National Report on Economic Reform: Product and Capital Markets Sweden

November 2001



FOREWORD

Work on economic reform of product and capital markets is high on the economic policy agenda of the EU. Completing the internal market and establishing more efficiently functioning markets will create necessary conditions for sustainable growth and full employment. Efficient product and capital markets also contribute to efficient labour markets by promoting favourable wage formation. In addition, consumers benefit through lower prices and an increased supply of goods and services. This also has an impact on the path of inflation. Several studies provide empirical support to the claim that economic reforms have significant economic gains.¹

A new strategic goal for the EU was set at the Lisbon European Council in March 2000.² The goal is to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion. Economic reform is an important means of realising this goal. This was also emphasised at the Stockholm European Council in March 2001, when the first annual follow-up of the Lisbon strategy took place. New measures were decided upon to accelerate reform efforts in product and capital markets.³

The National Report on Economic Reform of the Product and Capital Markets forms part of the "Cardiff process" under the ECOFIN Council.⁴ The annual process begins with the national reports of the member states, and is followed by a Commission report that assesses the functioning of markets from a Community perspective. The Council for the Internal Market, Consumer Affairs and Tourism also contributes to the Cardiff process.⁵ Both the Commission's report and the national reports contribute to the Broad Economic Policy Guidelines (BEPGs) for member states and the Community. These annual guidelines contain both general and country-specific recommendations for economic policy.6

The National Report on Economic Reform is also an important instrument for following up the BEPGs efficiently and in a structured manner. By evaluating progress and highlighting the consequences of implemented reforms, EU member states can learn from one another and exchange positive experiences. The Cardiff process is consequently an engine for continued progress towards efficient product and capital markets.

¹ See, for example, the OECD papers on "Regulatory Reform".

 $^{^2}$ See Presidency conclusions from the Lisbon European Council, 23-24 March 2000.

³ Ibid.

 $^{^4}$ See Presidency conclusions from the Cardiff European Council, 15-16 June 1998, and the recommendation from the ECOFIN Council, 1 May 1998.

 $^{^5}$ See "Council conclusions on Internal Market aspects of the Cardiff process", $6704/01~\mathrm{MI}$ 37 ECOFIN 83.

⁶ Article 99 of the EC Treaty.

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I. INTRODUCTION

Economic reforms in product and capital markets are a key component of the Swedish government's policy for growth and employment. Enhancing competition renders markets more efficient and benefits consumers. Increased competition improves resource allocation and makes the economy more dynamic, paving the way for higher potential growth and increased employment. Continual follow-up and evaluation are important components of reform work.

The National Report on Economic Reform describes the reform work in Sweden to render the goods, services and capital markets more efficient. The report outlines measures taken, highlights economic consequences of the reforms and identifies remaining barriers. This is the fourth National Report on Economic Reform of the Product and Capital Markets. This year's report is a follow-up of last year's National Report and of the country-specific guidelines for Sweden as set out in the 2001 BEPGs. Sweden received the following recommendations with regard to product and capital markets:

- to enhance compliance with regulations on public procurement and enhance competition in public services provision at local levols
- to increase competition in areas such as air transport and pharmaceuticals.
- to develop further the risk capital market by adapting the fiscal framework to make it more conducive to investment and entrepreneurship, the latter to be also encouraged by adjusting bankruptcy laws.

This report deals with the product and capital markets separately. It also includes a reform agenda for ongoing and planned measures. Each year, a detailed analysis of a number of selected areas is made.

This year's report contains integrated accounts of reforms in network industries and policies to improve the internal market as a dynamic environment for business start-ups, entrepreneurship and new technology. Policies to protect and improve the environment and measures to guarantee a sustainable pension system are also presented in separate appendices to the report.

II. ASSESSMENT OF MARKET PERFORMANCE AND ECONOMIC REFORMS

Participation in the internal market and the reforms that were implemented during the 1990s has on the whole generated positive economic consequences in Sweden.⁷ Developments in growth and employment have been favourable during the second half of the 1990s, partly as a result of increased competition.

Swedish consumer prices have converged towards the EU average since Sweden joined the EU in 1995. In spite of this, price levels in Sweden are still around 20 per cent above the EU average, which is partly believed to be a result of insufficient competition in certain sectors. It should also be mentioned, however, that the price level index in industries which were previously protected or dependant on the domestic market has fallen somewhat more than the overall price level index.⁸ The Swedish government is continuing its efforts to strengthen competition so that consumer prices in Sweden can fall to the average price level in the EU.

⁷ See, for example, Svenskt Näringsliv, "Vad har EU gjort för oss? – en samhällsekonomisk konsekvensanalys av det svenska medlemskapet i EU" (What has the EU done for us? – an economic analysis of the consequences of Swedish EU membership), May 2001.

⁸ National Board of Trade, Swedish Competition Authority and NUTEK, "Sverige - en del av EU:s inre marknad: Varför kvarstår prisskillnader?" (Sweden - a part of the EU's internal market: Why do price differences remain?), 2000.

II.A. PRODUCT MARKETS

1. Opening new markets to competition and furthering economic integration

The openness of the Swedish economy has continued to increase during the 1990s. OECD summary indicators of product market regulation indicate that the product market in Sweden is more open than in many other EU countries. In combination with stable macroeconomic conditions, this openness has benefited the Swedish business sector and consumers. The Swedish government will continue to devote its efforts to promoting the principles of free trade both within the EU and internationally.

Swedish trade integration with EU member states rose further in 2000 as a percentage of GDP. In May 2001, EU member states accounted for approximately 55 per cent of total exports of goods and 65 per cent of total imports of goods.¹⁰

Table 1. Trade integration with other EU member states as a percentage of GDP

Per cent

	1995	1996	1997	1998	1999	2000
Sweden	19.3	18.0	18.9	20.1	19.9	20.9
EU-15	14.9	15.1	15.6	16.2	16.3	17.6
SMS*	25.1	26.4	27.6	28.5	28.7	30.8
*CIII						

^{*}Small member states.

Note: Measured as (intra-EU exports of goods + intra-EU imports of goods) / (2*GDP).

Source: Eurostat, 2001.

Foreign trade in services has showed a steady increase. Swedish exports of services rose approximately 35 per cent and imports by around 25 per cent between 1997 and 2000.¹¹

In percentage of GDP, Sweden was the largest recipient of direct investment in the world in 1999. 12 It is also evident that the volume of direct investment between Sweden and the EU has increased in recent years. One important reason for the volume growth in 1999 was the favourable economic developments, which contributed to good return on investment both in Sweden and in the EU member states. In 1999, EU member states accounted for nearly two-thirds of outward direct investment and almost two-thirds of inward direct investment in Sweden.

1.1 Legal and administrative framework

In May 2001, Sweden had the highest degree of implementation of internal market directives among the EU member states.¹³ The share of non-implemented directives was only 0.5 per cent for Sweden, compared with an average of 2.5 per cent for the EU member states. Sweden has thus by a comfortable margin met the target of a maximum of 1.5 per cent of non-implemented directives, which was set by the European Council in March 2001.¹⁴

1.2 Remaining barriers to trade and to cross-border investment

A joint international price study regarding trademark-protected goods was presented in May 2001.¹⁵ The study, which was financed jointly by Sweden and the UK, aimed at increasing consumer interest in and knowledge about the internal market. Prices were studied in France, Germany and the US in addition to Sweden and the UK. The study shows that the internal market is still not functioning satisfactorily.

 $^{^9}$ OECD, "Summary indicators of product market regulation with an extension to employment protection legislation", 1999.

 $^{^{10}}$ Statistics Sweden, "Export och import av varor" (Exports and imports of goods), January-May 2001.

 $^{^{11}\,\}mathrm{The}$ Riksbank, "Betalningsbalansstatistik" (Balance of Payments Statistics), 2001.

 $^{^{12}}$ The Riksbank, "Direktinvesteringar 1999: Tillgångar och avkastning" (Direct investment 1999: assets and income).

 $^{^{13}}$ European Commission, "Internal Market Scoreboard", May 2001.

 $^{^{14}}$ See Presidency conclusions from the Stockholm European Council, 23-24 March 2001.

 $^{^{15}}$ UK Department of Trade and Industry and Swedish Ministry for Foreign Affairs, "International price comparisons", 2001. See www.eu2001.se.

The remaining barriers to trade are primarily within areas that have not been harmonised through EC legislation and where national requirements apply instead. The problems can essentially be dealt with in two ways: through further harmonisation within the EU and by making the principle of mutual recognition of national rules applicable in practice. During the year, the Swedish Board for Accreditation and Conformity Assessment arranged a conference on the theme of mutual recognition of conformity assessment in the non-harmonised sectors of the internal market. Sweden believes that further harmonisation of product requirements is necessary to ensure a high level of protection of life and health.

Standardisation is an important tool in the EU's harmonisation work. Currently, 95 per cent of all new Swedish standards are based on work conducted by European or international bodies. The Swedish standardisation organisation contributes actively to this work. Through its new organisation, procedures have been established that will prevent new Swedish national standards from constituting barriers to trade or competition.

Together with several other member states, Sweden has continued to pursue within the EU the issue of increasing the possibilities for parallel imports of trademark-protected goods. The current limitation on parallel imports means that European consumers have to pay more for the same trademark-protected goods than consumers in countries outside of the EU.

The National Board of Trade carried out extensive information campaigns in 2000 with the aim of making companies more aware of its role as the Swedish contact point for matters relating to obstacles to trade in the internal market. An evaluation in May 2001 showed that these information and marketing campaigns led to the number of enquiries from businesses rising by 45 per cent during the campaign weeks. ¹⁶ The marketing efforts have continued in 2001. In order to promote cross-border public procurement, the

National Board of Trade has elaborated its "Borderless Business" project and built up a website containing information on public procurement for small and medium-sized enterprises.¹⁷

Nordic integration work has progressed further during the year. An arrangement has been set up to facilitate Nordic cross-border trade in construction work and discussions in respect of new co-operation projects are planned.¹⁸ An initiative has also been taken to set up a joint advertising site on the Internet for public procurements below the threshold values applicable in the Nordic countries.

1.3 The service sector from a horizontal perspective

In Sweden, citizens have a constitutional right to carry on business. Restrictions in the right to carry on business or a profession may only be introduced to protect the general interests of the public and may never be introduced purely for the financial gain of select companies or individuals. For this reason, the number of regulated professions in Sweden is limited. As in other member states, regulated professions mainly include professions within the medical and healthcare sector, the transport industry, emergency and fire services as well as teachers, lawyers and auditors.

The varying degree of regulation within the EU means that Swedish citizens encounter significant difficulties in those member states where professions are regulated more extensively. As a consequence of this, it is in Swedish interests to simplify conditions for service sector professionals who wish to work in other countries.

 $^{^{16}}$ National Board of Trade, "Årsredovisning" (Annual Report), 2000.

¹⁷ See www.offentlig.kommers.se

 $^{^{18}}$ The arrangement involves the approval of machinery and professional qualifications.

Competition policy, taxes and public procurement

The internal market shall contribute to reducing or evening out differences in product prices in different countries. A prerequisite for this is unrestricted competition. Certain sectors dependant on the domestic market are protected from international competition either due to natural trade barriers or to regulations. The Swedish government is introducing measures to promote imports to Sweden to increase competitive pressure and lower the Swedish price level. 19

2.1 The competitive situation in certain sectors

The 2001 BEPGs contain a recommendation for Sweden to increase competition in the pharmaceuticals sector. In previous years, the food trade and construction sectors have also been singled out in the BEPGs as industries in which greater competition would be desirable.

The pharmaceuticals trade

The pharmaceuticals sector is highly concentrated, particularly at the distribution and retailing levels. Swedish price levels for pharmaceuticals are approximately at the same levels as average prices in Europe.²⁰ Price levels of parallel imported pharmaceuticals are on average 10 per cent below original manufacturers' prices. Parallel imported pharmaceuticals increased from 2 per cent of total purchases by Apoteket AB (Swedish Pharmacy Corporation) in 1997 to 8.6 per cent in 2000.²¹ The Swedish government has established that Apoteket AB's retail monopoly shall remain for public health reasons, but proposes a new

pharmaceuticals subsidy system.²² The proposed act entails the introduction of new rules on government subsidisation of pharmaceuticals for the general public. It is proposed that a new, independent authority be set up to be responsible for decisions regarding the subsidisation and price regulation of pharmaceuticals and other products covered by the pharmaceuticals subsidy system. The proposed act also includes a provision on the generic substitution of pharmaceuticals, by which pharmacies should exchange drugs if a less expensive replacement drug is available. The pharmaceuticals subsidy system will be treated in a bill in autumn 2001.

The food trade

The food trade sector is dominated at the distribution and retail level by three chains which together account for 90 per cent of the market. This structure may entail a barrier to new players wishing to establish themselves in the Swedish market. However, there are indications that foreign players are now entering the Swedish market via new operations. The block exemptions for retail chains, as set out in the Competition Act, ceased to apply as of 31 May 2001. Instead, the government has, in accordance with a model from the EU, adopted general block exemptions for vertical agreements, i.e. agreements between firms at different links of the distribution chain. From the point of view of competition legislation, it has yet to be examined whether the new exemptions can lead to changes in the prevailing structure of the food trade sector.

A report from the Swedish Competition Authority states that the application of the Planning and Building Act by municipalities may constitute a barrier to entry for new firms in the food retailing sector, and thereby contribute to the relatively high food prices in Sweden.²³ The Competition Authority proposes therefore that competitive interests should be clarified in the Planning and Building Act.

 $^{^{19}}$ Government Bill 2001/02:1, "Budgetpropositionen för 2002" (2002 Government Budget Bill).

National Social Insurance Board 1999:10, "Prissättning av läkemedel – svenska läkemedelspriser i ett internationellt perspektiv" (Pricing of pharmaceuticals – Swedish pharmaceuticals prices from an international perspective) and National Social Insurance Board 2001:5, "Nya läkemedel prissatta 1998 och 1999 – hälsoekonomiskt underlag och internationella priser" (New pharmaceuticals priced in 1998 and 1999 – economic basis and international prices).

 $^{^{21}}$ Apoteket AB, "Svensk läkemedelsstatistik år 00", (Swedish pharmaceuticals statistics for 2000), 2001.

 $^{^{22}}$ See, for example, SOU 2000:86, "Den nya läkemedelsförmånen" (The new pharmaceuticals benefits system).

²³ Swedish Competition Authority 2001:4, "Kan kommunerna pressa matpriserna?" (Can municipalities squeeze food prices?).

With a view to increasing knowledge of the competitive situation in the food market, the government has commissioned the Swedish Competition Authority to conduct studies of the competitive situation at the local level. It is estimated that the final report will be presented during autumn 2001. The government is also considering commissioning the Swedish Consumer Agency and the Swedish Competition Authority to conduct an analysis of shop structures, i.e. to determine whether consumers can save money by shopping in discount stores or in hypermarkets.²⁴

The construction sector

There is a high level of concentration in several of the many sub-markets which comprise the Swedish construction sector. Both horizontal and vertical ownership links between companies exist. Import competition is still underdeveloped, partly due to slow progress in harmonisation work with the Construction Products Directive, although there are no formal Swedish obstacles to using products from other countries that are not type-approved in Sweden. The low level of international competition is mainly due to reluctance among actors in the construction sector to seek suppliers outside of Sweden.

The Building Costs Committee has performed a detailed analysis of the origin and persistence of the lack of competition in different supply chains in the construction sector.²⁵ The government has set up a Forum for Building Costs to follow up the various proposals put forward by the committee.²⁶ The Forum for Building Costs works with increasing awareness and expertise among construction firms so that they can exert greater pressure on suppliers. In addition, the Swedish Competition Authority is conducting an extensive price survey of building materials. The findings of the survey will be presented later this year.

2.2 Competition policy and state aid

Competition policy

The Swedish Competition Authority is a nonpolitical, independent authority. The Swedish Competition Authority investigates suspected anti-competitive behaviour and issues decisions which can be appealed at the Market Court. From 1 January 2001 onwards, article 81 (on anti-competitive agreements) and article 82 (on abuse of dominant position) of the EC Treaty can be applied directly in Sweden by the Swedish Competition Authority. The number of applications for exemptions/negative clearance submitted to the Swedish Competition Authority has decreased in recent years and the authority has therefore had more scope for its own initiatives. The intention is for the Swedish Competition Authority to be able to concentrate on more serious restrictive trade practices, such as cartels. The Swedish Competition Authority has a budget of around SEK 75 million for 2001 and employs more than 100 people.

In conjunction with the competition policy bill presented by the government in May last year, a committee was appointed to look into possibilities to make available more effective tools for fighting cartels.27 The committee's final proposals were presented in October 2001.²⁸ Among other things, the committee proposes to extend the possibility for reducing sanctions against those who inform about cartel cooperation and to give enhanced protection to the identity of sources informing on cartel cooperation. It is also proposed that the Swedish Competition Authority be given the opportunity to assist competition authorities in other countries with information retrieval and carrying out investigations under certain circumstances. The government plans to submit a bill on this matter in spring 2002.

