Foreword

The 2003/04 Long-Term Survey has been prepared by the Division for Structural Policy of the Ministry of Finance. In addition to the main report, several special studies have been made and are presented as appendices to the main report.

The work has been undertaken under the leadership of Lena Unemo, Deputy Director. Included in the working group were Per-Lennart Börjesson, Special Adviser, together with Deputy Directors Kerstin Krafft and Jonas Norlin. Senior Administrative Officers Anders Bornefalk, Charlotte Bucht, Martin Hill, Anneli Josefsson, Marcus Mossfeldt, Frida Widmalm, Ola Yndeheim and Annika Århammar and Deputy Director Anette Granberg and Special Adviser Eva Oscarsson have all contributed to the Survey. During the course of the project, members of the Economic Affairs Department have also contributed with valuable comments.

Christina Hedenborg and Marita Rasmussen were responsible for administrative and other duties. Mikael Kiesbye prepared the cover.

In the course of the work, seminars have been arranged with experts in the areas analysed by the Survey. The Economic Council has also followed progress and presented its views.

I would like to express my warm thanks to all those who have contributed to the 2003/04 Long-Term Survey.

Stockholm, March 2004

Yvonne Fredriksson Director

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1 Introduction

The aim of the Long-Term Survey 2003/04, like its predecessors, is to provide a basis for economic policy. One of its main purposes is to analyse the challenges and opportunities facing the Swedish economy in the long term and to study their implications for economic policy. It should also contribute to the debate on economic development and the formulation of economic policy.

An additional aim of the Survey is to provide an overall assessment of long-term macroeconomic development. This assessment complements the short- and medium-term forecasts prepared by the Ministry of Finance and others. The long-term assessments do not serve as forecasts but rather as illustrations of possible developments in the Swedish economy based on a number of assumptions such as international developments and policy direction.

The main report has been prepared by officials at the Ministry of Finance. The Government has not established any terms of reference for the Long-Term Survey, unlike other official inquiries. Those involved in its preparation choose the subjects and methods judged best to correspond to its aim: to serve as a basis for economic policy and the economic policy debate.

1.1 A Short History

The first Long-Term Survey was presented in 1948. It was carried out at the request of the OEEC (now the OECD), then a new multilateral organisation. The Long-Term Survey 2003/2004 is the nineteenth in the series.

In the early Surveys, the dominating issues were the conditions for economic growth. There was an element of indicative planning in the estimates in the 1950s and 1960s. With the help of detailed information on developments in different parts of the economy, a comprehensive picture of economic development was assembled

and disseminated to decision-makers. The aim was to establish a common view on economic development, which was expected to contribute to more stable development.

In the 1970s and 1980s, the methodology used in the Surveys improved as a result of a better statistical basis and improved access to econometric models. Detailed descriptions of economic development for the next few years dominated the Surveys. In the 1970s and 1980s, estimates of requirements also came to be used in the Surveys. These were a type of conditional forecast in which the Survey, using certain assumptions, tried to specify what was required to achieve the desired level of development, for example, the required wage formation.

As time went on, the need for detailed planning became increasingly less attractive while the feasibility of doing detailed forecasts of the economic development of parts of the economy was called into question. Since the end of the 1980s, the main focus of the Surveys has been on the analysis of structural issues.

1.2 The Long-Term Survey 2003/04

The Long-Term Surveys have traditionally focused on the possibilities of generating good economic growth. The long-term conditions for growth have been central to the analysis at the same time that various restrictions on growth have been discussed. There has been considerably less discussion devoted to the design and financing of the welfare systems.

However, in the Long-Term Survey 1999/2000,¹ there was a relatively comprehensive analysis of the possibilities of financing the welfare system by taxation. The Long-Term Survey 2003/04 delves more deeply in this direction. The Survey has as its main theme the conditions for funding the welfare services that are expected to be in demand in future. An equitable distribution of welfare and relatively good economic growth in the long term are fundamental conditions in this respect.²

A more detailed analysis of the different issues can be found in the appendices to the Survey supplementing the main report. In-

¹ SOLI 2000:7

² A more detailed discussion and analysis of the general conditions for economic growth can be found in the previous Long-Term Survey (SOU 2000:7).

cluded in the appendices is the scenario picture, that is, a possible representation of long-term economic growth, the labour supply and different aspects of the income distribution policy. Some appendices also discuss issues that are not given detailed consideration in the main report, for example, environmental policy and Swedish competitiveness.

1.2.1 Increased Demand for Welfare Services in the Future

The main report of the Long-Term Survey focuses on the welfare systems, especially their financing. It also touches on the production and distribution of these services. The Survey's starting point is that welfare services are to remain well developed and contribute to income redistribution and to citizens' security. Therefore the Long-Term Survey is basically about protecting and strengthening the welfare systems. The aim is to create the conditions that will make it possible to meet the future demand for the services provided by the welfare systems.

The Survey's scenario projections point to positive growth in household disposable income, which means greater economic welfare for households. It is likely that this growth in income will lead to greater demand for welfare services, both in coverage and in quality. In this survey, welfare services include healthcare, social services and education. These services are often funded wholly or in part by tax revenue, but are produced in both the public and private sector. Welfare services are included in the public welfare systems, which also include chiefly transfer payments in the form of social insurance and contributions. Even though the Survey has chosen to focus chiefly on developments in welfare services, it is likely that in future, other parts of the welfare systems, such as the social insurance systems, will also experience more demand for the services that they provide.

In the long term, there are also reasons in addition to rising incomes that argue in favour of a growing demand for welfare services. Demographic developments are leading to a growing proportion of older people in the population. Even though the health of the elderly has gradually improved, the rising percentage of older people is expected to lead to more need for health and eldercare. This increases the demands put on resources in the public sector, not least in the form of personnel.

There are already clear signs that the central government, municipalities and counties are having problems meeting new, additional demands. In the 1990s the total supply of welfare services increased at a considerably slower pace than it had in previous decades, even though substantial resources have been put into certain areas, for example, care for the disabled. Such increases have been offset by reductions in other activities. In childcare, there have been staff cuts and in eldercare, resources have been increasingly redirected from less demanding services to cases that require more care. The difficulties in getting resources and needs to match have also resulted in growing recruitment problems in the public sector.

The problem noted by the Long-Term Survey is a consequence of the high level of tax funding of healthcare, social services and education. The problem is how a growing demand for these services can be met when the opportunities to keep on raising taxes would appear to be limited. The expected increases in the cost of providing these services make the problem more difficult. In turn, the increased costs are a result of the fewer possibilities available for improving productivity in the production of welfare services compared with other types of production. Healthcare, social services and education are labour intensive activities; therefore, as a rule, it is difficult to expand their production without increasing staff correspondingly. At the same time, wages in the public sector follow wage developments in the business sector and this puts a strain on the public systems. These problems, also known as Baumol's (cost) disease, will be discussed at greater length in the Survey.

1.2.2 Alternative Ways of Meeting the Demand

Then what possibilities are available for finding a solution to financing the growing welfare systems? The Long-Term Survey explores a number of different possibilities. Since the welfare systems presently are based on tax funding, raising the tax levy is the measure that is closest at hand. Therefore the Survey first examines whether increasing the tax levy is a possibility and a reasonable course of action. The second route explored is whether increased growth could make it easier to finance the welfare systems. A third possibility studied is whether productivity in the public sector could increase and thus keep the cost increases in the welfare systems

within bounds. The fourth alternative considered in the Survey is whether *increased alternative financing*, that is, fee-based funding or privatisation, could contribute to the future growth of the welfare systems.

In addition to the preceding alternative actions, the public sector has one more option: simply to defer or forgo measures that could make the funding of the welfare systems easier. As there would still be a demand for welfare services that would not be met (with respect to quantity and/or quality), it would most likely lead to the growth of solutions operating alongside the established welfare systems. In the long term, such a development could result in less confidence in the capacity of the public welfare systems to deliver what is expected of them. The systems' legitimacy could thus be weakened.

An equitable distribution of welfare is the principal goal in designing a well-functioning welfare system that covers all citizens. Therefore the distribution effects are key in any discussion of how the welfare systems could be changed. At the same time, it is important that the distribution effects do not hamper the changes that are necessary in the welfare systems. It is not the Long-Term Survey's task to answer the essentially normative question of how far income distribution aims should be extended. The Long-Term Survey instead wants to draw attention to the question of how basic components of the welfare system can be funded in future. The Survey thus wants to contribute to the basis for the future work that should lead to a clarification of what the public welfare systems should include in future.

This report discusses chiefly the period up to 2020; in some instances, the perspective is longer. The problems that the Long-Term Survey has observed and attempts to find ways of handling will become more serious in the long term. As conditions are relatively favourable over the next twenty years, this period should be used to improve the prospects for managing the greater problems that are likely to emerge later on.

1.2.3 Outline of the Report

The main theme of the report is the future difficulties of funding the welfare services: healthcare, social services and education. As welfare services are a part of welfare policy, *Chapter 2* gives a gen-

eral picture of the goals of welfare policy and its instruments. *Chapter 3* describes the economic and demographic developments up to 2020 based on the projections in the Survey's scenarios. The chapter is based on Appendices 1 to 2 of the Survey, which give a more detailed picture.³ The chapter provides background information on the future challenges that must be faced in connection with the public welfare systems.

The remaining chapters take as their starting point ways of meeting the future challenges. Chapter 4 discusses whether it is possible and reasonable to raise the tax levy. Chapter 5 considers the possibilities of funding the welfare systems with higher growth. As what creates the growth is critically important, two alternative paths to growth are considered: growth through increased productivity and growth through higher employment in the economy. The chapter also discusses the possibilities of increasing the labour supply in the economy. Chapter 6 examines the possibilities of increasing productivity in the public sector, especially the production of welfare services. Chapter 7 discusses the possibilities of increasing the contribution of alternative funding of the services that today are supplied by the public sector. The Survey concludes with a summary.

³ SOU 2004:11.

Welfare Policy Goals and Funding

The tax-funded welfare services – here defined as healthcare, social services and education – are the focus of the Long-Term Survey's main report. To put welfare services in context, this chapter provides a short description of welfare policy. The chapter describes the instruments used and discusses the reasons behind the policies being pursued. The picture that emerges is that it is far from clear what the welfare policy should include and how it should be designed. The reason is that welfare policy is largely founded on concepts such as justice and equality – both disputed and normative concepts.

2.1 Welfare Policy Instruments

The aim of economic policy is to create the conditions for a high level of welfare and its equitable distribution. In practice, a great number of all public measures can therefore be included in a definition of welfare policy, not least those measures aimed at improving economic growth. This report has chosen to define welfare policy as the instruments used mainly for the *redistribution* of welfare. Good economic growth is viewed in the report as an important prerequisite for the welfare policy.

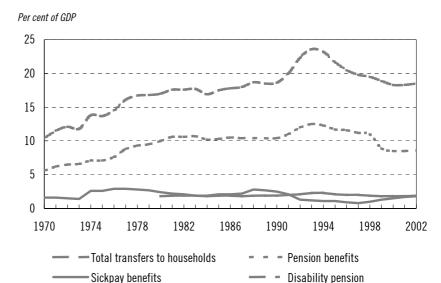
⁴ Social insurance also provides a service (insurance), but it is not included here in the concept of welfare services; instead it forms part of public transfers. In addition to welfare services, there are a great many other goods and services that are tax funded such as defence, public safety and justice, which are included in public sector expenditures. See also diagram 2.2.

2.1.1 Transfers and Welfare Services

The principal instruments used to redistribute welfare in addition to tax policy are *transfers* and *tax-funded goods and services*.

Public transfers make up over 40 per cent of public expenditure. The transfers are mostly comprised of social insurance benefits, which are paid out in connection with temporary and permanent loss of income. The benefits are paid in the event of illness, unemployment, parental leave, retirement and disability.⁵ Transfer payments also include various forms of allowances, for example, housing allowances, child allowances, study allowances and social assistance. Diagram 2.1 shows public transfers since 1970.

Diagram 2.1 Public Transfers to Households, 1970–2002



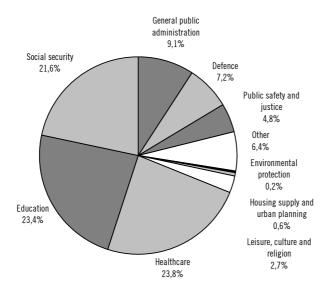
Note: The diagram does not give *exact* information on transfer payments as a percentage of GDP. Regulatory changes, some of a technical nature, affect the size of the ratio. Comparisons over time and across countries are therefore not reliable.

Source: Ministry of Finance.

 $^{^5}$ Since 2003, called sick pay or activity compensation, depending on the age group to which the compensation is directed.

The other main component of welfare policy, tax-funded goods and services, makes up about 50 per cent of public expenditure.⁶ This item is called *public consumption* in the national accounts.⁷ The distribution of public consumption for different purposes is shown in diagram 2.2. Healthcare, social services and education, what the Survey terms welfare services, are the most important services in terms of costs. The demographic trends do not affect the demand for the other services included in the concept to the same extent that they affect the welfare services.

Diagram 2.2 Public Consumption as a Percentage of Total Consumption Expenditures, 2002



Note: "Social security" covers mainly childcare and eldercare. "Other" covers mostly communications. Source: Ministry of Finance.

⁶ The remainder of the public sector consists of interest and investments, chiefly in infrastructure.

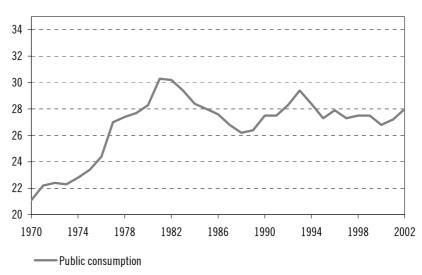
⁷ Public consumption is the tax-funded activity that is conducted under public or private auspices in such areas as healthcare, education and public administration. However, that part of public production that is funded by fees is not included in the concept. Section 7.2.1 provides a picture of the extent of fee-based funding of public services.

The municipalities and the counties bear much of the direct responsibility for tax-funded services. The municipalities' responsibilities include not only childcare, eldercare and care for the disabled, but also compulsory and upper secondary school. The counties are responsible for healthcare and some aspects of dental care. The total cost of the services produced by the central government is considerably less. Examples of services provided by the central government are police, defence and higher education.

Diagram 2.3 shows how public consumption has grown since 1970. In the 1970s, expansion was chiefly in the healthcare sector. In recent decades the greatest increase in expenditure has been in social services.

Diagram 2.3 Public Consumption, 1970-2002





Note: The diagram does not give *exact* information on public consumption as a percentage of GDP. Regulatory changes, some of a technical nature, affect the size of the ratio. Comparisons over time and across countries are therefore difficult to make.

Source: Ministry of Finance.

2.1.2 Welfare Policy: Expansion and Change

The expansion of welfare policy gathered speed in the 1960s. It was then that it came to be known as "the general welfare policy". What is actually meant by general welfare is not so easy to define. In some cases, it means that the welfare systems' distribution rules are general (that is, not directed). In other cases, it is a general statement referring to the broad reach of the policy. Swedish welfare policy contains both these components. Compared with many other countries, Sweden's welfare policy has fewer directed components. Another difference is that welfare services in Sweden and the other Scandinavian countries are mostly provided by the public sector. In continental Europe, the private sector is much more involved in the production of welfare services.

Tax Funding of Welfare Services Has Increased

The welfare systems have expanded with the help of taxes and periodically by borrowing. The tax ratio – total tax revenues as a percentage of GDP – has increased in line with this expansion. During the 1960s and 1970s, the tax ratio rose rapidly from just under 30 per cent to over 50 per cent of GDP (diagram 2.4). Since then, the pace of the tax-funded expansion of the welfare systems has abated. The tax ratio has remained around 50 per cent since the 1980s. Since 1990, real hourly wages after tax have instead increased.¹⁰

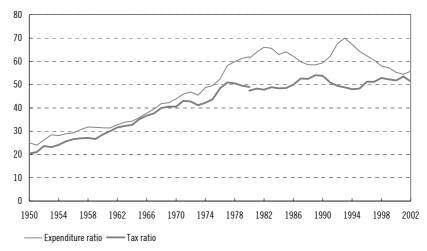
⁸ For a survey of the expansion of the welfare systems and the development of the public sector, see, for example, M. Ringqvist [1996].

⁹ There are other ways of defining the general welfare policy in addition to that described here. P. Molander [1999] gives a more detailed description of various attempts to interpret the concept.

¹⁰ See Appendices 1 and 2 of the Long-Term Survey (SOU 2004:11).

Diagram 2.4 Expenditure and Tax Ratios, 1950–2002

Per cent of GDP



Note: There is a break in the time series in 1980 owing to new calculation principles in the national accounts. The diagram does not give *exact* information on the percentage of GDP used in this way. Regulatory changes, some of a technical nature, affect the size of the ratio. Comparisons over time and across countries are therefore not reliable.

Source: Appendix 7 of the Long-Term Survey (SOU 2003:57) and the Ministry of Finance.

In a growing economy with a tax burden that is already heavy, there is little room to improve welfare policy if the tax burden cannot be raised or productivity in the public sector cannot be improved. In that event it is difficult for the public sector to meet households' increased demand for welfare services. Chapter 4 of the Survey discusses the question of whether it is possible to raise taxes to fund the growth of welfare services. Chapter 6 considers the possibility of improving productivity in the public sector.

In Some Areas, Public Commitments Have Been Scaled Down.

In the early 1980s an increase in the budget deficit led to pressure for change aimed at increasing efficiency and productivity in parts of the public sector. Changes in attitudes and citizens' demands have also led to changes in the sector. As a result, a number of state monopolies have been abolished, the degree of corporatisation has increased and activities have been contracted out to the public sector.

The energy, telecommunications and transport markets are examples of markets opened to competition. One important feature has been the separation of the provision of services from the operation of the infrastructure itself.¹¹

Another area in which many important changes have taken place is housing policy. Previously it was an important element of welfare policy owing to the heavy subsidies given the housing sector. These subsidies have since been scaled down. The municipalities have also sold off parts of their municipally-controlled housing associations.

Other services that have undergone change are guard and emergency services. Private security companies have been expanding in this area once dominated by the police.

There have also been changes in the production of welfare services. Since the early 1990s, more private actors have become involved in the production of welfare services for schools, healthcare and social services. Chapter 6 describes this development in more detail.

Various changes have also taken place in the social insurance systems. In the area of health insurance, a qualifying day and a sick pay period have been introduced. The benefit levels for unemployment and health insurance have also been changed.

Pension reform was the most significant change in welfare policy in the 1990s. Under the reform, premiums paid in are now individually linked to future benefits.

Given the changes that have taken place in public sector commitments in the 1990s, one relevant question is whether those areas that are now tax funded are, for various reasons, the most appropriate to be tax funded. This then leads to the question: what are the goals of welfare policy and what are the reasons for these goals?

¹¹ See the Long-Term Survey 1999/2000 (SOU 2000:7) for an overview of the structural measures that have been implemented since the 1980s; see also an overview of the changes in the product and capital markets in the past year by the Ministry of Finance [2003].

2.2 Welfare Policy Objectives

The chief reasons for welfare policy have to do with the income distribution policy, but there are also efficiency and to some extent, stabilisation policy motives. 12

The Reasons for Income Distribution Policy Encompass Many Objectives

The reasons for including income distribution in welfare policy cannot be summarised in a single goal; rather they form a number of objectives. One of the aims of welfare policy is to make life better for those who are worst off. This is accomplished by various directed subsidies such as social security and housing allowances. Another aim is to reduce the *income spread* between various groups in society. Here the chief instruments are tax and social benefit policies, but subsidising public consumption is also used. One example of the latter is subsidised education, which in the long term aims to smooth life incomes. To offer protection against too high a loss of income is another objective of the policy, which is primarily accomplished through the social insurance systems. One part of the systems has as its principal aim the redistribution of resources over the lifespan. The most obvious example is the pension system. Another aim that includes an element of redistribution is to guarantee everyone welfare services when needed and irrespective of their ability to pay. Therefore healthcare, social services and education are provided free of charge or are heavily subsidised. Also included under this aim are the principles that everyone is to be guaranteed equality of access to welfare services and equivalence in the services offered.

Section 2.2.1 discusses different views of what constitutes an equitable distribution, but first gives some of the other reasons underlying welfare policy.

¹² For a more detailed discussion of the reasons for the public measures in the area of welfare, see Appendix 7 of this Long-Term Survey (SOU 2003:57).

Efficiency and Stabilisation Reasons Underlying Welfare Policy

In certain respects, welfare policy may also be warranted for reasons of efficiency. This is true of such matters as public sector involvement in education even though there are also income distribution factors, which have already been mentioned. One basis for state subsidies to education is the argument that from society's point of view, individuals do not have the incentive to educate themselves sufficiently. Education is thought to give rise to external effects that are positive for society in general, for example, contributing to growth and strengthening democracy and social cohesion. Without subsidies, people would not acquire as much education and there would be fewer of the positive effects of the kind just named. Healthcare is another example of a service that is assumed to be of value not only to those making use of it. Healthy citizens are also seen as a social benefit owing to a decline in the spread of infections and an increase in the labour supply.

Efficiency reasons also underlie those parts of welfare policy that aim to distribute risks over the population and over time. It is chiefly the social insurance systems that may be considered in this way. By means of these systems, it is possible to spread the types of risk for which it would otherwise be difficult to establish a market. Social insurance schemes make it possible for those who are sick, for example, to suffer less financial hardship than if the insurance had been lacking. In practice, this also leads to the redistribution of resources among different individuals and therefore, these systems also have clear distribution effects.

Good arguments respecting insurance can also be found for subsidising the welfare services for healthcare and social services. These welfare services cause redistribution, not between different income groups, but rather between households that have different need of these services. Some people suffer more illness than others, irrespective of income. Tax-funded health and eldercare is one way of distributing the financial burden more equally.

There are also reasons in addition to income redistribution for providing subsidised childcare, as childcare helps increase the supply of labour (primarily among women) and therefore promotes

¹³ There is an examination of the distribution effects of education in Appendix 10 of this Long-Term Survey (SOU 2003:96).

economic growth.¹⁴ There are also income redistribution reasons for subsidised childcare – at least in the preschool – in that this activity also aims to compensate for differences in the conditions under which children grow up.

The need for stabilisation policies – to counter the impact of fluctuations in the business cycle – is yet another reason that justifies public intervention. The reasons underlying unemployment insurance are in part due to stabilisation policy.

Welfare Policy – A Balancing Act

As shown earlier, income redistribution reasons and the other reasons for welfare policy – efficiency and stability – are closely intertwined. Welfare policy can often be attributed to several of these reasons.

However, in many instances there is also a clash of interests, mainly between the aims of income redistribution and efficiency. Sick pay and unemployment benefits, together with other transfer payments, do indeed provide protection against significant loss of income, but they lower the financial incentive to work. Resource utilisation thus becomes inefficient and the conditions for growth are reduced. This, in turn, makes it difficult to maintain the same level of publicly financed welfare. In that respect, welfare policy can be described as a balancing act between different objectives. On the one hand, the welfare systems ensure individuals' security in the event that they for some reason find themselves in a situation in which their own income is not "sufficient". On the other hand, they should encourage people to take responsibility for their own lives. Finding the "right" balance between these objectives is one of those difficult questions to be tackled when designing welfare policy.

2.2.1 Different Views on the Basis for the Policy

Another series of difficult questions arises when designing welfare policy. To whom should the redistribution be made? How much of a redistribution should there be? What is the best way of achieving

¹⁴ Ds 1999:67.

the objectives? There are no easy answers to any of these questions, but the following sections give a description of some of the different perspectives on the subject.

The principal reason for welfare policy is to make a redistribution that in some respect is seen as more "just" than the distribution without the intervention. The meaning of the word *just* does not have any one exclusive interpretation. On the contrary, it is a controversial and emotionally charged concept. There is an extensive literature on the concept and a number of interpretations of what is just are discussed in Appendix 8 of the Survey.¹⁵

What Is Just? 16

Two main interpretations of what is just appear in both the literature and the political debate. One interpretation has to do with equality. Equality, broadly defined, means that everyone is to have the same rights and that social utilities are to be distributed as evenly as possible. A second interpretation refers to just enrichment. This means that everyone has the right to keep what he or she has legitimately earned or acquired. Arguments can be found to support both interpretations, but these interpretations are diametrically opposed.

The different interpretations of what is just are both used in welfare services, partly in different contexts. Arguments for just enrichment, for example, underlie the view that it would be more reasonable to permit citizens to keep the tax money that is used for publicly financed welfare services. Under this view, people would be able to use this money in whatever way they consider appropriate. It may, for example, mean arranging childcare or health care from a private source in a form of one's own choosing.

The other interpretation of what is just, based on the concept of equality, is a fundamental principle in any consideration of access to welfare services and their quality. That is to say, the concept is used in connection with the services people get from the public sector in exchange for the taxes that they have paid. In a purely formal sense, the concept of equality used in that way is fairly uncontroversial: welfare services are to be made available to everyone

¹⁵ SOU 2003:20.

¹⁶ This section is based on the discussion in Ds 2001:42 and in SOU 2003:20.

who needs them to the same extent. However, in practice it is not so simple to establish what this means. For example, how much can the quality vary between preschools or schools before the differences are considered unacceptable? Is equality in the services provided the same as uniformity? If not, how great can the differences be in the level of services and in their availability and still be acceptable? These are some of the questions that arise when the concept of equality is to be put into practice.

