the markets and preventing entry are considered to be one of the main reasons for certain price differentials between Switzerland and its neighbours and a major curb on the competitiveness of SMEs. But COMCO has banned only one vertical agreement in seven years, namely the Citroën case in 2002. See Zäch (2002), NZZ (2001) and Prümmer (2003).

23. In 1995 the Federal Council estimated the number of notifications at 10 to 15 per year, whereas since 1996 COMCO has been receiving between 30 and 35 notifications every year.
24. Since the law came into force, only 7 indirect sanctions have been imposed and there have been no indirect criminal sanctions. The latter concern natural persons responsible because of their decision-making authority in the company.
25. LCart Articles 58-59 concern the application of international agreements. Their objective is to eliminate restraints of competition that originate in Switzerland but take effect abroad.
26. As the OPCA report observes, however: “And yet, given the globalisation of the economy, exchanges of information between Swiss and foreign competition authorities are becoming a necessity” (OPCA, 2000a).
27. However, part of the liberalisation movement has already taken place in the European Union. By 2004 all businesses will be able to choose their provider. These are limit dates for EU members although several countries like the United Kingdom, Ireland, Germany and Spain have liberalised earlier on their own.
28. In order to work properly and avoid an excessive marginal cost when supply of renewables is scarce, this setup should be complemented by a cap premium over market price which, when attained, allows suppliers to use conventional sources.
29. Calculation of the COMCO point to losses for Swiss businesses of beyond CHF 800 million per year for not liberalizing the market. These calculations are based on the price differential of average electricity prices paid by Swiss firms with respect to German firms (4.65 cents per kWh) and on annual consumption (18 000 GWh) (Stoffel, 2003).
30. This is the case in the cantons of Freiburg, Jura and Obwald.
31. As in electricity, the liberalisation process will be completed in the Union by 2007, and choice of provider will be extended to all commercial consumers by mid-2004.
32. The Confederation still has a majority control of Swisscom, with 62.7 per cent of the shares.
33. In practice, the ComCom can impose interconnection prices only once negotiations between interested parties – in this case the incumbent operator and each of the competitors – do not succeed in fixing prices and conditions for interconnection, which is very likely to happen. This delays somewhat its intervention.
34. A previous decision of the Federal Tribunal on leased lines has favoured the position of Swisscom.
35. By mid-2003 there were 637 000 broad-band access lines (8.7 for every 100 inhabitants), half of them corresponding to ADSL lines and half to cable modems. However, although these figures show that internet access is evenly split between both technologies, voice access through cable modem is much less developed as it requires additional investment..
36. In particular, to provide voice transmission cable networks have to be adapted to allow bi-directional high speed transmission.
37. The market shares of the other two operators are 17 per cent (DiAx) and 14 per cent (Orange).
38. However, mobile companies have refused to reply to the questionnaires sent by the COMCO for its investigation.

39. As for the historic debt of CFF, part of it was cancelled and another part transformed into loans at zero interest rate with conditional payback clauses.
40. The principle of command is also applied to regional passenger transport by bus or ship
41. Until now, no complaints have been brought to the attention of the arbitration commission.
42. It is thought that the new solution complies with the concept of independence for slot allocation systems which is required by EU-Directives.
43. This is equivalent to one office per 12 km², the highest ratio in the OECD.
44. In April 2003, the Federal Council advised the Parliament to reject the popular initiative "Post service for everybody".
45. A formal decision on this final step of liberalisation in the EU by 2009 has not been taken yet.
46. On the other hand, productivity in the distributive sector as a whole does not seem very high by international standards (Figure 12). However, the link between competition and productivity in the trade sector is somewhat ambiguous as less competition allowing higher margins could in principle lead to higher productivity.
47. There are only some twenty hypermarkets of relatively modest size in Switzerland (Le Temps, 2002). The average floor area of retail stores was only 269 m² in 2000.
48. The range of food products offered by the main Swiss retailers is put at 10 000, but the main distributors provide only half of that range in most of their shops. In France and Germany, the range is between 15 000 and 20 000, and in the United States between 20 000 and 25 000 (Le Temps, 2002).
49. The Carrefour group, world number two in the hypermarket sector, when it bought up Jumbo in 2001, had less than 3 per cent of the Swiss food market.
50. In early 2003, Coop, the number two food distribution company, bought up Waro and EPA.
51. Shops close at 18h30 or 19h00 in 15 out of 26 cantons, and frequently at 16h00 or 17h00 on Saturdays. In some cantons, small supermarkets that are open in the evening and on Sundays have set up in service stations. However, measures have been taken to restrict competition on opening hours in the canton of Fribourg.
52. Imposed minimum and fixed resale price maintenance are not banned per se, but they do presume the elimination of competition. Firms therefore publish recommended prices which are not binding.
53. In a selective distribution system, the supplier can only sell his goods and services to approved stockists or repairers. In an exclusive distribution system, the supplier gives the retailer an exclusive sales area. Multiple brand selling means that the same dealer can sell several different brands
54. The recent arrival of the Fnac group, which has the capacity to do without this distribution system, may however increase competitive pressure in the sector.
55. In Switzerland, patent law is subject to the national exhaustion regime, which prohibits parallel imports of patent-protected products without the approval of the holder of the patents, even if there are large price differentials with other countries. In contrast with patent rights, copyright and brand rights are subject to the international exhaustion principle which allows parallel imports. See Kraus (2003) for a discussion of the legal framework on parallel imports.