As early as this autumn, however, the government will submit a bill on increased protection of the confidentiality of documents in respect of the

 $^{^{24}}$ Government Bill 2000/01:135, "Handlingsplan för konsumentpolitiken 2001-2005" (Consumer policy action plan 2001-2005).

 $^{^{25}}$ SOU 2000:44, "Från byggsekt till byggsektor" (From construction sect to construction sector).

 $^{^{26}}$ Government Bill 2000/01:26, "Bostadsförsörjningsfrågor m.m." (Housing supply issues, etc.).

 $^{^{\}rm 27}$ Government Bill 1999/2000:140, "Konkurrenspolitik för förnyelse och mångfald" (Competition policy for renewal and diversity).

 $^{^{28}}$ SOU 2001:74, "Kartellbekämpning" (Combating cartels).

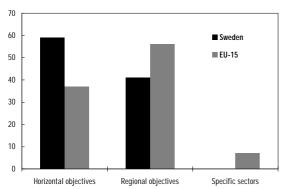
Swedish Competition Authority's investigations and on increased co-operation between Nordic competition authorities.

State aid

In order to prevent a distortion of competition at national level or EU level, Sweden is striving for a restrictive policy with regard to state aid to companies or individual sectors. Average state aid provided in Sweden during the period 1997-1999 amounted to 0.84 per cent of GDP, which can be compared to an average of 1.18 per cent in the EU.²⁹ For Sweden, this represents a decline compared with the period 1995-1997 and is in line with the undertaking from the European Council to demonstrate a negative trend in state aid by 2003.³⁰ The extent of state aid also declined within the EU between these periods.

Diagram 1. State aid to the manufacturing industry by areas of use 1997-1999

Per cent of total state aid



Source: European Commission (2000) 403, "Ninth survey of state aid in the European Union".

More than half of state aid in Sweden goes to the transport sector, particularly rail traffic. State aid to the manufacturing industry has increased somewhat, although it is solely of a general nature in accordance with community interests such as environmental improvements, R&D and support to small and medium-sized enterprises.

Overall, Sweden can be said to still belong to those countries which provide the lowest proportion of state aid within the EU.

2.3 Business and capital taxation

The 2001 BEPGs contain a recommendation that Sweden should further adjust taxation of venture capital to promote investment and entrepreneurship. The government therefore wishes to clarify that work on changing and simplifying business and capital taxation is constantly in progress.

A basic starting point for working out Swedish taxation of capital is neutrality between different forms of ownership. In the 2002 Government Budget Bill, the government therefore proposes that the imputed income for investment firms is lowered from 2 per cent to 1.5 per cent in order to create neutrality between these firms and mutual funds.³¹ The previously higher imputed income for investment firms was justified by the fact that investment firms are able to raise loans and that the interest expense is tax deductible against the imputed income. A more detailed analysis has shown, however, that this does not entail any tax advantage.³²

In February of this year, a report was submitted jointly by two corporate taxation commissions.³³ The report proposes that capital gains on business-related shares should be tax-exempt. Under the current regulations on capital gains taxation in parent companies, profits arising in subsidiaries are subject to taxation both in the subsidiary and in the parent company. This "chain taxation" is not in accordance with the Swedish principle of single taxation in the corporate sector. However, the rules counteract what is sometimes referred to as the piggy bank effect. In the absence of "chain taxation", indirect ownership of a share portfolio would entail tax advantages over direct ownership. As a result, capital gains on holdings not exceeding 10 per cent of

 $^{^{29}}$ European Commission (2000)403, "Ninth survey of state aid in the European Union".

 $^{^{30}}$ See Presidency conclusions from the Stockholm European Council, 23-24 March 2001.

 $^{^{31}}$ Government Bill 2001/02:1, "Budgetpropositionen för 2002" (2002 Government Budget Bill).

 $^{^{33}}$ SOU 2001:11, "Utdelningar och kapitalvinster på företagsägda andelar" (Dividends and capital gains on company-owned shares).

the votes will continue to be liable to corporate taxation.

In order to prevent the change in tax regulations from leading to tax planning, which is likely to undermine the Swedish corporate tax base, an extension of the rules relating to taxation of controlled foreign companies is proposed. According to the report, taxation of controlled foreign companies should be broadened to include income in foreign companies that are directly or indirectly owned by a Swedish natural or legal person.

The government's ambition is to change the taxation of capital gains on business-related shareholdings. Since the government is aware of the complexity of the issue, emphasis is being placed on the importance of taking all consequences of the above changes in regulations into account. There are also certain aspects of community law which need further elucidation. Due to the scope and complexity of the issues, it will not be possible to present a bill before the Riksdag (Parliament) any earlier than spring 2002.

Other areas of corporate taxation are also currently being reviewed. Since the 1990 tax reform, special regulations have applied to the taxation of shareholders in close companies who are also active in the company.³⁴ In 1999, the government appointed a commission to review the tax regulations governing dividends and capital gains with the aim of stimulating growth and investment in Swedish close companies.³⁵ The commission is also considering how the regulations can be changed to facilitate generation changes in close companies.

2.4 Public procurement

The 2001 BEPGs contain a recommendation that Sweden should enhance compliance with regulations on public procurement. The Public Procurement Committee estimates that the total public procurement market in Sweden is worth approximately SEK 400 billion per year, which corresponds to slightly more than 23 per cent of GDP.³⁶

The national supervisory body, the National Board for Public Procurement, stated in an evaluation that less than half of the surveyed units fully comply with the Public Procurement Act.³⁷ The National Board for Public Procurement has also examined the application of the act by state-owned, municipal-owned and county council-owned companies.³⁸ Around 20 state-owned companies and approximately 20 per cent of municipal enterprises did not consider themselves to be procuring units, a claim which is contested by the National Board for Public Procurement.³⁹ These supervisory projects are due to continue.

According to the Public Procurement Committee, the failure to comply with regulations is partly due to the fact that the rules are complex and in need of reform. The committee has therefore submitted a number of proposals in an interim report to clarify and simplify the rules, and has also proposed increased sanctions to raise the level of compliance.⁴⁰ The committee also maintains that public procurement should take environmental aspects into account.

In a bill, the government has taken a stand on certain aspects of the interim report and has proposed a number of measures to improve and

³⁴ Government Bill 1989/90:110, "Reformerad inkomst- och företagsbeskattning" (Income and corporate tax reforms) and Government Bill 1990/91:54, "Fortsatt reformering av inkomst- och företagsbeskattningen" (Further income and corporate tax reforms).

 $^{^{35}}$ Directive 1999:12.

³⁶ SOU 1999:139, "Effektivare offentlig upphandling: För fortsatt välfärd, trygghet och tillväxt" (More efficient public procurement: for continued welfare, security and growth).

 $^{^{37}}$ National Board for Public Procurement, "Effekter av lagen om offentlig upphandling", (Effects of the Public Procurement Act), 1998.

³⁸ National Board for Public Procurement, "Upphandling i statliga bolag" (Procurement in government-owned enterprises), 1999 and "Upphandling i kommun- och landstingsägda bolag" (Procurement in municipal-owned and county council-owned businesses), 2000.

 $^{^{\}rm 39}$ National Board for Public Procurement, December 2000, newsletter.

 $^{^{40}}$ SOU 1999:139, "Effektivare offentlig upphandling: För fortsatt välfärd, trygghet och tillväxt" (More efficient public procurement: for continued welfare, security and growth).

simplify the regulations, for example by permitting companies to submit tenders and tender notices over the Internet.⁴¹ In order to increase the possibilities for small and medium-sized enterprises to take part in public procurement procedures, more far-reaching requirements regarding the advertisement of public procurements below the threshold values were introduced on 1 July 2001.

An additional method of enhancing compliance with regulations is through training. Several courses on public procurement are offered by the Swedish Federation of County Councils and the Swedish Association of Local Authorities. Academic education programmes have also been initiated in recent years.

In addition, the committee proposes in its final report that a permanent committee be set up to deal with quality and development issues related to public procurement in order to enhance professional conduct and compliance with rules by developing methods and raising the level of awareness.⁴² The proposals of the Public Procurement Committee are currently being circulated for comment and a bill is planned for spring 2002.

2.5 Better regulation and measures for small and medium-sized enterprises

Around 10 per cent of the firms in Sweden consider administrative work to be the greatest obstacle to enterprise.⁴³ The SimpLex ordinance forms the core of the government's work on simplifying rules for the business sector and small businesses.⁴⁴ Most authorities report that the ordinance has provided them with an effective tool for working out impact analyses, espe-

cially with regard to small businesses.⁴⁵ However, there is a significant need for training. In order to address this need, the Government Offices initiated an additional training drive in autumn 2001 focusing on impact analyses in the early stages of the regulatory process. The government will also instruct authorities to submit proposals on how the current regulations can be simplified. The proposals will be drawn up in consultation with small businesses.

The government wishes to reduce the amount of information that businesses need to supply to different authorities. As a first step, this mainly applies to information submitted to the Swedish Patent and Registration Office, the National Tax Board, Statistics Sweden and the Swedish Customs Service. 46 The Swedish Patent and Registration Office is also working jointly with the National Tax Board on an IT project known as "Kontakt-N", which aims to develop a joint electronic application form for registering business enterprises over the Internet.

Two committees of inquiry on the simplification of rules relating to taxation and capital procurement are currently in progress.⁴⁷ In autumn 2002 at the earliest, the government will take a stand on the proposals presented from these committees.

 $^{^{41}}$ Government Bill 1999/2000:128, "Offentlig upphandling i informationssamhället" (Public procurement in the information society).

 $^{^{42}}$ SOU 2001:31, "Mera värde för pengarna" (More value for money)

 $^{^{43}}$ Ds 2001:20, "Benchmarking av näringspolitiken 2001" (Benchmarking of industrial policy 2001).

 $^{^{44}}$ Ordinance 1998:1820 analysing the effects of regulations on conditions for small businesses.

 $^{^{45}}$ Skr 2000/2001:143, "Regeringens redogörelse för regelförenklingsarbetet med särskild inriktning på små företag" (Government report on the simplification of rules, focusing especially on small businesses).

 $^{^{46}}$ Co-operation between the National Tax Board and the Patent and Registration Office will enable tax authorities in the future to obtain annual reports for company tax returns directly from the Patent and Registration Office instead of from the companies in question.

 $^{^{47}}$ Directives 1996:78, 1998:4 and 1999:12.

Public utilities and other network industries

In Sweden's consumer policy action plan for 2001-2005, the government emphasises that the ongoing liberalisation of services of general economic interest should continue since it leads to lower prices and greater freedom of choice.⁴⁸ Consumers are to be given greater opportunities to be active. This will involve improving information to consumers and enhancing the efforts of supervisory authorities.

3.1 Telecommunications

The Telecommunications Act came into force on 1 July 1993. At the same time, the state-owned Swedish Telecom was incorporated and changed its name to Telia AB (Telia). Most of Swedish Telecom's tasks in its capacity as an authority were transferred to the Swedish National Telecom Agency, currently known as the Swedish National Post and Telecom Agency. In so doing, the exercise of public authority was also separated from business operations. The overall political objective for telecommunications is that individuals and authorities across Sweden shall have access to efficient telecommunications at the lowest possible cost for society.

The Swedish telecommunications market has continued to develop well over the past year. The number of market players has risen from 176 companies in 1999 to 251 in 2000. The use of mobile telecom services by consumers continues to increase, while the market for fixed telephony is entering a more stable phase.⁴⁹

Telia still dominates the market for fixed telephony services, although the company's market share is continuing to fall. On 1 January 2001, Telia had approximately 85 per cent of the market value.⁵⁰ Tariffs for all types of fixed telephony

calls fell during 2000. Tariffs for calls from fixed to mobile networks have also begun to fall slightly. The main reason for this is that the Swedish National Post and Telecom Agency has imposed obligations on Telia to lower its interconnection charges for calls to mobile networks.

Access to infrastructure is a prerequisite for telecom operators to be able to supply telecom services. The market for network capacity has continued to develop positively with more companies and stiffer competition. However, there are considerable problems pertaining to the access to the local loop since only a small percentage of the market is profitable for direct connection by an operator other than Telia.⁵¹ On 1 January 2001, the EC regulation on unbundled access to the local loop entered into force. This entails an obligation for operators in the fixed public telephone network to provide access to their access network. In Sweden, this obligation currently applies only to Telia.

On 1 January 2001, the ordinance on price ceilings for subscriptions to fixed telephony services ceased to apply. Together with the EC regulation on unbundled access to the local loop, the elimination of price ceilings will facilitate greater competition on the subscriber market, both within traditional access networks and alternative infrastructures. To date, however, there have only been a limited number of examples where Telia has opened up its network to another operator. On 31 May 2001, there were only 1,080 connections where another operator had received access to Telia's access network.⁵²

In March 2001, the Riksdag voted to introduce changes to promote the use of number portability.⁵³ From 1 September 2001 onwards, number portability regulations also apply to the mobile market.

During 2000, the number of mobile subscriptions rose by 24 per cent to 6,338,000 subscriptions. At the end of 2000, the ratio of mobile

 $^{^{48}}$ Government Bill 2000/01:135, "Handlingsplan för konsumentpolitiken 2001-2005" (Consumer policy action plan 2001-2005).

 $^{^{49}}$ Swedish National Post and Telecom Agency, "Svensk telemarknad" (The Swedish telecommunications market), 2000.

 $^{^{50}}$ Discounting subscription revenues, where competition is virtually non-existent, Telia has a market share of approximately 76 per cent.

 $^{^{51}}$ The access network is the part of the network that is closest to the subscriber

⁵² Swedish National Post and Telecom Agency, 2001.

⁵³ Government Bill 2000/01:74, "Ändringar i telelagen 1993:597, avseende nummerportabilitet" (Amendments to the Telecommunications Act 1993:597, regarding number portability).

subscriptions to the Swedish population was approximately 71 per cent, an increase of 13 percentage points since the previous year. Telia's market share for mobile telecom services was just under 53 per cent at the end of the year, and the company has hence continued to lose market share to its competitors. Having remained constant for some time, there are signs that tariffs for mobile telephony began to fall from the middle of 1999.⁵⁴

On 1 May 2000, an amendment of the Telecommunications Act came into force. Licence holders of mobile telephone networks are now required to sell excess capacity in the network to companies who require such capacity. The amendment of the act may be one of the reasons why owners of mobile networks have become more open to accepting other service providers in their networks. Several virtual operators now offer services.

Rollout of the third-generation mobile telecommunications system, UMTS, is underway in Sweden. In December 2000, the Swedish National Post and Telecom Agency awarded licenses to Europolitan AB, Tele2 AB, Orange Sweden AB and HI3G Access AB. It is of significant importance for the competitive situation on the market for mobile telecommunications services that the number of market players will increase. This applies both to the current GSM market as well as to the future market for UMTS services.

3.2 Energy

Electricity

The purpose of the 1996 reform of the electricity market was to stimulate efficient resource utilisation and give consumers greater freedom of choice. Opening up the electricity market to competition was intended to lead to efficiency gains in the form of lower electricity prices for society as a whole and for individual consumers. In order to achieve this goal, a rule was intro-

duced prohibiting trading and production of electricity from being carried out by the same legal entity as the operator of the national electricity grid.

The electricity grid is a natural monopoly that is subject to electricity legislation. Electricity charges are set by the individual grid companies, while the Swedish National Energy Administration, an independent authority, exercises surveillance of pricing. Careful surveillance is necessary to ensure that the prices set by the grid companies are reasonable and that no discrimination takes place, for example in the terms for transmission of electricity or access to the national grid.

Around 200 players currently operate in the electricity trading market. New players, such as oil companies, have entered the market since the 1996 reform. Since access to the grid is regulated, market entry has not posed a problem for these new players. However, market concentration at the producer level is very high. In 2000, Vattenfall AB accounted for around 50 per cent of electricity production, Sydkraft AB accounted for around 20 per cent and Birka Energi AB for around 20 per cent.

When the electricity market was opened up to competition, all consumers were given a choice of electricity supplier. On 1 November 1999, the requirement to measure electricity consumption per hour was replaced with a standard assessment for the majority of customers, thus increasing consumers' freedom of choice and flexibility in the market. However, most customers remain relatively passive; only 28 per cent of customers have changed supplier. In its consumer policy action plan, the government emphasises that industry-financed advisory and information bodies would be a valuable complement to local consumer guidance.⁵⁵

⁵⁴ Swedish National Post and Telecom Agency, "Svensk telemarknad" (The Swedish telecommunications market), 2000.

 $^{^{55}}$ Government Bill 2000/01:135, "Handlingsplan för konsumentpolitiken 2001-2005" (Consumer policy action plan 2001-2005).

Table 2. Electricity prices including taxes and charges

Öre per kWh

	1996 [*]	1999	2001
House with electric			
heating	63.5	75.1	74.8
Medium-sized			
industry	34.6	28.0	24.1

^{*} Price on 1 July 1996

Note: Medium-Sized industry according to Eurostat's classification, i.e. 10 GWh, 2.5 MW, 4,000 hours.