The concept of equality can also be applied to fees charged for welfare services. One interpretation may be that there is equality if the fees charged are adjusted according to family income, that is, they are income related. Another interpretation is that there is equality if everyone pays the same fee. An argument for the latter reasoning is that the differences in ability to pay are true for all goods and services. As the problem cannot be solved by putting different prices on goods and services for different households, an argument could instead be made for preferring a general income equalisation. However, this obviously is contrary to the concept of just enrichment.

The most practical policy is often one in which a workable compromise between the various ideas about what is just has been found. The possibility of pursuing a "just" policy in practice is often further complicated if it comes into conflict with other completely different policy objectives. One such example is considered in Appendix 11 of this Survey, which analyses the conflicts between the objectives of environmental policy and income distribution policy.¹⁷

Welfare Policy Aimed at Creating "Equal Opportunities"

The various interpretations of the concept of justice, just reviewed, decide to a large extent the policy results: how large a part of income may be retained, what fees are to be paid and so forth. Another way of viewing welfare policy is that it is to create equal opportunities for everyone. Thus a policy that aims at improving people's prospects in life is also expected to lead to a more equitable distribution of income in the long run. At the same time, it is not completely clear what is meant by "equal opportunities".

¹⁷ SOU 2003:2.

Education policy is perhaps the best example of a policy aimed at creating equal opportunities. The provision of free education and study allowances is to enable everyone, irrespective of background, to have the opportunity to study. But irrespective of the opportunities they have had, people will always have different capacities to do well, for example in the labour market; therefore, an income redistribution policy is also needed.

An interesting definition of welfare policy, which is based on individuals' chances of affecting their own situation, can be found in the report, "Välfärdsbokslut för 1990–talet" [Evaluation of Welfare in the 1990s]. In this report, the basis of welfare is defined as individual resources, which help people to control and deliberately direct their own lives. If this definition is used as the starting point, the various welfare systems – social insurance schemes, allowances and welfare services – should be considered for their capacity to increase individuals' opportunities to direct their own lives. At the same time, this is a broad definition that in addition to welfare policy, very clearly covers growth policy. Economic growth that contributes to higher disposable incomes for households leads to greater opportunities for people to control and direct their own lives. Higher incomes can thus provide the opportunity to review the policy being pursued for the public welfare system.

No Distinct Boundaries for Welfare Policy

One conclusion that can be drawn from the various approaches reviewed in the preceding discussion is that it is not at all clear what income redistribution should be made or how the policy should be designed. For this reason, different countries have chosen welfare systems and goals for income redistribution that differ in some respects. Nor in many instances does there appear to be any explicit limit on how far the public measure should go in striving for a more equitable distribution. The assessment of what should be included in public welfare policy also tends to change over time.

However, in some instances the rules in the systems are such that they limit the extent to which income redistribution goals can be pursued. One such example is the limitation that exists in the

¹⁸ SOU 2001:79.

social insurance systems. There the systems protect against loss of income up to a limit amounting to the ceiling on benefits of 7.5 price basic amounts. Despite this limit, the social insurance systems are usually still considered to be part of the general welfare policy. However, in practice, the ceiling on this public measure is not constant since in real terms, it has gradually declined over time. Higher real wages have meant that some of the insurance systems have been weakened. In this respect the actual limit on welfare policy is a result of both the political decision on the limit and wage developments in the economy. It is worth noting that this construction tallies well with the earlier definition of welfare as being based on individuals' own means and prospects for directing their own lives.

Nor is it always obvious why some goods and services are tax funded while others are not. There are a number of goods and services that are not tax funded even though an argument could be made for their tax funding, both for income distribution and efficiency reasons. Food and housing are two such examples. Everyone requires food and housing and their consumption also gives rise to positive external effects. Eyeglasses and dental care are two other examples of income distribution reasons that would argue in favour of tax funding.

2.2.2 Difficulties in Evaluating How Well the Policy Fulfils Its Objectives

Evaluations of the welfare system's income redistribution effects often take as their starting point the distribution of income between various income groups. This course of action has its limitations, not least when studying the welfare services' redistributing effect. These services aim primarily to redistribute income not between income groups but between other groups other than income groups, for example: between the sick and the healthy, the unemployed and the working, the old and the young. Therefore, income redistribution between such groups should be studied to assess whether or not the policy meets its objective.

As shown earlier in this Survey, one reason for welfare services is the aim of equality: Equivalent services are to be guaranteed to all who need them. This aim underlying the provision of welfare services is not captured in evaluations of income redistribution. Instead greater inequality under certain circumstances could give rise to an equalisation according to these calculations. If public welfare systems no longer deliver what people expect of them, those who can afford to may choose to forgo a service provided through taxes and instead pay for the service privately, for example healthcare and social services. If at the same time these people continue to pay taxes that fund the public welfare systems, these payments may be regarded as a positive development from the standpoint of income distribution. People with high incomes will to a lesser extent make use of tax-funded services. If instead the differences arising with respect to the welfare services that different groups receive are taken into account, this situation will then be perceived as something negative – even from the standpoint of income distribution.

It is certainly difficult, perhaps impossible, to do an analysis that captures all the aspects covered by the welfare policy, not least the welfare services. This is due not only to inadequate follow-up methods, but also largely to the complexity of the issue. But methods used to analyse income distribution have improved considerably in recent years. In several of this Survey's appendices, the instruments currently available for doing a distribution analysis are used.¹⁹

Appendix 9 of the Long-Term Survey²⁰ looks at the distribution that takes place between different income groups when the value of subsidised public services are taken into consideration. The results of this and several other studies²¹ are that *transfers* and *taxation* have a relatively large equalising effect. However, the value of *public services* makes a more modest contribution to income equalisation. However, the distribution effect of welfare services varies between different income groups. The services are most important to the lowest income groups. It must be added that if bases of division other than income groups had been used, such as employed/unemployed, healthy/sick and so forth, the results would have been different.

The authors go one step further and estimate what proportion of all transfers and subsidies are "self-funded", that is, are paid by the individual's own taxes at some point in life. On average, an individual pays just over 8 out of 10 kronor at any point in time. The re-

¹⁹ SOU 2003:20, SOU 2003:110 and SOU 2004:2.

 $^{^{\}rm 20}$ SOU 2003:110. In the appendix, a dynamic microsimulation model is used.

²¹ Government Bill 1999/2000:1, Appendix 4, Government Bill 2001/02:100, Appendix 3 and Ds. 1994-86

mainder, almost 2 out of 10 kronor is what may be called *genuine* redistribution between individuals.²² However, as the estimates also include pensions, it is not especially surprising that a large proportion of the transfers and subsidies are self-funded.

One relevant question to ask is whether there is any part of the periodisation of individuals' incomes made via the welfare systems that could be transferred to the individuals themselves.

Another question is whether more clearly separating the different parts of the welfare systems, as has been done in the pension system, is justified. One advantage would be that it increases insight into what is paid into the systems and what people receive from them. Another advantage in separating the various parts of the welfare systems would be that it would make possible a clear definition of the public commitment in various areas. Expenditure increases in one system would not then lead to savings in another system, as they do at present.

2.3 Changes in the Conditions for Welfare Policy

This chapter has presented a picture of Sweden's welfare policy, with an emphasis on the welfare services. As in other countries, the welfare policy constitutes a public commitment in the form of healthcare, social services (particularly for the young and the old), education and transfers. The concept of welfare policy can also be expanded to include measures that stimulate growth, which generates higher incomes.

The conditions under which the public welfare systems operate change over time. This report in its introduction has emphasised the likelihood that higher disposable incomes will mean an increase in the demand for welfare services. This subject will be discussed at greater length in the chapter that follows. Increased income can also mean greater opportunity to review the policy being pursued within the framework of the public welfare systems. Other conditions are also changing, and these changes mean that it is not very advisable to set up a welfare system that is valid for all times.

Technological change is one such example. The development of information technology has had considerable impact on the ad-

²² One assumption in the estimates is that each birth cohort funds its own transfers and subsidies

ministration and operation of various systems and this trend is expected to continue in future. Moreover technological change in the areas of medicine and information technology may contribute simultaneously to improved methods of treatment and changes in the costs of both healthcare and social services.

Another example of changing conditions is the increased *demand for individual freedom of choice* in the consumption of various welfare services. There are good chances of finding information on various alternatives, especially with the help of information technology. Likewise people may also want to be able to choose the level of cost and coverage of welfare services such as healthcare. The result is likely to be the emergence of a more individual and individualised demand for welfare services. Ways of meeting a more diversified demand will be need to be found.

Another change in the conditions in which welfare policy is pursued is the increased *international integration*, such as that going on in the EU. Even though co-operation in the EU does not expressly concern the area of welfare, national welfare policy is affected by EU rules and regulations and their impact on economic policy. By way of example, the aim of freedom of movement for workers calls for the co-ordination of social insurance systems. Increased mobility has also raised the issue of the right of EU citizens from one country to seek such services as healthcare in another EU country and who then will pay the cost of this care. ²³

After this general picture of the objectives of welfare policy and its funding, the next chapter will discuss the economic conditions for expanding the welfare systems.

²³ For a survey of how economic integration in the EU is affecting the Scandinavian welfare states, see P. Blomqvist (ed.) [2004].

3 Future Challenges for the Welfare Systems

The main theme of this Long-Term Survey is the challenges facing the publicly funded welfare systems and the measures available to meet an expected increase in demand for welfare services. The focus of this chapter is on the first part of this problem.

The chapter presents a possible picture – a scenario – of how the economy might develop up to 2020. One aim of this scenario is to point out some of the challenges facing the public welfare systems. One such challenge is the demographic development that will require those who are working in the future to support an increasing number of elderly as well as to provide them with healthcare and social services. Another challenge is the new and future demands that will be made of the welfare systems as a result of growing material welfare.

3.1 One Possible Scenario up to 2020

One important task of the Long-Term Survey is to give a comprehensive picture of economic development in the medium to long term. The scenarios generally have several purposes. One purpose is to provide a basis for the economic policy problems that the Survey wants to emphasise. Another is their use as a basis for other studies when there is a need for a full picture of how future economic development might take shape. By constructing different alternative scenarios, it is also possible to point out the uncertainties that exist in the estimates and to analyse the consequences of various alternative courses of action.

Also in this Long-Term Survey, a number of economic development scenarios have been prepared. The *baseline scenario* presented in this chapter, provides a picture of the production and consumption possibilities in the event that economic development generally conforms to that of recent decades and no major changes

in policy are implemented. Later in this report, in Chapter 5, two scenarios with a growth rate higher than that in the baseline scenario are described. In one scenario the higher growth is due to greater productivity growth. In the other scenario the higher growth is due to more positive employment developments. The aim in choosing these alternative scenarios is to show how growth can have different effects on the public sector's real resources. A more detailed account of the three scenarios can be found in Appendices 1 to 2.²⁴

3.1.1 The Scenarios in the Long-Term Survey

From a long-term perspective, it is reasonable to assume that the magnitude and quality of the production resources determine not only the production result, but also the demand. In order for the economy to grow in the long term, either more resources in the form of labour and capital are required or existing resources must be used more efficiently; in other words, productivity must improve.

The baseline scenario starts with the premise that productivity in the business sector in coming years will grow at about the same rate as it did in the past few decades, which means an annual increase in production per hour worked of about 2.2 per cent. At the same time, employment, defined as the number of hours worked, will remain unchanged in the economy as a whole. In future any growth can thus be traced back to an increase in productivity.

In the baseline scenario, the future requirements for public services have been projected in line with the expected demographic developments. Accordingly, the calculations are based on a modest assumption, namely that healthcare, social services and education are to maintain the same staff ratio and level of service. Up to 2020, this assumption is compatible with an unchanged tax levy and the objectives established for public sector savings.

In the baseline scenario, GDP grows an average of 1.8 per cent a year between 2002 and 2020. This projected rate of growth can be compared with an average of slightly more than 2.0 per cent a year from 1970 to 2002.

²⁴ SOU 2004:11.

As shown in table 3.1, growth is estimated to decline slightly in the long term to 1.7 per cent a year between 2010 and 2020. The weaker growth results when the number of people of working age stops increasing, a result which contributes to a decline in the number of hours worked.

These expected rates of growth mean that GDP will be about 39 per cent higher in 2020 than in 2002, while GDP per person will be about 27 per cent higher. In comparison, during the previous eighteen-year period (that is, from 1984 to 2002), GDP grew by about 44 per cent, with a GDP per person of 35 per cent.

Table 3.1 GDP, Expenditure Approach, 1970–2020

Average annual percentage change in constant prices

	1970-	1980-	1990-	2000-	2010-
	1980	1990	2000	2010	2020
Private consumption	1.6	1.7	1.5	2.0	2.7
Public consumption	3.2	1.7	0.6	0.7	0.5
Municipalities	3.9	2.2	0.7	8.0	0.6
Central government	1.8	0.6	0.3	0.3	0.3
Investments	0.6	3.8	0.4	1.7	1.8
Exports	3.8	4.3	7.8	3.7	3.4
Imports	2.4	3.8	5.5	3.2	4.0
GDP	2.0	2.2	2.0	1.8	1.7
GDP per person	1.7	1.8	1.6	1.4	1.3

Source: The Long-Term Survey's scenario calculations in Appendices 1-2 (SOU 2004:11).

Total consumption, that is, the sum of public and private consumption, will grow at about the same rate as it has in recent decades, but the growth will have a different composition. Historically, except for the 1990s, tax-funded consumption has increased at the same rate or more rapidly than that part of consumption paid for with household income. In the years ahead, public consumption is expected to increase at a decidedly slower pace than private consumption. At the same time, private consumption will increase considerably faster than it did from 1970 to 2000. This can largely be explained by the assumption made in the estimates that tax rates will stay the same. The following sections discuss the assumptions underlying developments in the baseline scenario.

3.1.2 The Labour Force and Employment

One important basis for the type of long-term estimates presented here is an assessment of how the size and composition of the population will change. Demographic developments have an important impact on the future labour supply and thus on future prospects for growth.

Three factors determine total population growth: the number of births, the average lifespan, and immigration and emigration. Up to 2020, the number of persons aged 20 to 64, the most important group in terms of employment, will not be affected at all by the birth rate, and only modestly by future changes in lifespan. In this time frame, immigration and emigration will be the chief determinants of change in the number of persons of working age.

The population projections underlying the estimates in this Survey were published by Statistics Sweden (SCB) in the spring of 2003.²⁵ Under this projection, Sweden's population will come to about 9.7 million in 2020, an increase of about 836,000 people compared with 2002. During this time, the number of people between the ages of 20 and 64 will increase by about 230,000 people to almost 5.5 million people (see table 3.2).

Table 3.2 Demographic Developments, 1970–2020

In thousands of persons							
	1970	1985	2000	2010	2020	1970-	2000-
						2000	2020
			Level			Chai	nge
0-19 yrs	2233	2091	2139	2140	2231	-94	92
20-24 yrs	658	588	517	617	520	-141	3
25-54 yrs	3089	3308	3662	3609	3749	573	87
55-64 yrs	987	917	1034	1181	1177	47	143
64-79 yrs	923	1141	1078	1234	1523	155	445
Over 79 yrs	190	313	453	485	519	263	66

8883

9266

9719

802

836

Source: SCB [2003b].

8081

8358

Population

²⁵ SCB [2003b].

Thus between 2000 and 2020, more than 70 per cent of the population increase will take place in groups classified as not of working age. Moreover it will be primarily persons aged 55 to 64, with a comparatively small labour supply, that will form the majority of the increase in the number of persons of working age. Demographic developments will thus not be of much help in increasing the future labour supply.

Immigration Could Help Increase the Labour Supply

Another significant factor in the expected demographic developments is the importance of immigration. As shown in table 3.3, immigration accounts for the entire increase and more in the number of persons aged 20 to 64 in the next twenty years. The domestic contribution to the increase in this age group is negative. Without positive net immigration, the number of persons in the age group 20 to 64 would thus decline.

By far the largest part of this addition to the population made by immigration currently consists of persons born outside an enlarged EU and this pattern is expected to continue. The average employment rate of this group today is considerably below average, while the level of unemployment in this group is higher than in other groups. In order for any future increase in the population in the age group 20 to 64 to result in more than a marginal increase in employment, immigrants' position in the labour market must be strengthened.²⁶

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 $^{^{26}}$ Appendix 4 of this Long-Term Survey discusses immigrants' establishment in the labour market. (SOU 2004:73).

Table 3.3 Demographic Developments, 1970–2020, by Net Immigration and Domestic Contribution

Change in thousands of persons

	·	Net immi-	Domestic	Total change
		gration	contribution	
1970–1980	Total population	82.2	154.4	236.6
1970-1900	Population 20-64 yrs	41.7	-14.8	26.9
1980–1990	Total population	170.1	102.3	272.4
1300-1330	Population 20-64 yrs	104.5	87.1	191.6
1990–2002	Total population	259.3	90.7	350.0
1990-2002	Population 20-64 yrs	155.3	155.0	310.2
2002 2010	Total population	245.8	79.7	325.5
2002–2010	Population 20–64 yrs	152.8	-9.1	143.7
2010 2020	Total population	267.6	185.6	453.2
2010–2020	Population 20-64 yrs	159.5	-121.0	38.5

Source: SCB [2003b].

In 2002, an average of 80.9 per cent of those born in Sweden in the age group 20 to 64 were employed. The corresponding number for those born abroad was 62.7 per cent. If labour force participation rates in the future are assumed to remain unchanged with respect to age and country of birth, the average rate of employment for those born abroad will fall to 58.3 per cent in 2020. The reduction depends on any shifts in the composition of this group during these years. The percentage of persons born outside an enlarged EU, the group currently with the weakest link to the labour market, is expected to grow rapidly. However, the percentage of those born in the Nordic countries and the current EU countries will decline markedly.

In the estimates made for this Survey, it is assumed that the labour market position of those born abroad will gradually approach that of those born in Sweden. In the baseline scenario, the average employment rate of those born abroad is estimated to increase to 64.2 per cent in 2020. The increase is especially pronounced in the group that currently shows the most difference in a comparison with the native-born, that is, among foreign-born women and persons born outside an enlarged EU. In Chapter 5 there is a discus-

sion of whether the conditions exist for a further expansion in the rate of employment among those born abroad.

Absence for Reasons of Illness Assumed to Decline

Another critical factor of importance to the future labour supply is the current high rate of absences due to illness. In 2002, according to SCB's studies, an average of about 6.7 per cent of those employed who were aged 20 to 64 were absent due to illness for some part of an average week.²⁷ For persons aged 55 to 64, absence due to illness estimated in the same way amounted to about 10 per cent. The percentage of absences due to illness is high in international comparisons, and it has increased sharply in recent years. In 1997 absences due to illness defined in the same way came to 4.0 per cent of the group aged 20 to 64 and to 6.6 per cent of the group aged 55 to 64. From 1997 to 2002, the costs of health insurance to the public sector increased from just under SEK 15 billion to more than SEK 43 billion a year.²⁸

In the estimates in the Long-Term Survey, it has been assumed that the current high rate of absences due to illness will be reduced, especially among those aged 55 to 64. Only a modest reduction is expected to take place through the return to work of those long absent due to illness. A considerable number of these persons are assumed in practice to have left the labour market and will, in time, be given a disability or retirement pension. The estimated reduction in absence due to illness is instead based on the assumption that tomorrow's 55 to 64 year olds will not be on sick leave to the same extent as today's 55 to 64 year olds.²⁹

Weak Growth in the Number of Hours Worked

The assumptions made in the baseline scenario about immigrants and those on sick leave mean that more people are expected to be employed in this scenario than in an estimate based solely on demographic developments and unchanged behaviour. At the same

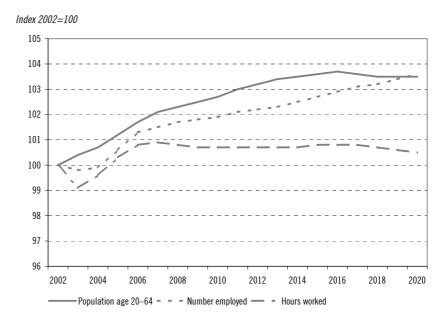
²⁷ SCB [a].

²⁸ SOU 2004:11.

²⁹ Appendix 5 of this Long-Term Survey contains a description of absence due to illness, focusing on older workers. (SOU 2004:44).

time, it has been assumed that some of the future growth will be consumed in the form of shorter working hours. The demand for leisure time is assumed to increase in line with GDP growth and more consumption possibilities. As a result, the average working hours for those employed will be shortened by 0.2 per cent every year. This is a relatively limited reduction, which means that the average working hours per week by full-time employees will be reduced by approximately one hour by 2020. Such a reduction in hours worked is in line with developments in recent decades.

Diagram 3.1 Labour Supply in the Baseline Scenario, 2002-2020



Source: The Long-Term Survey's scenario calculations in Appendices 1-2 (SOU 2004:11).

As indicated in Diagram 3.1, the number of hours worked is largely unchanged up to 2020 in the baseline scenario. The increase in the number employed is insufficient to offset the reduction in the number of hours worked resulting from the gradual shortening of the work week. The number of employed increases at approximately the same rate as the working age population. During this period, the shifts that take place in the composition of the popula-

tion to groups with a relatively low level of employment, such as the elderly and the foreign born, are offset in the estimates by a fall in absences due to illness and an increased level of employment for the foreign born.

3.1.3 Productivity and Wages

Productivity growth defined as the increase in production for a given input of labour is the single most important factor in the growth of general prosperity. Historically, productivity growth has been higher than the entire GDP growth per person, while the change in the number of hours worked has made a negative contribution to growth. The number of hours worked in 2002 was slightly less than in 1970, even though the number of persons aged 16 to 64 increased by almost 10 per cent in the intervening years. In the same period, GDP increased by almost 90 per cent.

In the baseline scenario, a productivity growth in the business sector of 2.2 per cent a year has been assumed. This means a productivity growth in the economy as a whole of about 1.8 per cent a year. This rate of increase is a little faster than in the 1980s, but slower than in the 1990s.

Productivity is not expected to continue to grow at the rate that it did in the latter part of the 1990s because part of the relatively rapid rate of increase recorded then is thought to have been temporary in nature. The recovery after the crisis in the early 1990s and the rationalisations that had to be made then were partly of a one-off character and contributed primarily to a permanently higher level of productivity. Another factor having a dampening affect on future productivity growth is a continuing shift in demand to more services. In the baseline scenario, this is reflected by a tendency for the average growth in productivity in the business sector to decline slightly over time.

In the national accounts, productivity in the public sector is assumed to be unchanged over time. This means that each increase in production in the public sector corresponds in principle to an equally large increase in the number of working hours. In the scenario estimates, the same assumption has been made. The reasonableness of this assumption is discussed in more detail in Chapter 6.

Recruiting More Civil Servants Could Be Problematical

Given the assumption made about a gradual reduction in the average number of working hours, the number employed in the civil service will increase at a slightly faster rate than production and the number of hours worked. In the baseline scenario, the number employed in the public sector is estimated to increase by about 120,000 persons, from 1,278,000 persons or 30.1 per cent of total employment in 2002, to 1,415,000 persons or 32.3 per cent of those employed in 2020.

Such an expansion in the number of public employees could be problematic for at least two reasons. First, recruitment would need to be considerably higher to meet the net increase in the number of employees. The average age of persons employed in the public sector today is relatively high. As a result, about half will probably leave before 2020, either owing to their age or to work in the private sector. Thus a total of almost 800,000 persons will need to be recruited by the public sector up to 2020.³⁰

A second factor that makes hiring staff in the public sector more difficult is the uneven gender distribution. About 75 per cent of those employed in the public sector today are women. Women make up over 90 per cent of those employed in childcare and care for the elderly and disabled. If there is no change in these gender patterns, most of the recruits to the public sector will be women. This means that an ever greater percentage of all employed women will be active in this part of the labour market. If the increase in employment projected in the baseline scenario takes place without any change in the gender pattern, about half of all employed women will be civil servants in 2020.

Recruitment problems threaten to be especially significant in the care of the elderly and the disabled. The number of young people choosing an education in healthcare and social services in upper secondary school has fallen radically in the past 10 to 15 years. In 1989 about 9,000 students entered form 1 of the branch of nursing that corresponds to the current Healthcare Programme, compared with about 3,500 in recent years. This number would need to be doubled to keep the number in the labour force with this training at the same level as today.³¹

³⁰ Appendices 1-2 of the Long-Term Survey (SOU 2004:11).

The figures reported above refer to the national average. On a regional basis, the labour supply and demand looks considerably different. In many regions, above all in sparsely populated areas, recruitment will be especially difficult. In an appendix to this Survey, the future matching problems that might arise at the local level are illustrated.³²

The substantial recruitment needs and the aim of a more equal gender distribution will probably help push up wage levels in parts of the public sector in relation to other parts of the economy. In the 1990s, wages for public employees fell behind the wages of those employed in the private sector. This gap in wages is a continuation of a process that has been under way at least since the end of the 1960s. In 2000 a public employee earned on average about 16 per cent less than someone employed in the private sector with the same number of years of education and work experience. In 1991 this difference was 11 per cent and in 1968 it was less than 2 per cent.³³

In the estimates, it has been assumed that the annual hourly wage growth in municipalities and counties will on average be 0.5 percentage points higher than in other parts of the economy. This growth in wages means that wages in the municipal sector will come considerably closer to wages paid in the private sector. As a result of shifts in relative wages, production in the municipal sector will also become more expensive in relation to other production.