56. For patented drugs, the best prices found at international level are 40 per cent lower than in Switzerland, while for non-food consumer goods the average wholesale price differential is put at 30 per cent (Federal Council, 2002; Frontier Economics, Plaut and BAK, 2002).
57. Between 300 and 350 000 professionals work in regulated sectors. Among them, there are 43 000 engineers and architects, 21 000 doctors, 88 000 nurses and 23 000 travelling salesmen.
58. The volume of procurement contracts accounted on average for 20 per cent of GDP in the OECD countries in 1998, while the share of these markets potentially open to international competition was estimated at 7.6 per cent of GDP (OECD, 2002d).
59. The incorporation of international agreements into domestic legislation is done separately for the Confederation and the cantons, which means that the law has not evolved uniformly. Under federal law, for example, negotiations with bidders are allowed during the procedure, which is not the case for the cantons.
60. A survey carried out between January 2000 and March 2001 showed that nearly half of the Confederation's contracting bodies did not publish invitations to tender.
61. The legislation is sometimes in contradiction with the DMA (Domestic Market Act) and the law on cartels, which also apply to procurement contracts. For example, under cantonal legislation on procurement contracts, bidders have to comply with the working conditions in force at the place where the contract is carried out, but it is the DMA that determines the place of origin.
62. The maximum amount for contracts negotiable by mutual agreement was raised from CHF 50 000 to 150 000 for a service or construction supply contract and to CHF 300 000 for a contract on the shell of a building.
63. To respond to an invitation to tender in the canton of Geneva, architects and engineers have to have their head office in the canton. It is possible, however, under certain conditions, to be registered temporarily in the canton.
64. According to different surveys, only 2 per cent of insured people, mainly the young who are a good risk, changed insurers in 2000, and the level of switching decreased between 1997 and 2000 (Colombo, 2001). Insurers can encourage bad risks to leave or, alternatively, seek to attract good risks by proposing additional options at interesting prices. .
65. Tarmed, which is to come into force in early 2004, will be replacing the 26 cantonal systems currently in use. It establishes prices for medical services throughout the whole of Switzerland on the basis of a point system which takes into account the time spent on each patient, the competence of the doctor and the type of treatment provided. The value of the point has to be negotiated at cantonal level.
66. In 2000, 7 000 drugs were authorised, 2 500 of which were reimbursed under the basic sickness insurance scheme, whereas the French social security system reimbursed 20 000 products.
67. Part of the drugs reimbursed by the compulsory sickness insurance is prescribed by hospitals, which are managed by the cantons. These pharmaceutical products are also bought at cheaper prices. The share of medicines reimbursed by the compulsory sickness insurance, outside hospitals, reaches 60 per cent of sales.
68. Switzerland is the only European country which re-evaluates the prices of reimbursed drugs after expiry of patents or after fifteen years.