Source: Swedish National Energy Administration, "Elmarknaden" (Electricity Market), 2001.

Electricity prices in Sweden (not including taxes and VAT) are among the lowest in the world. Partly as a result of increased competition, electricity prices fell drastically in 1996, particularly for industrial customers. After the 1999 reform, the price reductions also had an impact at the consumer level. However, electricity prices rose significantly during the first half of 2001, causing the government to appoint a commission to highlight the competitive situation on the electricity market.⁵⁶ The commission is expected to complete its work by 1 December 2001. Approximately one third of the electricity cost for households comprises electricity, one third comprises the network charge and one third comprises taxes. The network charge varies according to the location in Sweden. Grid companies that cover many rural areas have the highest charges, and charges are lowest in urban regions.

The electricity market is under constant review. The Electricity Grid Commission has submitted two interim reports containing proposals for amending the regulations pertaining to the surveillance of the electricity grid and, in particular, compulsory administration of grid companies.⁵⁷ An investigation is currently in progress to design a system of tradable certificates based on quotas in order to promote the production of electricity from renewable energy sources.⁵⁸

Natural gas

Natural gas accounts for approximately 2 per cent of Sweden's total energy supply. A new Natural Gas Act entered into force on 1 August 2000. The new act entails adapting Swedish regulations to the EC Directive concerning common rules for the internal market in natural gas. At present, approximately 50 per cent of the natural gas market is open to competition. By 2003, the entire gas market is to be open to competition, taking existing binding agreements into consideration.⁵⁹ The market has initially been opened to customers with an annual gas consumption exceeding 25 million cubic metres of natural gas. The Swedish National Energy Administration plans to develop methods and procedures for surveillance of the natural gas market.

3.3 Transport services

The transport sector has gradually been opened up to competition over the past ten years. The government's objective has been to carefully adapt the transport system to a gradual increase in competition, both within and between different modes of transport. Today, railway passenger traffic is the only area which is not fully deregulated.

Air traffic

The 2001 BEPGs recommend that Sweden increase competition within air transport. The deregulation of domestic air traffic in 1992 has not led to increased competition and lower air fares as had been hoped. Standard ticket prices have risen on an overwhelming majority of routes and prices of non-business tickets have also gone up on most routes, in spite of the reduction in VAT from 18 to 12 per cent. Prices have been cut on some routes, in particular from Stockholm to destinations in Norrland, most likely as a result of increased subsidies from municipalities. One effect of the deregulation has been greater price differentiation.

⁵⁶ Directive 2001:69.

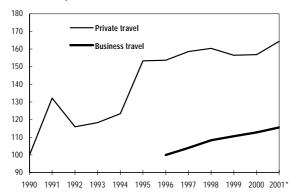
⁵⁷ SOU 2000:90, "Elnätsföretag – regler och tillsyn" (Grid companies – rules and surveillance) and SOU 2001:73, "Elnätsföretag – särskild förvaltning och regionnätstariffer" (Grid companies – special compulsory administration and regional network charges).

⁵⁸ Directive 2000:56.

 $^{^{59}}$ Government Bill 2001/02:1, "Budgetpropositionen för 2002" (2002 Government Budget Bill).

Diagram 2. Price trend for domestic air travel

1993=100 for private travel and 1996=100 for business travel



* Average for January-June. Source: Statistics Sweden, 2001.

SAS' dominant position on the domestic market in Sweden has strengthened further. In 1999, the Swedish Competition Authority sued SAS for abuse of dominant position on the grounds that SAS' Eurobonus system constituted an integral part of the economies of scale that SAS enjoys as a result of its dominant market position. SAS appealed against the decision of the Swedish Competition Authority to the Market Court, which ruled that SAS passengers should not be allowed to use earned bonus points on domestic routes subject to competition. The effect of the ruling may possibly be starting to become apparent since smaller airlines are now considering establishing themselves on individual routes in the domestic market. In July 2001, the European Commission also decided to fine SAS and Maersk Air for having entered into a secret agreement which led to SAS having a monopoly on the Stockholm-Copenhagen route. 60 The government has commissioned the Swedish Civil Aviation Administration to investigate the market situation for Swedish domestic air traffic and to propose measures to enhance competition. The commission is to submit its report by 15 November 2001.

In order to ensure fair competition, it is important that take-off and landing slots are allo-

cated in a correct manner.⁶¹ In Sweden, slots are allocated by an independent, and consequently, impartial co-ordinator. Sweden will actively contribute to EU's efforts to promote more flexible rules pertaining to the allocation of take-off and landing slots and to pave the way for increased competition.

The Swedish Civil Aviation Administration is a public enterprise whose tasks include responsibility for operating and improving Swedish stateowned civil aviation airports, promoting the development of civil aviation and overseeing the safety of civil aviation. After the deregulation, the Swedish Civil Aviation Administration has been the subject of several investigations into its organisation. So far, these have resulted in an internal separation of roles within the Administration to avoid conflicting roles.

Railways

Deregulation of the railway sector commenced in 1998, when Swedish State Railways (SJ) was split into the National Rail Administration and the public enterprise, SJ. At the end of 2000, SJ was converted into several limited companies so that it could operate under the same terms as other railway operators. Railway cargo traffic is completely deregulated for companies that are registered in Sweden. Green Cargo's (formerly SJ Gods) market share of cargo transport is estimated at around 80 per cent.

The degree of competition in the market for passenger traffic has gradually increased. During the past few years, passenger traffic routes deemed as unprofitable by SJ have been offered for procurement. A legislative amendment in November 2000 strengthened the position of new operators of rail traffic procured from the state. ⁶² When agreements expire, SJ no longer has the right to automatically reinstate traffic without prior examination by the government.

SJ's share of total passenger traffic in Sweden has fallen from a monopoly in the mid-1990s to

 $^{^{60}}$ Press release from the European Commission, 18 July 2001.

 $^{^{61}}$ In accordance with Council regulation on common rules for the allocation of slots at Community airports.

 $^{^{62}}$ Ordinance 2000:744 amending ordinance 1996:734 on the State's rail-track systems.

around 50 per cent at present. The increased competition in conjunction with public procurement has led to reduced costs for society. In terms of ticket prices, standard second-class tickets have generally become slightly cheaper in real terms during the period 1997-2000.⁶³ New alternatives (products) such as the X2000 high-speed train have been introduced and gained market share, and price differentiation has become more significant. Prices have been stable on intercity and interregional lines. However, a report from the Swedish National Audit Office states that the level of consumer protection for rail passengers is weak.⁶⁴

The trend towards a greater number of rail operators places demands on systems to regulate and supervise the allocation of infrastructural capacity. The National Rail Administration is responsible for making decisions regarding rights to traffic routes, track allocation, licences to operate track systems, rail traffic, etc.

The government has appointed a commission with the task of implementing new regulations in Swedish law as a result of international agreements. This applies, for example, to the role of the National Rail Administration as the regulator of rail infrastructure. In addition, the commission is to analyse future development alternatives for rail traffic in the best interests of consumers. The government is also reviewing the matter of how investment in infrastructure can be rendered more efficient through public-private partnership financing. 66

Bus traffic

Interregional bus traffic is mainly operated commercially in a deregulated market where the four largest operators have around 50 per cent of the bus market. The majority of bus traffic is run

in local and regional public transport, which is partly tax subsidised. More than 90 per cent of this traffic is procured in competition between different operators. The government has appointed a committee with the task of analysing the problems and opportunities of public transport from a consumer perspective and proposing changes.⁶⁷

3.4 Postal services

The monopoly on the regular conveyance of letters ceased to exist on 1 January 1993, which means that the Swedish postal services market was completely deregulated. The former Swedish Postal Administration was transferred into a wholly state-owned limited liability company, Posten AB (Posten), on 1 March 1994. At the same time, a new regulatory system for postal services in Sweden was introduced.

The Postal Services Act stipulates overall objectives for universal postal services. The act stipulates that there must be a nationwide postal service that enables everyone to receive letters and other addressed items weighing no more than 20 kg. The act also encompasses overall quality requirements and reasonable prices for postal services. The licensing and supervisory authority for postal services is the Swedish National Post and Telecom Agency. Posten is through licence terms and obligations the only license holder obliged to provide a universal postal service.

Posten still occupies a unique position in the Swedish postal market. Most of the postal companies that have arisen since the market was deregulated are close companies that operate locally. In recent years, however, newspaper distribution companies that also deliver letters as well as companies which run postal services in several towns have been established.

The Swedish market has continued to show a stable development in the past year. The number of suppliers of postal services has fallen slightly. At the end of 2000, there were 45 local post

 $^{^{63}}$ Troche, G., "Pris och utbudsutveckling på järnvägslinjer i Sverige, 1997-2000", (Price and supply trends in respect of railway lines in Sweden, 1997-2000), March 2001.

 $^{^{64}}$ Swedish National Audit Office 2001:21, "Svagt konsumentskydd för tågresenärer – myndigheterna saknar konsumentperspektiv" (Weak consumer protection for rail travellers – the authorities lack a consumer perspective).

⁶⁵ Directive 2001:48.

 $^{^{66}}$ Ds 2000:65, "Alternativ finansiering genom partnerskap" (Alternative financing through partnerships).

 $^{^{67}}$ Directive 2001:1.

companies. The positive effects for consumers are most evident in the parcels segment, where Posten has encountered the most competition. However, Posten still has more than 90 per cent of the letter market, while its greatest competitor, CityMail AB, has around 4.5 per cent.⁶⁸

The Swedish National Post and Telecom Agency is currently reviewing whether solutions can be deemed satisfactory in order to guarantee a competitively neutral, shared utilisation of the postal infrastructure.

3.5 Other public utilities

Other public utilities provided at the municipal level include road maintenance, waste and sewage management and the supply of water and district heating. Costs for these services vary considerably between municipalities. The greatest cost variation concerns waste, water and sewage rates. The substantial differences in water and sewage costs arise to a large extent due to different methods of calculating and reporting capital expenditure and different construction rates. For services such as street and road maintenance, water and sewage management, cost differences due to factors beyond the control of the municipality, such as low population density, are taken into account in the municipal equalisation system.

Table 3. Annual costs for various municipal services 2001

SEK per square metre of floor space in apartments

Service	Lowest	Average	Highest
Waste	4	12	25
Water and sewage	16	41	78
District heating	65	105	145

Note: The costs are based on a standard apartment building covering 1,000 square metres and comprising 15 apartments. The costs represent an average for all municipalities (not adjusted to the population). The district heating cost is based on 75 per cent of municipalities.

Source: Ekangruppen, "Fastigheten Nils Holgerssons underbara resa genom Sverige" (The Nils Holgersson property's fantastic journey across Sweden), 2001. Waste management and district heating are totally financed by direct charges in all municipalities. Water and sewage services, where fixed costs comprise around 90 per cent of total costs, are financed entirely by direct charges in more than two-thirds of the municipalities.⁷⁰

For many years, municipalities were fully responsible for the provision of district heating. The district heating market is still dominated by municipally-owned players, although some district heating operations have been contracted out and a few large, non-municipal players have now also entered the market. The government will be taking measures to improve competition in the market for district heating.⁷¹

4. Integration of environmental issues

Since the end of the 1980s, the use of economic instruments in environmental policy has risen markedly in Sweden. Today, economic instruments are an integral part of Sweden's strategy for improving the environment. Environmental taxes have played a major role, although charges and deposit-refund systems are also applied nowadays. The introduction of other control measures, such as tradable emission permits, is currently being debated but has yet to be implemented.

The government's green tax strategy involves further linking the tax system to the environment, as well as a continued green tax reform in the form of higher taxes on energy and lower taxes on income. The 2000 Government Spring Bill set out guidelines for a green tax reform in the order of SEK 30 billion during the period 2001-2010.⁷² The green tax reform for 2002 entails around SEK 2 billion.⁷³

 $^{^{68}}$ Swedish National Post and Telecom Agency, "Service och konkurrens" (Service and competition), February 2001.

 $^{^{69}}$ SOU 1998:151, "Kostnadsutjämning för kommuner och landsting" (Cost equalisation for municipalities and county councils).

 $^{^{70}}$ Swedish Association of Local Authorities, 2001.

 $^{^{71}}$ Government Bill 2001/02:1, "Budgetpropositionen för 2002" (2002 Government Budget Bill).

 $^{^{72}}$ Government Bill 1999/2000:100, "2000 års ekonomiska vårproposition" (2000 Government Spring Bill).

 $^{^{73}}$ Government Bill 2001/02:1, "Budgetpropositionen för 2002" (2002 Government Budget Bill).

It is difficult to assess whether the deregulation of public utilities, especially within the energy sector, has had a detrimental effect on the environment. Since some electricity is produced using non-renewable fuels, lower electricity prices could lead to greater demand for this type of electricity production, thus negatively affecting Sweden's chances of achieving its environmental objectives, such as climate targets.

Since the market was deregulated, electricity prices have fallen in Sweden, partly as a result of greater competition but also due to the availability of inexpensive hydroelectric power. However, electricity prices for the end user have not fallen markedly in Sweden, since raised electricity taxes have counteracted this effect. Electricity taxes for consumers have almost doubled between 1996 and 2001. Nonetheless, electricity consumption has risen in Sweden in recent years, albeit at a normal rate.74 It is therefore difficult to assess whether the deregulation of the market has resulted in increased energy consumption and is therefore in conflict with the environmental goal. However, this potential conflict of goals has probably been dampened through raised electricity taxes.

5. A knowledge-based economy

Two studies published recently by the OECD and the European Commission state that Sweden is the country that has come the furthest in terms of developments towards a knowledge-based economy. The studies encompass research and innovation, the information society and education and training.

5.1 R&D and innovation

Sweden continues to invest twice as much in research and development (R&D) as a proportion of GDP than other EU countries, almost 4 per cent compared to 2 per cent in the EU as a whole. The majority of R&D investments, approximately three-quarters, are made in the corporate sector, particularly in larger companies. As an indication of the rate of innovation, the number of patents per million inhabitants increased by 13 per cent in 1999 compared with the previous year.⁷⁶

A new organisation for research funding was set up on 1 January 2001. The new organisation consists of fewer but larger authorities than previously, thus enhancing opportunities for mustering strength and undertaking comprehensive ventures. Of the approximately SEK 1.5 billion additional government grant for research during the period 2001-2004, almost SEK 700 million will go to authorities within the new organisation.⁷⁷ These new research resources are intended to boost the recruitment of researchers and enhance Swedish research within strategic areas such as bioscience, IT, materials science and educational science.

In September 2001, the government put forward a bill to further enhance R&D and the in-

 $^{^{74}}$ Swedish National Energy Administration, "Elmarknaden" (Electricity Market). 2001.

 $^{^{75}}$ OECD, "Science, Technology and Industry Scoreboard 2001" and European Commission (2001)1414 "Innovation Scoreboard 2001".

⁷⁶ Eurostat, 2001.

 $^{^{77}}$ Government Bill 2000/01:3, "Forskning och förnyelse" (Research and innovation) and Government Bill 2001/02:1, "Budgetpropositionen för 2002" (2002 Government Budget Bill).

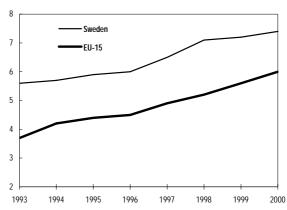
novation system in Sweden.⁷⁸ With the aim of promoting links between universities and the business sector, it is proposed that all universities and university colleges be given the opportunity to set up holding companies. Previous experience has shown that holding companies are effective means of supporting the commercialisation of research. The government also proposes that SEK 570 million be injected into industrial research institutes during the period 2002-2005. Part of this contribution is to be used for restructuring research institutes so that they become fewer, larger and more competitive internationally. The institutes are to contribute to the development of new, growing areas of industry and are to act as a link between universities and the business sector, especially small and mediumsized enterprises.

5.2 The information society

The information society has continued to undergo development in recent years. In September 2000, 76 per cent of households had a computer at home. 79 At the same time, almost 75 per cent of the labour force used a computer at work, which represents a higher percentage than in other EU countries. 80 In 1999, there was one computer for every ten pupils in compulsory education and one computer dedicated to teacher use for every six teachers. This represents a 40 per cent increase compared with 1997. Investment in information and communications technology (ICT) as a percentage of GDP remains at a high level.



Per cent



Source: Eurostat, 2001

A survey in 1999 showed that 26 per cent of households connected to the Internet had purchased goods over the Internet at some point. Online retailing has risen and accounted for 1.6 per cent of total retail sales in September 2001.⁸¹

In its administration policy programme, the government emphasises the need for "24-hour authorities", i.e. authorities that can provide round-the-clock service with the help of IT solutions. Most authorities, 94 per cent, had their own web site in 2000. In November 2000, almost half of the Swedish population had visited a web site of at least one government authority.⁸²

In order to further promote the spread of ICT, businesses, sole traders and property owners are offered tax reductions on expenditure relating to broadband connections.