3.1.4 The Public Welfare Systems

Most services produced by the state are largely consumed by one specific age group. Consumption expenditures are higher for the youngest and especially the oldest, while those aged 30 to 65 make less use of public services. Women make use of public consumption to a greater extent than men do. Owing to these clear gender and age patterns, total consumption expenditures and the extent and scale of various activities will be affected by the future growth in the number of persons in various age groups.

In the baseline scenario, projections of public consumption have been based on demographic changes in different age groups. For

³³ SOU 2001:53.

³² See also Appendix 3 of the Long-Term Survey. (SOU 2004:34).

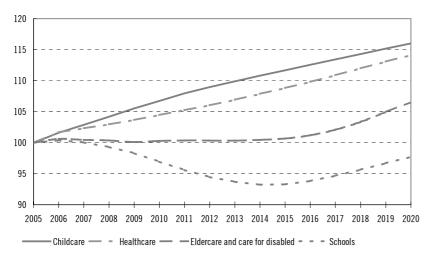
example, an increase in the number of children means that a corresponding increase in the resources for activities such as schools and childcare is assumed. The basis for the projections is thus in principle an unchanged supply of tax-funded welfare services per person in each age group.

One exception to this simple method for making projections is eldercare. The resources for this activity are not expected to grow at the same rate as the number of elderly. The reason is that ill-health is assumed to decrease. There will be more elderly, in part because the prospects of surviving to a greater age are gradually increasing. Improved health is also assumed to lead to a deferment of the need for eldercare to a later age. The time when the elderly will begin to need care is therefore assumed in the estimates to take place later and later in life. However, such a development cannot be taken for granted.

In section 3.1.2 there is a brief presentation of future demographic developments. The higher number of births means that as time goes by, there will be an increasing number of children of preschool age and thus a growing need of childcare. But the number of children of school age will fall because the future birth rate will not quite reach the high levels of the early 1990s. Therefore, there will be a decrease in the school's demographically dependent resource needs in the next decade. A greater number of elderly will lead to a steadily growing need for medical treatment. The increase in eldercare is not as pronounced. This is due to the assumption made about the need for eldercare gradually being deferred to later in life as well as to the fact that it is primarily the number of "younger elderly" that will increase in the next few years. In these age groups, the need for care is not as great. However, after 2020 the large group born in the 1940s will begin to reach 80 years of age, and then a more marked rise in the need for eldercare will occur. Diagram 3.2 illustrates developments in some of the more important areas of activity in the municipal sector if the standard of care per user is to remain unchanged up to 2020.

Diagram 3.2 Volume of Activity in Various Municipal and Joint County-Municipal Areas of Responsibility, 2005–2020, Given an Unchanged Standard of Care per User

Index 2005 = 100



Note: In the estimates, the improved health of the elderly, and thus somewhat less demand for care than what otherwise would have been the case, have been assumed.

Source: The Long-Term Survey's scenario estimates in Appendices 1-2 (SOU 2004:11).

In total, public consumption needs to increase by about 7.4 per cent between 2005 and 2020 if the level of service is to remain unchanged. This corresponds to an annual increase of about 0.5 per cent. If the health of the older population is not improved as assumed, consumption will need to increase by close to 10 per cent, an increase which means an annual rate of increase of 0.6 per cent.

From a historical perspective, an increase of such numbers would appear to be extremely small. As table 3.4 shows, tax-funded consumption has, as a rule, grown considerably more rapidly than warranted by demography, a growth that can be interpreted as a gradual increase in the desired standard of service.

Table 3.4 Public Consumption, 1950–2000

Average annual percentage change

	1950-	1960-	1970-	1980-	1990-
	1960	1970	1980	1990	2000
Public Consumption	4.4	5.7	3.2	1.7	0.6
Demographically depen-					
dent demand	8.0	0.9	0.5	0.5	0.5
Difference	+3.6	+4.9	+2.7	+1.2	+0.1

Note: The estimate of the demographically dependent demand is based on gender- and age-specific user patterns from 1999 in combination with historical demographic developments. The estimate is the same as that made for the projection of public consumption in the baseline scenario.

Source: SCB [b] and the Long-Term Survey's estimates.

The scenarios' estimates show that progress toward an ever higher standard of service is no longer possible if public commitments are to be successfully met in a longer-term perspective. To cope with the demographically dependent increase in demand after 2015 without a sharp rise in the tax ratio, large savings and a moderate growth in expenditures in the public sector are required over the next few years.

A Number of Critical Conditions Must Be Met

In the baseline scenario, the welfare that is funded with taxes is maintained at today's level of service by a very slim margin up to 2020. However, this requires that a number of important conditions be met. One deciding factor is a favourable growth in the labour supply. This requires a halt to the growth of the number of persons taking sick leave and disability pensions and a strengthening of immigrants' position in the labour market, as assumed in the scenarios.

In addition to positive growth in the tax base in the form of favourable labour market developments, real additional grants by the central government will be required to enable municipalities and county councils to develop their activities in line with the changes in the size and age composition of the population, given no change in municipal tax rates. In the baseline scenario, central government grants to the municipalities and county councils are assumed to increase from 5.0 to 5.5 per cent in relation to GDP. In the calcula-

tions, this increase is consistent with the objective of a net lending in the public sector equivalent to 2 per cent of GDP up to 2015.

In the baseline scenario, restraint with respect to new public expenditures is needed for growth to take place. Given the assumptions that have been made, there is no scope for raising the standards for tax-funded welfare. Thus another assumption is that increases in the central government general grants will be given without restrictions. In other words, the central government is assumed to raise its grant to the local government sector at the pace necessitated by the demographic increase in demand without establishing new requirements for more extensive or improved activities. Such a development would differ from that in previous years when increased requirements have generally been attached to central government supplementary grants.

In the estimates, it has also been assumed that municipalities and county councils can raise the fees charged concurrently with increases in production costs, a move that is not in line with the existing systems with maximum charges in childcare and eldercare.

Another condition that has to be met to make possible the developments in the baseline scenario is flexibility on the part of the local governments in redistributing resources from those activity areas where demand may be falling to activity areas that for demographic reasons need to grow. For example, as shown in diagram 3.2, resources to schools are assumed to decline by 7 per cent between 2005 and 2015 owing to a corresponding decrease in the number of school children. The resources that are thus freed up will make room for more places in childcare and healthcare. The example refers to developments at the national level. At the local level, redistribution needs will in many cases be considerably greater. This degree of flexibility can be difficult to achieve in reality.

3.1.5 Greater Demographic Challenges after 2020

Developments up to 2015 can in one sense be thought of as a breathing-space. The shifts that will take place in the age composition of the population up to that time are not expected to lead to any more marked increase in the total requirements of tax-funded activities. In the baseline scenario, public consumption increases at about the same pace as the number of people up to 2020.

From then on, developments are more problematic. From 2015 to 2035, the number of persons over the age of 65, and particularly the age group over 80, is expected to increase rapidly compared with the working age population. This will lead to a substantial increase in the demand for healthcare and social services, at a time when the labour supply and tax base are only growing at a modest rate.

Table 3.5 shows how the production of various services supplied by the public sector must grow to maintain the same standard per user up to 2050. The projections are based on gender- and agespecific user patterns from 1999, in combination with current population projections. For childcare to be supplied at the same staff ratio in 2050 as it is today, production for the number of children then expected to be in that age group has to increase by about 23.5 per cent compared with 2002. The corresponding figures for medical treatment and social services for the elderly and disabled are 38.5 per cent and over 52 per cent respectively. This still requires some reduction of eldercare per entitled person, owing to the improved health of the elderly. Without such an improvement in health, requirements will increase by over 80 per cent up to 2050. In total public consumption will need to increase by about 26 per cent up to 2050 to be able to maintain the same level of service.

Table 3.5 Demographically Dependent Demand for Welfare Services, 2010–2050

Index 2002=100

	2010	2020	2030	2040	2050
Childcare	107.3	116.6	117.4	117.0	123.5
Youth education	98.8	99.6	106.8	107.8	108.8
Post-secondary education	102.7	99.1	102.2	107.6	109.0
Healthcare	108.6	118.7	127.8	134.3	138.5
Care for the elderly and disabled	102.1	108.5	135.2	144.6	152.1
Other activities	103.3	108.5	113.1	116.0	119.2
Total public consumption	103.8	109.3	118.2	122.5	126.4

Note: Improved health among the elderly is assumed to dampen the demand for care.

Source: The calculations for the scenarios in Appendices 1-2 (SOU 2004:11) of the Long-Term Survey.

The increase in demographically driven demand shown in table 3.5 will be largely in the local government sector. If the municipalities

and county councils are to be responsible for the funding of this increase, the average local government tax levy will need to be raised by over 3 kronor between 2020 and 2050. (The average municipal tax rate in 2004 is SEK 30.39 per SEK 100 of income). If instead the increase in demand spurred by demographic trends is funded by higher grants from the central government, they will have to increase by an additional 2.2 per cent of GDP between 2020 and 2050.

3.2 Maintaining the Status Quo in Welfare Services Is Not Enough

In the calculations made for the Long-Term Survey, the future resources for public activities have been projected in line with the expected demographic developments. This means that resources for public activities such healthcare, social services and education are assumed to be unchanged per user. Because productivity in these activities is assumed to be unchanged, the level and quality of the services will be unchanged. Accordingly, the basis for the estimates is that healthcare, social services and education will deliver the same standard as before while the scope for household spending on the consumption of these services will gradually grow. An appropriate question is whether citizens will find such a development acceptable. In line with the rise in material welfare, there will be a growing demand for the welfare services now funded by taxes.

One striking feature of these developments is the reversals taking place in the growth of private versus public consumption, as seen in table 3.6. In the next few decades, private consumption will show a growth that has not been noted since the 1950s and 1960s. At the same time, the public sector is expected to continue to grow at approximately the same rate as it did in the 1990s, a period which many associate with savings and downsizing. This means that per capita public consumption will largely be unchanged.

Table 3.6 Public and Private Consumption per Person, 1950–2020

Average annual percentage change

	1950-	1960-	1970-	1980-	1990-	2000-	2003-
	1960	1970	1980	1990	2000	2003	2020
Public con-							
sumption	3.8	5.0	2.8	1.4	0.2	0.9	0.0
Private con-							
sumption	1.8	3.0	1.3	1.4	1.2	0.8	2.0
Ratio	2.1	1.6	2.2	1.0	0.2	1.2	0.0

Source: SCB and the calculations for the scenarios in Appendices 1-2 of the Long-Term Survey (SOU 2004:11).

The weak growth in public consumption from a historical perspective is necessary to keep public indebtedness within the bounds dictated by the level of tax rates that has been decided. The scope for increasing public activities is limited since the cost of public consumption is growing much more rapidly than other production costs. This more rapid rise in the cost of public consumption is, in turn, due to the fewer possibilities available for improving productivity in the production of welfare services compared with other production. In the next section, the mechanisms behind this shift in costs between public and private consumption is described in more detail.

3.2.1 Shifting Prices

The opportunity to increase production per working hour varies between different parts of the economy. The possibilities are obviously greater in industry, agriculture and forestry than in the service sectors. Industrial production is highly mechanised, with new production equipment and improved processes that lead to productivity increases year after year. In many service sectors, there is considerably less scope for improving productivity. The production of healthcare and social services involves a large number of contacts between different individuals, which is difficult to reduce without the services suffering a decline in quality. In the production of welfare services, it is also possible to introduce technical aids such as greater use of computers and higher efficiency, but the

conditions for rationalising production are considerably worse than they are in industry.

As a result of the rapid growth of productivity in many branches of industry, the price of the goods produced increases slowly, or even falls. More efficient methods of production mean that the same quantity of goods can be produced with lower costs for labour and other inputs. If these cost savings only resulted in greater profits in a specific company, a very small group would reap the benefits of the increase in welfare that the productivity increase involves. However, with a functioning competition, lower productivity costs will be passed on to all consumers in Sweden and elsewhere in the form of lower prices. This, in turn, means that these consumers have more money left over for the consumption of other goods and services. In this way, productivity growth, allied with a well-functioning competition, is one the most important forces behind a general increase in the material standard of living.

If the price of a good or service depends on how efficiently it can be produced, the price of goods that can be produced more efficiently over time will fall in relation to the price of goods and services with low productivity growth. Historical observations clearly show that the price of services has tended to increase relative to the price of goods. This phenomenon has long been known and is often referred to as Baumol's (cost) disease after the economist who first described it in detail.³⁴

The Impact of Prices and Incomes on Demand

If the price of a utility is raised relative to the price of other goods and services, demand for the more expensive utility will, as a rule, decrease. How big the reduction will be, the good's *price elasticity*, will depend on how easy it is to replace this utility with other products and how expendable it is to the consumer. The demand for certain products may fall markedly if the price rises, while for others, relatively large price increases may be tolerated without affecting demand appreciably.

Positive productivity growth means that household real income will rise over time. Higher incomes mean that demand and consumption will increase. However, demand will not increase at the same rate for all utilities. For a given increase in income and no

³⁴ J.W. Baumol [1967] and J.W. Baumol, S.A.B. Blackman, & E.N. Wolff [1985].

same rate for all utilities. For a given increase in income and no change in prices, the demand for some products will increase more than for other products. How large the increase will be in any specific case depends on the good's *income elasticity*, that is, how demand changes when income increases. For some products, this relationship may be negative so that higher incomes tend to lead to less, not more, demand for the good in question.

Given the assumptions made in this Long-Term Survey, households' scope for consumption will grow over time. At the same time, there will be continuous shifts in the relative prices of the utilities for which there is a demand. The shifts result because productivity does not increase at the same rate in all parts of the economy. The extent to which households choose to consume a certain utility in the future depends on one hand on how much relative prices and incomes change in future. On the other hand, it depends on the extent to which the demand for a specific utility is affected by changes in relative prices and incomes.

If the income effect is positive and greater than the negative price effect, demand will increase even if the good rises in price relative to other consumption. For certain utilities, the propensity to consume more when income increases is so great that demand for these products will grow more rapidly than it will for other consumption. This may happen even if the product in question becomes increasingly more expensive, relatively speaking. Such products will therefore require a steadily growing percentage of household income. Even other utilities that rise markedly in price in relation to other consumption, but nevertheless experience higher demand, may over time take a larger bite out of household budgets.

More Public Activities Generally Require More Staff

A fundamental problem in the funding of the private sector is that as a rule, more public activities imply more staff. It is difficult to reduce the time that doctors devote to patients or teachers to their students without this reduction being perceived as a deterioration in quality. When new medicines and methods of treatment are introduced, they are often made available to new patient groups and used to cure new complaints. Medical-technical developments are more likely to result in better quality than in freeing up resources for other purposes.

Production in other activities can, as a rule, grow without needing to increase the size of the staff correspondingly. These differences in conditions mean that the services provided by the public sector are becoming progressively more expensive in relation to what is produced in other sectors. Another way of describing this is that more public activities require higher taxes. For activities funded by taxes to be able to keep in step with other production and consumption, regular increases in taxes are required.

The rising costs of public sector activities in relation to other production and consumption does not mean that the central government, municipalities and county councils have to be "inferior" producers and employers compared with private, profit-driven companies. The differences in what is produced are of greater importance. The core of public sector activities consists of services such as healthcare, social services and education. These services are not only decidedly labour intensive, but they also generally assume a direct personal contact between the provider and the user. The time spent providing the service is difficult to reduce without detrimentally affecting the services' quality.

3.2.2 Costlier Services, but Greater Demand

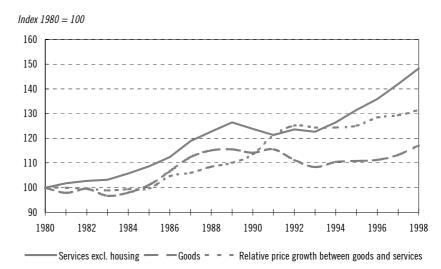
The dilemma facing the welfare state is ultimately a consequence of its reliance on taxes as its principal means of financing. If the welfare that currently is paid for with taxes were instead paid directly by households, the restrictions would not be as obvious. With private funding, households are free to demand and consume more of these welfare services.

One possible way of studying whether this would be the case is to examine the ways in which households have chosen to allocate their consumption expenditures for goods and services over time. The difference in the productivity growth that exists between private and public activities is about the same as the difference in productivity growth that normally exists between the production of goods and services in the private sector. Thus privately produced services rise in price in relation to privately produced goods at approximately the same rate as tax-funded services go up in price in relation to the sum of the consumption paid directly by households. Households' choices of goods and services may therefore be said to have certain similarities to the choices faced by politicians

when the scope for consumption is to be divided between taxfunded and private consumption.

Normally household and national incomes grow at a rate that allows consumption in general to grow. For all types of consumption to be able to grow at the same rate, however, a higher percentage of income has to be set aside for the utilities that go up in price the most. If public consumption is to grow at the same rate as private consumption, tax increases will be necessary. If a household increases its purchases of services at the same rate as its purchase of goods, the result will be a corresponding shift in its own budget. By definition, an equivalent growth in volume requires that the utilities whose prices increase the most must be allowed to absorb a higher percentage of consumption expenditures.

Diagram 3.3 Private Consumption of Goods and Services, 1980–1998



Note: Goods and Services here refer to growth in volume. Source: SCB [b].

The level of taxes and the proportion of production used in taxfunded production are well documented. That a steadily rising percentage of the household budget is being used to purchase services does not receive the same attention. This shift in household budgets is to some extent a consequence of services becoming gradually more and more expensive in relation to goods. It is also a consequence of the rise in the consumption of services in real terms. It is even normal that the purchase of services, after deducting for price changes, increases at a faster rate than the purchase of goods, as seen in diagram 3.3. The percentage of household consumption of services thus rises both as a result of a relative rise in prices and of the particularly rapid growth in that part of consumption.

Households encounter no obvious problems in allotting a growing percentage of their income for something that is rising in price in relation to other consumption. The historical growth in private purchases by households appears therefore to support the hypothesis that households would like to have more or better welfare services, even when these services continue to rise in price in relation to other utilities. With the exception of the 1990s, public consumption has also increased at the same rate or faster than private consumption.

3.2.3 Indications of More Alternative Funding

In parallel with a slow-down in the growth in public consumption, alternatives to tax funding of welfare services have increased in use in recent years. These alternatives have taken different forms and the extent of their use varies from one area to another.

The change in direction to greater alternative funding is in some measure the result of the difficulties experienced in the 1990s in meeting a growing demand for welfare and other services by raising taxes. The crisis in the early 1990s caused widespread reductions in large parts of municipal and county council activities. In the Long-Term Survey's baseline scenario, future public consumption increases at approximately the same rate as it did in the 1990s (table 3.6). The ability of scarce resources to meet "growing needs" will presumably not be greater in the future. Therefore the experiences of the 1990s can be important in analysing future challenges and opportunities.

Voluntary Work in Place of Fees

Private funding alternatives in childcare are few. The fees for publicly subsidised preschools are today governed by a maximum

charge, which makes it more difficult for families to use their own funds to obtain better service.

This does not preclude parents from helping by voluntary work in both municipal and co-operative preschools. This help may involve such activities as cleaning, shopping or substituting for absent staff members. Similar phenomena can also be found in schools. Examples of what parents can do to help are repairs or additions to premises and playgrounds, participation in excursions or sending a packed lunch when there are excursions, notwithstanding the legal regulations on free school lunches. By doing so, parents have an opportunity to take a greater part in their children's everyday life, but in practice it also involves a kind of charge, one that is not financial, but is payment in kind, in the form of their own labour

Thus the design of the fee systems may, in certain areas, mean that the willingness to pay that exists over and above the centrally or locally established fee is not allowed to manifest itself in a direct payment, but instead results in unpaid work. If in future parents' willingness to pay increases, current regulations on the fee charged for childcare and schools will probably lead to a greater contribution of unpaid labour by parents.

In eldercare, the combination of substantial public subsidies and maximum charges, together with the increasing proportion of the population that is elderly, has led to a tighter rationing of services. Fewer elderly now receive help at home and the average need for care among those who are receiving care has risen considerably. Partly as a consequence, eldercare includes a substantial element of work done by relatives to supplement publicly financed care. Field surveys of the elderly living in their own homes conducted by the National Board of Health and Welfare show that two thirds of those over 75 who received help at home get this help in the form of informal help. An additional one sixth received informal help in combination with the home help service. In 2000, only one sixth of those living in their own homes received help exclusively in the form of home help service. ³⁵

These studies also show that the percentage of those needing help who received help only from the home help service fell from 28 to 18 per cent between 1994 and 2000. The entire decrease can be attributed to reductions in the home help service for those living

³⁵ National Board of Health and Welfare [2002a].

alone. For those living alone, it is, where applicable, children, and then chiefly daughters and daughters-in-law, who bear a large part of the informal help. In 2000, the percentage of those not living alone who received only informal help came to 88 per cent. It is to some extent possible to purchase supplementary services on the market, especially services such as cleaning and shopping.

More Private Payments in the Form of Money

In healthcare and dental care, informal work is hardly an alternative. But here private payments are a possibility. Private health insurance is available that in some cases makes healthcare accessible more rapidly than it is using the public systems. It is also possible to purchase medical treatment on an entirely private basis. Similarly, it is possible to buy services that are not paid for by the public medical services, such as cosmetic surgery or certain types of eye treatments.

Private elements in the area of social insurance have also increased. For example, this is true of pensions: private pension savings have gradually grown in importance. At the same time, pension agreements have progressed from benefit- to premium-based systems, in which individuals in many cases have the opportunity to decide for themselves who is to manage the pension capital. Moreover the majority of those employed are covered by supplementary health and unemployment insurance that the social partners in the labour market have agreed.

3.2.4 More and Better Welfare Services Require New Solutions

Welfare services have a high level of tax-funding as a result of various policy decisions. The ultimate aim of this policy is to provide welfare services such as healthcare, social services and education according to need, not according to capacity to pay. Another argument for funding welfare services with taxes is that these services give rise to positive external effects. As a result of subsidisation, people will consume these services to a greater extent than if they paid for them with their own money. Education and medical treatment are two examples of services that are presumed to be of value

not only to those using them, but also to society in general. Likewise, childcare is presumed to have positive distribution effects because it contributes to higher labour force participation by parents of small children, especially by mothers with small children.

The External Effects of Tax-Funding Tend to Decline

For tax-funded welfare services to give rise to positive external effects, consumption of these services must be perceived as especially desirable. Subsidisation must also lead to higher consumption of these services than would otherwise have been the case. For the latter condition to be met, the public sector must have the necessary resources at its disposal. However, greater tax-funded resources can scarcely meet the growing demand for welfare services. There is a risk that adhering strictly to the present system for funding welfare services will, in the long run, lead to a situation in which the consumption of these services is *smaller* than it would have been had these services been funded privately.

Diagram 3.4 Welfare Services: Supply and Demand

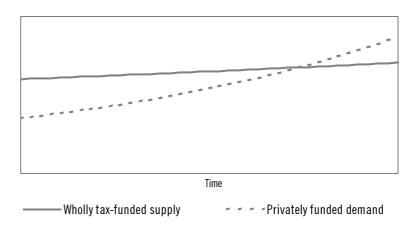


Diagram 3.4 describes this fundamental problem. The continuous line represents the supply of services that can be provided if they are funded solely by taxes. This is a simplified picture of the actual

situation as welfare services, as seen previously, are in many cases built on a combination of tax-funding and fees. The broken line represents the underlying demand that would have occurred if the services had not been subsidised. At the beginning of the period, the supply of tax-funded services is considerably larger than it would have been if the services had been completely paid by private means. The higher consumption in combination with the desirability of consuming these utilities gives rise to positive economic effects for society.

However, the positive effects that are a consequence of taxfunding will become increasingly limited over time since the underlying demand will grow at a faster rate than can be funded by taxes. Eventually a point is reached where the two curves intersect. Past this point, a supply that is solely funded by taxes means that the utilities will be supplied and consumed to a *lesser* extent than if these services had instead been financed by private and voluntary means. Therefore, with time (given increasing incomes), there is a risk that the positive external effects of an exclusively tax-funded supply of welfare services will be completely absent. Thus an important argument for funding the majority of welfare services exclusively with taxes also disappears.

Thresholds for Private Funding Tend to Decline

Additional purchases by households to supplement an inadequate public supply are still not very common. It is hard to compete with the public sector's heavily subsidised services. Households can independently perform some of these services such as caring for children and the elderly, but here tax funding also raises obstacles. As a rule, providing care using one's own resources yields a considerably worse return compared with being gainfully employed and leaving the responsibility for care to the municipalities. This is also a reason for choosing taxes as the form of funding.

In future the advantage of tax-funded production will also be a very important factor in people's choices. However, with a widening gap between what people want to have and what the public sector can offer, new ways will be tried. Steadily rising household income mean that the existing obstacles to alternative solutions appear smaller and smaller.

Developments in the baseline scenario reflect the beginning of such a process. Economic developments are favourable but do not automatically bring about any additional public activities. The policy is assumed to be restrictive. Taxes remain unchanged and charges for public activities grow in line with their cost. The additional resources that become available during this period are channelled to those parts of the activity where need is growing fastest because of demographic developments. This means that there will be more resources for childcare, eldercare and healthcare, but fewer resources for schools. In general the additional resources mean that the quality of the welfare services can largely be maintained at current levels.

In time people will presumably want the services to provide more than this. Dissatisfaction with the welfare services being provided can therefore be expected to grow. It is expected to become increasingly difficult for the public sector to recruit personnel. To be able to maintain the current range and quality of activities, the wages of public employees will most likely have to be raised more than wages in other parts of the labour market. At the same time, households will be looking for new ways of satisfying their own demand. This will be expressed as an increased demand for private alternatives, but an increased share of the welfare services will also be performed by households themselves.