69. The market of generics rose by almost 40 per cent in the first half of 2003 (year-on-year) and this increase will probably be stronger in the second half of 2003.
70. 20 per cent of Swiss exports are pharmaceuticals, while Novartis, Roche and Serono have a 7 per cent share of the world market.
71. This reduction of the price level will remain limited compared with the estimated difference vis-à-vis the European average, which reaches 25 per cent if one takes into account the relatively higher Swiss standard of living. The easing of monetary policy and the endogenous exchange rate adjustment should also avoid that the downward pressure on prices will lead to deflation (Annex 3).

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ANNEX 1

Comco Communications in the realm of the vertical agreements

72. By virtue of LCart Article 6, COMCO may stipulate in a Communication the conditions on which competition-related agreements may generally be deemed justified on grounds of economic efficiency within the meaning of LCart Article 5, par. 2. If greater judicial security is required, COMCO may also issue Communications, in analogous application of the aforementioned Article 6, to lay down other principles for interpreting the law. To date, COMCO has adopted four Communications. The first one, issued on 15 December 1997, dealt with the certification and sponsoring of sports goods.⁷² On 4 May 1998 COMCO adopted a Communication on calculation formulas which specified the conditions justifying the use of such formulas by associations. In 2002, COMCO adopted two important Communications. The first dealt with the assessment of vertical agreements and the second with vertical agreements in the distribution of motor vehicles.

Communication of 18 February 2002 on the assessment of vertical agreements

73. In February 2002, COMCO adopted a Communication regarding the assessment of vertical agreements. In that Communication, the content of which is similar to Community law, COMCO deems that vertical agreements have a notable effect on competition, within the meaning of LCart Article 5, par. 1, if, *inter alia*, they:

- Impose on merchants, either directly or indirectly, fixed or minimum prices for the resale of goods or services;
- Limit a merchant's resale territory or circle of customers, either directly or indirectly;
- Limit sales to final consumers, insofar as such limitation is imposed on an approved merchant within a system of selective distribution;
- Limit cross-supply relationships between approved merchants within a selective distribution system, even if the merchants are active at different echelons of the market;
- Prevent a supplier from supplying spare parts to third parties (final consumers, repair shops, etc.) other than merchants who are parties to the agreement;
- Impose a non-compete obligation for a period exceeding five years, or exceeding one year after a vertical agreement expires.

In its Communication, COMCO stipulates that other vertical agreements are not generally deemed to have a notable effect on competition if the market shares of all participating businesses do not exceed 10 per cent in any of the relevant markets. However, the Communication also states that there can be exceptions to this principle if competition in the relevant market is limited by the cumulative effects of a number of similar vertical distribution networks operating side by side, provided that participating suppliers and merchants are effectively or potentially in competition.

74. Any vertical agreement that has a notable effect on competition, within the meaning of LCart Article 5, par. 1, is deemed unlawful unless justified on grounds of economic efficiency within the meaning of LCart Article 5, par. 2. The Communication states that an agreement may be justified *inter alias* if it enables a distribution network to be organised more efficiently, and if a restriction of competition is necessary to achieve that aim.

Communication on vertical agreements in motor vehicle distribution

75. COMCO issued a Communication on vertical agreements in motor vehicle distribution in October 2001. This Communication, which is in harmony with the new European exemption Regulation (EC) No. 1400/2002, supplements that of February 2002 on vertical agreements, stipulating certain aspects specific to the distribution of motor vehicles. The fundamental aspects of that Communication are as follows:

- It compels the motor vehicle industry to allow vehicles to be imported from the European Economic Area (EEA);
- It dissociates sales from after-sales service;
- It facilitates the sale of spare parts and parallel imports thereof;
- It allows a choice between selective and exclusive distribution systems;
- It facilitates access to spare parts, information (including training) and diagnostic equipment for independent repairers;
- It compels the motor vehicle industry to allow multi-branding, *i.e.* to allow dealers to offer more than one brand for sale in the same establishment.