5.3 Supply of highly skilled personnel

An adequate supply of graduates is vital to the knowledge-based economy. The 2000 Labour Market Tendency Survey published by Statistics

 $^{^{78}}$ Government Bill 2001/02:2, "FoU och samverkan i innovationssystemet" (R&D and co-operation in the innovation system).

⁷⁹ Eurostat, 2001 and SIKA, "Fakta om informations- och kommunikationsteknik i Sverige" (Facts about information and communications technology in Sweden), 2001.

 $^{^{80}}$ Ds 2001:20 "Benchmarking av näringspolitiken 2001" (Benchmarking of industrial policy 2001).

⁸¹ Swedish Federation of Trade, "Internetindikator" (Internet indicator), September 2001.

 $^{^{82}}$ SIKA, "Fakta om informations- och kommunikationsteknik i Sverige" (Facts about information and communications technology in Sweden), 2001.

Sweden also shows that graduate engineers are in strong demand on the labour market.⁸³

Compulsory education in Sweden has gradually been expanded and 98 per cent of young people now go on to study at upper secondary level. The proportion of upper secondary leavers who go on to university studies within three years has almost doubled since the mid-1980s.⁸⁴ It is worth noting that 95 per cent of all 18-year olds are enrolled in some form of education. This is the highest percentage of all the EU member states. However, Sweden also has the sharpest decline in the number of students who go on to higher education directly after leaving upper secondary school. The government's long-term goal is that half of all school leavers should have entered into higher education by the age of 25.⁸⁵

The higher education system in Sweden was expanded significantly during the 1990s. Between 1990 and 1997, the average number of students in higher education increased by 50 per cent in Sweden as well as in the OECD countries. Sweden's investment in science and technology during the 1990s led to a 100 per cent increase in the number of graduates in these areas as a percentage of the labour force in the 25-34 age group. This is a positive development in light of the high demand for technical expertise. However, in comparison with the OECD average, Sweden has a slightly lower proportion of the population with a university education of three years or longer and postgraduate education. ⁸⁶

Since the increase in resources to universities in recent years, the focus is now shifting to compulsory schools, with the aim of increasing teacher-to-student ratios. During the period 2001-2006, SEK 17.5 billion will be injected into compulsory education.⁸⁷

83 Statistics Sweden, "Arbetskraftsbarometer" (Labour Market Tendency

Survey), 2000.

II.B. CAPITAL MARKETS

1. Legal and regulatory framework

It is of material importance to the economic development that the financial system is stable and efficient. At the same time, it must guarantee consumers a high level of protection.

1.1 Developments in legislation

With the aim of improving the conditions for the implementation of securitisation in Sweden, a change in financial legislation came into force on 1 June 2001. The change means that a company which on isolated occasions acquires claims or stocks of claims does not require a permit for this activity if it does not, on a recurring basis, raise funds for this activity from the general public.⁸⁸ Securitisation has positive effects on the stability of the financial system. It leads to a spreading of credit risks, and reduces the risk of inaccurate pricing of credit. The method can also lower financing costs.

In a governmental committee report, it is proposed that mortgage institutions be given the opportunity to raise capital by issuing secured bonds.⁸⁹ This would help reduce borrowing costs, which would enable consumers to be charged the lowest possible interest rate on their mortgages.

A reform of the legislation governing banks and credit market companies, based on the proposals of the Banking Law Committee, is currently being prepared. 90 In addition to making the legislation more effective and streamlined, it is intended to reduce red tape and increase competition, particularly in borrowing and granting

⁸⁴ Statistics Sweden, "Utbildningsstatistisk årsbok" (Yearbook of educational statistics), 1998.

 $^{^{85}}$ Government Bill 2001/02:1, "Budgetpropositionen för 2002" (2002 Government Budget Bill)

⁸⁶ OECD, "Education at a Glance", June 2001.

 $^{^{87}}$ Government Bill 2001/02:1, "Budgetpropositionen för 2002" (2002 Government Budget Bill).

⁸⁸ Government Bill 2000/01:19, "Bättre förutsättningar för värdepapperisering" (Better conditions for securitisation).

⁸⁹ Ds 2001:38, "Säkerställda obligationer" (Secured bonds). In the event of the bankruptcy of the mortgage institute, secured bonds provide investors with a right of priority in the credit stock of the mortgage institution.

 $^{^{90}}$ Directive 1995:86. See inter alia SOU 1998:160, "Reglering och tillsyn av banker och kreditmarknadsföretag" (Regulation and supervision of banks and credit market companies).

credit. The intention is to submit a bill on this issue during 2002. The e-money directive is also being prepared for speedy implementation into Swedish law.⁹¹

The 2001 BEPGs contain a recommendation that Sweden should encourage entrepreneurship through changes in the bankruptcy laws. In Sweden, insolvency legislation covers in the broad sense the Bankruptcy Act, the Business Reorganisation Act, the Right of Priority Act and the Wage Guarantee Act. In addition, there are provisions relating to bankruptcy in various other legislation.

Sweden has, like many other countries, reformed its bankruptcy legislation during the 1990s with the aim of improving the opportunity to reorganise companies. Companies can be reorganised either under or outwith the framework of Bankruptcy Act. The Bankruptcy Act provides considerable options for a business to be carried on again. Companies can also be reorganised through the procedure in the Business Reorganisation Act, which was added in 1996.

As a stage in the reform of bankruptcy legislation, the Right of Priority Committee has submitted proposals that, among other things, would enable companies to receive help more quickly in the event of financial difficulties, increase the community of interests among creditors in the event of insolvency and ensure more rapid insolvency hearings. Furthermore, in the event of a reorganisation, the terms of the Bankruptcy Act and the Business Reorganisation Act would be put on a more even footing, partly through enacting that the central government wage guarantee should apply under both acts. ⁹² A bill relating to new rights of priority rules is planned for spring 2002.

During autumn 2001, the Right of Priority Committee will submit its final report, which deals with the issue of whether, during a company reorganisation, debtors should be given a right to terminate agreements prematurely.⁹³ The

government is also considering changes to the recovery rules for security. During 2001, the government in addition appointed a commission on certain international legal aspects of insolvency in view of new EC legislative acts.⁹⁴

1.2 Changes in the supervisory framework

Within the Financial Supervisory Authority – which exercises supervision over financial companies in the insurance, credit and securities markets – several development projects are currently in progress. These include the refining of an internal risk assessment system. The Authority is also taking measures to enable it to administer the new regulations on capital adequacy, which are expected to be implemented in 2005.

During the year, the Authority also strengthened its market supervisory organisation, and initiated extensive development work in this area. The development of fund supervision and supervision of life solvency is also in progress. The cooperation agreement signed with Finland, Denmark and Norway in October 2000 was broadened during 2001. The agreement has resulted in increased co-operation among the supervisory authorities in these countries.

2. The financial sector

The deregulation of the credit market in the mid-1980s, European economic integration and technical progress have all contributed to structural changes in the financial sector in Sweden.

2.1 Market developments

The negative trend on the Stockholm Stock Exchange during most of 2000 continued during the first half of 2001. The trading statistics of the Stockholm Stock Exchange indicate, however, that from a historical perspective, trading remained high during the first half of 2001. Aver-

^{91 2000/46/}EC.

 $[\]frac{92}{100}$ SOU 1999:1, "Nya förmånsrättsregler" (New rules on right of priority)

⁹³ Directive 1997:26.

 $^{^{94}\, \}text{See}$ inter alia 2001/17/EC and 2001/24/EC.

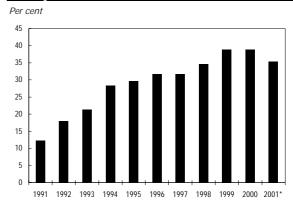
age trading per day amounted to SEK 16 billion, with a falling trend over time. The declining turnover on the stock market has depressed profitability, in particular for smaller brokerage firms, which are more dependent on private clients.⁹⁵

The OM Group has been involved in the restructuring of the European markets, partly through investing in a platform for integrated trading, clearing and settlement of European and North American shares (*Jiway*). The German-Swiss derivative market, Eurex, has announced plans to establish a presence in Sweden, and this has led to OM reducing its fees for derivative trades by around 40 per cent. Competition may also become fiercer as VPX, a trading system jointly owned by the major banks, has now commenced operations, and is offering the banks' custodial costumers a trading service in shares and warrants via the Internet during evenings and weekends.⁹⁶

At the end of February 2001, the opening hours of the Stockholm Stock Exchange were extended to increase accessibility for private individuals and foreign institutions. During the summer, the Stockholm Stock Exchange decided to create a daytime and an evening session. Due to a lack of interest in evening trading, and some technical problems, the Exchange decided during the autumn to postpone the evening session until 2002.97

Foreign ownership on the Stockholm Stock Exchange was unchanged at the end of 2000 on the level of the preceding year, at just under 39 per cent. The proportion has, however, fallen to just over 35 per cent in the first half of 2001, partly as a result of the large and falling shareholdings of foreign shareholders in the telecoms company, Ericsson.⁹⁸

Diagram 4. Foreign ownership on the Stockholm Stock Exchange



*Q1 2001. Source: Statistics Sweden, 2001.

Total Swedish wealth in mutual funds continued to increase during 2000, from SEK 720 billion to SEK 768 billion, which was due to net saving in funds more than doubling. The Premium Pension Authority accounted for almost all of this increase.⁹⁹

The Swedish bond market has suffered from declining liquidity in recent years. This is due, among other things, to lower profit margins and a fall in the number of traders. To overcome this development, in May 2001 the OM Fixed Income Exchange introduced electronic trading in the interbank market for ten-year Swedish government bonds. This trading has already won around 20 per cent of total interbank trading in government bonds. 100

2.2 Restructuring of the banking and insurance sectors

Among the four major banks, the trend towards increasingly larger structures continues. One of the four, Nordea, had its bid for the Norwegian Christiania Bank approved, and so acquired a significant market share and presence throughout the Nordic countries. Two of the others, Föreningssparbanken and SEB, planned to merge. However, the banks withdrew their application

 $^{^{95}}$ In summer 2001, the Swedish Securities Dealers Association had around 40 members, of which six were large domestic players and six were non-Nordic financial groups. Two of the smaller brokerage firms merged during 2001, and the number of pure Internet brokers has been reduced through mergers from the original seven to three.

 $^{^{96}}$ VPX was formerly called OffeX. Warrants are securities which give the holder the right to buy a share or bond at a given price from a certain date.

⁹⁷ Press release from the Stockholm Stock Exchange, 12 September 2001.

 $^{^{98}}$ Statistics Sweden, Statistical Report, FM 20 SM 0103.

⁹⁹ Statistics Sweden, Statistical Report, FM 37 SM 0103.

 $^{^{100}}$ OM, "Delärsrapport" (Interim Report), January-June 2001.

to merge after an investigation by the EU's competition authority.

In spite of the expansion by the four major banks, the proportion of other deposits and lending by other banks has risen, from 3.6 per cent of lending and 2.1 per cent of deposits in 1991, to 16.5 per cent of lending and 14.3 per cent of deposits in 2000. 101 It is also worth mentioning that new players have been granted permits to establish banking business, or are planning to apply for permits. Two large retail chains have well-advanced plans to offer banking services to their customers. The government believes that the banks' monopoly right to accept deposits should be abolished or restricted. 102

Nonetheless, the mobility of bank customers must be regarded as being limited. The government has commissioned the Swedish Competition Authority and the Swedish Consumer Agency to investigate the reasons for this.

Diagram 5. Deposits with commercial banks

SEK billion

1 400
1 200
1 000
800
400
200
1 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000

Source: The Swedish Bankers' Association, "Bankaktiebolagen 1990-2000" (Jointstock banks 1990-2000).

The Swedish banks continue to focus strongly on "home banking", where the use of the Internet is a central feature. The proportion of private customers who signed agreements with banks on ac-

cess to their accounts via the Internet trebled during 2000. 103

New technology, in combination with price competition, has contributed to the insurance companies' expansion into the bank market. The share of household deposits held by banks owned by insurance companies is still low, but it constitutes a significant share of the advance by the niche banks into the household market over the past three years.¹⁰⁴ The weak trend in the stock market has had a negative effect on insurance companies. The return on invested assets was negative during the first half of 2001 for both non-life and life companies.¹⁰⁵ In the non-life insurance area, there is a merger agreement between the Finnish company, Sampo, and If Skadeförsäkring, which is owned by Skandia. The merger is conditioned on Sampo's bid for Storebrand being approved by the Norwegian authorities and the subsequent consummation of the deal. 106

The government has tabled a bill on the transition to a conventional taxation method for foreign non-life insurance companies. ¹⁰⁷ It is proposed that foreign non-life companies will be taxed in the same way as Swedish companies. The rules are proposed to come into force on 1 January 2002.

2.3 The venture capital market

The venture capital market grew to new record levels during 2000. The difficult situation in the stock market has, however, seriously hampered the venture capital market in 2001.

A total of SEK 19.4 billion was invested in 569 unlisted companies in Sweden in 2000, compared with SEK 11.2 billion in the preceding year. As a

 $^{^{101}}$ The Swedish Bankers' Association, "Bankaktiebolagen 1990-2000" (Joint-stock banks 1990-2000).

 $^{^{102}}$ Government Bill 2001/02:1, "Budgetpropositionen för 2002" (2002 Government Budget Bill).

¹⁰³ SIKA, "Fakta om informations- och kommunikationsteknik i Sverige" (Facts about information and communications technology in Sweden), 2001.

 $^{^{104}}$ Affärsvärlden no. 39, 26 September 2001.

¹⁰⁵ Statistics Sweden, Statistical Report, FM 12 SM 0102.

¹⁰⁶ Press release from If Skadeförsäkring, 21 May 2001.

 $^{^{107}}$ Government Bill 2001/02:42, "Övergång till en konventionell beskattningsmetod för utländska skadeförsäkringsföretag" (Transition to a conventional taxation method for foreign non-life insurance companies).

share of GDP, this investment was equivalent to almost 1 per cent, which can be compared to the European average of around 0.4 per cent.¹⁰⁸ The bulk of the increase in 2000 was, however, related to investments in mature companies. Investment in the earliest seed and start-up phases fell scarcely at all in absolute terms, but fell all the more as a share of total investment in unlisted shares. Investment activity continued in the first quarter of 2001, albeit at a decreasing rate. It is noteworthy that the bulk of the investment during this period was in the earliest seed and start-up phases, as well as in the expansion phase.¹⁰⁹

The number of members in the Swedish Venture Capital Association increased from 55 in 1998 to 158 in autumn 2001. At the same time, capital under management intended for investment in Sweden rose from SEK 41 billion in 1998 to a preliminary SEK 150 billion in 2001. In 2000, capital under management in Swedish venture capital companies increased by SEK 30.6 billion, and of this a full 65 per cent came from foreign investors, who are becoming increasingly important players in the Swedish venture capital market.

A restructuring of the central authority functions within industrial policy is underway. The restructuring is aimed at co-ordinating resources and extracting synergies.¹¹¹ The effect of the co-ordination will be that small and medium-sized companies will have simplified access to the financing opportunities offered by the various authorities through one-stop-shopping.

2.4 Consumers on the financial markets

Developments in the area of financial services have, in many ways, led to improvements for consumers. In the government's action plan for consumer policy for 2001–2005, it is noted that the basic level of consumer protection in the financial services area is good, but that there are certain deficiencies. 112

There has been a shift from traditional bank saving to a more varied pattern of saving in securities and mutual fund shares, which implies increased risk-taking, and therefore a greater need for expert advice and protection for the consumer. In Sweden there are no general rules on liability for financial advice. In the light of this, the government will set up a commission to investigate the need for increased consumer protection relating to financial advice. The commission is to submit its report no later than 30 June 2002. In addition, the present financial services advisory bureau will also cover the securities market.

An activity which can lead to problems for consumers is the practice of certain credit institutions granting fast loans at high interest rates, such as telephone loans. There is, consequently, a need to take action to limit the problem of overindebtness of consumers. The government will commission the Swedish Consumer Agency to analyse in more detail the reasons for consumers falling into debt traps and propose measures to limit the problem.

In many cases, the transfer of money between banks takes too long, which penalises consumers. The time taken for such transfers should, therefore, be further reduced. The government is monitoring developments and intends to bring forward legislation if this should be considered necessary.¹¹⁴

¹⁰⁸ European Venture Capital Association, "Yearbook 2001".

¹⁰⁹ NUTEK and Swedish Venture Capital Association, "Riskkapitalbolagens aktiviteter under första kvartalet 2001" (Activities of venture capital companies during the first quarter of 2001).

¹¹⁰ Swedish Venture Capital Association, 2001.

¹¹¹ Government Bill 1999/2000:71, "Vissa organisationsfrågor inom näringspolitiken" (Some organisational issues in industry policy).

¹¹² Government Bill 2000/01:135, "Handlingsplan för konsumentpolitiken 2001-2005" (Consumer policy action plan 2001-2005).

¹¹³ Directive 2001:41.

 $^{^{114}}$ Government Bill 2001/02:1, "Budgetpropositionen för 2002" (2002 Government Budget Bill).