In the medium term, the impact on the national accounts will not be especially large, but from a long-term perspective, it is likely that the increased demand for welfare services will have to find an outlet one way or another. Various solutions are possible. Households in a good financial position will be more apt than others to try alternatives that mean paying with one's own money. Households having poorer financial positions will, to a greater extent, have to rely on solutions that involve satisfying demand in informal ways, for example, with the help of relatives and friends. Irrespective of what the alternatives are, there is a risk that the taxes that have to be levied will increasingly be called into question. If there is a growing tendency towards providing welfare services in informal ways, the size of the tax base might be negatively affected as well. To sum up, this means that there is a risk that tax revenue will fall and with it the prospects of continuing welfare services under public auspices.

In the medium term, the baseline scenario's restrained policy may be possible. However, in the long term the gap between what is funded by taxes and what can actually be provided is expected to increase. In the 2020s the problems will intensify when the large generation born in the 1940s begins to pass the age of 80, and consequently the need for eldercare will rise sharply.

3.3 A Need for Greater Resources for Welfare Services

There are two kinds of problems facing the production of taxfunded services in the future. First, the demographic shift to an ageing population will result in increased demand for healthcare and social services, services that today are principally funded by taxes. A simple projection shows that it is possible to maintain the current level of public services with a very small margin up to 2020. During this period there is no scope for reforms or improvements in quality. After that, the demographic problems will intensify and bring with them a rising demand especially for eldercare, but in healthcare as well. Coping with these developments will require considerable restraint when it comes to public expenditures – at least if the tax ratio is to remain unchanged.

Second, the scenario implies a very large difference in the growth of private and public consumption. While per capita private consumption is estimated to increase in volume by 40 per cent between 2003 and 2020, per capita public consumption will remain unchanged. Even though private incomes rise sharply, no extra scope for tax-funded services automatically ensues. However, with substantially higher private incomes, it is highly probable that a portion of the increase in income will be channelled into a demand for welfare services.

What then are the possibilities of increasing the resources going to welfare services in the future? The remainder of this report examines various possibilities of increasing public resources. First it looks at whether a higher tax levy is a possible and reasonable route. Second it studies whether higher growth could facilitate the funding of the welfare systems. A third possibility is whether public sector productivity can improve. A fourth alternative examined is increasing the contribution of alternative funding of the services that now are supplied by the public sector.

4 Higher Taxes

In the scenarios in the Long-Term Survey, the estimates are based on the assumption that policies do not change. In taxation this means that there is no change in tax rates. The estimates in the previous chapter show that the revenue from taxation will, by a very small margin, be enough to maintain the current level of quality in the public welfare systems. However, there is no room for improvement. At current tax rates, there is therefore no financial margin with which to meet the increased demand for welfare services that is anticipated to result from higher incomes. It might also be difficult to meet the increase in demand in the long term as a result of the demographic changes after 2015.

Taxes account for the very largest part of public sector funding. Historically the tax rates have gradually risen and the tax base has been broadened to fund the expansion of the public sector. A large part of economic growth has therefore been taken out as tax increases instead of growth in real wages. Since the mid–1980s, this has ceased and the tax ratio, the total tax levy in relation to GDP, has been more or less unchanged.

One possible way of meeting future demand for publicly funded services would be to change the tax rates or broaden the tax bases and thus increase public tax revenue and make room for reform. This chapter therefore discusses whether it is reasonable and possible to raise the tax levy.

4.1 Higher Taxes Bring Costs to Society

Taxes are the chief means of financing public expenditure, both transfers to households and welfare services. However, most taxes are associated with costs to society in that they give rise to tax wedges. Tax wedges cause a difference between the private return on labour or investments and the benefits to society from these

activities. This, in turn, affects the behaviour of individuals and companies. Therefore the efficient use of resources and products in society is also affected.

The concept of the marginal cost of tax revenue is used to describe how taxes affect the efficient use of resources.³⁶ In addition to the direct cost in the form of reduced disposable income owing to increased taxes, this concept also includes an indirect cost in the form of distortions in the economy caused by the tax. By way of example, the tax on labour means that the after-tax wage will be lower than the before-tax wage and therefore that the labour supply will tend to be lower and leisure time (or unpaid housework) will be greater than if there had been no tax. 37 Thus production will also be less than it would have been had the tax been lower. This means that any given tax is associated with a cost to society in addition to the effect on the individual of paying the tax.

Owing to the impact of taxes on the labour supply, tax increases may affect the chances of recruiting staff for publicly funded activities in healthcare, social services and education in addition to the recruitment problems described in 3.1.3. Recruitment difficulties may in turn drive up wages in these occupations beyond what has been assumed in the baseline scenario; this increase in wages would make funding the welfare services even more difficult. Likewise the taxation of capital can affect the extent and type of investment.

The costs to society of tax revenue need to be weighed against the benefit that the public expenditures give rise to. A tax increase is economically efficient as long as the marginal utility of increased public expenditure is greater than the marginal cost of the tax revenue.

4.1.1 **Efficient Taxes**

Empirical studies show that the marginal costs of tax revenue are greater for sensitive tax bases, such as the company tax, than for less sensitive tax bases, such as the average tax on labour. The empirical studies also show that the marginal costs vary between different taxes. The marginal costs of tax revenues generally increase

³⁶ For a review of the theories on the indirect costs of taxation and the marginal costs of tax revenue, see I. Hansson & T. E. Norrman [1996].

37 This assumes that the substitution effect that results from higher taxes is greater than the

income effect, an assumption that most empirical studies validate.

with rising tax rates. An efficient tax system means that tax rates are adjusted so that the marginal cost is the same for all taxes, while taking the distribution effects into consideration.³⁸

The marginal costs of tax revenue and the marginal utility of public expenditure are not constant, but change over time. Thus it is relevant to discuss the changes that will affect marginal costs and marginal utility in the future and how this, in turn, should affect the future design of the taxes. The marginal costs of tax revenue, like the marginal utility of the tax-funded services, change over time as a consequence of changes in values or changes in conditions in general. This means that to be economically efficient, the tax system in the future will gradually need to be adjusted for new conditions.

Two important factors that will affect future marginal costs and marginal utility are the demographic changes and the continuing internationalisation of the economy. An ageing population, ceteris paribus, will increase the demand for healthcare and social services. This will result in an increase in the marginal benefit of higher public consumption of such services as healthcare and social services. If the tax rate does not change, the marginal utility of tax revenue will increase. The continuing internationalisation of the economy will affect the marginal cost of taxes in Sweden, even though the effects will vary between different tax bases (see also section 4.1.2). As a result, the marginal cost of taxes for a given tax rate will increase. It is not possible to decide in advance which of these two counteracting effects will be dominant and therefore to decide the optimal tax rates. However, the marginal cost of tax revenue will undoubtedly be higher with a new optimal tax rate. Consequently the optimal level of public expenditures other than public consumption of healthcare and social services, for example, transfers, will be lower in the future unless other conditions, such as people's preferences, change.

 $^{^{38}}$ See Appendix 7 of this Long-Term Survey for a compilation of studies on the costs of taxation (SOU 2003:57).

4.1.2 Internationalisation Increases the Marginal Costs

Continuing internationalisation affects the prospects of taxfunding the welfare systems. Increasingly mobile tax bases mean that the marginal costs of tax revenue are rising.

Tax bases vary in their sensitivity to internationalisation; therefore, the marginal costs of tax revenue can be changed in different ways for different tax bases. An increase in the mobility of a tax base increases the marginal cost of tax revenue from this tax base. This may, in turn, result in a need to lower the tax rates in order for taxes to be optimal.

With growing internationalisation, the taxation of tax bases that are very mobile becomes increasingly expensive for society. The labour force in general is usually viewed as a resource that is possible to tax relatively heavily since employees' mobility is low. The increased mobility of the labour force has thus far had limited effects on the tax system as the proportion of the labour force that is internationally mobile still makes up a small percentage of the total labour force.³⁹ But as mentioned previously, even if it were possible, given internationalisation, to introduce higher taxes on labour, these taxes would have a negative impact on society, owing to their effect on the labour supply.

The next largest source of tax money is the tax on the consumption of goods and services, and it will presumably also continue to be a relatively stable base for taxation in future. It is primarily near the borders between countries that differences in tax rates can lead to a contraction in the tax base. In the long term, commerce on the Internet could lead to increasing mobility in the tax base since it reduces travel and other transaction costs. The Tax Base Commission (Skattebasutredningen) indicates that Sweden in the long term will have to be prepared to reduce the gap between the Swedish level of the value-added tax (VAT) and the minimum level in the EU. At the same time, the Commission points out that there is some scope for financing the closure of this gap by abolishing the VAT reductions that are in effect in certain areas. In addition, the Commission argues that Sweden should work to have the EU permit a special tax level for e-commerce and similar services.

³⁹ See, for example, the Long-Term Survey 1999/2000 (SOU 2000:7).

⁴⁰ SOU 2002:47.

In comparison to the taxation of labour and consumption, the taxation of capital contributes relatively little to the funding of the welfare systems. However, internationalisation has a big impact on the tax base. In that connection, a distinction should be made between capital used in production in Sweden, irrespective of where the owner resides, and capital owned by residents of Sweden. With an internationally integrated capital market, taxes on capital used in production in Sweden mean that a correspondingly higher return before tax is required. This means that the tax on capital used in production is often more costly to society than the tax on labour. This tax revenue is very sensitive to internationalisation and changes in the tax levy in other countries. Thus the marginal cost of tax revenue from a tax on capital also increases when there is greater international mobility.

The taxation of capital owned by residents of Sweden, irrespective of where the capital is invested, is sensitive to internationalisation for entirely different reasons. In principle this type of capital would be taxed at a higher rate in Sweden than in other countries, as residents of Sweden are obliged to pay taxes on all capital income, irrespective of where the income originates. The problem is that international capital markets have made it simpler to move capital and thus simpler to hide income from capital from the Swedish tax authorities. Moreover an individual's choice of country of residence is also affected by the tax.

Internationalisation and the increased mobility of the tax base affect the marginal costs of tax revenue and thus influence the optimal design of the taxes. Internationalisation affects some tax bases more than others. The tax on capital appears to be the most sensitive to internationalisation and therefore the area in which reform of the existing taxes will be most relevant in the next few years. With reference to the level of the total tax levy, the Tax Base Commission comes to the conclusion that from the standpoint of internationalisation, it is possible to retain the current level of taxation, but if so, some changes are required. This conclusion holds true only if current tax levels are maintained in the face of ongoing internationalisation; no assessment is made of the pros-

⁴¹ The Tax Base Commission in SOU 2002:47 points out that Sweden should be prepared to lower its taxes on capital on condition that the same trend is evident in other countries. According to the Commission, certain taxes on the ownership of capital should also be reformed.

pects of raising tax levels. Even if it proved possible to maintain current tax levels, it is not obvious that the level is optimal if the marginal costs of tax revenue change.

4.2 Strong Upward Pressures on Local Government Taxes

4.2.1 More Demand May Increase Local Government Taxes

The increased demand for welfare services anticipated in the future will largely involve the services funded and provided by the municipalities and county councils, namely healthcare, schools and social services. Increasing the general central government grants to local government is one answer to the funding problem. Thus these grants could help fund the growing demand for welfare services brought on by the demographic changes. Even if this takes place, the pressure on the local government authorities to deliver more and better services will probably be substantial. It is therefore not unreasonable that the local government authorities will also choose to raise taxes to enable them to provide the services demanded.

The increases in the local government tax in recent years point to a trend in this direction. In 2003 the local government tax increased an average of 65 öre, the largest increase in 25 years. The taxes were raised in 2003 in 69 municipalities and four county councils, while the taxes were reduced in three municipalities.⁴² Over 50 municipalities and four county councils are raising the tax in 2004, while two municipalities are lowering it. The average total local government tax rate (municipality plus county council) will go up 34 öre in 2004. A report from the Swedish Association of Local Authorities⁴⁴ (Svenska Kommunförbundet) also provides a picture of very weak growth in local government finances up to 2007, a situation that could lead to additional tax increases in the municipalities in the years ahead. It is important to note that these relatively large tax increases and the anticipated weak growth in local government finances in the next few years will come about in a period when the demographically driven increase in demand is relatively limited. It is not until after 2015 that the demographic

⁴² SCB [2003a].

⁴³ SCB [2003c].

⁴⁴ Swedish Association of Local Authorities [2003d].

change will lead to greater demand for local government services. The trend to higher local government tax rates that cannot be explained by demographic demand pressure reflects the fundamental long-term problems described in Chapter 3. The demand for welfare services – a large part of which is the sole responsibility of local government – will increase in line with rising incomes, at the same time that productivity growth in these services is weak, relative to other sectors.

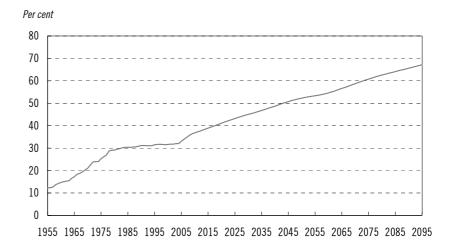
The residents of a municipality may also wish to raise taxes to meet the increased demand and to do something about deficiencies in quality that have been experienced. The higher household income assumed in the scenarios may also make acceptance of tax increases easier. However, the opposite is also possible. Residents may feel that the public sector is not delivering what they expected of it. Instead they are forced to pay for part of what the public sector is expected to provide or earlier had provided. In such instances, very few will accept the tax increases. On the contrary, there is a risk that the residents will feel that they are being forced to pay for the same service twice.

The acceptance of tax increases may also be affected by how many will benefit by the tax-funded services or transfers. It is likely that the greater the number of people who benefit from these services or transfers, the greater the acceptance of the tax increases will be.

4.2.2 Higher Local Taxes Not a Long-Term Solution

It is possible that local tax rates could be raised a little further without too large a negative impact on the labour supply. This statement does not automatically mean that tax increases would be economically efficient. Higher municipal tax rates increase the marginal costs of tax revenue. For such an increase to be economically efficient, the value of the extra kronor spent has to exceed the cost to society of the extra kronor in tax; this is not necessarily the case.

Diagram 4.1 Local Government Tax Rate, 1955–2095, according to the Long-Term Survey of the Swedish Association of Local Authorities



Note: The sum of the municipal, the secondary local government authority and the church tax levy. Source: Swedish Association of Local Authorities [2002a].

An increase in the local tax rates is not a long-term solution to the public sector's financing problems. If in future public consumption is to be able to grow in line with private consumption, 45 continued tax increases will be required. Therefore, a one-time increase in the tax level is not enough. Estimates show that it would require annual local tax increases of 0.35-0.4 percentage points for local government consumption to increase as quickly as private consumption (diagram 4.1). 46 As early as 2020, local taxes would be close to 40 per cent and even after that, taxes would continue to rise at the same rate. The estimates are based on a number of simplified assumptions, among them that the tax increases would not affect the labour supply, an outcome that would hardly be the case in the real world.

It should be underlined once again that the problem for public sector funding is not a transitory problem, which will be solved further ahead. On the contrary, the demographically driven de-

⁴⁵ As table 3.6 shows, public consumption has increased more rapidly than private consumption since 1950, with the exception of the 1990s.

46 Swedish Association of Local Authorities [2002a].

mand for public sector services will increase sharply after 2015. It is then that those who were born during the large baby boom of the 1940s will reach their eighties. In these circumstances, local tax increases do not appear an appropriate way to solve the public sector funding problems in the next few years.

Even if some increase in local tax rates finds acceptance, these increases will result in negative effects on the labour supply and thus on both production and tax revenues. A reduction in the labour supply as a consequence of higher taxes on labour would also make it more difficult to recruit staff for the activities – healthcare, schools and social services – that the higher taxes were intended to fund.

4.2.3 Systems Design Risks Making Local Taxes Inefficient

Owing to the design of the tax system and municipal income equalisation systems, a municipality does not bear the full costs to society of a higher local tax rate. The local government authorities themselves receive the increased tax revenue that is brought about in the short term. But with the equalisation system, the cost will be in the form of a lower labour supply and with that, a smaller tax base to be divided by all local government authorities. This negative effect is, however, of limited size. The lower labour supply that results from the tax increase also reduces the tax base for the central government income tax, the payroll taxes and the value-added tax. As well, it is a cost that no single municipality bears directly. Central government expenditures may also increase if the manifestation of the reduced labour supply is that more people need social insurance benefits for support. To sum up, this means that a local government authority has little financial incentive to refrain from raising the local tax as the costs in the form of a smaller labour supply are born by the entire country. As a result of the way in which the systems are designed, local tax rates in the long term tend to be higher than what is economically efficient. Of course, this disadvantage has to be weighed against the aim of the system for cost distribution and income equalisation: the equalisation of conditions between various municipalities and counties which is necessary when local governments are responsible for a considerable part of public welfare, as is the case in Sweden.

In view of the upward pressure on local tax rates that is likely in the future, the design of the tax and equalisation systems needs to be reviewed to see if it is affecting local government incentives and consequently the labour supply.⁴⁷ One way of preventing local government tax increases is to freeze local taxes. This was done previously in Sweden in connection with the major tax reform in the early 1990s. The tax system was subsequently changed to a system with a financial penalty on local tax increases, which means that municipalities/county councils were only allowed to keep part of the increase in tax revenue resulting from the rise in taxes. However, one objection is that a permanent tax ceiling is not consistent with local self-government. Another significant weakness associated with the type of measure as it has been applied thus far is that the structure is preserved at a certain point in time, and that the differences between municipalities or changes in conditions in individual municipalities are not taken into account.

In Norway there has long been a ceiling on municipal taxes, which is a way of limiting municipal tax increases without locking in the taxes at today's level. In all municipalities, the tax rate is now at the maximum level allowed; thus, the tax ceiling most likely acts as a brake on additional tax rate increases. A more radical change in the funding of the tax and welfare system, proposed in the SACO model and others, 48 would involve reducing the municipalities' area of responsibility by having the central government assume responsibility for funding certain welfare services. Thus the central government would become responsible for the areas with greater demand pressure. The State is better able to take into consideration all the economic effects of the tax increases, and thus reduce the risk of excessive taxes. Among the disadvantages of such a system are that it reduces local autonomy, that there can be no local adjustment in the level and standard of service and that fewer different solutions for providing welfare services can be tried. In its first interim report, the Committee on Public Sector Responsibilities (Ansvarskommittén) proposes in its subsequent work to review the structure and division of expenditures in important social

⁴⁷ A new proposal for a local tax equalisation system was presented in 2003 (SOU 2003:88). However, the proposal did not consider this problem.

fields, including the division of responsibility between the central and local governments.⁴⁹

4.2.4 Broadening the Municipal Tax Base Will Not Provide More Resources

In discussions on the funding problems facing local governments, it is sometimes asserted that the problem could be solved by broadening their tax base, for example, with a municipal property tax. There are in principle no tax bases in Sweden that the central or local governments are not already using. Broadening the local government tax base for a specified total tax ratio would mean that local governments would receive more tax revenue. At the same time, central government tax revenue – as well as the central government grant to local governments – would fall by the same magnitude. It then becomes a question of the extent to which local government revenue is to come directly from local taxes or take a detour via the central government. From an international perspective, a large proportion of local government revenue in Sweden already comes from local taxes.⁵⁰

For local governments, having a larger share of their revenue coming from their own taxes may be desirable to strengthen local government autonomy and responsibility for development in their own municipality.

4.3 Higher Taxes No Long-Term Solution

To sum up, the existence of marginal costs for tax revenues means that continual increases in the tax levy cannot be considered a long-term solution for funding the growth of the welfare systems.

In the past two years, municipal and county taxes have been raised an average of 1 krona. The increases have been introduced at a time when demographic developments have been favourable as far as the demand for welfare services is concerned. There is an obvious risk that municipalities and county councils will also meet in-

⁵⁰ J. Lotz [2004].

⁴⁹ SOU 2003:123.

creased demand in the future with tax increases, not least when the demographically driven demand increases.

Even though continual tax increases are not judged to be a long-term solution for meeting increased demand for welfare services, there is an obvious risk that this is precisely what will happen in the next few years. The local governments have the greatest responsibility for welfare services but bear only a small part of the costs to society of local tax increases.

5 Higher Growth

The preceding chapter examined the possibilities of improving tax revenue by raising the tax rates and broadening the tax bases. This chapter focuses on how an increase in resources can be achieved through economic growth, which means that taxable incomes rise.

To begin with, this chapter describes two alternative scenarios for economic growth up to 2020. The aim is to shed light on how the way in which future growth takes place affects the future scope for tax-funded consumption. In one of the alternative scenarios, higher growth is achieved through a growth in employment. In the other scenario, higher growth is achieved by higher productivity growth in the business sector. The results of the estimates clearly show that growth based on increased employment has a more positive impact on the room for tax-funded production than growth based solely on higher productivity. The other part of the chapter is devoted to a discussion of the potential that exists for increasing employment and thereby increasing public resources.

5.1 Employment-Led Growth Increases Public Resources

Welfare services today are funded mainly by taxes. The tax base is residents' earned income, primarily wages and income from business activities. Other taxable income comes from sick pay and parents' allowances, unemployment compensation and pensions. This part of the tax base also depends on wage developments. Higher wages automatically trigger an increase in the compensation levels in the social security systems. The predominant role of wages in the tax base means that the growth of employment and wage levels is critically important to the growth of the tax base.

The costs of healthcare, social services and education are largely determined by wage developments because these activities are

highly labour intensive. As a rule, the greater part of the costs is for staff. The possibilities for progressively improving productivity, that is, being able to provide more and better services without changing the number of people employed, are relatively few. To be able to offer more and better services normally requires more staff.

Economic growth based on increased productivity in the business sector, and thus higher real wages in the labour market as a whole, means that the costs of producing welfare services rise as wages in this sector increase. These cost increases are offset by the rise in tax revenues. In total there is some net increase, but this increase in resources is small in relation to the increase in production simultaneously taking place in the business sector.

If the addition to production is instead a consequence of higher employment, the outcome will be better from the perspective of the public sector. More employment in the business sector does not contribute to increases in public sector costs to the same extent that increased productivity does. On the contrary, public outlays may be cut if the higher employment is accompanied by reduced payments in the form of unemployment compensation, social security and sick pay. In that case a larger part of the total tax revenue is used for other purposes, such as the production of welfare services. In addition the rise in employment, as with higher real wages, gives rise to higher tax revenues. The effects of higher employment in the business sector are accordingly positive in two ways.

Public Consumption a Priority in the Alternative Scenarios

The two alternative scenarios to be described here have been designed so that as many variables as possible are equal in the two cases. This means that growth is the same in the two scenarios – an average of 2.0 per cent a year over the entire period up to 2020. GDP in 2020 is at the same level in both cases, while GDP per hour worked is different. The same goal as that in the baseline scenario applies to general government net lending. The regulatory regimes governing the pension system, other transfer systems and the tax levy are also similar in the three scenarios.

In the baseline scenario, demography alone determines the growth in public consumption. In the other two scenarios, the higher growth provides scope for more positive developments. The

question being posed is how much more room there will be as a result of higher growth, given existing regulations for public transfers, tax rates and the level of net lending in the government sector.

In the alternative scenarios, the entire increase in tax revenue is assumed to be used for public consumption. For this and other reasons, the estimates are to be viewed as illustrations. It cannot be ruled out that in reality, the gains from a more positive economic growth might also be used for other purposes. An increase in the compensation levels in the social security systems is one possibility. Lower tax rates are another possibility. The estimates are intended to give a picture of the *maximum* possible extra scope that higher economic growth could provide for public consumption.⁵¹

5.1.1 Growth from Higher Employment

In the first alternative scenario, higher employment will lead to higher growth. In total, the number of hours worked will increase by 3.6 per cent between 2002 and 2020, or an average annual increase of 0.2 per cent (table 5.1). In comparison, the number of hours worked in the baseline scenario grew only by a total of 0.5 per cent between 2002 and 2020. There are 134,000 more persons employed in 2020 in the scenario with higher employment than in the baseline scenario.

The growth in employment means that the Government's employment targets are met in the alternative scenario. In the baseline scenario, the percentage of those employed aged 20–64 comes to 77.4 per cent in 2020. In the alternative scenario, this percentage gradually increases, beginning in 2007, to reach 80 per cent in 2020.

The added employment that takes place can be traced to two groups that initially have a relatively weak position in the labour market: namely older people and immigrants. The alternative scenario assumes that employment for women and men aged 55–64 returns to the level that prevailed for the group as a whole in the early 1970s. This means that the number of working hours per person in this age group will increase by 15 per cent between 2002 and 2020. Immigrants are the other group that increases its labour supply. In 2020 the current difference between native and foreign born

⁵¹ For a more detailed discussion of the alternative scenarios, see Appendices 1-2 of this Long-Term Survey (SOU 2004:11).

persons in the labour market has been reduced by two thirds, whereas in the baseline scenario, the difference between the two groups falls by only one quarter.

The growth in employment leads to a more rapid growth in GDP and higher tax revenues than found in the baseline scenario. Economic conditions in the public sector also improve, owing to lower public expenditures resulting from the gradual decline in the number of people needing social insurance allowances. Payments in the form of unemployment compensation, disability and early retirement pensions and social security decline the most. Since productivity growth and hourly wages are the same in the two scenarios, the income index, used to determine the size of pension payments, will grow by about the same amount. Thus in the alternative scenario, there is no additional burden on the welfare system in the form of higher pension payments.