ANNEX 2

Main features of the Swiss health care system

76. The private sector accounts for a large proportion of health care funding and supply. The main features of the system are as follows:⁷³

- The system is based on a private insurance market. There are a large number of private funds providing households with basic insurance, which is compulsory, plus optional complementary insurance. These funds are not allowed to make profits on basic insurance, which provides cover defined by the Federal Social Insurance Office (OFAS). The absence of profits in this market segment is based on the principle that health care decisions should not be guided by profitability but only by strictly medical considerations.
- For a given insurance fund, the insured pay the same premium whatever their age and sex. Premiums, which are paid individually, can however vary between funds which are in competition in the same canton. The insured can obtain reductions in their *premia* if they are ready to restrict their choice of health care provider by, for example, joining a managed care system or whatever family doctor system their insurers can propose. *Premia* can also be reduced if members are prepared to pay a bigger deductible than the scheduled minimum.
- Under the Swiss system, which operates with single *premia* per insurer, a risk equalisation mechanism has been introduced on a temporary basis (up to 2005), to take account of differences in people's medical requirements and prevent competition between funds from resulting in risk selection. In each canton, the insured are divided into 30 groups defined according to age and sex and the average costs of each group are compared with the average costs of the insured as a whole. Each insurer receives from or pays into an equalisation fund a contribution which depends on the differential between the average cost of the population he covers and the population as a whole. This risk equalisation takes place at the end of every financial year.
- The cantons and communes co-fund about 60 per cent of the hospitals, while the Confederation and the cantons partly subsidise the insurance premiums of low-income households. Hospitals are to a large extent funded on the basis of the number of days of hospitalisation, while doctors in private practice are remunerated on a payment-per-service basis.
- All insurers are bound by the obligation to contract, *i.e.* they have to accept invoices submitted by all doctors approved.

77. In Switzerland, two main phases need to be completed before a drug is put on the market and reimbursed by the mandatory health system: (1) a marketing approval procedure and (2) the inclusion in the Specialities List. Since the new Law on Therapeutic Products came into force, *Swissmedic* has been the responsible authority in the first phase. Medical products may only be distributed if a corresponding licence is granted by this authority, which examines the drugs' quality, safety and efficiency point of view. *Swissmedic* issues licences but may also withdraw them. This licence is one of the preconditions for inclusion in the Specialities List (SL), which defines the medicines reimbursed by the mandatory health insurance. In the second phase, the *OFAS* is the responsible authority. It decides on inclusion or exclusion from the SL and establishes the upper price limits for all service providers in Switzerland. Calculation of the prices is based on a comparison of prices abroad in Germany, the Netherlands, Denmark and the United Kingdom (and also with Italy, France and Austria), and a therapeutic cross-comparison, where comparable SL medicines are available in terms of indication or action.

ANNEX 3

Assessing the benefits of the regulatory reforms: Methodological information

78. This annex provides methodological information on the quantification of the macroeconomic effects of reforms that would increase competition in the agriculture, health care, telecommunications, gas, electricity, professional services and distribution sectors, which together account for a third of total production.

79. The methodology employed is similar to that used in the OECD study on regulatory reform⁷⁴ (OECD, 1997). Effects were quantified in two steps. The first consisted in calibrating the possible effects of sectoral reforms, using static analysis to gauge the potential impact on prices. The second step established a correspondence between the assumptions underlying the price decline estimated for the economy as a whole and the resultant rise in production. This was done by assessing the reforms' dynamic effects via a macroeconomic model, capable of quantifying the consequences of a reduction in business margins and wage mark-ups, and of a boost to labour efficiency, that the proposed reforms are expected to produce.

First step in the quantification: calibrating the effects of sectoral reforms

80. Calibrating the potential effects of regulatory reform at the sectoral level entailed a set of assumptions regarding the impact on productivity, margins and wage mark-ups in the sectors concerned. In some capital-intensive sectors such as electricity or gas, assumptions of a decrease in the cost of capital were also factored in because of the economies of scale that reform-related restructuring is expected to generate. The calibration adopted in the various sectors with regard to these different assumptions was based on a variety of considerations. First, it depended on the potential effect on prices. The effect of the price cuts factored in at the sectoral level took account of price level differentials with other countries, as estimated, for example, from purchasing power parity data. This sectoral effect was quantified using a static analysis that was able to take account not only of the assumptions made with regard to margins, productivity and wages, but also of price decreases for intermediate consumption, thanks to the use of an input-output matrix.⁷⁵ Second, account was taken of the effect of regulatory reforms carried out in other countries in order to quantify their possible effects. In the case of electricity, the studies available would suggest, for example, that the reform undertaken in Germany enabled businesses to cut their prices by 15 to 20 per cent. Lastly, empirical information gathered when the various sectors were analysed - *e.g.* concerning productivity gaps with other countries – was used as well.