II.C. OTHER REFORMS

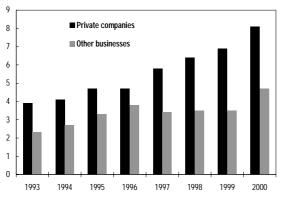
The transformation of the public sector

In the 2001 BEPGs, Sweden was recommended to increase competition within the public services sector at local level. The government intends to take further the development of alternative approaches to management and operation in the public services area, and to increase the share of the collective economy which is open to competition. The principle is, however, that health services, schools and care will be publicly funded, democratically governed and open to all on equal terms.

The trend in the 1990s has been towards increased competition in the public services sector. The percentage of workers employed by alternative providers of welfare services doubled between 1993 and 2000.¹¹⁶ Developments vary, however, between different areas of activity. The greatest increase has been in care for the elderly.

Diagram 6. Percentage of workers employed by alternative providers of welfare services

Per cent of total employees in the welfare sector



Note: Other businesses includes for example government-owned enterprises and nonprofit associations.

Source: SOU 2001:52, "Välfärdstjänster i omvandling" (Welfare services in transformation).

 $^{115}\,$ Government Bill 1999/2000:140, "Konkurrenspolitik för förnyelse och mangfald" (Competition policy for renewal and diversity).

In other areas of public services, external providers are also being used to a considerable extent. Contracts are the most common form of market utilisation in Swedish municipalities. Private providers' share of contract operations has increased markedly in recent years.¹¹⁷

With respect to the effects of using alternative operating forms, a study by the Swedish Association of Local Authorities shows that this has helped increase the efficiency of resource allocation. The result has been a reduction in cost and clearer demands on the operation. According to the municipalities interviewed, it also appears that quality has increased. 119

A study by the Swedish Agency for Administrative Development shows that the majority of authorities and government-owned enterprises run competitive operations in some form.¹²⁰

The increased competition has, in some cases, involved competition problems between operators in the public and private sector.¹²¹ A report from the Council for Competition on Equal Terms between the Private and Public Sectors (Competition Council) states that the conflicts can, to some extent, be limited. It further notes that public sector players sometimes run operations outside their remit without any reasonable grounds for doing so. The Council presents a number of recommendations, including that public sector competitive operations should be delimited in their accounts. A basis for conflict resolution rules in the Competition Act has been prepared in a governmental committee report.¹²² Such a rule would be important in particular for conflict situations in which small local companies are involved. It is further proposed that the Competition Council be tied to the Swedish

 $^{^{116}}$ SOU 2001:52, "Välfärdstjänster i omvandling" (Welfare services in transformation).

¹¹⁷ Swedish Association of Local Authorities, "Kommunernas marknadsutnyttjande 1995-1999" (Municipalities' market utilisation 1995-1999)

¹¹⁸ Swedish Association of Local Authorities, "Konkurrens för fortsatt välfärd?" (Competition for continued welfare?), 1999.
119 Ibid.

 $^{^{120}}$ The Swedish Agency for Administrative Development, "Staten som kommersiell aktör" (Central government as a commercial player), 2000.

 ¹²¹ SOU 2000:117, "Konkurrens på lika villkor mellan offentlig och privat sektor" (Competition on equal terms between public and private sectors).
 122 Ds 2001:17, "Konkurrens på lika villkor mellan privat och offentlig sektor" (Competition on equal terms between public and private sectors).

Competition Authority, and that the Market Court be strengthened by the appointment of an expert with particular knowledge of the type of public sector operation which may be tried under the new regulations. The proposals have been circulated for comment. The government intends to reach a decision on the proposals during autumn 2001.

The local governments are responsible for one-fifth of Sweden's GDP. It is, therefore, of crucial importance that their resources are used efficiently. A report from the Committee on the Future Development of a Municipal Database proposes that a database be established with key figures which describe the municipalities' operations using volume, financial and quality parameters. ¹²³ It also proposes that a board for municipal analysis and comparison be established, with responsibility for the database. It is proposed that the database should be available on the Internet from 2002. The database will be an important instrument providing consistent information on trends in different municipalities.

The state is a significant player in the Swedish business sector. Government-owned enterprises represent around 25 per cent of the domestic business sector, and the market value of central government shareholdings amounted to around SEK 138 billion at the end of August 2001.¹²⁴ Since last year, the Swedish Government Offices have published quarterly reports to increase the transparency of government-owned enterprises. The government has budgeted SEK 45 billion for the period 2002-2004 for the sale of state-owned holdings.¹²⁵

III. MEASURES FOR FURTHER REFORM

The government considers that economic reform is of vital importance to increase the potential for growth and employment both in Sweden and the EU. Sweden has implemented comprehensive economic reforms since the mid-1980s. In spite of this, there are solid grounds for continuing the reform work in respect of the product and capital markets and to enhance the benefits for consumers. In order to work towards this goal, further reform measures are being undertaken.

1. Enhanced competition and consumer benefits

- The Swedish government will continue to promote the principles of free trade as well as initiate work to promote imports to Sweden in order to increase competitive pressure and lower the price level.
- In Sweden's consumer policy action plan for 2001-2005, the government emphasises that the liberalisation of services of general interest should continue since it leads to lower prices and greater freedom of choice. Consumers are to be given better opportunities to be active.
- Measures to improve the functioning of the internal market will continue. Such measures include information campaigns to raise awareness of the National Board of Trade's role as a contact point and to promote cross-border public procurement. Sweden will continue to pursue the matter of parallel imports of trademark-protected goods from countries outside of the EU.
- The rules governing competition are constantly being made more stringent to render legislation more effective. This work includes the programme that has been proposed by the Committee on Cartels for reducing sanctions against

 $^{^{123}\,\}mathrm{SOU}$ 2001:75, "www.kommundatabas.NU!".

 $^{^{124}}$ The Swedish Ministry for Industry, Employment and Communications, "Rapport för företag med statligt ägande" (Report on governmentowned companies), January-June 2001. The holding in Telia represented approximately one-third of the total listed holding.

 $^{^{125}}$ Government Bill 2001/02, "Budgetpropositionen för 2002" (2002 Government Budget Bill).

those who inform on cartel co-operation and to give enhanced protection to the identity of sources informing on cartel co-operation. A bill based on the committee's proposals is planned for spring 2002.

- As early as this autumn, however, the government will submit a bill on increased protection of the confidentiality of documents in respect of the Competition Authoritys' investigations, and on increased co-operation between Nordic competition authorities.
- Studies of the competitive situation and price trends in various sectors such as food and building materials are being conducted to ensure that enhanced competition will benefit consumers.

2. Efficient and competitive public utilities

- The competitive situation and price trends in the electricity market and the domestic air traffic market are currently being examined. The intervention of supervisory authorities in recently deregulated markets will be investigated.
- En bill on issues relating to the electricity grid and district heating will be presented during autumn 2001.¹²⁶ The government will take measures to enhance competition in the district heating market.
- The entire gas market is to be opened up to competition by 2003, taking existing binding agreements into account.
- The changes made in the postal infrastructure in 1999 are currently being evaluated in order to guarantee competi-

- tively neutral sharing of the postal market between players.
- A commission has been appointed to propose how the Telecommunications Act and the Radio Communications Act can be adapted to future EU regulations on electronic communications.¹²⁷

3. Promotion of a knowledge-based economy

- With the aim of promoting links between universities and the business sector, it is proposed that all universities and university colleges be given the opportunity to set up holding companies. It is also proposed that SEK 570 million be injected into industrial research institutes during the period 2002 to 2005.
- The government's long-term goal is for half of all school leavers in any year to have entered higher education by the age of 25. Following the enhanced resources to universities in recent years, the focus is now shifting to compulsory schools for the next few years. During the period 2001-2006, SEK 17.5 billion will be injected into compulsory education.
- In its administration policy programme, the government emphasises the need for "24-hour authorities", i.e. authorities that can provide round-the-clock service with the help of IT solutions. Businesses, sole traders and property owners are also offered reduced taxes on expenditure relating to broadband connections.

 $^{^{126}}$ Press release from the Ministry of Industry, Employment and Communications, 19 October 2001.

¹²⁷ Directive 2001:32.

4. Strengthened capital markets and improved supply of capital

- Further measures are being implemented to improve the functioning of the capital markets. Such measures include the drafting of proposals to reform the legislation governing banks and credit market companies, to among other things enhance competition in the market for borrowing and granting credit.
- EC directives, such as the e-money directive, are being prepared for speedy implementation into Swedish law. The government also proposes that savings banks and member banks be given the same rights as joint-stock banks to operate abroad.¹²⁸
- A review is to be made of consumer protection in the area of financial services.
 The government will commission the Swedish Consumer Agency to analyse in more detail the reasons why consumers fall into debt traps and propose measures to limit the problem.
- The length of time that it takes to transfer money between banks should be shortened further. The government also considers that the banks' monopoly right to accept deposits should be abolished or restricted.
- Work is constantly underway to review and change business and capital taxation in order to stimulate investment and entrepreneurship. Measures include tax exemption for capital gains on businessrelated shares, expanded rules for the taxation of income in foreign companies, tax rules relating to dividends and capital gains in close companies and regulatory

- changes to facilitate generation changes in such companies.
- A restructuring of the central authority functions within industrial policy is underway with the aim of co-ordinating resources and extracting synergies.

5. An efficient public sector

- In its final report, the Public Procurement Committee has submitted a number of proposals that aim to enhance compliance with regulations by simplifying them. A bill is planned for spring 2002.
- With the aim of ensuring efficient competition between operators in the private and public sector at the local level, the government intends to reach a decision during autumn 2001 on the proposals presented in a governmental committee report based on the recommendations in the report from the Competition Council
- Measures are being taken to simplify company registration, for example through the "Kontakt-N" IT project, which aims to develop a joint electronic application form for registering business enterprises over the Internet.
- It is proposed in a committee report that a municipal database should be set up in 2002. The database is to contain key figures that describe the municipalities' operations using volume, financial and quality parameters.

¹²⁸ Government Bill 2000/01:141, "Rätt för sparbanker och medlemsbanker att driva verksamhet utomlands m.m." (Rights of savings banks and member banks to pursue operations abroad, etc.).

IV. ANNEXES

A. Policies to protect and improve the environment

Sweden attaches great importance to a policy aimed at sustainable development. The overall objective of environmental policy is to hand over to the next generation a society in which Sweden's main environmental problems are solved. 129 Sweden has a good tradition of using economic policy instruments to deal with environmental problems. The aim of this annex is to present an overview of the use of market-based instruments and their role in achieving the established environmental policy objectives. Conflicts associated with the objectives resulting from the use of market-based instruments within other policy areas will also be discussed.

Objectives and strategies

Sweden has worked with a number of environmental policy objectives since the late 1980s. With time it became so difficult to get an overview of the objective framework that in April 1999 the Riksdag adopted a new framework with fifteen national environmental quality objectives. 130

To clarify the environmental quality objectives and propose action strategies, two parliamentary committees were appointed as well as a commission of inquiry, which submitted their reports during spring 2000.¹³¹ Based on these documents, the government presented a bill for a chemicals policy for a non-toxic environment in February 2001, followed in May 2001 by a Government Bill with interim targets and action strategies for achieving fourteen of the fifteen

environmental quality objectives.¹³² During the autumn, the government will present a special climate bill with interim targets and actions for the remaining objective. In many cases the interim targets are measurable, with defined time frames. According to the directives for both inquiries, the objectives should be formulated based on assessments of social costs and benefits.

Climate change and air quality

Sweden is actively working to reduce emissions of greenhouse gases and other air pollutants. The major underlying environmental problems are climate change and acidification.

In the overall environmental quality objective for limiting impact on the climate, the level of greenhouse gases in the atmosphere must be stabilised at a level at which human impact will not have a harmful effect on climate systems. Together with other countries, Sweden is responsible for achieving this global objective.

In 1993, the Riksdag ratified the convention on climate change and declared that Sweden's strategy should be to stabilise carbon dioxide emissions from fossil fuels at the 1990 level by the year 2000, and thereafter reduce such emissions. Under the Kyoto Protocol Sweden, together with other EU member countries, has agreed to reduce greenhouse gas emissions by 8 per cent between 2008 and 2012, using the 1990 level as a baseline. Within the framework of the EU burden sharing agreement, Sweden may increase emissions by 4 per cent relative to the 1990 level. There is also an objective to stabilise carbon dioxide emissions from transports at the 1990 level by 2010. 134

¹²⁹ Government Bill 1997/98:145, "Svenska miljömål – miljöpolitik för ett hållbart Sverige" (Swedish environmental quality objectives - environmental policy for a sustainable Sweden).

 $^{^{130}}$ Ibid.

¹³¹ SOU 2000:52, "Framtidens miljö – allas vårt ansvar" (The future environment – the responsibility of all), SOU 2000:23, "Förslag till svensk klimatstrategi" (Proposed Swedish climate strategy) and SOU 2000:53, "Varor utan faror" (Non-hazardous products).

 $^{^{132}}$ Government Bill 2000/01:65, "Kemikaliestrategi för giftfri miljö" (A chemicals policy for a non-toxic environment) and Government Bill 2000/01:130, "Svenska miljömål – delmål och åtgärdsstrategier" (Swedish environmental objectives – interim targets and action strategies).

 $^{^{133}}$ Government Bill 1992/93:179, "Åtgärder mot klimatpåverkan m.m." (Measures against climate change, etc.).

 $^{^{134}}$ Government Bill 1997/98:56, "Transportpolitik för en hållbar utveckling" (Transport policy for sustainable development).

The objectives have not been determined specifically based on a cost-benefit analysis. ¹³⁵ In recent years, however, there have been several studies and models calculating the cost of actions and forecasting emissions. ¹³⁶

In 1997, the Riksdag approved an energy policy scheme with measures and objectives important to emissions of greenhouse gases and other emissions into the air. These included increasing production from renewable energy sources as well as using energy more efficiently.¹³⁷

There are no measurable objectives for more efficient energy use, but the Swedish National Energy Administration has set up an operational objective that energy efficiency measures must contribute to an energy savings equal to 1 TWh/year. The energy policy scheme has been evaluated.¹³⁸

In the overall environmental quality objective "Clean air", the air must be clean enough not to damage human health, flora, fauna or cultural values. The government has proposed four interim targets for the healthy air objective.

The objectives are not explicitly specified based on a cost-benefit analysis, but are partially consistent with the objective in a directive currently under development within the EU and emission limits in accordance with the Göteborg protocol. According to calculations by the European Commission, it will cost EUR 87 million annually until 2010 for Sweden to implement the national emission ceilings in the proposed directive. The benefit of such a restriction has been estimated at EUR 140 to 260 million annually. 140

According to other studies in the field, the cost of restricting sulphur and nitrogen emissions at the previously established environmental targets amounts to just under SEK 3 billion annually.¹⁴¹ However, all of the calculations are marred by significant uncertainty.

Table 1. Interim target for air quality and emissions to air			
Air quality Objective			
Level of SO ₂	All municipalities shall achieve a level of 5 microgram/m³ as an annual mean value by 2005.		
Level of NO _X A level of 20 microgram/m ³ as an annual mean and 100 microgram/m ³ as a one-hour mean value shall be achieved by 2010.			
Ground-level In 2010, ozone levels shall be less than ozone 120 microgram/m³ as an 8-hour mean value concentration			
Air emissions Objective			
VOC* Emissions to have decreased to 241 ktonne by 2010.			
SO ₂ Emissions to have decreased to 60 ktonne by 2010.			
NO_X	Emissions to have decreased to 148 ktonne by 2010.		

* Volatile organic compounds excl. methane. Source: Swedish Environmental Protection Agency and Government Bill 2000/01:130, "Svenska miljömal – delmål och åtgärdsstrategier" (Swedish environmental objectives - interim targets and action strategies).

Water quality and water scarcity

Compared with many other countries, Sweden has a plentiful supply of good quality water. The main objective is therefore to preserve its quality and to avoid pollution of lakes and waterways. The biggest problems are acidification and eutrophication.¹⁴²

In the environmental quality objective "Natural acidification only", the acidifying effects of acid deposition and land use must not exceed limits that can be tolerated by land and

 $^{^{135}}$ Because of the global nature of the climate issue, it is especially difficult to assess damage caused by greenhouse emissions.

¹³⁶ For reference to two Swedish analyses, see SOU 2000:23, "Förslag till svensk klimatstrategi" (Proposed Swedish climate strategy).

¹³⁷ Government Bill 1996/97:84, "En uthällig energiförsörjning" (Sustainable energy supplies). Renewable energy sources include biofuel, hydroelectricity and wind power.

 $^{^{138}\,\}rm Skr\,2000/01:15,$ "Den fortsatta omställningen av energisystemet m.m." (Further adaptation of the energy system, etc.).

¹³⁹ Proposal for a Directive of the European Parliament and of the Council on national emission ceilings for certain atmospheric pollutants (COM(125)final)

 $^{^{140}}$ Government Bill 2000/01:130, "Svenska miljömål – delmål och åtgärdsstrategier" (Swedish environmental objectives – interim targets and action strategies).