Table 5.1 Some Key Indicators for the Period 2002–2020 in the Baseline Scenario and in a Scenario with Higher Employment

Average annual percentage change

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	Baseline scenario	Alternative scenario 1
		Higher employment
Hours worked	0.0	0.2
Business sector productivity	2.2	2.2
GDP	1.8	2.0
Public consumption	0.5	0.8

Source: The estimates for the scenarios in Appendices 1-2 of the Long-Term Survey (SOU 2004:11).

Growth stemming from higher employment increases the possibilities for funding the public welfare systems. This can occur thanks to both increased revenue from taxation and reduced public expenditure in the form of social security benefits. If all the additional resources stemming from growth are used to increase public consumption, this consumption could increase 0.3 percentage points more rapidly per year than it would in the baseline scenario.

In the baseline scenario, the increase in public consumption is entirely dependent on demographic changes. In that scenario, there is no room for raising either the quality or quantity of welfare services. With employment growing at a higher rate in the alternative scenario, some room for reforms emerges. If all this room is used to increase the production of tax-funded services, public consumption can be raised 5.7 per cent above the level achieved in 2020 in the baseline scenario.

5.1.2 Growth through Higher Productivity

In the second alternative scenario, higher growth is achieved through higher productivity growth in the business sector as a result of more efficient methods of production. The scenario is constructed in such a way that total production, that is, GDP, grows at the same rate as it did in the other alternative scenario; this means an average GDP growth of 2.0 per cent a year between 2002 and 2020. Achieving this rate of growth requires an increase in productivity in the business sector of 2.5 per cent a year, compared with 2.2 per cent in the baseline scenario (table 5.2).

Even though GDP increases at the same rate as it did in the first alternative scenario discussed, the additional resources for the public sector will not be of the same magnitude. The more efficient methods of production in the business sector and the improvements in real wages that ensue certainly bring with them more revenue from taxation; however, they also lead to higher expenditures on the part of the public sector: expenditures in the form of higher wages for public employees and higher levels of compensation in the publicly funded social security system. Another difference from the first alternative scenario is that there is no corresponding savings on the expenditure side in the form of a reduction in the number of persons in need of social insurance allowances.

Table 5.2 Some Key Indicators for the Period 2002–2020 in the Baseline Scenario and in a Scenario with Higher Productivity Growth

Average annual percentage change

	Baseline scenario	Alternative scenario 2
		Higher Productivity Growth
Hours worked	0.0	0.0
Business sector productivity	2.2	2.5
GDP	1.8	2.0
Public consumption	0.5	0.6

Source: The estimates for the scenarios in Appendices 1-2 of the Long-Term Survey (SOU 2004:11).

The scenario demonstrates the clear connection that exists between economic growth and public sector expenditure. This connection also explains why the real scope for public activity is no greater than it is in the baseline scenario, even though GDP in this scenario also grows at a relatively favourable pace.

One major reason for this connection between economic growth and public sector expenditures is that a large part of the expenditures consists of wages paid to public employees. A more rapid productivity growth in the business sector creates room for a higher rate of wage increase without a drop in profitability in this sector. Wages also have to be raised in the public sector to enable it to recruit and retain labour in the long term, irrespective of how productivity grows in this part of the economy.

Another reason for public expenditures to follow changes in the tax base is that a great number of public transfers have a guaranteed value in real terms; in other words, there is an automatic upward adjustment linked directly or indirectly to wage developments. One example is pensions, which make up more than half of public transfers to households. In the new pension system, there is an automatic link between the level of the pensions paid out and the general wage development via an income index. The insurance systems, which compensate for lost wage earnings such as sick pay and parental benefits, also have an important link to wage developments.

In total, developments in the scenario with a higher productivity growth mean that public consumption can increase an average of 0.6 per cent a year between 2002 and 2020. This compares with 0.5 per cent in the baseline scenario. Thus public consumption will be

1.8 per cent higher in this alternative scenario than in the baseline scenario in 2020. In the first alternative scenario discussed, public consumption was 5.7 per cent higher than in the baseline scenario, or an increase of more than three times the size.

At the same time it should be pointed out that a productivity-led growth is also essential for welfare in that growth increases a society's total resources. A policy that results in higher growth therefore involves greater welfare for society in general. Nevertheless, it does not automatically mean that there will be more resources for publicly funded welfare. However, economic growth does increase household resources and thus also their ability to pay for welfare services.

5.1.3 Higher Growth Yields Limited Additional Resources

In the scenario just described, the assumption is made that the *entire* capacity for additional reform is used to boost public consumption. All extra revenue from taxation is channelled into increasing the production of tax-funded services. No part of the additional resources is used for other reforms, such as tax relief or higher benefit levels in the social security systems. Even though all the extra room brought about by growth is used for public consumption, the effects are still relatively limited. The higher economic growth allows for a growth in public consumption of only one or some few tenths of a percentage point faster than in the baseline scenario (table 5.3).

Table 5.3 Public and Private Consumption per Capita, 2002–2020

Average annual percentage change

<u> </u>			
	Baseline scenario	Alternative 1	Alternative 2
		Increased Employment	Higher Productivity
Public consumption	0.0	0.3	0.1
Private consumption	2.0	2.1	2.2
Difference	-2.0	-1.8	-2.1

Source: The estimates for the scenarios in Appendices 1-2 of the Long-Term Survey. (SOU 2004:11).

It is clear from table 5.3 that growth generated by higher employment in the economy makes a greater quantitative contribution to

the capacity to increase public consumption than does growth based solely on increased productivity. In addition the growth in the alternative scenario with higher productivity results in a greater difference in growth between public and private consumption than in the baseline scenario (see the bottom row in table 5.3). The more rapid growth in private consumption may also give rise to additional demands being made on services funded by taxes. In that event, there is a risk that the additional resources that are a result of growth will contribute to aggravating rather than alleviating the funding problem in the public sector.

In the scenario with higher employment, the higher growth also leads to a somewhat faster growth in private consumption than in the baseline scenario. However, the increase in private consumption is less than the increase in public consumption. Public consumption in the alternative scenario with higher employment could increase by 0.3 per cent per person annually, or at approximately the same rate of increase that was experienced in the 1990s (see table 3.6 and table 5.3).

Despite the assumptions made in this alternative scenario about a marked increase in the level of employment for immigrants and persons in the age group 55 to 64, the higher growth does not contribute to any decisive change in the growth of public consumption in relation to private consumption. In this connection, it should also be pointed out that there is a limit to the potential that exists in the form of unutilised labour. The extent to which older workers, immigrants or other groups can find employment in the labour market cannot be raised inexorably. When all reserves have been used, a further increase in employment levels is not possible and this factor can no longer make a contribution to any further increase in public consumption.

5.2 A Reversal in Trends Required for an Increased Labour Supply

From a historical perspective, growth that is based on an increase in the labour supply cannot be taken for granted. Historically, growth has been decided by improvements in productivity.

In the first alternative scenario, the labour supply is assumed to increase so that employment reaches 80 per cent in 2020. What are the possibilities in the future of achieving this or an even greater

improvement in the labour supply? This issue can be approached in various ways. One way is to examine the general developments in the labour supply in the working age population. What are the historical developments respecting average working hours, labour force participation, employment, and absenteeism and what do they have to say about future developments? Another way to approach the question is instead to see if there are any individual groups with a labour supply that is clearly lower than that of other groups. This section examines the potential for an increase in the labour supply from both these angles.

5.2.1 Declining Average Labour Supply

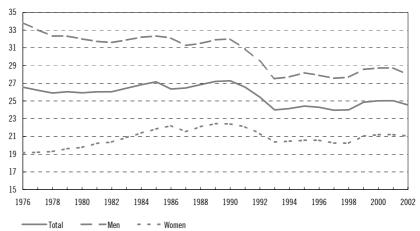
From a historical perspective, the long-term trend shows a gradual decline in the labour supply, measured as the number of hours worked per working age person.⁵² The total number of hours worked in the economy today is by and large the same as it was 30 years ago, even though the working age population has grown by about 10 per cent. The growth also should be seen in the light of women's labour force participation. In this period, women joined the labour force and now are wage earners to an extent never experienced before. The impact on the labour supply of the population increase and women's entry into the labour market has offset the declining labour supply among men and a delayed entry into working life because of studies.

The average number of hours worked among persons of working age has fallen for almost thirty years, as shown in diagram 5.1. Especially obvious is the decrease that occurred during the economic crisis in the early 1990s. As also shown in diagram 5.1, the trends are considerably different for women and men. Men are working less and less, even though the downward trend has tended to be stagnant in the past ten years. However, women's total labour supply increased continuously up to the end of the 1980s and, after a short downturn in connection with the 1990s crisis, has stayed at a largely unchanged level. The difference between men and women's total labour supply has not changed appreciably in the past ten years.

⁵² Working age is defined here as 20–64 years of age.

Diagram 5.1 Trends in the Average Number of Hours Worked per Week per Person in the Population Aged 20–64, 1976–2002

Number of hours per week



Source: SCB [a] and own estimates.

What are the factors behind the general trend to a reduction in the average labour supply? The explanation can roughly be divided into two parts. The first is made up of the average working hours per week by those who are working (see diagram 5.2).⁵³ The second is composed of the number of persons aged 20 to 64 who are not working. Those who are not working can, in turn, be divided into three different groups: those who are employed but for some reason are absent from their jobs, those who are in the labour force but are unemployed and those who for various reasons are not part of the labour force at all.

⁵³ For those in fact working (a minimum of one hour) during the week measured. Those who are absent the entire week, for example, those on holidays, are therefore not included.

Population

At work

Hours worked

Employed, absent from work

Unemployed

Not in the labour force

Students

Vacation

Students

Unable to work

Other

Diagram 5.2 Population According to Labour Market Status

Generally speaking, the average working hours for every person that is working have declined slightly since the middle of the 1970s and the percentage of the population that for various reasons is not working has increased. However, behind these general trends, there are large differences between different age groups as well as between women and men.

Some Reduction in the Average Number of Working Hours per Week for Persons with Work

The average weekly working hours for persons who are working has fallen slightly since the middle of the 1970s. However, even though the total picture shows a relatively small change, it masks two very different trends for men and women. The average working week for men has been shortened continuously and fell by almost two hours a week over the entire period. During the same period, women have continuously increased their total working hours by the equivalent of over two hours a week. One important explanation for this is a drop in part-time employment among women; today about 60 per cent of women work full-time, compared with just over 50 per cent in 1987. The different trends for

 $^{^{54}}$ SCB[a]. Refers to the percentage of employed women working full-time.

men and women have led to a sharp fall in the gender difference in working hours per week since the middle of the 1970s.

However, the average working hours per week for men who are working is still six hours longer than the average weekly working hours for women who are working.

Whether in the future more full-time employment can contribute to a further increase in women's average working hours per week is uncertain. Concurrent with the steadily increasing percentage of people who work full-time, the increase in the percentage of women who are working full-time will likely decline. Thus the trend to an average decline in working hours per week will become more obvious.

One important explanation for the lower labour supply is that women have historically taken more responsibility for children and the home. Women have taken and continue to claim a considerably larger percentage of parental leave and also work part-time to a greater extent during the years when their children are small. However, the lower labour supply is true not only of women with children, but also of younger and older women without small children. The high percentage of women working part-time is also likely due to the fact that many women work in sectors in which employers prefer part-time work, such as retail trade and healthcare and social services. It is likely in the future that women will also take chief responsibility for the home and children and that a considerable number of women will also choose to work part-time. If this pattern is to be broken, important reforms would probably need to be made, not least in parental benefits, a topic that is discussed in Appendix 12 of the Long-Term Survey.⁵⁵ At the same time, such an increase in the female labour supply could very well result in a reduction in the male labour supply.

As Chapter 3 made clear, a considerable number of older people living at home who are in need of help already receive informal help today. In future when the number of elderly increases, more elderly will get help from relatives. In addition to husband /wife/partner, the help has come mostly from daughters or daughters-in-law. If current gender roles endure, it is likely that women of working age will in the future take greater responsibility for the care of the elderly at the same time that the number of elderly is increasing and public resources for eldercare will be limited. Greater responsibility

⁵⁵ SOU 2003:36.

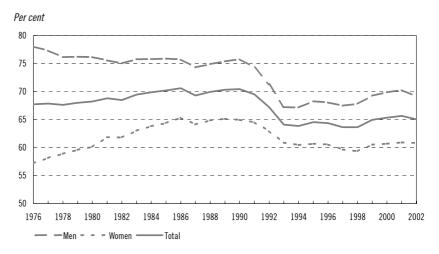
for the care of the elderly may affect the labour supply of women of working age. Such a trend would grow if the public sector's ability to maintain eldercare worsens, owing to limited public resources.

The Proportion of Persons Working

In addition to the average number of working hours of those who actually work, the labour supply is determined by how many are working. Owing to women's entry into the labour market, their representation increased continuously up to the second half of the 1980s at the same time that the percentage of men who were working fell (see diagram 5.3). However, the upward trend in the percentage of women working came to a stop with the crisis in the early 1990s when their representation fell sharply. After that, the percentage of persons working has increased somewhat, but it is still well below the highest levels reached during the boom in the late 1980s.

A decline in the percentage of those working naturally means that there is a simultaneous increase in the percentage of those who, for various reasons, are not working. As previously mentioned, those not working can be divided into three groups: employed persons who are absent from their jobs, the unemployed and persons not participating in the labour force at all. The following sections discuss the trends for these three groups over the past 25 years.

Diagram 5.3 Percentage of the Working Population Aged 20–64, 1976–2002



Source: SCB[a].

Absenteeism: No Upward Trend, but Sharp Variations from Year to Year

A considerable proportion of employee absenteeism from work is attributable to holidays, but absenteeism for this reason has not increased in the past 15 years; on the contrary, it has fallen.⁵⁶ The trend in absenteeism from work owing to illness or care for children does not appear to have changed appreciably in the past 30 years.⁵⁷ However, there are large swings from year to year. Absenteeism was at its highest during the boom of the late 1980s and then fell rapidly to its lowest level during the crisis in the early 1990s. However, in recent years employee absenteeism has increased rapidly. It is very important to end this trend so that in the future the supply of labour does not decline any further. In the Survey's baseline scenario, this negative trend is assumed to have

⁵⁶ SCB[a].

⁵⁷ SCB[a]. Absenteeism refers to absence from work for the whole week measured. This means, for example, that holidays the entire week are counted as absenteeism, whereas short-term absences (meaning that a person has worked at least one hour during the week measured) owing to illness are not included.

been stopped. If that does not prove to be the case, the baseline scenario will overestimate the labour supply as well as growth.

Higher Unemployment

For a long time, unemployment in Sweden was very low. Unemployment rose sharply during the crisis in the early 1990s, but it has since fallen. Even so, unemployment today is considerably higher than it used to be. Unemployment in general has risen, but certain groups are affected much more than others. The level of unemployment is considerably higher among the young, immigrants, the unskilled and older people. Section 5.3.3 discusses the position in the labour market of some of these groups in more detail.⁵⁸

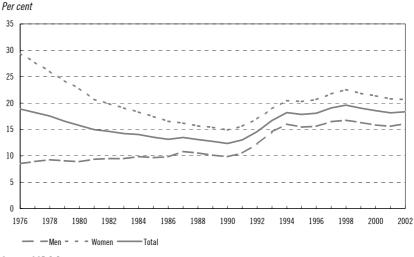
A Sharp Increase in the Percentage of Persons Not Participating in the Labour Force

In 2002 about one fifth of women and one sixth of men aged 20 to 64 were not in the labour force (see diagram 5.4). The percentage of men not participating in the labour force has been on an upward trend since at least the middle of the 1970s. With women entering paid labour in the 1970s and 1980s, the percentage of women in the labour force increased. Since 1990 the trend showing that an increasing percentage are not participating in the labour force has been the same for women as for men. As a result, the gender difference has changed little in over ten years.

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 $^{^{58}}$ See also the Long-Term Survey 1999/2000 (SOU 2000:7), for an in-depth analysis of the causes of unemployment.

Diagram 5.4 Men and Women in the Population Aged 20–64 Not Participating in the Labour Force, 1976–2002



Source: SCB [a].

About 40 per cent of those not participating in the labour force in 2002 were studying. About a third were people who were sick without a job to return to. In many instances, they had taken early retirement for health reasons.⁵⁹ The remainder – just over 20 per cent – were not participating in the labour force for other reasons.

Among the young aged 16 to 19, the percentage of those studying has increased both because more are taking an upper secondary school education and all upper secondary school programmes now take three years. The rapid expansion of universities has contributed to the increase in the percentage of students in the population. This is true of persons both under and over age 25. It should also be noted that among young persons aged 16 to 24, the number of persons who neither work nor study has more than doubled since 1990. In 2002 about 11 per cent of young persons in this age

⁵⁹ In December 2002, over 9 per cent of the population aged 20–64 received early retirement pensions or temporary disability pensions; about three quarters of these received full pay. About half of those with an early retirement pension or temporary disability pension were 55 years of age or older. The National Social Insurance Board (Riksförsäkringsverket) [2003b].

group neither worked nor studied.⁶⁰ Over half of these have stated that they do not want to work.

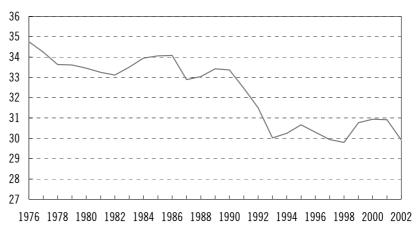
5.2.2 Fewer Men Aged 25 to 54 Work

The previous section gave a general picture of how the labour supply has changed in recent decades. This has been largely accomplished by describing the trends in the entire working age population, that is, the total number of persons aged 20 to 64. As discussed, the general trends accommodate important differences between women and men and between different age groups. It is important to examine the trend for the group often considered to be the core group in the labour market, namely, men between 25 and 54 years old. This should provide a picture of the underlying trends. This group very clearly has the highest labour supply of all groups, but it nevertheless exhibits a steep decline in its labour supply over time.

⁶⁰ Refers to young people who, according to SCB's Labour Force Survey (LFS), are not in the labour force, but are not studying. Thus, according to the LFS, the figures do not include young people who are registered as unemployed. See also SOU 2003:92, which discusses the situation for this group.

Diagram 5.5 Number of Hours Worked per Week by Men Aged 25–54 Spread over the Population, 1976–2002

Number of hours per week



Source: SCB [a].

Diagram 5.5 shows the labour supply expressed as the number of hours worked per week spread over the total number of men in the population in that age group. The drop in the labour supply expressed as the number of hours worked per person in the entire population has been affected to some extent by an increase in unemployment. Also the mean working hours for persons who are actually working declined, partly as a result of a rising proportion of part-time work among men between the ages of 25 and 54. However, absenteeism due to illness, holidays and similar reasons has not changed appreciably in this group when viewed from a long-term perspective. But the most important explanation for the sharp drop in the labour supply among men between the ages of 25 and 54 is that an increasing number are not participating in the labour force. There are certainly fewer in this group who do not participate in the labour force than in other groups, but nevertheless more than 10 per cent of men between the ages of 25 and 54 were not in the labour force in 2002. Thirty years earlier the percentage stood at less than 5 per cent.

One important explanation for the increasing percentage of men in this age group who do not participate in the labour force is that the percentage of men stating that they are unable to work has risen sharply. The percentage of the population in this age group that is unable to work has more than doubled since the beginning of the 1990s and came to over 4 per cent in 2002. This increase is also reflected in the statistics for the number of persons who have taken early retirement or temporary disability pensions. In December 2002, 4.8 per cent of the men in this age group had taken early retirement or were living on temporary disability pensions.⁶¹

The proportion of those not participating in the labour force because of studies has also increased. In 2002 almost 70,000 men between the ages of 25 and 54, or 3.7 per cent of the number of persons in this age group, were not in the labour force because they were studying. In addition to these students, there are more than 67,000 employed men who are studying. About 40 per cent of the latter are studying full-time; the result in most cases is a lower labour supply. 62 As already mentioned, part-time work in this age group has increased; a part of the increase in part-time work can probably be attributed to a higher percentage of students. As shown in diagram 5.6, this means that a total of more than 7 per cent of men in this age group are studying. For the majority, this means that their labour supply will be lower than it would have been otherwise. During the academic year 2002/2003, more than 67,000 men between the ages of 25 and 54 received study allowances.63

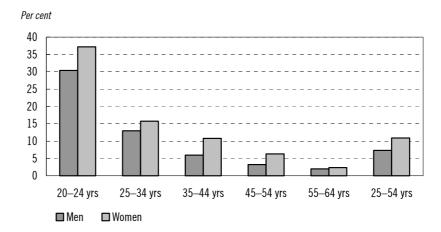
Diagram 5.6 also shows that the percentage of women that are not participating in the labour market owing to studies is considerably higher than the percentage of men. In the middle of the 1970s, the gender distribution of students was considerably more even.

⁶² Many of these full-time students work evenings and weekends, for example.

⁶³ CSŃ [2003].

⁶¹ Some had pensions on a part-time basis. Recalculated as full-time absence, the percentage came to 4.3 per cent of the population. Riksförsäkringsverket [2003b], see table 3b in the appendix, and SCB[a].

Diagram 5.6 The Percentage of the Population that Is Studying, by Age Group, 2002



Note: The information refers to the total number of persons not in the labour force who are students and employed persons who are studying.

Source: SCB [a].

There is a steep negative trend in the labour supply of men between the ages of 25 and 54. At the same time, it is difficult to find an explanation for the negative trend in the labour supply of this group. This is not the group normally expected to have a high incidence of ill-health. Nor is it this group to which the education system is primarily directed. Nevertheless the percentage of students in this group has risen and an increasing number are not participating in the labour force as they regard themselves as unable to work.

General Trend to a Declining Labour Supply

The trend displayed by the labour market's core group strengthens the impression that there is a continuing downward trend in the labour supply among the working age population. This trend depends to some extent on the drop in the number of working hours, but by far the most important explanation is that for various reasons, more persons in this age group are not participating in the labour force. The same development can also be found among older workers and, in recent years, among women. The tendency for women's labour supply to approach that of men appears to have

been broken and a gender difference remains. Taken together, the labour market trends that have been described give the impression that there is a general downward trend in the labour supply. The most important factor explaining this trend is the decline in labour force participation.

A declining labour supply is consistent with choosing an increase in welfare in the form of more leisure. However, given that household disposable income after taxes has not increased during the entire period studied, this cannot be the only explanation. Changes in the work environment, increased educational requirements and changed attitudes about working might also have contributed to the shrinking labour supply. Another possible explanation might also be that young people who entered the labour market during the crisis in the early 1990s never managed to get a foothold in the labour market and even after the crisis, they have had difficulty entering the labour market.

The systems for taxation and government grants are of importance to the labour supply owing to their impact on the individual's financial incentive to work. The tax on labour affects the choice between work and leisure time. The higher the tax on labour, the less expensive leisure time appears. As discussed in Chapter 4, there is a considerable risk that in the future, local governments will raise taxes to meet the demand for welfare services. Such tax increases could reduce the motivation to work and thus have a negative effect on the labour supply and in that way, make it more difficult to fund the growth of the welfare services.

The social insurance system does provide an incentive to begin working since most benefits are linked to income. Once one has qualified for the benefits, poorly designed social insurance programmes may instead contribute to a reduction in the labour supply. As seen in Appendix 14 of this Long-Term Survey,⁶⁴ the marginal effects of working longer hours for those who are already employed have fallen in recent years, that is to say, it has become more profitable for those already working to increase the number of hours that they work. However, according to the same appendix, the combination of taxes and grants does not make it especially profitable for certain groups to switch from unemployment or sick pay benefits to work. Poor control reinforces the negative effects on the incentive to work.

⁶⁴ SOU 2004:2.

To break the downward trend in the labour supply, it is therefore important to have an ongoing review of the design of the social insurance systems, their observance and the means of control. Likewise, measures in other areas that can foster a higher labour supply may also be of importance. At the same time, shortening working hours or other changes in the rules that contribute to lowering the labour supply would appear to be steps in the wrong direction.

In the baseline scenario in the Long-Term Survey, the assumption is made that the downward trend in labour force participation is broken. This assumption presupposes a policy aimed at promoting a high labour supply.

5.2.3 Some Discernible Potential in Individual Groups

The general trend in the labour supply is important to keep in mind in discussions about the individual groups in which, it is often argued, there is a potential for an increase in the labour supply. Three groups are often singled out in the debate: the young, older people and immigrants. These groups currently have a lower labour force participation rate than other groups. How important are these groups for the labour supply, and how can the labour supply in these groups increase?

Young People's Establishment in the Labour Market

As became clear in a previous section, the percentage of young people who are not working owing to studies has increased over time. Having more people continue their studies is also an explicit policy objective that has been implemented by such measures as the expansion of post-secondary education and an extension of all upper secondary school programmes to three years. Investing in education raises the competence of the labour force, a result which is positive for productivity and growth in the long term. A higher level of education can also help contribute to greater flexibility in the labour force. At the same time, the percentage of unskilled workers is declining. Unemployment in this group had increased concurrently with the disappearance of the simpler jobs in the manufacturing and other sectors. In general more education and a

higher level of competence can thus be positive for the economy in the long term.