81. Overall, the assumptions made were consistent with price decreases of between 3 and 17 per cent in the sectors analysed. The sharpest decreases involved health care services and agricultural and processed food products. These sectors are the ones with the greatest downside potential, since in both cases the price level differential relative to the EU average is between 50 and 60 per cent. In all, the aggregate impact of the proposed sectoral reforms on the whole economy pointed to a drop in the general price level of some 6 per cent. This would be obtained through a 6½ per cent reduction in margins, productivity gains of 5 per cent and a 2 per cent compression of wage mark-ups. In addition, intermediate costs might drop by roughly 5 per cent. While significant, these cost reductions and productivity gains would still offset only a fraction of the gap in the level of these variables as compared to other countries.

Second step in the quantification: estimating the induced effect on production

82. The OECD's macroeconomic model Interlink was used to estimate the proposed structural reforms' dynamic effect on production.⁷⁶ A simulation of rising trend productivity and falling margins and wages, calibrated on the above estimates, was performed over a ten-year period.⁷⁷ The simulated reductions in margins and wages, combined with a widening of the output gap because of the rise in potential output, was conducive to downward price pressures. It was therefore assumed that the authorities relax monetary policy to neutralise those pressures. Interest rate cuts would also reduce the exchange rate, which would be conducive to an upturn in activity compatible with that of potential output. This easing of monetary policy was calibrated as being compliant with the National Bank's goal of price stability.

83. The results of this simulation show that the positive effects of regulatory reform on production, which result from productivity gains, are likely to be reinforced in the long term by rising employment and an increase in the stock of capital. The permanent reduction in wage mark-ups and business margins in fact induces a structural decrease in unemployment and stimulates potential employment, the rise being accompanied by an upturn in capital spending. This increase in the stock of capital is also underpinned by the fall in interest rates. Moreover, this dynamic favourable to the rise in potential output is stimulated by triggering a virtuous circle of lower costs and improved international competitiveness. The cumulative impact of the rise in GDP is estimated at 8 per cent after ten years as compared to the reference scenario, the bulk of these gains representing a rise in potential output. Continued price stability, combined with exchange rate depreciation exceeding 10 per cent at the end of the period, also allows an *ex post* reduction of price levels in relation to other countries. This strengthening of macroeconomic performance also widens the scope for action by general government, which benefits from a rise in tax revenue and an easing of debt service.

84. Clearly, an empirical exercise such as this provides only an approximation of the long-term benefits of enhanced competition as a result of the proposed reforms, and the time needed to achieve the reforms is also uncertain. Nevertheless, the estimated overall impact would appear reasonable, insofar as the positive effect of productivity gains on production should ultimately be bolstered by a rise in employment and the stock of capital. As shown by similar empirical analyses concerning European countries (Bayoumi *et al.*, 2003), increased competition should in fact reduce the market power wielded by businesses and workers that prompts them to cut supply while increasing their rents.

NOTES

72. This Communication dealt with the conditions justifying certification and sponsoring agreements, insofar as such agreements regulate or influence competition in the market for sports goods.
73. See OECD (2000) for a detailed description.
74. A similar exercise assessing regulatory reforms had also been carried out in the previous survey (OECD, 2002).
75. The input-output matrix used was derived from work by the Laboratory of Applied Economics in Geneva using a database for 1990 recalibrated for 1995 by the Swiss Federal Institute of Technology in Zurich (see Lips and Nieuwkoop, 2001 for further details).
76. The structure of the Interlink model's supply block makes it possible to evaluate at an aggregate level the effect of trend output and profit and wage behaviour on activity (Turner *et al.*, 1996).
77. In order to ensure consistency with the static quantification of the reforms undertaken in the first step of this exercise, the shock was calibrated on an *ex ante* basis, *i.e.* without factoring in the impact of other (*e.g.* financial) variables describing the functioning of the rest of the economy. The interaction between the margin, wage and productivity variables was taken into consideration, however, so as to ensure adequate calibration of the shock performed with the model.

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