¹⁴¹ Statistics Sweden, Environmental Accounts 1998:9, "Svenska miljöräkenskaper för svavel och kväve samt Sveriges kostnader för kväveutsläpp" (Swedish environmental accounts for sulphur and nitrogen emissions and costs caused by nitrogen emissions in Sweden).

 $^{^{142}}$ Swedish Environmental Protection Agency, "de Facto, Miljömålen – vår generations ansvar" (De Facto, Environmental goals – our generation's responsibility), 2000.

water, nor may it accelerate the corrosion of technical materials or buildings. 143

Besides the interim targets on acidifying air emissions presented in the air quality section, the government has proposed two additional interim targets. No more than 5 per cent of the number of lakes and 15 per cent of streaming waters may be afflicted by acidification in 2010, and the trend toward increased acidification of forestlands must be broken. Today it is estimated that about one third of Sweden's waterways and almost 20 per cent of all lakes are affected by acidification caused by human activity.

The environmental quality objective concerning eutrophication means that nutrient levels in soil and water must not cause adverse effects on human health, biodiversity, or versatile land and water use.

The government has proposed five interim targets. Emissions of phosphorus compounds and nitrogen into the waters south of the Åland sea must be reduced continuously, and by at least 30 per cent by 2010 compared to the level in 1995. In addition it is proposed that emissions of ammonia must drop by 15 per cent from the 1995 level. Since a large part of acid deposition comes from abroad, Sweden is highly dependent on measures to reduce emissions in other countries, and on ensuring that international agreements are followed.¹⁴⁴

Waste and recycling

Landfills contribute to several environmental problems, such as emission of polluted leachate and methane gas. In general, three types of waste are generated in Sweden: industrial waste, hazardous waste and waste from households and businesses. The main objective is to reduce the quantity of waste sent to landfills and to remove

hazardous substances from the waste. Any waste generated should be recycled as a first choice.¹⁴⁵

The government has submitted a proposal for an objective that the amount of waste sent to landfills excluding mining waste shall be reduced by at least 50 per cent by 2005, compared with the level in 1994, with no change in the total quantity of waste generated. In addition, by 2008 at the latest all waste landfills shall achieve a uniform standard and meet the stringent environmental requirements stipulated in the EU Directive on the landfill of waste. 146

Cost-benefit analyses of the waste area have not been used to any great extent. Instead, environmental impact statements have been used as a basis.¹⁴⁷

Measures and policy instruments

Since the end of the 1980s, the use of economic instruments in environmental policy has risen markedly in Sweden. Today, economic instruments are an integral part of Sweden's strategy for improving the quality of the environment. Environmental taxes have played a major role, although charges and deposit-refund systems are also applied nowadays. introduction of other control measures, such as tradable emission permits, is currently being debated but has yet to be implemented. The government has proposed a green tax reform that involves linking environmental concerns even more closely to the tax system and a continued green tax exchange involving higher taxes on energy and lower taxes on income. After notification in the 2000 Government Spring Bill, a strategy for this type of green tax reform was presented in the 2001 Government Budget Bill

 $^{143\,}$ Government Bill 2000/01:130, "Svenska miljömål – delmål och åtgärdsstrategier" (Swedish environmental objectives – interim targets and action strategies).

 $^{^{144}}$ These include protocols under the UN Convention on Long-range Transboundary Air Pollution and the future EU directive on emission ceilings for certain pollutants.

¹⁴⁵ Government Bill 1996/97:172, "Hanteringen av uttjänta varor i ett ekologiskt hållbart samhälle - ett ansvar för alla" (Handling worn-out goods in an ecologically sustainable society - a responsibility for every-one) and Government Bill 1997/98:145, "Svenska miljömäl - miljöpolitik för ett hållbart Sverige" (Environmental objectives - environmental policy for a sustainable Sweden).

 $^{^{146}}$ Government Bill 2000/01:130, "Svenska miljömål – delmål och åtgärdsstrategier" (Swedish environmental objectives – interim targets and action strategies).

¹⁴⁷ OECD, "Economic Surveys - Sweden", March 2001.

with a total balance of some SEK 30 billion during the period 2001-2010.¹⁴⁸

Climate change and air quality

Swedish climate policy is based on the principle that it must be formulated cost-effectively. A carbon dioxide tax was introduced in 1991 with the primary goal of limiting carbon dioxide emissions, but the tax also has a fiscal purpose. The tax is levied on all fossil fuels and the level is decided in relation to the average carbon content of each fuel.¹⁴⁹

Since the tax was introduced in 1991, the rate has risen from SEK 0.25 /kg to SEK 0.53/kg carbon dioxide in 2001. The industry tax rate amounts to SEK 0.18/kg carbon dioxide. A proposal has been submitted to raise the tax by 15 per cent in 2002.¹⁵⁰

The general energy tax was introduced in 1957, mainly for fiscal reasons. It has changed many times since then, and it now also influences environmental and energy policy. In 1995, the energy tax was harmonised to EU rules on the taxation of crude oil, which means that the energy tax is levied on fuels used for heating or for running motors. Fuels used for production of electricity are exempt from the energy tax. Instead, the energy tax is charged when the electricity is delivered to the end user.

The sulphur tax was introduced in 1991 with the aim of reducing emissions of sulphur in connection with combustion of oil, coal and peat. The tax is levied on the sulphur content of the fuel and currently amounts to SEK 30/kg sulphur. For liquid fuel a sulphur tax is levied at the rate of SEK 27/m³ fuel for each tenth per cent weight of sulphur in the fuel. If the sulphur emissions are reduced through purification or binding into ash, the producer may receive a tax deduction. 151

148 Government Bill 1999/2000:100, "2000 års ekonomiska vårpropositionen" (2000 Government Spring Bill).

Table 2. Energy and CO ₂ tax rates on fossil fuels 2001					
<u>Fuel</u>	Та	Tax rate			
	Energy tax	Carbon- dioxide tax			
Petrol (SEK/I)					
Environmental class 1	3.26	1.24			
Environmental class 2	3.29	1.24			
Other petrol	3.92	1.24			
Oil (SEK/m³)					
With dye	688	1,527			
Colourless					
Environmental class 1	1,512	1,527			
Environmental class 2	1,739	1,527			
Environmental class 3	2,039	1,527			
Crude tall oil (SEK/m³)	2,215	0			
Liquefied petroleum gas (SEK/tonnes) For motor-powered vehicles, ships					
or aircraft	0	1,264			
Other use	134	1,606			
Methane and natural gas (SEK/m³) For motor-powered vehicles, ships					
or aircraft	0	1,039			
Other use	223	1,144			
Coal and petroleum coke (SEK/tonnes)	293	1,329			

Source: The National Swedish Tax Board, RSV 505 edition 14.

In 1992, a charge was introduced on emissions of nitrogen oxides from larger waste combustion plants. The aim of the charge was to achieve a faster and more cost-effective reduction of nitrogen oxide emissions than what was considered to be possible with emissions guidelines and permits alone. The charge is based on direct measurements of emissions and with time has come to include more and smaller facilities. The charge is only levied on the production of energy used for heating, electricity generation or in industrial processes. The charge in 2001 is SEK 40 per kg of nitrogen dioxide. The total amount of the charge is refunded to the producer in proportion with each production unit's share of the total energy production used.152

The government has developed a tax strategy for alternative fuels, which means that Sweden

 $^{^{149}}$ Some fuels, however, are exempt from the carbon dioxide tax.

 $^{^{150}}$ Government Bill 2000/01:1, "Budgetproposition för 2001" (2001 Government Budget Bill) and Government Bill 2001/02:1, "Budgetproposition för 2002" (2002 Government Budget Bill).

 $^{^{151}}$ No sulphur tax is levied on fuels if the sulphur content is no more than 0.1 per cent by weight.

 $^{152~{\}rm See},$ inter alia, Government Bill 1989/90:141, "Vissa ekonomiska styrmedel inom miljöpolitiken m.m." (Certain economic policy instruments in environmental policy, etc.).

shall apply for a general exemption to the EU's mineral oil directive from the carbon dioxide tax for alternative fuel. In addition, the government has appointed a commission of inquiry that will review road tax from the perspective of traffic, safety, competition and the environment.¹⁵³

Table	3. Other	environmentally-related	taxes	and	tax
ratac	2001				

18163 2001	
Тах	Tax rate
Tax on electricity consumption	SEK 0.181/kWh
Lower rate for certain municipalities in Northern Sweden	SEK 0.125/kWh
Lower rate for electricity use for electricity, gas, water and heating supply	SEK 0.158/kWh
Industrial manufacturing processes, agriculture, forest management or water consumption	0
Separate tax on electricity from nuclear power	SEK 5,514/MW and month
Sulphur tax on fossil fuels (excl. crude tall oil)	SEK 30/kg sulphur for solid and gaseous products SEK 27/m³ for each tenth per cent weight sulphur in liquid fuel
Tax on waste	SEK 250/tonne
Pesticide tax	SEK 20/kg [*]
Fertiliser tax	SEK 1.80/kg nitrogen** SEK 30/g cadmium***
Natural gravel tax	SEK 5/tonne

^{*} Calculated as active ingredient.

An advisory committee has studied the possibility of using the Kyoto Protocol's flexible mechanisms in Sweden and submitted its report in spring 2000. A decision was made in July 2001 to appoint a special delegation with the task of developing a system for trading in emission rights in respect of carbon dioxide.¹⁵⁴

Currently a system is being studied for trading with green certificates for electricity from renewable energy sources. The inquiry will be completed in October 2001, with the aim of replacing the current support measures for renewable energy sources with the new system. There are also voluntary programs promoting energy efficiency measures. Conditions and possibilities for introducing voluntary agreements between central government and industry are being studied at this time. The system of the system

Water quality and water scarcity

In 1984, a tax on fertiliser was introduced aimed at decreasing the use of fertiliser in agriculture and thereby eutrophication of lakes and waterways. The tax rate is based on the amount of cadmium and nitrogen in the fertiliser. In 2001, it amounted to SEK 1.80/kg nitrogen and SEK 30/g cadmium.¹⁵⁷

A tax on pesticides was imposed in 1984 aimed at reducing the presence of pesticides, and thereby the ensuing adverse health effects and negative environmental impact. The tax is levied exclusively on pesticide use in the agricultural sector. The tax rate in early 2001 was SEK 20/kg active ingredient in the pesticide.

Waste and recycling

In recent years, several measures have been taken to reduce the quantity of waste sent to landfill. On 1 January 1992, rules were introduced permitting increased differentiation of the municipal waste management fees. A tax on waste was introduced on 1 January 2000. The tax is SEK 250/tonne and is charged on waste brought in to landfills. The purpose of the tax is to increase financial incentives for better treatment of waste in terms of the environment and conservation. The government has

^{**}The proportion of nitrogen must be at least 2 per cent.

The cadmium content must exceed 5 g/tonne phosphorous. Source: The National Swedish Tax Board, RSV 505 edition 14.

¹⁵³ Directive 2001:12

 $^{^{154}}$ SOU 2000:45, "Handla för att uppnå klimatmål" (Emissions trading – A way of achieving the climate goals) as well as directive 2001:56.

¹⁵⁵ Directive 2000:56.

 $^{^{156}}$ See Government Bill 2001/02:1, "Budget proposition för 2002" (2002 Government Budget Bill).

¹⁵⁷ Government Bill 1983/84:176, "Avgifter på gödsel- och bekämpningsmedel" (Charges on fertiliser and pesticide) and Government Bill 1994/95:213, "Ändring av vissa förfaranderegler m.m. för punktskatter" (Change in certain procedural rules, etc., for selective taxes).

 $^{^{158}\,\}mathrm{SOU}$ 1996:139, "Skatt på avfall" (Tax on waste).

proposed a 15 per cent increase in the tax on waste in 2002. ¹⁵⁹

As of 1 January 2002, unsorted combustible waste will be banned from landfills, and a similar ban on the landfill of organic waste will come into force on 1 January 2005.

A charge on small batteries was introduced in 1987 and has been extended since then to other types of batteries. The charge is intended to finance the cost of collecting and taking care of used batteries that are hazardous to the environment. 160

Deposit-refund systems for beverage containers have existed in various formats since 1973. Today, there are deposit systems for aluminium cans and PET bottles. There are also several deposit systems based on voluntary agreements among different industries.

Producer responsibility was introduced in Sweden in 1994 for packaging, wastepaper and tyres. Since 1998, producer responsibility also applies to cars, and beginning on 1 July 2001, electrical and electronic products are also included. Producer responsibility means that manufacturers are responsible for ensuring that worn-out products are taken care of in an environmentally responsible manner. The aim is to stimulate the use of more environmentally sound products in order to facilitate handling and reduce impact on the environment.

In 1975, a scrapping charge was introduced for cars registered in Sweden. Concurrently, the carscrapping fund was created aimed at financing a system giving car owners a financial incentive to bring their cars in for scrapping. The car scrapping fund finances a car scrapping premium for cars left with an authorised car scrapping merchant.

The energy and environmental taxes have increased in significance in recent years and in 2000 amounted to just under SEK 54 billion, which is equal to about 64 per cent of total income from excise duties. Environmental tax revenues amounted to almost 5 per cent of total tax revenue.

SEK billion				
Тах	Revenue			
Energy tax				
Petrol (environmental class 1-2)	19.35			
Oil products, etc.	7.57			
Other fuels	0.15			
Electricity	11.30			
Crude tall oil	0.03			
Carbon dioxide tax				
Petrol (environmental class 1-2)	4.61			
Oil products, etc.	6.64			
Other fuels	0.75			
Sulphur tax	0.07			
Special tax on electrical power from nuclear power				
station	1.71			
Tax on waste	1.09			
Pesticide tax	0.04			
Fertiliser tax	0.38			
Natural gravel tax	0.13			
Total revenue from environmental taxes Source: Ministry of Finance.	53.79			

Even though economic instruments are well established in Swedish environmental policy, to date there are few examples of detailed analyses of the effects of these instruments.

Climate change and air quality

Carbon dioxide accounts for about 80 per cent of total greenhouse gas emissions in Sweden. At the end of the 1990s, total emission of greenhouse gases in Sweden was close to the 1990 level. Unlike in many other countries, carbon dioxide emissions dropped considerably in Sweden during the 1970s and 1980s. Above all this was the result of the energy policy of that period, which was aimed at restructuring the energy system to reduce dependence on oil. During the

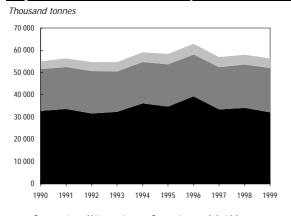
Environmental and fiscal impacts of the policy instruments

¹⁵⁹ Government Bill 2001/02:1, "Budgetpropositionen för år 2002" (2002 Government Budget Bill).

 $^{^{160}\} www.batteriinsamlingen/environ.se,\ 23.09.01.$

1990s, emissions increased somewhat once again. One reason for this trend was the increase in transports. A carbon dioxide tax imposed in 1991 had a particularly slowing effect on the growth rate of emissions. It is difficult to estimate the actual reduction in emissions caused by this tax, since carbon dioxide tax and energy tax are both levied on the same fuels. The carbon dioxide tax, however, is a more reliable instrument for reducing emissions since it is paid in proportion to the carbon content of the fuel. According to the climate convention's review of Sweden's first national report, it was estimated that the carbon dioxide tax accounted for 70 per cent of the effects achieved in 2000. 162





■ Energy sector, exkl. transports ■ Transports ■ Industrial processes

Source: Swedish Environmental Agency, 2001.

The fiscal aim of the tax appears to have been accomplished well. The tax base changes slowly and because of the low price elasticity of fossil fuels, an increase in taxation will result in increased tax revenue, at least in the short term. 163

According to analyses made during the 1990s, more vigorous measures and greater international collaboration are needed to achieve the climate objective. The marginal cost of further reducing emissions in Sweden is higher than in many other countries. One method of lowering carbon dioxide emissions is to raise the carbon dioxide tax. According to the 1999/2000 report from the Long-term Survey of the Swedish economy, the carbon dioxide tax would have to amount to SEK 0.91/kg CO₂ in order to achieve Sweden's undertaking in accordance with the Kyoto Protocol. Available calculations and forecasts indicate that with the current policy instruments, carbon dioxide emissions will increase by about 5 to 15 per cent by 2010. 164

The Swedish Institute for Transport and Communications Analysis has calculated the marginal cost excluding carbon dioxide for passenger cars in rural and urban areas and compared this with the energy tax on fuel. In rural areas, costs are largely internalised in the tax, while the deviation between cost and tax is relatively large for diesel-powered cars in rural areas. If the marginal cost including carbon dioxide is compared with the total tax on fuel, the internalisation rate will vary with the value of carbon dioxide emissions used.¹⁶⁵

The majority of sulphur and nitrous oxide deposition over Sweden comes from foreign sources. In 1995, foreign sources were responsible for 90 per cent of sulphur deposition and 80 per cent of nitrogen deposition over Sweden. 166

Swedish emissions of sulphur dioxide have decreased substantially since 1980, and were essentially halved between 1990 and 1999. Above all, this is because of the increased use of low-sulphur oil and new purification technology. The

 $^{161\ \}mathrm{Energy}$ taxes are also imposed for energy policy, economic policy and budgetary purposes.