However, investment in education also has a cost side. There are costs both in the form of the education itself and in the form of the reduction in the labour supply that lasts for the length of the education. Because more are studying for an increasingly longer time, there are fewer persons in the labour market than there would be otherwise, and production and growth tend to be lower. Accordingly, the future return in the form of higher competence and productivity has to be weighed against the present costs, such as a lower labour supply and thus lower production. The effect of a higher proportion of students is unequivocally negative as far as the prospects of funding the welfare services with taxes are concerned.⁶⁵

The labour supply is also reduced because young people on average are spending a longer time in the education system. It has become more common to supplement or raise one's upper secondary school grades by studies in the municipal adult education system (komvux). Over 60 per cent of those young persons between the ages of 19 and 24 who began studies at the upper secondary school level of komvux in 2002 had at least a three-year upper secondary school education behind them.⁶⁶ A study of conditions in 2003 noted that 40 per cent of all 23 year olds had experience studying at komvux.⁶⁷ Among all the age groups studied, every fifth person had begun studies at a komvux at 20 years of age at the latest.

The length of university studies has also increased, while the number graduating has not at all kept pace with the number of students entering. 68 It appears that young persons are spending more time in total studying than is warranted by the length of their educational programme. This naturally has a downside in the form of the costs to society of a lower labour supply.

To sum up, this trend means that the age at which young persons are establishing themselves⁶⁹ in the labour market has tended to increase. This age was about five years higher in 2000 than it was

⁶⁵ Swedish Association of Local Authorities [2002a].

⁶⁶ Appendix 10 of the Long-Term Survey 2003/04 (SOU 2003:96).

⁶⁷ Swedish National Agency for Education (Skolverket) [2003b].

⁶⁸ Ds 2000:58

⁶⁹ In SOU 2001:54 this was defined as the age at which 75 per cent of the age group were employed.

in 1987.⁷⁰ Measured in the same way, women in 2000 were establishing themselves in the labour market when they were about 27 years old and men when they were 26 years old.

Thus it is evident that young persons are working less today than they did earlier. Looking to the future, the question is what potential there is for an increase in the youth labour supply. The lower labour force participation depends to a considerable extent on studies, which can be viewed as an important part of future economic growth in that there will be a better supply of well-educated labour. At the same time, there is good reason to ask if the labour supply among young people has fallen more than can be considered economically efficient as a result of studies or other reasons.

There should therefore be some potential for young people to increase their labour supply in the future without having a negative impact on education levels. This should be possible by shortening the time spent studying, for example, by reducing supplementary studies at the komvux and speeding up the throughput at the university level.⁷¹ At the same time, historical trends point to lengthier education programmes, which indicate that young people are unlikely to constitute any significant potential for increasing the labour supply. In the scenarios in the Long-Term Survey, the assumption has been made that the historical trend to longer study times has come to an end and the percentage of students in various age groups will not exceed current levels.

Older Workers' Retirement from the Labour Market

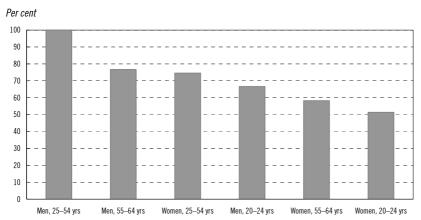
The differences in the male and female labour supply are most apparent for older workers in the labour market – here meaning persons between the ages of 55 and 64. While older women have increased their labour supply in the past 30 years, men have reduced theirs, even though some recovery has taken place in the ten years after the crisis in the early 1990s. Though the labour supply among older men has fallen, it is this group that has the highest supply of

⁷⁰ SOU 2001:54.

⁷¹ As one of its tasks, the Commission on Higher Education Admission (Tillträdesutredningen) (dir 2003:38) is to propose measures for reducing the number of persons at komvux repeating upper secondary school courses to increase their competence for reasons of competitiveness and for increasing the number of students going directly to university from upper secondary school.

labour after the core group in the labour market: men between 25 and 54 years of age. The labour supply of older men is about 25 per cent lower than in the core group (see diagram 5.7) and older women's labour supply is about 40 per cent lower than that of the core group. However, older men's relatively high labour supply is explained by the fact that the percentage of men between 55 and 59 years of age who are working is only a few percentage points lower than that for men between 25 and 54 years of age. However, among the older men in the labour market, those between the ages of 60 and 64, fewer than half are working. The labour supply in this age group is therefore considerably lower than it is for men in the core group.

Diagram 5.7 Labour Supply in Different Age Groups Compared with the Labour Supply of Men Aged 25–54, 2002



Note: The labour supply is expressed as the number of hours worked per week per person in the population in each age group.

Source: SCB [a] and own estimates

It should also be noted that there appears to be a general international trend to a reduced labour supply among older people. In the ten countries compared, labour force participation among men between 60 and 64 years old has declined continuously since the beginning of the 1960s in all the countries.⁷²

⁷² Gruber, J. & Wise, D.A. [1999].

In the description in section 5.1 of the alternative scenario with an increase in employment in the economy, this increase is assumed to take place among immigrants and older workers. If the labour supply per person 55 to 64 years old were to increase by about 15 per cent – an assumption made in the alternative scenario - the impact on the total labour supply would mean that in 2020, the labour supply would be about 1.5 per cent higher than the assumption made in the baseline scenario of the Long-Term Survey. This should be put in the context of the total increase in the number of hours worked, which is 3.2 per cent in the alternative scenario compared with the baseline scenario. The total increase in the labour supply described in the alternative scenario yields an increase in GDP growth of 0.2 percentage points a year (see table 5.1). At the same time, it improves to some extent the possibilities of funding public consumption of such services as welfare. Here public consumption per person would be able to increase by 0.3 per cent a year, compared with 0 per cent in the baseline scenario.

The change in older workers' labour supply assumed in the alternative scenario can also be expressed as a change in the actual retirement age.⁷³ A 15 per cent increase in the labour supply of older people would be equivalent to an increase in the actual retirement age of about eight months, in comparison with the baseline scenario, or from 62.4 to 63.1 years of age.⁷⁴

The assumptions in the alternative scenario about the future labour supply of older people have to be viewed as optimistic. The assumptions mean that older people increase their labour supply sharply, while the youth labour supply does not increase. Important changes are probably needed to achieve such a development. Appendix 5 of the Survey discusses the type of changes that would be needed to achieve this increase such as relatively far-reaching reforms of social insurance programmes. It is difficult to see how it would be possible or reasonable to implement such extensive reforms aimed solely at older workers in the labour market. In that case, it is probably more appropriate and more effective to take more general measures that affect all groups in the labour market, including older workers. There is also a higher percentage of people

⁷³ The effective retirement age referred to here is the average retirement age for persons aged 50 still in the labour force.

⁷⁴ Specially requested estimates prepared by Hans Olsson, Swedish Association of Local Authorities.

with health problems in this age group. Thus it is plausible for the labour supply to be somewhat lower among the oldest in the labour market than it is among the younger. The Survey therefore considers general measures that would increase the labour supply among older people as well as other groups to be most relevant. But these general measures could well be combined with other measures to remove specific existing labour market obstacles for older workers.⁷⁵

Immigrants' Position in the Labour Market Remains Weak⁷⁶

Persons with a foreign background, 77 especially those with origins in countries outside the EU, currently have lower labour force participation and experience higher unemployment than persons born in Sweden, and the difference is substantial. Moreover, as Chapter 3 made clear, it is expected that in the future most of the increase in the percentage of foreign born persons of working age will be in the form of immigration by refugees and their relatives. If this group continues to have the same position in the labour market that it has now, the total labour supply in the economy will decline up to 2020, even though the number of persons of working age will increase. In the baseline scenario, it has been assumed that the labour market position of the foreign born will improve over time. Even with this assumption, employment among the foreign born is estimated to be about 15 percentage points lower than among the native born. Employment among the foreign born is estimated to come to over 64 per cent in 2020.

If the foreign born were working to the same extent as the native born, there would, of course, be a considerable rise in the labour supply. However, the likelihood of such a development is questionable. Historical trends in Sweden do not provide support for

⁷⁵ See Appendix 5 of this Long-Term Survey for a discussion of possible obstacles and measures. (SOU 2004:44).

⁷⁶ Immigrants' position in the labour market is discussed in Appendix 4 of this Long-Term Survey. (SOU 2004:73).

⁷⁷ A number of different concepts are used in the statistics as well as in public discussions. Persons with a foreign background are those who have themselves immigrated or have at least one immigrant parent. Immigrants have themselves immigrated, as has a person termed foreign born. 'Second-generation immigrants' is a term sometimes used to refer to children of persons who have immigrated – sometimes only when both parents have immigrated, sometimes when only one parent has done so. A differentiation is sometimes also made between persons with Swedish and foreign citizenship.

much optimism. The labour market position of persons with a foreign background has been especially weak, not least in the 1990s, with high unemployment and the exclusion of a large proportion of this group from the labour force. As well, persons born in Sweden with parents from other countries and persons with a Swedish education but a foreign background have a weaker position in the labour market. Persons with a background in countries outside the EU also have a weaker connection to the labour market than do other immigrants. At the same time, the majority of immigrants in the past decade have come from such countries. In the population projections that are the basis of this Long-Term Survey, it is also assumed that most of the future immigration will come from countries outside an enlarged EU. The population projections assume that the entire net addition of persons of working age in the population come from these countries.

The reasons for the low level of employment among the foreign born have been studied and several explanations have been put forward on both the supply and the demand sides. On the supply side, education, proficiency in Swedish, time spent in Sweden and networks in Sweden may have an impact. However, there are considerable differences between various groups having a foreign background; therefore, it is not possible to make generalisations on the supply factors for the whole group. It also seems that the demand side is an important component in explaining the labour market establishment of persons with a foreign background. The existence of discrimination in the labour market that makes it more difficult for persons with a foreign background to get a fast foothold in the labour market must not be ignored. Because of this discrimination, it is not enough to strengthen individuals' financial incentives to work in order to boost the labour supply. It also requires measures that encourage the labour market demand for various groups of persons with a foreign background. It is possible that the demand will increase in the future in the event of a labour shortage. Possibly one can hope that this will reduce the incidence of discrimination and other factors that in the long term affect the labour market demand for persons with a foreign background.

In the light of historical trends, it is difficult to see how the potential labour supply that exists among persons with a foreign background can be fully realised. It will probably require changes in legal instruments as well as attitudes in the labour market to-

wards these persons if employment levels are to increase more than what is anticipated in the baseline scenario.

In the alternative scenario based on higher employment, it is assumed that two thirds of the difference in the level of employment between the foreign and native born will disappear by 2020. This would increase the total labour supply measured as the number of working hours so that by 2020 it would be 1.7 per cent higher than it is in the baseline scenario. This can be compared with the increase of 3.2 per cent in the total number of hours worked by 2020 in the alternative scenario compared with the baseline scenario. As previously mentioned, growth in the alternative scenario is 0.2 percentage points higher than it is in the baseline scenario and makes possible an increase in public consumption of 0.3 per cent a year.

However, immigration is assumed to take place chiefly in the form of refugees and relatives, while labour force immigration will be small, even with the expansion of the EU in the spring of 2004. Since most countries in Europe, like Sweden, will be confronted with a demographic trend to an ageing population, there is little potential for any more large-scale immigration to Sweden from countries in Europe. Instead it is more likely that people from such regions as North Africa and East Asia may be interested in immigrating to Sweden and other parts of Europe. Accordingly, the potential for labour immigration to Sweden is presumably highest in groups whose compatriots have had difficulty getting a firm foothold in the Swedish labour market.

For labour immigration to have any great importance in funding the public sector in the future, this immigration would need to be on a very large scale. Given that labour immigration would have to be on a large scale and that the potential for labour immigration is found chiefly in countries outside the EU, it is improbable that labour immigration could play any greater part in solving the future funding of the public sector. As shown in Appendices 1 to 2 of the Long-Term Survey, ⁷⁹ it is more important from the perspective of public resources that the immigrants who are already in Sweden can find a foothold in the labour market than it is to increase the labour supply through labour immigration.

⁷⁸ D. Rauhut [2003].

⁷⁹ SOU 2004:11.

5.3 Changes Required for a Higher Labour Supply

As this chapter has shown, higher growth means higher economic welfare, irrespective of whether the high growth is based on increased productivity or on increased employment. However, only higher growth generated by increased employment is able to help increase real public resources in any material way. However, the potential for a larger labour supply drawn from all sources is not so great that it would be able in the long term to increase public resources in line with the increase in the demand for welfare services when incomes rise.

The higher employment anticipated in the alternative scenario will not emerge of its own accord. On the contrary, there appears to be a general trend to a smaller labour supply. The Survey's baseline scenario can therefore be considered relatively optimistic, as labour force participation and absenteeism are anticipated to remain at their current levels and not drop any further. 80 The employment rate for immigrants is assumed to increase. To achieve more positive results in the labour supply beyond those assumed in the baseline scenario would require changes that mean a reversal in the downward trend in the labour supply. The conclusion in this chapter is that measures to increase the labour supply should first be general in nature, rather than focusing on individual groups in the labour market. This includes continued tightening in the social insurance systems. Such tightening would, in addition to promoting a higher labour supply, also reduce public expenditures. A larger labour supply would increase growth and improve the public sector's prospects of funding welfare services.

More general measures also need to be supplemented by measures that are primarily aimed at individual groups. The trend to young persons' increasingly later labour market entry should be countered by such measures as streamlining education and thus shortening study time. However, there is a trend to longer study times. In addition there is good reason for measures to help persons with a foreign background get a stronger foothold in the labour market; there appear to be serious problems on the demand side for this group.

⁸⁰ In the baseline scenario, it is assumed that average working hours will continue to decline.

6 Higher Productivity in Public Activities

The possibility of improving productivity in the production of welfare services is a factor that could counteract the heavier burden on public sector finances in future. As Chapter 3 makes clear, the national accounts are based on the assumption that productivity growth in the public sector is null. This means that production in the public sector can increase only if the input of resources increases.

In the scenarios in the Long-Term Survey, which are based on the national accounts, the same assumption is made. Estimates of productivity growth in all or part of the public sector indicate that productivity growth here is weaker than in other parts of the economy.

This chapter discusses the arguments for and against the possibilities of productivity improvement in the public sector. Special attention is given the experience gained from the increased exposure to competition that has occurred in public sector activities in recent years.

6.1 Productivity in Public Activities

A rise in productivity means that for a given resource input, it is possible to produce more services or improve the quality of the services already being produced. As discussed in Chapter 3, the conditions for productivity growth differ from one activity to another. In certain activities, it is simply more difficult to raise productivity through rationalisations or in other ways. This is often the case in labour intensive services, for example social services or education, where it has proved difficult to reduce the time-consuming labour required without a decline in the volume and/or quality of that being produced. This indicates that the potential for future productivity improvements is limited for many of the wel-

fare services that the public sector in Sweden to a large extent funds and produces.

At the same time, there are other factors that indicate that there should also be a potential for productivity improvements in the production of welfare services. The technical developments in such fields as medical technology and information technology that have improved treatment methods and administrative processes are one such factor.

6.1.1 Weak Productivity Growth in Public Activities

A productivity increase in private production is often expressed in the form of a lower price on a good of a certain quality. This productivity increase can also be expressed in the form of an improvement in the quality of the good at a given price. Productivity is estimated by relating the value added to the resources used in making the good or producing the service. For welfare services funded by public money and not priced in a market, there is no market price to help in estimating the value added of what is being produced. In the national accounts, the value added in the public sector is assumed to be equal to the costs of the resources used. In addition, productivity growth in the public sector is assumed to be null. In attempting to estimate the actual productivity growth in public activities, the change in costs is related to some form of measure of what is being produced. Some measure of volume is often used, for example, the number of students per teacher or the number of operations. Progress in the quality of the service is less often taken into account. The statistics needed for this are frequently lacking. As a result, measures of the change in productivity of welfare services are based either on assumptions or on measures in which the change in costs is related to volume measures. Consequently, the best one can get is approximations of the growth in actual productivity.

The Few Existing Studies Point to Weak Productivity Growth in the Public Sector

Studies of the actual productivity growth up to the early 1990s indicate that the assumptions in the national accounts have not been

entirely wrong. The measurements, which also have weaknesses, show that productivity growth up to 1992 was low in the public sector and in certain cases, it was even negative.⁸¹

There are no analyses of productivity growth anywhere in the public sector in the 1990s and early 2000s. The Swedish Agency for Public Management (Statskontoret) in 1998 estimated productivity growth between 1990 and 1997 in a number of central government activity areas. The productivity of the public authorities examined increased by an average of 0.8 per cent a year during the period studied. However, the Agency's study cannot be used to assess the growth of the public sector as a whole, as the activities that are included comprise a limited part of central government activities. The central government sector, in turn, makes up only one part of the total public sector; municipal authorities and county councils are responsible for large parts of public sector activities.

Cost Savings in the 1990s – Uncertain Impact on Productivity

A large part of public production takes place in municipalities and counties, which are responsible for healthcare, schools and social services. In the first half of the 1990s, there was extensive downsizing in these areas. This downsizing led to a fall in the cost per child, student or elderly person. This may have had an impact on the quality of the activities, but there is no measure of quality for making such an assessment.

As the cost reductions that occurred in the early 1990s were achieved primarily through lower staff ratios, it is possible that the quality suffered. A study by Björklund et al. (2003) concluded that on average a higher teacher ratio helped improve pupils' results and that it had the most effect on pupils with a disadvantaged family background.

Assembling a picture of productivity growth of the welfare services in the 1990s, one finds that the knowledge of how productiv-

82The following central government authorities were included in the study: Swedish National Labour Market Administration [Arbetsmarknadsverket or AMV (employment offices)], the Swedish Immigration Board (Invandrarverket), colleges and universities (undergraduate studies, post-graduate studies), the Swedish Enforcement Administration (Kronofogdemyndigheten), the Swedish Police (Polisen), the Tax Authority (Skatteförvaltningen), the National Courts Administration (Domstolsväsendet), the Swedish Prison and Probation Service (Kriminalvården), the social insurance administration and the public prosecutors.

⁸¹ Ds 1994:24.

ity in healthcare, social services and schools grew in the past ten years is very inadequate. This in itself is remarkable. This means that knowledge is lacking about the impact of downsizing and other changes, such as changes in responsibility, on efficiency and quality in a considerable part of the Swedish economy and major parts of the public welfare systems.

Improved Statistics on Public Activities

Work is under way to improve measurement of production volumes in the public sector in the national accounts. When the new methods are used, they will affect the estimates of growth and productivity in the public sector. The new volume estimates, planned to be introduced in the Swedish national accounts by 2006 at the latest, do not solve all the measurement problems, but the long-term goal is to develop methods that can satisfactorily measure quantity and quality changes.⁸³

Weak Productivity Growth in the Public Sector in Other Countries

International efforts are also under way in both the OECD and the EU to improve productivity measurements for services, especially for public services. Like Sweden, most countries still have a fixed assumption in the national accounts about productivity growth in the public sector. In most countries, productivity growth is assumed to be null. However, there are exceptions. For example, in Norway and Germany productivity growth in the public sector is assumed to be 0.5 per cent a year. ⁸⁴ Denmark and the United Kingdom are well on the road to introducing productivity estimates for the public sector. ⁸⁵

In Denmark the estimates that have been made indicate that productivity growth in the public sector in the 1990s has been negative, but that the negative trend was broken in the last years included in the study (see diagram 6.1). Estimates in the United Kingdom indicate a weak negative productivity growth in the pub-

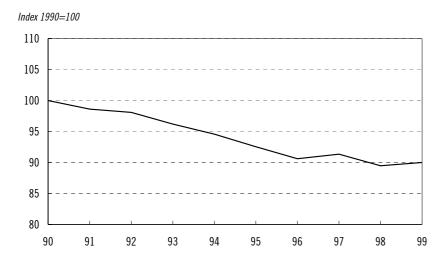
 $^{84}\,SOU$ 2002:118. In Norway, defence is not included in the assumptions.

⁸³ SOU 2002:118.

⁸⁵ In Appendix 6 of SOU 2002:118, there is a description of the methodological development work in these countries.

lic sector between 1995 and 2001. The estimates in both Denmark and the United Kingdom are based on volume measures only. This means that no consideration has been given to possible improvements in the quality of what is being produced. For example, it is the cost per pupil in schools that is used as a measure of productivity. Whether students learn more or less is not taken into account.

Diagram 6.1 Productivity Growth in the Danish Public Sector, 1990–1999



Source: The Danish Ministry of Finance [2001].

Weak Productivity Growth in the Production of Private Sector Services

Productivity growth in the private service sector could give an indication of the possible potential for productivity improvement in the production of welfare services. Statistics can shed light on the growth of productivity in the service sector generally in relation to the goods sector, as well as provide information on the growth of productivity in the private production of welfare services.

⁸⁶ A. Pritchard [2003].

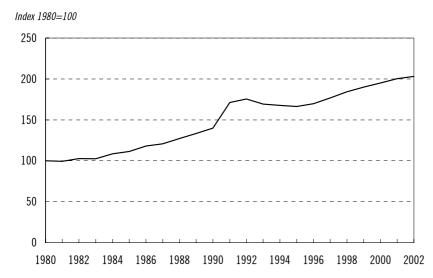
Unfortunately the statistics for services that are privately produced are also inadequate, especially at a more detailed level, a situation that makes this type of comparison more difficult.

The statistics for the production of services in other countries also suffer from serious measurement problems. Consequently it is difficult to do any meaningful cross-country comparisons of the productivity growth in individual service industries.

Despite these difficulties, one possible way of getting an idea of productivity growth in services that are similar to those produced in the public sector or at least are similarly labour intensive, such as social services, is to study price developments in certain private services. The idea is that in the long term, price developments provide a good indication of relative productivity growth between various parts of the economy. Given a functioning competition, price developments in the long term will reflect the differences in productivity growth between various parts of the economy. Prices of goods and services with lower productivity growth will grow more rapidly than prices in sectors with more rapid productivity growth. Diagram 3.3 shows how prices for private services rose by over 30 per cent more than prices for goods, or at about 1.5 per cent a year between 1980 and 1998. This difference indicates that productivity growth was clearly weaker in the production of services than in the production of goods.

Similarly, price developments for an individual service can be compared with general price trends. Here there are also measurement problems that include changes in measurement methods and price changes that can be attributed to tax and other changes. Despite these problems, diagram 6.2 presents one such comparison of an individual service. Hairdressing is a labour intensive service with few possibilities of increasing efficiency. It requires direct contact between the producer and consumer. These are conditions that also can be found in the social services, for example, even though conditions are otherwise dissimilar. As diagram 6.2 shows, since 1980 prices for hairdressing services have risen at twice the speed of the general price level measured by the consumer price index, or a difference of about 3.2 per cent a year. This clearly indicates that productivity growth in this type of labour intensive service is fairly limited in relation to other production.

Diagram 6.2 Price Trends for Hairdressing Compared with Trends in the Consumer Price Index



Note: The price refers to men's haircuts; trends in the prices of women's haircuts are generally the same, although the increase in prices is marginally higher.

Source: SCB and own estimates.

6.1.2 Difficulties in Measuring Quality Improvements

As discussed previously, statistics for productivity growth in the public sector are inadequate. This is true, not least of developments in the past ten years. From the existing basic data, it is difficult to draw general conclusions about whether productivity growth in the public sector is particularly high. Nor is there any historical basis for maintaining that future changes in technology and organisation would result in a higher, measured productivity as a matter of course.

By way of example, one possible explanation why technical and pharmaceutical developments in healthcare and social services are not reflected in the productivity statistics is that these changes make it possible to treat illnesses and patients that previously could not be treated. New methods of treatment may reduce costs and increase productivity, but at the same time may mean that more people can be treated and therefore the total cost of healthcare rises. As a result, the productivity increases that actually take place

owing to technological change are not always seen in the more general statistics. New methods of treatment may also be expensive and thus increase medical costs. However, these costs should be weighed against the positive impact of these improved treatments on patients' quality of life.

In eldercare, technological developments can make it possible for more people to continue to live at home and manage on their own, with little or no help. The percentage of elderly receiving help has also fallen in the 1990s. This could indicate that technological innovation has contributed to higher productivity in the economy as a whole. It could also mean that other factors such as the economy, changes in means tests, and so forth have been significant.

Those elderly currently receiving help from the public sector have a more extensive need of help than was previously the case. The average cost for elderly persons receiving care may therefore increase without necessarily meaning that production has become less efficient. The services now being provided are simply more extensive, often involving a considerable element of medical treatment. Various aids can alleviate the need for more staff to care for the elderly, but a continually increasing need of healthcare by those elderly receiving help prevents any such result from appearing in the statistics. In this case, the measured cost per person rises rather than falls and this rise can be interpreted as falling productivity. In the economic statistics, only this result will be seen, not the improvement that takes place in the form of more elderly being able to manage on their own.

Another reason why productivity growth appears weak or might even become negative is that existing statistics are not able to describe the quality improvements that actually take place. It is possible that the same resource inputs may have yielded the same volume of services, but that the quality of these services has improved over time. For example, improved teaching methods in the schools could give students more knowledge for a given resource input. While the cost per child, pupil or recipient of care has changed, the quality may also have changed accordingly. However, this effect is not reflected in existing measurements of productivity and there are not any very good alternatives at present.

6.2 Changes in the Forms of Production with Unclear Results

Different ways of increasing efficiency in the public sector have been tried, not least since the early 1990s when the economic crisis made extensive downsizing in public activities necessary. The aim of the changes in most instances was to reduce the costs and increase the efficiency of the activities, but certain reforms have also aimed at increasing individuals' options.

Efforts to reduce costs and improve efficiency and freedom of choice have taken various forms. These have concerned changes in the division of responsibilities between public actors and changes in budget processes and in other steering instruments. More competition and private producers to promote efficiency and development of production methods have also taken on greater importance.