¹⁶² See, inter alia, Swedish Environmental Protection Agency, "de Facto, Miljömälen – vår generations ansvar" (De Facto, Environmental goals – our generation's responsibility), 2000 and SOU 2000:23, "Förslag till svensk klimatstrategi" (Proposed Swedish climate strategy).

¹⁶³ Swedish Environmental Protection Agency, "Miljöskatter i Sverige ekonomiska styrmedel i miljöpolitiken" (Environmental taxation in Sweden - economic policy instruments in environmental policy), 1997.

 $^{164~\}rm SOU~2000:23,$ "Förslag till klimatstrategi", (Proposed Swedish climate strategy) as well as SOU 2000:7, "Långtidsutredningen 1999/2000, bilaga 2" (1999/2000 Long-term Survey, Annex 2).

 $^{165~\}rm SIKA~2000:10$, "Översyn av förutsättningarna för marginalkostnadsbaserade avgifter i transportsystemet. Slutredovisning" (Overview of prerequisites for marginal cost-based fees in the transportation system. Final report).

¹⁶⁶ Swedish Environmental Protection Agency, "de Facto, Miljömálen – vár generations ansvar" (De Facto, Environmental goals – our generation's responsibility), 2000.

earlier target of reducing emissions by 80 per cent by 2000 relative to the 1990 level was reached already in 1993. Analyses indicate that the sulphur tax contributed to almost 30 per cent of the total reduction of sulphur dioxide emissions between 1989 and 1995. The Swedish Environmental Protection Agency has estimated that it is possible to reduce emissions by an additional 25 per cent from the 1995 level within the framework of a cost of SEK 30/kg emissions.¹⁶⁷

Swedish emissions of nitrous oxides decreased as well, though not to the same degree as sulphur dioxide emissions. Improved combustion and purification technology are the primary causes of the reduction in emissions. The earlier target to reduce emissions by 30 per cent from 1980 to 1995 was not achieved. An evaluation of the nitrogen oxide fee shows that it contributed to about 50 per cent of the reduction in emissions between 1990 and 1992. Moreover, the fee stimulates more efficient operation purification plants. The fee, however, has resulted in an increase of other emissions such as ammonia, nitrous oxide and carbon monoxide. 168

The marginal cost of reducing nitrogen oxide emissions by 50 per cent between 1980 and 2005 has been calculated to SEK 36/kg decreased emissions. According to another study, the marginal cost of reducing emissions by 200,000 tonnes is estimated at SEK 40/kg, and SEK 198/kg for a further 10,000-tonne reduction. These results indicate that the nitrogen oxide fee can be said to correspond to some extent with the cost of reducing emissions, but the results are marred by considerable uncertainty. 169

Water quality and water scarcity

Until the mid-1990s, there was a decrease in the phosphorous and nitrogen load on the sea. Since then the total load has increased somewhat, even though emissions from point sources (urban communities and industries) have continued to decrease. The continued increase in the total load can mainly be explained by an increase in precipitation.¹⁷⁰

About 75 per cent of acid deposition of ammonia comes from foreign sources, while about half of the Swedish ammonia emissions stay in Sweden. The majority of ammonia emissions, 90 per cent, comes from agriculture. Swedish emissions have dropped somewhat in recent years, but the statistics are relatively unreliable.¹⁷¹

The environmental tax on fertiliser has had some direct effect on the use of fertiliser, but above all it has had an indirect effect by financing the action programmes that have lowered concentrations. Calculations indicate that the tax has reduced the total quantity of fertiliser by about 10 per cent. The environmental tax on phosphorous was lifted in 1994. The use of phosphorous in fertiliser has increased since then.¹⁷²

The tax on pesticide has had a somewhat dampening effect on its use. The indirect effects through financing of counselling, research and development, are assumed, however, to have had a greater influence on its decreasing use.

Additional analyses are needed to determine whether the taxes on fertiliser and pesticides have achieved environmental improvements in a cost-effective manner. A commission has therefore been appointed to conduct an overview of taxes on pesticides and fertiliser.¹⁷³

¹⁶⁷ Swedish Environmental Protection Agency, "Ren luft och gröna skogar - förslag till nationella miljömal" (Clean air and green forests - proposal for national environmental objectives), 1997 and "Miljöskatter i Sverige – ekonomiska styrmedel i miljöpolitiken" (Environmental taxes in Sweden - economic policy instruments in environmental policy), 1997.

¹⁶⁸ Swedish Environment Protection Agency, Miljöskatter i Sverige – ekonomiska styrmedel i miljöpolitiken" (Environmental taxes in Sweden - economic policy instruments in environmental policy), 1997.

¹⁶⁹ Statistics Sweden, Environmental accounts 1998:7, "Kostnader för att minska utsläpp av kväveoxider och flyktiga organiska ämnen" (Cost of decreasing emissions of nitrogen oxides and volatile organic compounds).

¹⁷⁰ Swedish Environmental Protection Agency, "Kväve- och fosfortillförsel till havet" (Supply of nitrogen and phosphorous to the sea), www.environ.se. 13.09.01.

¹⁷¹ Government Bill 2000/01:130, "Svenska miljömål – delmål och åtgärdsstrategier" (Swedish environmental objectives – interim targets and action strategies).

¹⁷² Swedish Environment Protection Agency, Miljöskatter i Sverige – ekonomiska styrmedel i miljöpolitiken" (Environmental taxes in Sweden – economic policy instruments in environmental policy), 1997.

 $^{^{173}\ \}mathrm{See}\ \mathrm{directive}\ 2001{:}55.$

Waste and recycling

The quantity of waste has increased in recent years. To some extent, this increase may be caused by the changed classification of waste. With the exception of the mining and mineral industries, the quantity sent to landfills has decreased, while recycling has increased.¹⁷⁴

Producer responsibility has effectively contributed to achieving the established recycling goals, but according to certain studies in the area this may have occurred at a high cost. Based on current knowledge, however, general no conclusions can be drawn on the societal economic effects of different methods of handling waste.¹⁷⁵ A commission has therefore been appointed to review the environmental and economic effects of producer responsibility.¹⁷⁶

Since the tax on waste has only been in force for a short time, it is still too early to assess its effects on waste management. A commission has been appointed to evaluate the waste tax system.¹⁷⁷

The charge for batteries has mainly been for financing purposes, and it has hardly had any influence on use. Since the charge also financed information campaigns to consumers, however, it cannot be ruled out that it has had an indirect influence on use.¹⁷⁸

Conflicts with other policy areas

The Swedish electricity market was deregulated in 1996. The aim of deregulation was to achieve a more efficient use of resources throughout the energy sector through increased competition, thereby lowering electricity prices, which would lead to economic benefits. Lower prices, however, lead to increased consumption of electricity. As a certain part of electricity

generation is produced using non-renewable fuels, lower electricity prices could worsen Sweden's potential for achieving the objectives in the climate area, for example.

Since deregulation, the price of electricity on the Swedish market has fallen, partially because of increased competition, but particularly due to good access to inexpensive hydroelectric power. The price to the end customer, meanwhile, has not dropped to the same extent. Raising the electricity tax has even led to an increase in the total electricity price for some customers. Consumption of electricity, however, has risen in Sweden during the past few years, though the growth rate has not been abnormally high. It is difficult to assess whether deregulation resulted in increased consumption of electricity, and thereby is in conflict with the environmental objective. The conflict has probably been lessened by the raised electricity taxes.¹⁷⁹

Tax differentiation within energy taxation among other things, that manufacturing and recycling industries. agriculture, forestry and greenhouse businesses do not pay any energy tax and only a fixed percentage of the carbon dioxide tax that applies to other sectors.¹⁸⁰ This tax differentiation can be seen as a conflict of objectives. For example, Sweden would like to decrease carbon dioxide emissions, yet it wants to protect those sectors that are vulnerable to international competition. As the marginal cost of emissions reductions varies among fossil fuel users because of the tax differentiation, it could be viewed as an obstacle to an effective environmental policy. This is not necessarily the case, however, since the negative effect of greenhouse gases is independent of where the emissions take place. Differentiating the tax in order to counter the trend among the export industry of moving to regions with a less ambitious environmental policy can therefore entail a greater reduction of global emissions for

¹⁷⁴ Swedish Environmental Protection Agency, "Avfallsstatistik", (Waste statistics), $\it www.environ.se, 17.09.01.$

¹⁷⁵ Ds 1999:66, "Återvinning utan vinning" (Recycling without gain) and SOU 2000:7, "Långtidsutredningen 1999/2000, bilaga 4" (1999/2000 Long-term Survey, Annex 4).

¹⁷⁶ Directive 2000:28.

¹⁷⁷ Directive 2001:13.

¹⁷⁸ Swedish Environment Protection Agency, Miljöskatter i Sverige – ekonomiska styrmedel i miljöpolitiken" (Environmental taxes in Sweden – economic policy instruments in environmental policy), 1997.

 $^{^{179}}$ The Swedish National Energy Administration, "Elmarknaden" (Electricity Market), 2001.

 $^{180\,\}mathrm{The}$ share for 2000 was 50 per cent. The increase in the carbon dioxide tax from 1 January 2001 was designed so that the tax burden for industry remained unchanged. This means that those sectors with reduced taxes currently pay 35 per cent of the carbon dioxide tax.

the same cost as a uniform tax. In a general numerical assessment of the Swedish carbon dioxide tax differentiation, it has been established that differentiation may very well be an effective environmental policy in the absence of international co-ordination.¹⁸¹ It is the Swedish government's view that differentiation is a necessary part of an ambitious environmental policy based on economic policy instruments. The government has appointed a commission to review the regulations for reductions in the energy tax system.¹⁸²

The income tax system allows a deduction for travel to and from work for that part of costs in excess of SEK 7,000 annually. The deduction is motivated, among other things, by regional and labour market policy, and leads to lower costs for car use in particular. It can therefore lead to an increase in the total volume of car transport and fuel consumption. This could thereby be in conflict with the environmental objective on decreasing emissions from transports. The deduction amounts to SEK 7.6 billion in 2001 and is the largest gross benefit affecting the net balance. However, the exact amount with which the deduction affects emissions has not been calculated.

The agriculture sector receives acreage compensation and livestock premiums, i.e. price support aimed at compensating farmers for reduced prices on crops and meat, respectively. The EU finances both forms of price support. According to the Swedish Environmental Protection Agency, acreage compensation can lead to increased leakage of nitrogen and increased use of pesticides. This effect occurs since a premium is paid for cultivating crops that leak nitrogen and that usually require large amounts of pesticides. The livestock premium can lead to increased ammonia waste and nitrogen leakage. If nitrogen leakage and

pesticide use were to increase, this would be clearly in conflict with the objective on no eutrophication. The effect of this funding on the environment, however, has not been analysed.

¹⁸¹ Bergman, L., "Sectoral Differentiation as a Substitute for International Coordination of Carbon Taxes: A Case study of Sweden", 1996.

¹⁸² Directive 2001-29

 $^{^{183}}$ Government Bill 2000/01:100 "2001 års ekonomiska vårproposition, bilaga 3" (2001 Government Spring Bill, Annex 3).

¹⁸⁴ Statistics Sweden R2000:3, "Miljöskatter och miljöfarliga subventioner" (Environmental taxes and environmentally hazardous subsidies).

B. Measures to ensure a sustainable pension system

Sweden, like other countries in the EU, is facing a substantially changed population structure. The proportion of older people in the population is increasing, at the same as the proportion of the working age population is falling. The old-age dependency ratio, calculated as the number of persons over the age of 64 in relation to persons in the age-range 20-64, will increase from 29 per cent to 46 per cent by 2050.

The change in the population structure will among other things have consequences for the pension system. The increased number of pensioners will give rise to expenditure pressure on pension payments at the same time as the reduction in the number of people in working age will lead to a reduction in contribution payments. In 1999, Sweden introduced a reformed pension system. The essential features of the reformed pension system were established between 1991 and 1994 by the Pensions Working Group, which included representatives from all the parties in the Riksdag¹⁸⁵. The Riksdag legislated for a new reformed pension system in 1998. 186

The aim of this appendix is to set out the main features of the Swedish pension system, and, in the light of demographic changes, to project a possible scenario for pension expenditure up until 2050.

The Swedish Pension System

Sweden's former pension system consisted of a flat-rate pension paid to everyone with at least 40 years of residence in Sweden between the ages of 16 and 65. In addition to the flat-rate pension, there was an earnings-related supplementary pension which provided a benefit of 60 per cent of the average income of the contributor's 15 best

years of earnings, with a requirement of 30 years of earning to receive a full benefit.

The reformed pension system consists of a defined contribution pay-as-you-go system (DC PAYG), a guaranteed minimum benefit and a funded premium pension system. The DC PAYG and the funded premium pensions are contribution-based, and are based on lifetime earnings. The guaranteed minimum benefit is financed from general taxation, and functions as a supplement to the earnings-related pension up to a guaranteed minimum level. The reformed pension system covers individuals born in 1938 and after, with transition rules for persons born between 1938-1953. The transition rules are formulated so that those born in 1938 have 4/20ths of their benefit calculated according to the new rules, and 16/20ths according to the old rules. Individuals born in 1953 have 19/20ths of their benefit calculated according to the new rules and 1/20th according to the old rules.

Over the past two decades, the former pension system accumulated funds equivalent to 38.5 per cent of GDP in 2000. As part of the pension reform, just over 30 per cent of this fund has been transferred to the central government to cover the central government's extended obligations. The remaining fund will act as a buffer fund, which will help finance pension payments to the large number of pensioners born in the 1940s.

The defined contribution pay-as-you-go system The DC PAYG pension system is autonomous. The employee and the employer pay a total of 16 per cent of earnings. The central government also makes contributions to the pension system for individuals who are in receipt of unemployment benefit, sickness benefit, disability pension or are on parental leave. The self-employed are also covered by the system.

The DC PAYG pension system functions as a defined contributions insurance scheme, but without any individually funded accounts. The rate of return received is based, not on a market rate of return, but on the average wage growth.

Contributions are recorded in individual accounts. The accounts represent a claim on future pension payments, while contributions are used to pay current pensions. The value of the indi-

¹⁸⁵ Government Bill 1993/94:250, "Reformering av det allmänna pensionssystemet" (Reforming the national pension system).

¹⁸⁶ Government Bill 1997/98:151, "Inkomstgrundad ålderspension, m.m." (Income-based old-age pensions, etc.) and Government Bill 1997/98:152, "Garantipension, m.m." (Guarantee pension, etc.).

vidual accounts at the end of the year consists of contributions accumulated in the year plus the account value from the previous year. The latter is indexed to earnings growth per contributor. Even though the system itself is not funded, it may accumulate a buffer fund due to demographic changes.

The earnings-related pension is payable from age 61 onwards. The DC annuity is calculated by dividing the individual's account value by unisex life expectancy at the specific date of retirement. This makes the system very robust in the face of demographic changes. Since the system is actuarial and permits flexible retirement ages, the individual can counteract the lower annuity resulting from increasing life expectancy by postponing the date of retirement.

An assumed future real rate of return of 1.6 per cent is factored into the annuity. This provides a higher initial benefit. In future years the pension will be increased by the index of earnings with a deduction of 1.6 per cent. Partly as a result of the index of earnings being based on average earnings per person and not on the wage sum, the system has also been equipped with an automatic balancing mechanism that can act as a brake on expenditure and on the indexation of pension rights, in the event, for example of a reduction in the labour force or an increase in average life expectancy. The mechanism is activated only if the liabilities of the pension system are greater than its assets, and aims to ensure that the consolidation rate never falls below 100 per cent. Parliament approved a Bill on the balancing mechanism in May this year, but the calculations used in this paper do not take the balancing mechanism into account.187

The funded premium pension system

The funded premium pension system is, like the DC PAYG pension, obligatory, and follows the transition rules mentioned above. The contribution rate is 2.5 per cent of the contribution base. Individuals choose how their money is to be invested in a very large number of privately-

managed funds. This means that the funded premium pension will grow in line with the rate of return on the selected funds. The annuity can be claimed at any time from age 61, in part or in full. On the date of retirement, the individual can choose a fixed or variable annuity.

The guarantee pension

Individuals with very low pensions are guaranteed a supplement from the guarantee pension. The guarantee pension is financed by general revenues from the central government budget. The minimum guarantee benefit is payable from the age of 65, not earlier. The benefit, together with a means-tested housing benefit is higher than the minimum income standard. The benefit is also based on the number of years of residence in Sweden with special rules for immigrants.

Tax status

All benefits are subject to income tax with effect from 2003. The former pension system contained a special tax deduction for pensioners, which is being abolished from 2003. In the new system, the special tax deduction and the flat-rate pension have been replaced by a taxable guarantee pension. The level has been set so that the benefit after tax will be at least as high as before the reform.