6.2.1 Division of Responsibility and Governance Systems

Division of Responsibility between the Central Government, the Municipalities and the County Councils

The division of responsibility between the central government, the municipalities and the county councils can, in certain instances, bring ambiguities and the risk of economic inefficiency. Changes elsewhere can also make a division of responsibility that previously had functioned well become less relevant. Consequently, the division of responsibility between the central government, the municipalities and the county councils has changed over time. Two examples of the production of welfare services from the early 1990s are municipalisation of schools and the "elderly reform", which shifted services for the elderly from the health to the social sector. No systematic evaluation of these reforms has been made. Thus there is insufficient knowledge of the effects of changes in the division of responsibility on costs, quality and productivity in these areas.

The division of responsibility needs to be reviewed regularly in line with changes in the external conditions for the activities. At present the issue of the future division of responsibility between

⁸⁷ A review is currently being conducted of the "elderly reform", with the focus on the organisation of healthcare and social services (Dir 2003:40).

the central government, the municipalities and the county councils is being examined by the Committee on Public Sector Responsibilities. ⁸⁸ The Committee's mandate is far reaching: it is to examine current civil society organisations' chances of meeting their public welfare commitments. In its first report, ⁸⁹ the Committee explained and generally analysed the social changes that affect and could bring about changes in the structure and division of tasks in the relation between the central government, county councils and municipalities.

The Budget Process and Other Governance Systems

The budget process is a key element in the governance of public activities. It is political decisions that decide how large a part of common resources are to be used for various purposes. At the same time, the design of the budget process is important in making budget decisions. The design of the budget process affects how politicians respond to demands for resources for public administration and thus how costs are managed.

Amendments to the budget law have changed the conditions for the central government budget process and improved the prospects of controlling total costs and establishing priorities among areas. The law requiring municipalities to have balanced budgets has created restrictions on cost developments in the municipalities. However, in certain situations, the State has provided extra funding to the municipalities. As a result of the body of rules and regulations and the actions of the State, the municipalities do not always have the incentive to keep to the budget. 92

In addition to the design of the budget process in general, various administrative systems for improving governance and for monitoring activities have an impact on efficiency. Developments in information technology have facilitated the use of new systems of governance. In the 1990s, a number of experiments with different types of governance systems were carried out, further developed, and in some instances, discontinued. No comprehensive

⁸⁸ Dir 2003:10.

⁸⁹ SOU 2003:123.

⁹⁰ J.Rattsö [2002].

⁹¹ For an evaluation of the new budget law, see SOU 2000:61.

⁹² Ds 2002:18.

evaluation of the experience gained from the various systems tried in different areas and their impact on productivity has been made. However, healthcare studies show that an organisation with internal markets, divided, for example, into service purchasers and service providers, definitely increases efficiency and productivity.⁹³

Insufficient Adaptability when Age Groups Vary in Size

The demographic trend to an ageing population and the relatively large variations in the size of the different age groups are factors that have to be taken into account in the planning of local government activities. In the scenarios in the Long-Term Survey, it has been assumed that local governments will adroitly transfer resources from the area where, for demographic reasons, need has fallen to areas with increasing needs. That is not so easy to do in practice. It would mean that the resources for schools, for example, would be cut when the number of pupils declines and instead, the number of recipients in another service increases, for example, social services, only to increase again later in schools when the number of pupils increases. However, historical trends in schools, where the size of age groups varies relatively sharply from one group to another, point to difficulties experienced by municipalities in cutting costs when the number of pupils declines. Instead there is a tendency for the total resources to remain relatively unchanged while the number of pupils varies; thus, resources per pupil vary over time. A comparison between the number of teachers/headmasters and pupils shows a similar picture. Sandström (2002) comes to the conclusion that a school's size is not adjusted to suit a declining number of pupils and when the number of pupils increases, it takes several years before resources are increased. 94 If the assumptions made in the Long-Term Survey are to be realised, there needs to be a better way of adjusting the scale of various activities to match the demographic trends.

⁹³ M. Tambour & C. Rehnberg [1997] and U.G. Gerdtham, C.R. Rehnberg, & M. Tambour [1997]. ⁹⁴ F.M. Sandström [2002].

Development by Comparison

With the aid of information technology, it has become easier to compare developments in one's own municipality with developments in other municipalities or in other public authorities. In recent years, several Internet based services with the aim of facilitating comparative analyses between the various municipalities and county councils have appeared.95 These systems collect statistics from various municipalities and county councils, but the qualitative variables collected so far are relatively few. According to a study from the Swedish Association of Local Authorities, ⁹⁶ there is unused potential in the information currently available. According to the authors, the information, if correctly used, could lead to better forms of governance and better results for local government activities. Among the key factors needed for benchmarking to work well at the local level, the study names committed purchasers at the political level, comparisons that are conducted on a regular basis, confidence in the quality and relevance of the information, integration into the activities, and perceived usefulness among politicians, senior civil servants and representatives of those engaged in the activi-

Roseveare (2002) points out that the decentralised healthcare structure makes some county councils more innovative than others. However, it takes time before their experience spreads to the rest of the country. Better and more serious evaluations and monitoring of the changes that have been carried out would make the process of learning from others' experience easier.

6.2.2 Exposure to Competition and Private Producers

Since the beginning of the 1990s, exposure to competition and the use of private actors in the production of welfare services has increased in extent and forged a path in the work to reduce the costs to the public sector by improving efficiency.

⁹⁵ Examples are the Municipal Database (Kommundatabasen), the database of the Swedish Association of Local Authorities called WebOr, the database of the Federation of County Councils (Landstingsförbundet) New Healthcare Data in Focus (Nya Sjukvårdsdata i fokus) and the database for the Swedish National Agency for Education called SIRIS.

Different Forms of Exposure to Competition

Exposure to competition can take different forms. One possibility is to initiate comparisons between different entities in the public sector or create competition between public service providers in different buy/sell systems. A second alternative is competition that occurs in the form of public procurement, when several actors compete for the job of producing a certain service. A third alternative is to introduce some form of customer choice giving the user of the service the option of choosing between different private or public producers.

The competition should be designed based on the type of service intended. The first way is the most suitable for different forms of exercise of public authority, such as the police and services of a legal nature, for which it is not reasonable to have competing private actors to any great extent. Competition by public tenders is practicable, for example, for more technical services such as refuse collection, cleaning and snow clearance. These services are less complex, and thus it is simpler to write a contract. It is also easier to verify that the contract is observed. In addition if the service is standardised, the requirement that it be adapted to an individual's needs is limited. Public tenders are also relevant when the aim is to guarantee service in sparsely-populated areas or in certain narrow user segments where other forms of competition are not possible. Public tenders are also relevant when other systems cannot be expected to provide any competitive pressure or if there is considerable risk that the systems themselves will lead to an increase in demand. If public entities participate in the procurement, it is of course important that the public entity ordering the service is different from the public service provider. One factor that has to be considered in public procurement is the transaction costs in the form of drawing up contracts, monitoring and so forth.

Exposure to competition via some form of customer choice system may be relevant for services in which significant individual adjustment is important and the customer can also make an active choice between different alternatives. A customer choice system involves adjusting the service to individual needs and creating incentives for the producer to increase efficiency. At the same time, it assumes that the competition is functioning, that there are several options to choose from and that the individual can make a rational choice. This assumes, in turn, that there is information on

the alternatives and that the individual is able to choose (this is not always obvious, for example, those needing special housing under eldercare services). In addition, it is preferable that it be possible to change one's choice if one is not pleased with the service, a change which is not always easy (for example, for an old person in special housing, for whom the strain of another move may be too much). The system must also avoid a situation in which the producer, to improve efficiency, tries to choose the customers that are "cheapest" when the payment is based on an average cost. Finally, the system should be constructed so that the competition does not result in an increase in the total demand and thus increase the cost to the public purse (increased demand is not in itself a problem if it is financed privately, but it is a problem if it increases the cost to the public sector). The potential problems with customer choice systems for complex welfare services make careful design of the legal structure governing the activity necessary. With this form of competition, it is also important to consider the transaction costs when assessing the system's impact on total costs and efficiency.

Yet another possibility of changing the production of welfare services is privatising both their production and their funding, in combination with some form of regulation. A complete privatisation would increase efficiency in production, but it assumes that functioning markets will indeed emerge. The emergence of such markets is not a foregone conclusion and the reason for the public activity in the first place is often the occurrence of various types of market failures. Income redistribution objectives are an additional reason for the public activity. For a total privatisation of the public activity to lead to greater efficiency, there must be no market failures or such failures must be manageable by regulation or in another way. Moreover it is a condition that any changes in income distribution that arise are acceptable or can be taken care of by other measures. A complete privatisation also assumes a public sector regulatory system that may be associated with administrative costs, which are to be taken into account when the costs to society are calculated.

In a number of countries, there is a much greater element of private funding of welfare services than there is in Sweden. When the services are mostly privately funded, the arguments in favour of their public production are weaker. One reason for retaining public production in such a situation is that it might make it easier to monitor the activity. Another argument might be that it would cre-

ate conditions needed for the activity actually to take place. There are examples of combined public and private services in Sweden as well. Refuse collection is entirely funded by private means, but in many municipalities the service is performed by the public sector (or by private companies commissioned by the municipality). Here it is the existence of natural monopolies, combined with the external effects of an absence of garbage collection that make public control over the activities warranted. For welfare services, the occurrence of both market failures and income distribution policy objectives can affect the potential for improving efficiency by a total privatisation of the activities. The situation probably varies from one welfare service to another.

The conditions for competition may thus differ for different types of welfare services, and such differences may warrant various forms of competition. The regulatory regime in Sweden also varies from area to area and public tenders and customer choice occur in varying degrees for different welfare services. Public tenders are used for procurement in such services as eldercare whereas customer choice is uncommon in this service. In childcare and schools the situation is reversed. Parents have many options from which to choose and public tenders are rarely used.

More Private Sector Participation in Production

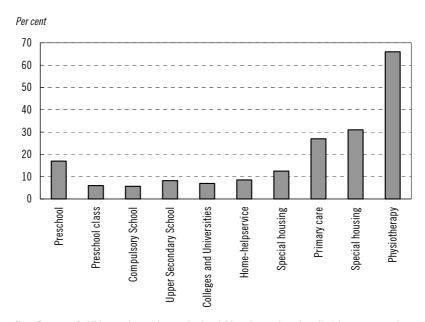
As a result of the expansion of the public sector, which boomed in the early 1970s, many welfare services today are mostly produced in the public sector. However, since the beginning of the 1990s, there has been a trend to more private actors in the production of welfare services, and the percentage of privately produced services has steadily increased for over a decade.

According to Statistics Sweden, there were about 765,000 persons employed in public authorities and about 105,000 employed in various firms producing welfare services, a small portion of whom were employed in publicly owned companies in 2001. Public employees, including employees in publicly owned companies, made up 88 per cent of those employed in welfare services in 2001, compared with 93 per cent six years earlier.⁹⁷

⁹⁷ SCB [2002]. In the report, welfare services are defined as preschool activities, care for school children, compulsory school, upper secondary school, municipal adult education, healthcare and care for the elderly and disabled and individual and family care and healthcare.

Since the early 1990s, the private element has grown in most areas⁹⁸, but the differences between various welfare services are still considerable (see diagram 6.3). The percentage of users receiving a privately produced service was low in compulsory schools, while well over half of visits to physiotherapists were to private producers.

Diagram 6.3 Percentage of Persons Using Privately Produced Welfare Services in 2002



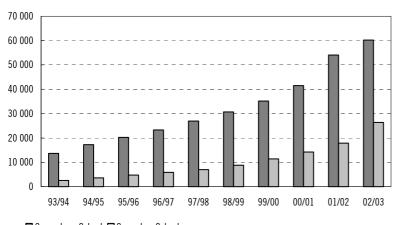
Note: Per cent of children registered in preschool activities, the number of pupils (nine-year compulsory and upper secondary schools), the number of students at post-secondary institutions, retired persons receiving healthcare/social services (home-help service, special housing), the number of patient visits (primary healthcare, specialised healthcare, physiotherapy). Primary healthcare, specialised healthcare and physiotherapy information is for 2001.

Sources: For the preschool, preschool class, compulsory school and upper secondary school: Swedish National Agency for Education (Skolverket) [a]. For post-secondary institutions: the home page of the National Agency for Higher Education (Högskoleverket): www.hsv.se. For home-help service, special housing, primary health-care, specialised healthcare and physiotherapy: the National Board of Health and Welfare (Socialstyrelsen) [2003].

⁹⁸ For developments since the beginning of the 1990s, see, for example, G-B.Trydegård [2001].

In 2002, 17 per cent of children were registered in privately operated preschool facilities, compared with 12 per cent in 1994. The number of pupils in independent compulsory schools has increased continuously over the past ten years and in 2002, 5.7 per cent of pupils attended independent compulsory schools. The number of students in independent upper secondary schools has risen sharply in the past ten years and in 2002, 8.2 per cent of upper secondary school students attended independent schools (see diagram 6.4). According to a study by the National Agency for Education, parents more commonly choose another municipal school over the one that is closest than they choose an independent school. 100

Diagram 6.4 Number of Pupils in Independent Schools, 1993/94–2002/03



■ Compulsory School
■ Secondary School

Note: Also includes pupils in Sami schools, international schools and National Boarding Schools. Source: Swedish National Agency for Education [a].

In eldercare, public production is definitely the most common, but the percentage of elderly receiving care from private actors has risen. In 2002, 8.5 per cent of the elderly received home-help service and 12.5 per cent special housing supplied by private actors.

⁹⁹ Swedish Association of Local Authorities [2003a].

¹⁰⁰ The National Agency for Education [2003a]; the study refers to the choice of the nine-year compulsory school.

In 2001, private healthcare providers were responsible for the operation of 24 per cent of community healthcare centres/doctors' surgeries. One year earlier, it was 14 per cent. However, in several counties there are only public community healthcare centres. In 2001, 27 per cent of visits to doctors in primary healthcare and 31 per cent of visits for specialised healthcare were made to private healthcare providers. ¹⁰¹ The public sector dominated institutional care, but there are also private elements present there. Private producers have long been common in physiotherapy; in 2001, 66 per cent of all visits to physiotherapists were made to physiotherapists working under private management. In 2001 over 40 per cent of dentists were privately employed.

6.2.2 Experience with Private Production

The empirical research on private production and competition in welfare services in Sweden, or under conditions similar to those in Sweden, is limited. There is no comprehensive evaluation of the changes that have taken place in the production of various welfare services. Moreover, the evaluations of changes in individual areas are in many instances inadequate. It is therefore not possible to get an overall picture of what impact the changes that have taken place in the public sector since the beginning of the 1990s have had on costs, productivity, quality, customer satisfaction and work environment. This lack of systematic evaluation of the reforms that were implemented is in itself noteworthy, not least when it concerns areas both of substantial economic importance to the public sector and of considerable importance to the individual concerned.

There is some knowledge of the effects of competition on technical services such as refuse collection, cleaning and snow clearance. A review of the international studies conducted in these areas shows positive effects in most instances. The distribution is large, but in many instances the cost savings amount to 10 to 30 per cent. One conclusion that can be drawn is that the competition itself brings about lower costs. It does not depend on whether the activities were carried out by a public or private actor. Swedish studies referred to by the Competition Authority (Konkurrens-

¹⁰¹ The National Board of Health and Welfare [2003].

¹⁰² The studies are summarised in box 1 in J. Lundsgaard [2002].

verket) in 2002 indicate cost savings dependent on competition of 0 to 10 per cent. However, according to the Long-Term Survey, these results are not directly transferable to the production of welfare services. Welfare services are considerably more complex and it is also considerably more difficult to measure their quality. For some services, the difficulties of writing contracts and monitoring their observance may be so substantial that the transaction costs will be high. The transaction costs for certain complex services may also be unreasonably high for small municipalities and as a result, they may be more apt than other municipalities to choose to produce these services themselves.

The Competition Authority (2002) and Andersson (2002) refer to a number of studies on the impact of competition on welfare services. According to these studies, the quality has not been depleted and no major segregation tendencies have been observed. The costs have been forced down somewhat. Misgivings that profiteering would undermine activities appear not to have been verified.

There are few studies of how the quality of the services has evolved when participation by private producers increases. The Swedish Quality Index (Svenskt Kvalitetsindex) is a system for collecting and analysing information on customers' expectations, the quality experienced and the valuation of goods and services. ¹⁰³ As Table 6.1 shows, customer satisfaction is generally higher in private activities than it is in public activities. The exception is eldercare. Here public care (special housing) shows somewhat higher customer satisfaction, but the difference is not statistically significant. Eldercare also differs from childcare and compulsory school in that public tenders are most commonly used to procure private production. Thus arrangements for eldercare are in most instances made not by an active customer choice to use a private producer, but as a result of local government procurement.

¹⁰³ Swedish Quality Index.

Table 6.1 Differences in Customer Satisfaction with Welfare Services in 2002

	Customer satisfaction with private versus public production
Childcare	Very much more satisfied
Compulsory school	Much more satisfied
Eldercare	Slightly less satisfied
Healthcare	Very much more satisfied

Note: The result for eldercare is not statistically significant. Source: Swedish Quality Index, www.kvalitetsindex.org

The use of procurement and external providers has led to increased competence on the part of the authorities purchasing the service because they are now compelled to formulate clearer objectives for the activity. Public production has also benefited; that is, public procurement has caused public production to become more efficient. Competent public procurement officials are indispensable if competition in the production of welfare services is to function well. To maintain proficiency in public procurement and be able to write good contracts, it may be necessary to keep some production under public management. At the same time, it is important that the procurement process does not favour public production and thus eliminate the competition. 104

As mentioned, competition and private producers can increase the administrative costs and these higher costs must be taken into account in assessing the total impact of competition. It is difficult to find any information on the past and present costs of contracting out welfare services in Sweden. ¹⁰⁵ Owing to this lack of information, it is not possible to assess the total impact that competition has on the costs of producing welfare services.

No Dramatic Effects in Any One Area

There are studies in individual areas that can contribute to the knowledge about the effects of the changes. Moreover, greater

¹⁰⁴ F. Andersson [2002].

¹⁰⁵ Two foreign studies estimate the costs for technical services to be a few per cent of the contract's total value, J. Lundsgaard [2002].

competition and private production of various welfare services form the subject of several current studies and inquiries. 106

Of the studies made in individual services, most concern the increasing participation of private producers in schools.

Björklund et al. (2003) draw four conclusions about the impact of the growing number of independent schools. First, they point out that the increase in the number of independent schools has contributed to increased segregation between schools. Second, they found no connection between the percentage of pupils in independent schools and the costs per pupil. Third, they concluded that there was a positive connection between learning achievements in the ninth form and the percentage of independent schools, but that this effect was relatively small. Fourth, they found no connection between academic achievement and the proportion of private school pupils who were foreign-born or had parents with little education.

Ahlin (2003) concluded that more competition from independent schools at the compulsory school level improves pupils' grades in mathematics, but has no significant impact on achievement in English and Swedish. In addition, the study indicates that the grades of children of immigrants and children with special needs tend to gain more by increased competition from independent schools than other children do, but children having a mother with little education showed some tendency to do less well. A study of upper secondary school results that took into account such factors as students' backgrounds indicates that the independent upper secondary schools are better able to improve students' results than the municipal schools.¹⁰⁷

Misgivings have been expressed that more independent schools would lead to increased segregation. Before the number of independent schools began to grow, the Swedish school already had many different and separate educational and cultural milieus. Studies have shown that 80 per cent of the children whose parents were professionally employed and/or were university graduates

¹⁰⁶ The National Board of Health and Welfare is currently studying competition and its impact on eldercare. The Competition Authority (Konkurrensverket[2004]) has studied the competition in dental care. A public commission of inquiry has recently analysed the private operation of hospital emergency departments (SOU 2003:23). The Competition Authority (Konkurrensverket [2002]) has described the incidence of competition and private producers in eldercare and healthcare. The National Social Insurance Board (Riksförsäkringsverket) has been instructed to study the independent pricing of dental services (Riksförsäkringsverket [2003c]).

¹⁰⁷ Ds 2001:24.

professionally employed and/or were university graduates were enrolled in classes that were not attended by 80 per cent of the children whose parents were labourers. Björklund et al. (2003) concluded that the increase in the number of independent schools has contributed to greater segregation between schools because foreign-born children and children of the well-educated attend independent schools in greater numbers. Andersson (2002) points out that existing studies do not indicate that students or parents from certain groups systematically make unwise choices even though the degree of active choice may vary between different groups.

There are no studies about the effects of parents' choice of a municipal school other than the closest one, even though this choice is more common than choosing an independent school.

There is a relatively large element of private production in childcare, but there do not appear to be any studies on how this may have affected costs, quality or productivity.

There is relatively little private production in eldercare and even less individual freedom of choice. Swedish studies indicate that public procurement may have contributed to stopping the trend to relatively large cost increases. ¹⁰⁹ The largest impact on the growth in costs seems to occur in the first year of exposure to competition. Another conclusion is that contracting out has given an impetus to quality consciousness and greater interest in following up on activities. The National Board of Health and Welfare has been given the task of analysing the effects of competition in eldercare.

There is also inadequate knowledge of the effects that a greater number of private producers and more freedom of choice for patients have had on healthcare costs and productivity. Even though no definite conclusions can be reached, it appears from the statistics that have been gathered thus far that few exercise the right to choose healthcare providers and knowledge of that right is inadequate. Even so, many appreciate that freedom of choice exists. 110

¹⁰⁸ The National Agency for Education [1998].

¹⁰⁹ See, for example, M.Svensson & P.G.Edebalk [2001], and the Competition Authority [2002], which has a compilation of various studies and an appendix with a special study of eldercare.

eldercare.

110 P.Blomqvist & B.Rothstein [2000].

6.3 Potential for Greater Productivity

As discussed earlier in the chapter, the available, albeit inadequate, statistics on productivity growth in the public sector do not provide any basis for a particularly optimistic view of the potential for improving productivity in the public sector. There are arguments both for and against improved productivity growth in the future. In addition to the factors already discussed about labour intensive services with limited potential for rationalisation and technological improvements to productivity, there are a number of other factors that may affect future productivity growth.

6.3.1 Exploiting Municipal Experience

Municipal Cost Differences

The municipalities are responsible for a considerable part of the welfare services. A comparison of the costs of various activities in different municipalities gives some indication of whether or not there is any potential for more efficient production in some municipalities. This comparison shows, for example, that the cost of upper secondary school in the municipality with the highest costs is almost twice that of the municipality with the lowest cost; for compulsory school, the difference is more than 60 per cent.¹¹¹

However, simple cost comparisons of this type have to be made with some care, as they do not take into account such factors as structural differences or differences in the level and standard of service between municipalities. The Swedish Association of Local Authorities makes regular comparisons of the costs between different municipalities that take into account structural differences between the municipalities, such as differences in age structure or the cost of school premises. Even when structural factors are taken into account, there are still substantial cost differences between individual municipalities.

There are various explanations for these cost differences. One possible explanation is that not all structural differences are captured in the measurements used. An example of one such difference that has not been taken into account is that wage levels are

¹¹¹ Swedish Association of Local Authorities [2002b].

generally higher in some areas than in others, the Stockholm area being one example. A second possible explanation is the differences in level and standard of service in various municipalities; that is, some municipalities deliberately choose to expend more (or fewer) resources on a specific activity to achieve a good quality.

A third possible explanation for the cost differences is the differences in efficiency from one municipality to another. Unfortunately there is little in the way of data for assessing how large a part of the proven cost differences depends on differences in efficiency between municipalities.

Learning from Others

As previously mentioned, the potential for development found in the available statistics is not fully exploited. Improved use of the comparative method could upgrade both municipal and secondary local government authority activities. However, this requires committed purchasers at the political level, ongoing work to get an anchorage in the activity, and perception of usefulness among various actors.

Better and more serious evaluations and follow-ups of the changes implemented in various activities would make a learning process easier.

The Commission of Inquiry on Innovative Processes (Utredningen Innovativa processer)¹¹² has presented proposals on how municipalities and county councils can systematically make better use of research and development (R&D) and other knowledge to modernise and improve their work. The proposals are based on a survey of the extent to which municipalities and county councils use R&D to modernise and improve their own work. Among the five proposals submitted by the Commission was the establishment of a new broadly based and high-quality database of local government experience. Such a database would improve local governments' ability to learn from each other and from past experience.

R&D in welfare services may possibly increase in line with higher relative costs for many of these services. With higher relative costs for welfare services, the relative return on investment in

¹¹² SOU 2003:90.

R&D will increase in these areas. This increase could lead to more research and thus more rapid development of these services.

6.3.2 Lower Productivity after Large-Scale Recruitment

As Chapter 3 made clear, large-scale recruitment of staff for the public service will be needed in the future as a result of the increased volume of activities and retirement. With the current low volume of students in certain education programmes such as social services, it might be necessary to recruit persons who have no training in the area in which they are to be employed. This will mean that experienced staff will be replaced by less experienced persons and to some extent, by persons without the relevant training.

Such a development will very likely affect productivity in the production of welfare services. New employees will need a learning period before they can work as efficiently as those with more experience and experienced staff will have to set aside a larger part of their working time to train the new employees. Both these factors will mean that production will be lower, for a given input of resources; in other words, productivity will fall during the transition period. The extensive recruitment needs in the production of welfare services can thus reduce or eliminate any potential that may exist for productivity growth in the public production of welfare services.