Early retirement, disability and survivors' pension The majority of the population retires at age 65 due to the rules in the former pension system and labour market agreements. In 1998, the average retirement age was about 62. In the reformed pension system, it is possible to retire at age 61, but there is a twofold loss from early retirement. First, the reformed pension system is based on lifetime earnings, which means that all years with earnings are credited. Secondly, the level of the benefit is calculated on the basis of the cohortspecific life expectancy from the date of retirement. Early retirement accordingly leads to both a lower notional pension capital and a longer period for payments. The benefit per annum will, therefore, be lower compared with a later retirement age.

¹⁸⁷ Government Bill 2000/01:70, "Automatisk balansering av alderspensionssystemet" (Automatic balancing of the old-age pension system).

Pensions in the reformed system are individual-based. All benefits that derive from another individual, usually the husband, are being gradually phased out. The previous widow's pension has been replaced by a new, temporary and gender-neutral survivor's adjustment allowance. The survivor receives the allowance for 6 months, but the payments continue as long as the survivor has children under 12 years old. The level of benefit is based on the deceased's earnings in the former pension system.

The central government pays the old-age pension contributions for those on disability pension, which generates normal pension rights. The old-age pension for disability pensioners is based, as for other old-age pensioners, on total income history.

The reformed Swedish pension system makes no distinction between public and private sector employees. The same rules apply to every individual in the labour market.

A possible scenario for pension expenditure

The reformed pension system in Sweden has been formulated in light of the fact that the former system was not financially sustainable. In order to illustrate an important part of the expenditure increases following from demographic trends, below is a presentation of a possible scenario for pension expenditure. The simulation presented here was run in September 2001 within the Ageing Working Group under the Economic Policy Committee. 188

Assumptions

In order to simulate expenditure trends, assumptions were made relating to population, GDP growth and participation in the workforce. The calculation assumptions are shown in table 1.

Table 1. Calc	ulation a	ssumptio	ons			
	2000	2010	2020	2030	2040	2050
Population, thousands	8,870	8,963	9,136	9,258	9,204	9,200
% of popu- lation 20-64 years	58.7	59.2	57.6	54.9	54.0	54.3
% of population 65+	17.3	19.1	21.9	23.8	25.2	25.1
Labour mar- ket partici- pants 20-64 years	82.6	84.3	84.7	84.9	85.7	85.4
Unemploy- ment*	6.0	5.1	5.1	5.1	5.1	5.1
GDP growth	3.5	2.1	1.5	1.3	1.8	1.6
GDP productivity	1.3	1.8	1.8	1.8	1.8	1.8
Growth in real wages	2.9	2.1	2.0	2.0	2.0	2.0
Growth in CPI	1.3	2.0	2.0	2.0	2.0	2.0
Real rate of interest	4.1	4.0	4.0	4.0	4.0	4.0

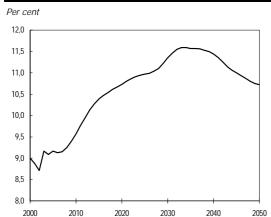
^{*} ILO definition which includes job seekers in full-time education. This group is not included in the Swedish definition. Source: Ministry of Finance.

Results

The calculation shows that pension expenditure as a share of GDP will reach a peak in the year 2033 at 11.6 per cent, which is an increase of 2.6 percentage points compared with 2000. Expenditure will then fall to 10.7 per cent of GDP in 2050.

 $^{188\ {\}rm The}\ {\rm Economic}\ {\rm Policy}\ {\rm Committee}$ is an expert group under the Ecofin Council.

Diagram 1. Pension expenditure as a percentage of GDP 2000-2050



Source: Ministry of Finance.

The principal explanation for the increase in pension expenditure in the future is that average life expectancy is rising. An increase in average life expectancy has a significantly lower impact on the reformed pension system than on the old system. Average life expectancy will still, however, be important over the next few decades due to the phasing out of the former system. Within the framework of the new pension system, and with a given retirement age of 65, increased average life expectancy leads to lower pensions. The full impact will not, however, be felt, since benefits are calculated on the basis of average life expectancy on the retirement date. That part, about one-third, of the increase in average life expectancy which occurs after the retirement date will lead to a weakening in the financial position of the reformed pension system.

In conclusion, the above calculation indicates an increase in expenditure pressure on public finances from pension expenditure over the next 50 years. The calculation assumes, however, that the retirement age is 65. The fact that the population is becoming healthier in older age groups should lead to a higher retirement age. The reformed pension system contains clear incentives to such a development. Finally, it has been equipped with an automatic balancing mechanism, which guarantees that the pension system will be financially sustainable.

C. Follow-up of the recommendations in the BEPGs

This appendix aims to outline the follow-up of the policy recommendations for Sweden as set out in the 2001 BEPGs. For more specific information, please refer to the main report.

1. The product market

The Council recommended Sweden to "enhance compliance with regulations on public procurement".

The government considers it to be of vital importance that public procurement is improved further. The Public Procurement Committee proposes in its final report that a permanent committee be set up to deal with quality and development issues related to public procurement. The committee's proposals are currently being circulated for comment and a bill is planned for spring 2002.

The Council recommended Sweden to "enhance competition in public services provision at local levels".

There has been a clear trend in recent years towards increased competition and the use of alternative forms of operation in the public service sector. The government is of the opinion that this trend should continue and that the share of the collective economy that is open to competition should increase. A conflict resolution rule in the Competition Act has been presented in a governmental committee report. Such a rule would be particularly important for conflict situations in which small local companies are involved. It is further proposed that the Market Court be strengthened by the appointment of an expert with particular knowledge of the type of public sector operation which may be tried under the new regulations. The government intends to reach a decision on the proposals during autumn 2001.

The Council recommended Sweden to "increase competition in air transport".

In spite of the deregulation of the air transport market in 1993, the market is still dominated by one player (SAS). The Swedish Competition Authority has actively intervened in the air transport market. The Civil Aviation Administration is to investigate the market situation for Swedish domestic air travel and propose measures to improve the competitive situation.

The Council recommended Sweden to "increase competition in pharmaceuticals".

The government has established that Apoteket AB's retail monopoly shall remain for reasons of public health. However, the government proposes the introduction of a new act on pharmaceuticals subsidy system. The proposed act includes a provision on the generic substitution of pharmaceuticals, by which pharmacies should exchange drugs if a less expensive replacement drug is available. The act on pharmaceuticals subsidy system will be treated in a bill in autumn 2001.

2. The capital market

The Council recommended Sweden to "develop further the risk capital market by adapting the fiscal framework to make it more conducive to investment and entrepreneurship".

The government is continuing its ongoing work on changing and simplifying corporate and capital taxation in order to stimulate entrepreneurship and investment. In the Government Offices, work is currently in progress on the detailed framing of taxation of capital gains on business-related shareholdings. The government has appointed a commission to review the tax rules relating to dividends and capitals gains. The commission has also been instructed to consider how the regulations can be changed to facilitate generation changes in close companies.

The Council recommended Sweden to "encourage entrepreneurship by adjusting bankruptcy laws".

Like many other countries, Sweden has reformed its bankruptcy legislation during the 1990s with the aim of improving opportunities to reorganise companies. The Right of Priority Committee has submitted proposals that aim, among other things, to put the terms of the Bankruptcy Act and the Business Reorganisation Act on a more even footing in the event of reorganisations, partly through enacting that the central government wage guarantee should apply under both acts. The Right of Priority Committee will submit its final report during autumn 2001. A bill relating to new rights of priority rules is planned for spring 2002.

D. **Statistics**

Economic integration

Table 1. T	Table 1. Total trade integration as a percentage of GDP						
Per cent							
	1995	1996	1997	1998	1999	2000	
Sweden	30.3	29.0	31.0	32.0	31.8	35.1	
EU-15	8.5	8.7	9.6	9.5	9.6	11.5	
SMS*	36.0	37.7	40.4	41.2	41.9	46.5	

^{*}Small member states in the EU.

Note: Measured as (exports of goods + imports of goods) / (2*GDP)

Source: Eurostat, 2001.

Table 2. Price level index and VAT-adjusted price level index for major groups and some subgroups in Sweden compared with EU member states in 1998

Major group/subgroup	Price level index	VAT-adjusted price level index
Private consumption	121	118
Food, beverages and tobacco	126	118
Food	111	105
Beverages	164	165
Tobacco	180	170
Clothing and footwear	104	98
Housing and energy	123	120
Furniture and household goods Health and medical	111	105
care	143	150
Transport and communications	113	107
Recreation, enter- tainment, education and culture	114	110
Misc. goods and services	134	124

Note: The price level index measures the price level in Sweden compared with all EU member states, including Sweden. The VAT comparison includes all member states apart from Sweden. The VAT correction may therefore be too large. Source: National Board of Trade, Swedish Competition Authority, NUTEK, "Sverige en del av EU:s inre marknad: Varför kvarstår prisskillnader?" (Sweden – part of the EU's internal market: Why do price differences remain?), 2000.

Table 3. Percentage of directives not implemented or delayed in Sweden and the EU

Per cent

	November 2000	May 2001
Sweden	1.2 (2)	0.5 (1)
EU-15	3.0	2.5

Note: Figures in parentheses indicate Sweden's position in the EU. Source: European Commission, "Internal Market Scoreboard", November 2000 and May 2001.

Small and medium-sized enterprises

Table 4. Percentage of employees in different sized companies

Per cent

Year	Companies with 1-199 employees	Companies with ≥ 200 employees
1993	34	66
1995	36	64
1998	38	62
2000	40	60

Source: Statistics Sweden, 2001.

Table 5. Percentage of genuine new start-ups and companies in bankruptcy

Per cent of total company stock

Year	New start-ups	Bankruptcies
1986-1990	6.5	1.7
1991-1993	5.7	4.3
1994-1998	7.7	2.1
1999-2000	7.8	0.1

Source: Statistics Sweden and SOU 2000:7, "Långtidsutredningen 1999/2000" (Long-term Survey 1999/2000).

General government sector

Table 6. Sector-specific and ad hoc state aid as a percentage of GDP

Per cent

	1997	1999
Sweden	0.7	0.6
EU-15	1.0	0.8

Note: Ad hoc aid refers to one-off subsidies, e.g. subsidies to individual

companies. Source: Eurostat, 2001.

Table 7. Openly advertised public procurement as a percentage of total public procurement

Per cent

	1996	1998
Sweden	13.2	15.3
EU-15	11.2	13.1

Note: Refers to advertising in the EU's Official Journal.

Source: Eurostat, 2001.

Public utilities

Table 8. National calls and calls from fixed networks to mobile telephones 2001

Private customers (price per minute including VAT)

Operator	Initial charge	National call (weekdays 8-18)	National call (other times)	Call to mobile phone (weekdays 8-18)	Call to mobile phone (other times)
Telia	0.45	0.23	0.12	2.50/2.95	1.50/2.25
Telenordia	0.65	0.18	0.09	2.70	1.90
Tele2	0.45	0.20	0.11	2.40/2.65/2.90	1.40/1.45/2.20
Utfors	0.40	0.20	0.10	2.30	1.70
Rix Telecom	0.40	0.19	0.11	2.40/2.45/2.85	1.35/1.45/2.15
Glocalnet	0.50	0.21	0.11	1.99	1.99
Universal	0.30	0.19	0.11	1.67	1.47

Note: Price information as per 11 September 2001. The different prices of calls to mobile phones for some operators depend on whether the call goes to the same operator or to a different operator.

Source: Swedish National Post and Telecom Agency, 2001.

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Operator	Initial charge	Denmark	UK	USA	Italy	Australia	South Korea	Irak
Telia	0.45	0.95	0.99	0.99	1.95	3.50	9.95	11.95
Telenordia	0.65	0.80	0.80	0.85	1.80	2.85	7.85	9.65
Tele2	0.45	0.90	0.88	0.95	1.90	2.99	7.99	9.99
Utfors	0.40	0.81	0.81	0.85	1.88	2.88	6.00	9.63
Rix Telecom	0.40	0.80	0.80	0.85	1.80	2.50	3.50	8.50
Glocalnet	0.50	0.85	0.79	0.89	1.79	2.69	6.98	8.99
Universal	0.30	0.49	0.48	0.54	0.68	1.19	2.28	6.90

Note: Price information as per 11 September 2001. Source: Swedish National Post and Telecom Agency, 2001.

Table 10. Value on the market for fixed telephony services by telecom operator

Per cent

Operator	1996	1997	1998	1999	2000
Telia	94	93	90	88	85
Tele2	6	5	5	6	7
Telenordia	-	-	1	2	2
Others	0	2	4	4	6

Note: Telenordia is included in Others 1996-1997.

 $Source: Swedish\ National\ Post\ and\ Telecom\ Agency,\ 2001.$

Table 11. Value on the market for mobile telephony services by mobile telecom operator

Per cent

Operator	1996	1997	1998	1999	2000
Telia	71	65	60	55	52
Tele2/ Comviq	16	17	19	21	23
Euro- politan	13	18	21	24	25

Note: Telia includes both NMT and GSM.

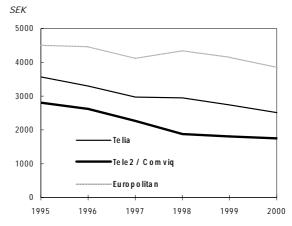
Source: Swedish National Post and Telecom Agency, 2001.

Table 12. Number of subscribers to mobile telephone services by mobile operator

Services by mobile operator					
Per cent					
Operator	1996	1997	1998	1999	2000
Telia					
(NMT)	37	24	12	6	3
Telia (GSM)	33	37	42	46	48
Tele2/					
Comviq	19	26	31	32	33
Euro-					
politan	11	13	15	16	16
Source: Swedish National Post and Telecom Agency 2001					

Source: Swedish National Post and Telecom Agency, 2001.

Diagram 1. Average income per GSM subscription and pre-paid card per mobile operator



Source: Swedish National Post and Telecom Agency, 2001.

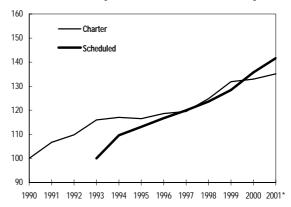
Table 13. Market share for postal companies Per cent Company 1997 1998 1999 2000 96.0 95.0 95.2 Posten AB 94.8 CityMail AB 3.6 4.4 4.8 4.4 Svensk Direktreklam 0.1 Other postal 0.3 0.4 companies 0.6

Note: For 1998-2000, Svensk Direktreklam is included in the statistics for Other postal companies.

Source: Swedish National Post and Telecom Agency, 2001.

Diagram 2. Price trend for international flights

1990=100 for charter flights and 1993=100 for scheduled flights



^{*} Average January-July. Source: Statistics Sweden, 2001.

The knowledge-based economy

Table 14. Total R&D expenditure as a percentage of GDP

Per cent

	1993	1995	1997	1999	
Swede	n 3.2	3.5	3.7	3.7	
EU-15	2.0	1.9	1.9	1.9	
USA	2.5	2.5	2.6	2.6	

Source: Eurostat, 2001.

Table 15. Percentage of the population with Internet access at home

Per cent

	October 1999	April 2000	October 2000
Sweden	51.0	47.5	53.8
EU-15	12.0	18.3	28.4
USA	30.0	-	46.7

Source: Eurostat, 2001.

Table 16. Number of patents

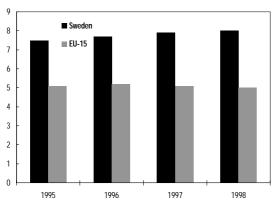
Per million inhabitants

	1996	1997	1998	1999
Sweden	129	165	197	223
EU-15	79	90	101	111
USA	71	77	87	93

Source: Eurostat, 2001.

Diagram 3. General government expenditure on education as a percentage of GDP

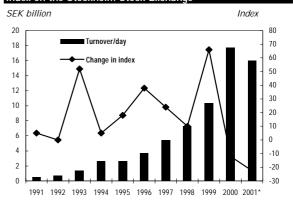
Per cent



Source: Eurostat, 2001.

Capital market and financial services

Diagram 4. Average turnover per day and annual change in index on the Stockholm Stock Exchange

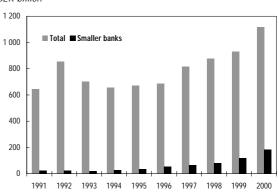


 ${\rm *Refers\ to\ January-August\ 2001}.$

Source: Stockholm Stock Exchange, "Årsstatistik" (Year statistics), 2000.

Diagram 5. Lending by commercial banks

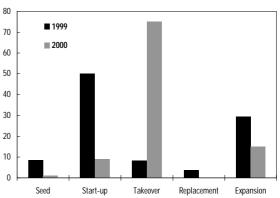
SEK billion



Source: Swedish Bankers' Association, "Bankaktiebolagen 1990-2000" (Joint-stock banks 1990-2000).

Diagram 6. Venture capital by type of business

Per cent



Source: European Venture Capital Association, 1999 and 2000.