One special problem that will need to be addressed is how to establish good service in sparsely populated areas with a large percentage of elderly in the population. In future certain regions will have a much higher percentage of elderly and persons needing various forms of care. This problem is examined in more detail in Appendix 3 of the Long-Term Survey. In some smaller regions, over 40 per cent of those working will be employed in the public sector in 2020, compared with about one third in the country as a whole. In Appendix 3 of the Survey, there are estimates of the shortage of certain types of labour in various regions. The analysis indicates a significant shortage of trained medical personnel in many regions, including northern Sweden. In these regions, the impact of a shortage of available staff on production could be substantial.

6.3.3 More Competition in the Production of Welfare Services

Experience thus far with competition, private producers and more freedom of choice points to a number of areas in which the regulatory structure and conditions would need to be changed for competition and customer choice systems to function well and thus to be able to contribute to higher productivity.

For a customer choice system to bring about a well-functioning competition, there must be both a good basis for decision-making and active choice by individuals. More needs to be done in both respects to achieve better functioning customer choice systems. Greater competition and customer choice also requires well-functioning systems for oversight and follow-up to guarantee equivalence in the services provided and counter tendencies to limit competition through market concentration.

Improved Access to Information

An individual's access to good information about the quality of a service is a basic prerequisite for a customer choice model if it is to lead to the desired competition. There needs to be some independent party who puts together reliable information about different actors. However, this may be difficult in practice. In such cases, a first step is to take the initiative in research or in development leading to the design of a ratio that quantifies the quality of the activities. However, one risk with various ratios is that the actors elect to concentrate on achieving good results in the areas for which there are ratios. Other equally important areas that are more difficult to quantify receive less attention. This has been discussed in the schools where it is considerably easier to measure quantitative results with the help of various tests, while other objectives may be more difficult to measure. The issue is discussed in Björklund et al. (2003).

The National Board of Health and Welfare is pursuing work to develop follow-up procedures for activities in healthcare and eldercare. The work should result in better means of follow-up and evaluation in the long term.

¹¹³ The National Social Insurance Board [2001].

Despite the difficulties that exist in finding objective, well-functioning indicators of the quality of the available alternatives, it is nevertheless better for the individual to have access to information before making a choice. Therefore, the aim in all areas where some form of customer choice exists should be for the public sector to be responsible for putting together the relevant information.

Promoting Active Choices

If customer choice is to promote competition, the individual must make an active choice. This cannot always be taken for granted. With the choices that now exist respecting schools, it is possible that some groups may be more active than others when it comes to a choice of school. It is important to follow developments in this area so that no group of pupils is at a disadvantage because their parents have been less active in the school selection process. In the event that a trend showing significant differences in the utilisation of existing options becomes discernible, a major effort to inform certain groups may be appropriate. It is also important to follow up so that freedom of choice does not lead to greater segregation in society. However, having all schools under public management is no guarantee against this happening.

Elderly who need care may have difficulty in making an active choice themselves. The cost to a person in special housing of changing providers may be considerable in the form of the inconvenience involved. In those municipalities where different options exist, few elderly appear to make an active choice. Therefore, for customer choice in eldercare to function well, measures are probably needed to encourage active choices. A first step would be to examine the reasons why so few make an active choice. Subsequently it may be appropriate to proceed with measures, for example, in the form of concerted information efforts or independent individual advice and help at the time that the choice is made.

¹¹⁴ The Competition Authority (Konkurrensverket[2002]).

Better Monitoring and Follow-up

With more private providers, the need for supervision, follow-up and evaluation increases since the possibilities for direct control of the activity decrease. Furthermore, it is important that all providers, both public and private, are monitored in the same way in order to uphold the objective of equivalence in the services provided. Supervision, follow-up and evaluation are also important for it to be possible to provide objective information in connection with individual choices. For supervision to be effective, some form of sanction is also required. The sanctions system should be similar for both private and public actors. However, it has to be taken into consideration that the municipalities have ultimate responsibility for seeing that the activities are carried out, so it is hardly possible to close down a public provider unless there is an alternative.

One potential problem that may need to be faced is what one can do for users of a service when the provider, for various reasons, cannot supply the service in its entirety or whose activity is ultimately discontinued.

Assessing the Need for Care

From a resource allocation perspective, the effectiveness of a customer choice system in eldercare depends on how well the elderly person's healthcare and other needs can be defined and measured, and whether or not the resources needed at that particular level can be defined. If the payment for the care provided does not cover the provider's costs, there are consequences not only the provider, but also for the elderly person. If, for example, the provider is only paid for the inputs defined in the decision granting aid, there is a risk that the provider will not give sufficient priority to activities that indirectly affect the care recipient, for example, healthcare planning or co-operation groups. With more use of competition in eldercare, it is important to take into account various types of potential problems.

Preventing Market Concentration

It is also important to see that there is not too much concentration among the private firms so that there is no risk of reduced competition. Greater concentration increases the risk of weakening competition in a given area, which is not good for either cost or quality. The risk is potentially greatest in the activities having the largest element of big profit-driven firms, which currently is true in eldercare and healthcare. In childcare and the schools, current private alternatives are predominantly not-for-profit small actors and hence, the risk of concentration is not especially high at present. Countering concentration tendencies that risk leading to a deterioration in competition should be a task of the Competition Authority within the framework of competition law.

The design of the competition system is also an important factor in how the market will function. Public tenders in some instances have tended to be on such a large scale that only big, established companies have been able to submit bids. Such a development may in the long term result in less competition owing to increased market concentration. Customer choice systems in which the public sector approves producers based on certain criteria but does not guarantee any production volumes, but gives the individual the right to choose the provider, can make it easier for small companies to compete.

6.4 Greater Productivity in Public Activities: Important but Not Enough

For public consumption at a given level of taxes to be able to grow at the same rate as private consumption, the productivity growth required in the public sector appears unattainable in the light of historical trends in productivity in Sweden and in other countries. A growing proportion of public sector production in future will consist of healthcare, social services and education, areas in which the prospects for steady productivity growth are limited since these activities are, and most likely will remain, labour intensive, with few opportunities for rationalisation. Technological developments in this area can also create the conditions for higher productivity growth, but not to the extent found in large parts of the production of goods.

The cost differences found between municipalities indicate that there is some potential for more efficient production. This is probably also true of county council (and central government) responsibilities. This means chiefly that there is some potential for raising the level of productivity, rather than the rate of growth.

Obviously all possibilities for higher productivity should be used to advantage since doing so means more or better services are obtained using the same resources. This is so even if increased productivity alone is not sufficient to finance public sector growth in future. Therefore systems need to be developed for providing welfare services in such a way that it is possible to take advantage of any existing potential for productivity improvements in the short and long term.

7 More Alternative Funding for the Welfare System

One of the main points made in the Long-Term Survey is that there will be a demand for more and better welfare services and it will be difficult to fund this demand with more tax increases. The potential for productivity improvements is limited as well. The productivity improvements that are possible are not expected to be adequate to meet the higher demand for welfare services that in the long run results from steadily rising incomes.

This chapter focuses on the possibilities of increasing alternative financing of the welfare systems. The chapter begins with a brief survey of the reasons for collective funding of welfare services and the types of insurances that are to provide protection against loss of income. Next there is a discussion of different ways in which more alternative funding could take place: instituting higher fees for the welfare services, incorporating a greater element of private solutions into the social insurance systems, no longer giving priority to certain activities, or setting a basic level for the tax-funded service with the possibility of supplementing it with private payments.

7.1 What Taxes Fund and Why

There are several reasons for the high level of tax-funding of welfare services. One of the main arguments is that these services should be provided as needed, not according to capacity to pay. Another reason for tax-funded welfare services is that these services contribute to a higher labour supply and thus to a larger tax base. As well, tax funding of these services affects the scope for consumption distribution between households. With tax funding, those having the greatest need of welfare services have more money left over for other consumption. As taxes are levied according to

ability to pay, there is also a redistribution from high-income to low-income earners.

Subsidisation of the welfare services is also linked to their consumption in that this consumption is in many instances perceived as a worthy aim. In a good many cases, the services are considered to give rise to various positive external effects. This is especially true of education and healthcare.

Consequently a number of desirable effects can be achieved with tax funding. However, these gains must be weighed against the economic losses that may arise. One risk is that welfare services may be provided on a larger scale than what households are actually willing to pay for and what is justified from the standpoint of efficiency. The chances of detecting such a misuse of tax funding are few when the services are free or the price is low from the users' perspective. An overproduction may also occur if the resources appear barely to meet the demand generated by the absence of fees. Another problem is the negative impact that taxes may have on the labour supply and thus the prospects of funding the welfare services and other measures (section 4.1.1).

Why Publicly Funded Social Insurance?

A fundamental task of every society is to find solutions to the problem of providing for those individuals who do not have sufficient capacity to provide for themselves. The chief aim of social insurance is to contribute to citizens' income security. The protection covers loss of income in the event of illness, unemployment and childbirth and in retirement. Parallel public and private solutions can be found within the family and on the market, for example, labour market agreements.

Social insurance is normally obligatory. Another characteristic is that it is usually uniform. Irrespective of risk, a set premium is paid, often a certain percentage of income. The insurance is funded by payroll taxes, social insurance contributions by self-employed persons and taxes. For the individual, there is a considerable connection, up to a certain income level, between the fees levied and the benefits available. In this respect, social insurance calls to mind similar private insurance solutions.

Even though the principal reason for social insurance is not to level out social differences, there is an element of this in the present design. One factor influencing social insurance in this respect is that fees are also levied on incomes that exceed the income level that is covered by the insurance. Another factor is that the premiums are set without taking into account that the risk of loss of income is unequal for different income and occupational groups. Such a differentiation would have been inevitable if the insurance had instead been voluntary. One important criterion for the solution chosen is that income security is to be obligatory and the same for everyone.

7.2 The Possibility of Increasing Fees for Welfare Services

Increased alternative funding of public activities can, in principle, be achieved in two ways. One possibility is for the private element to increase side by side or in place of the public activity, that is, privatisation. The other possibility is to fund the public systems by making more extensive use of fee-based funding instead of tax funding.

The difference between what constitutes a tax and what constitutes a fee is not always obvious. A tax is usually defined as an obligatory payment that is not associated with a benefit of an equivalent value. A fee may be obligatory, but in that case, the fee must not exceed the price that the individual would voluntarily pay for the benefit. If it does, the fee must be regarded partly as a tax.

This section analyses the possibility of creating room for the welfare services to continue to grow under public management by using more fee-based funding for these services. The fees provide additional revenue, but mean that demand is kept in check also. Therefore the introduction of fees can also be a way of checking demand that otherwise over time would grow more rapidly than the public sector's capacity to deliver.

Increased fee-based funding has several advantages over privatisation. One advantage is that even in the future, it will be possible to affect in a political way the design of the services; where, when and how the services are distributed; and if any form of rationing and needs assessment is to guide their provision. With politically established fees, it is possible to design the fees in such a way that the appropriate balance is found between efficiency and income redistribution. With funding remaining a political decision, it should also be easier in principle to preserve the objectives of a universal and equal welfare for everyone.

Despite the advantages of fee-based funding, introducing fees in practice is not without problems. Even though it is easy to perceive the need for higher and additional fees, it is much more difficult to decide which fees should be raised and in what new areas fees can be levied.

Another part of the picture is that the answers to these questions have to be modified over time. For fees to generate steadily growing resources, these fees must gradually be extended. This means not only higher fees, but also the need for the subsequent introduction of new fees. What today can be funded by taxes may not be possible to fund in the same manner tomorrow. For providers of welfare services to be given access to growing resources, new decisions regularly need to be made on what is no longer, or to a lesser degree, to be tax funded.

This will be an extremely difficult balancing act between redistribution principles, various efficiency arguments and the rationing effect that the fees will have on demand. It is difficult as a rule to weigh the various distribution considerations against each other, but even more difficult when these considerations are to be reconciled with a number of other considerations. It will be an equation with many uncertain parameters. And an equation that will need modifying over time.

7.2.1 Current Fees Are Few and Modest

At present, there is relatively little use of fees to fund public welfare services. This is also true of services that are individualised and that have relatively high marginal costs. That fees contribute so little to the funding of welfare services is not only a result of the low fees, but also the consequence of many services having no fee at all. This is especially true of basic education and healthcare.

Table 7.1 shows the extent to which fees contribute to funding a number of municipal activities. The activities selected are to some extent funded by fees, but are not public utilities. In 2002 the total revenue in the form of taxes and fees for proper municipal activities (that is, activities that are not public utilities) amounted to

SEK 13 billion. At the same time, the cost of this part of municipal activities came to about SEK 350 billion. In other words, revenue

from fees accounts only for just under 4 per cent of the total cost of proper municipal activities.

Table 7.1 Municipal Revenues from Taxes and Fees in 2002

	Revenue from fees, SEK billions	Costs, SEK billions	Fee-based funding as a per cent of cost
Childcare	4.3	44.0	9.7
Eldercare	3.5	75.7	4.7
Care for the disabled	0.4	34.6	1.1
Sports and leisure	0.7	9.6	6.8
Streets, roads and parking	1.2	9.1	13.6
Other (e.g. schools)	2.9	176.4	1.6
Total proper activities	13.0	349.3	3.7

Note: Revenue from rent is not included in fee-based revenue from eldercare and care for the disabled. If revenue from rent is included, the percentage of fee-based revenue increases to 8.8 per cent of the cost of eldercare and to 3.2 per cent of the cost of care for the disabled.

Source: SCB [2003d].

The baseline scenario in the Long-Term Survey assumes that the current level and design of the welfare services will be retained. The changes in the services offered in the future will principally be a result of changes in the size and age composition of the population. Resources for welfare services in this projection are thus largely unchanged, calculated on a per user basis.

More resources will be needed to enable the municipalities and county councils to meet the demands caused by demographic changes. The baseline scenario assumes that tax rates do not change. Instead resources are supplemented by increased central government grants. In the calculations, the percentage of the costs of production that revenue from fees is assumed to account for is unchanged.

Income from fees increases both because more welfare services are being provided and nominal fee rates are higher. Since fee rates are assumed to grow at the same pace as production costs, the increases will not provide any real additional resources. However, as a result, fees for welfare services will increase more rapidly than consumer prices in general. This relative rise in fees does not result in any change in the percentage of household disposable income spent on welfare services. This is true even though in practice households do not have access to more or better welfare services.

More fee-based funding aimed at producing real additional resources for the production of welfare services means fee increases higher than those assumed in the Survey's scenarios. This is the basis for the discussion of the conditions for increased fee-based funding in this section.

Fewer Preschool Groups Funded by Higher Childcare Fees

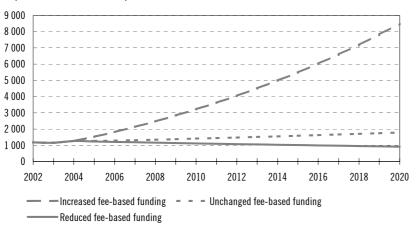
The expansion of fee-based funding assumed in the Survey's scenarios does not conform to current regulations on pricing in all areas. For example, childcare and eldercare – areas with a relatively high percentage of fee-based funding (table 7.1) – are activities for which a regulatory structure has been created that controls the maximum fee that can be levied. In childcare the objective is for the maximum fee to remain nominally unchanged, while the ceiling on the fee for eldercare is to follow the consumer price index. In both cases, this means that these fees tend to grow at a slower rate over time than the cost of the activities does. Consequently the fees for these activities gradually decline in importance as funding sources. The assumptions made in the Long-Term Survey can be construed to mean that current regulations will be changed or alternatively, that in time new fees will be introduced in both these areas. 115

Diagram 7.1 shows calculations for childcare that illustrate this phenomenon. The middle curve reflects the extent to which the maximum charge for childcare needs to be raised after 2004 for fees charged to grow at the same pace as the costs of the service in accordance with the assumptions made in the Survey. The lower curve shows a nominally unchanged maximum charge. The upper curve shows the fees that would need to be levied to be able to fund much smaller groups of children. All three fee levels are expressed in terms of 2004 consumer prices. This means that deductions have been made for future changes in the general price level.

¹¹⁵ According to current rules, the preschool fee must not exceed 3 per cent of a household's income up to a maximum of SEK 1260 a month for the first child, 2 per cent up to a maximum of SEK 840 kronor a month for the second child and 1 per cent up to a maximum of SEK 420 a month for the third child. There is no fee for the fourth child.

Diagram 7.1 Maximum Charge for a Child in Preschool, Illustrative Calculation

SEK per month in 2004 consumer prices



Source: Own estimates

The lower curve, labelled reduced fee-based funding, reflects the highest charge, nominally unchanged, for a child in preschool. The downward slope of this curve is a result of the decline in the preschool fees in relation to consumer prices in general. In the calculations done for the Long-Term Survey, the consumer price index is assumed to increase by two per cent a year. With rising household income, a growing number of households reach the nominally unchanged ceiling. This means that more and more households will all pay the same fee, that is, the nominally unchanged maximum. Future differences in the childcare fee will increasingly be the result of differences in the number of children rather than differences in income.

The middle curve, labelled unchanged fee-based funding, means that the fees are raised at the same pace as the increase in the costs of providing the childcare. Thus childcare fees will be raised at approximately the same rate as the rise in household disposable income, but more rapidly than prices for other consumption. The fees levied will differ between households with different incomes in the future as well. Income from fees in this alternative is in line with the calculations in the Long-Term Survey, unlike the alternative with a nominally unchanged maximum childcare fee.

The upper curve, labelled increased fee-based funding, is intended to illustrate a hypothetical case in which the fees are raised to the extent necessary for these increased fees alone to fund in its entirety a gradual decline of 25 per cent in the size of the groups of children by 2020. With this improvement in available resources, it would be possible to spread the same amount of resources in the form of school premises and staff among 15 children that was previously spread among 20 children. This change is assumed to take place gradually, beginning in 2005. Group size will first reach the size referred to in 2020. In 2010 group sizes will have dropped by 10 per cent, a decrease which means that the same quantity of premises and staff will then be used for 18 children instead of 20 children, the size in 2004. 116

Relatively substantial fee increases are required if fees alone are to contribute to a resource improvement of this extent. In 2010 it is estimated that the maximum charge for a child will need to come to over SEK 3,600 kronor, or almost three times as much as in 2004. The new fee in 2010 when discounted to 2004 consumer prices is SEK 3,200 as compared with the actual maximum charge of SEK 1,260 in 2004. In 2020 the maximum charge for one child in childcare will need to be SEK 11,700. In current kronor, this charge would come to SEK 8,500. With three children, the fee, like today, would double.

Naturally, it is not only the fee ceiling that is assumed to be raised, but also the limits on the fees that can be levied in relation to household income. As table 7.1 shows, childcare fees in 2002 made up almost 10 per cent of the total costs. The percentage for preschools was a little lower (about 8 per cent). In the calculation of the example with higher quality, this percentage needs to be increased to 38 per cent. Likewise, the fees have to be raised in relation to household income. Currently, the fee for the first child must not exceed 3 per cent of household income before tax. In the projections, this limit needs to be raised to 15 per cent. With the same shift in the limits for the second and third child, a family with three children in preschool would pay a maximum of 30 per cent of

¹¹⁶ In the illustrative calculation, it is assumed that costs for premises and staff amount to 90 per cent of total costs. A reduction in the size of the groups of children by 25 per cent results in a cost increase of 30 per cent.

gross income in childcare fees compared with 6 per cent today (table 7.2). 117

Table 7.2 Fees for Children with Higher Quality Preschool Care, Illustrative Calculation

Per cent of household income

	2004	2010	2020
One child	3	7	15
Two children	5	12	25
Three children	6	14	30

Note: The figures refer to the rates charged for households with incomes below a fixed cut-off point In 2004 this cut-off point was at a monthly gross income of SEK 42,000 Households with higher incomes pay a lower percentage of their income in childcare fees. In the estimates, the rise in the cut-off point is assumed to correspond to the increase in household income.

Source: Own estimates.

The childcare fees in the example in table 7.2 would need to be increased 500 per cent in relation to household income. Such an increase would obviously limit the other consumption possibilities of families with children. A family with three children in childcare in 2020 would have less left after paying childcare fees than a similar family in 2004, even though real income before childcare fees is estimated to be 34 per cent higher than it is today.

Such a high fee levy can scarcely be reconciled with the current aim to have no one excluded owing to high fees from an early start in learning and developing. Another problem is the high marginal effects for families with small children that would result. Fees as a percentage of income as shown in table 7.2 refer not only to fees as a percentage of total household income, but also the extent to which the amount of the fee is affected by changes in individual household income. For example, a family with three children in preschool in 2020, will have to pay an additional SEK 300 in childcare fees if the household's gross income goes up SEK 1,000. The

¹¹⁷ The ceiling on the childcare fees refers to both the nominal amount of the fee and its percentage of household income. In 2004 the highest fee for a child in preschool is SEK 1,260, but the fee must not exceed 3 per cent of a household's gross income. Consequently, households with a monthly income exceeding SEK 42,000 pay a fee (SEK 1 260 kronor) amounting to less than 3 per cent of income. In the illustrative calculation it is assumed that the fees as a percentage of household income will be raised to the same degree as the ceiling for the maximum monthly fee.

¹¹⁸ Government Bill 2003/04:1, volume 8.

actual proceeds of a rise in income will be further reduced since part of the increase will go to higher income tax payments. In addition there are the marginal effects that various allowances may give rise to. With such childcare fees, the financial incentives to work risk becoming largely nonexistent for broad groups of families with small children.

The calculations shown should be viewed as a fictitious example, but they do illustrate the difficulties of using higher fees to fund higher preschool standards.

Can Higher Pensions Pay for Higher Eldercare Fees?

Eldercare fees are another area of activity where relatively substantial sums are levied. Hopes are sometimes expressed that future fees for this service will be able to contribute more to funding it than they do today. Underlying these hopes are expectations that retired persons as a group will have increasingly better incomes and thus in time, they will be better able to pay for healthcare and social services out of their own pocket.

In recent decades, retired persons as a group have experienced considerably better income growth than other groups in society. The reason is not that the incomes of *individual* pensioners have increased very much. The improvement instead stems from the "replacement" over time of retired persons with low incomes by retired persons with better incomes. These shifts in the composition of this group are the main reason for its favourable average income growth.

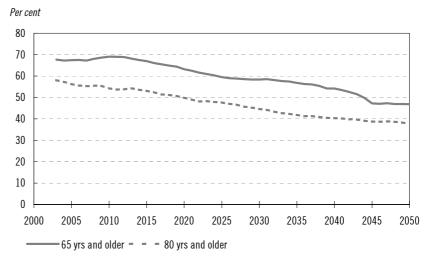
There are generally risks in drawing too far-reaching conclusions from trends. Past trends do not always continue unchanged. This circumstance is especially true of retired persons' average income. The improvement in retired persons' incomes to such a great extent in recent decades is largely a result of the national supplementary pension system (ATP-system) introduced in the early 1960s. Since then, a great many retired persons with no or only a small national supplementary pension have died, and at the same time new retired persons with substantially better benefits have been added. This process is now largely completed, and as a result, average incomes of retired persons from now on will grow more in line with general income developments.

One factor limiting these prospects is the new pension system that has been introduced. An important plank in this system is the strong connection between what is paid into the pension system and what is paid out. A gradually rising average life span means that there will be more retired persons. For this reason, the accumulated pension funds that have been earned will have to be divided among an increasing number of people. The increase in the average life span being predicted will therefore have a significantly negative impact on the future size of pensions.

Between 2002 and 2020, the average life span after 65 years is expected to increase by two years. This means that the average number of years remaining in the life of someone aged 65 will increase from 16.9 to 18.9 years, or almost 12 per cent. At the same time the risk of dying before aged 65 will continue to fall. In total, the average lifespan will increase by more than three years between 2002 and 2020. As well, the increase in the average lifespan connected with the lower risk of death at a younger age contributes to limiting the size of average pensions in future. With an increasing number of retirement-aged people, more will have to share the accumulated pension funds.

The gradually rising lifespan means that retired persons as a group will have to tolerate a poorer income growth than other groups, assuming that people will start drawing on their retirement pensions at the same age as they do today. Between 2003 and 2020, retired persons' average taxable income after deducting taxes is estimated to increase by 7 per cent less than the average incomes of those in the 20 to 64 year age group. The corresponding figure for those 80 and older is minus 14 per cent (diagram 7.2).

Diagram 7.2 Average Incomes of Older People, 2000-2050, Compared with Those Aged 20 to 64



Note: The information refers to taxable earned income after income taxes paid have been deducted. Included in income are wages, public taxable transfers, and benefits from occupational pension schemes.

Source: Own estimates.

For eldercare fees to be able to cover a greater part of the activity, the fees will have to use progressively more of retirees' incomes. In the estimates in the Long-Term Survey, this shift is assumed to take place just when the fees for care of the elderly are rising at a considerably faster pace than retired persons' average incomes. The fees for eldercare (including rent) are assumed to increase an average of 3.9 per cent a year. However, pension incomes for those 80 years of age and older will only increase by 3.1 per cent a year on average. Over 17 years (that is, between 2003 and 2020), this development means that the fees for care of the elderly will increase markedly in relation to older people's incomes.

In this case, prospects for fee increases in addition to those estimated, have to be based on the assumption that retired persons as a group will have a considerably greater ability to make do on less income than other groups in society. The fact that older people's incomes will fall significantly in relation to other age groups makes it even more difficult to raise the fees on services that are used primarily by retired persons.

Another factor that limits the possibilities of a more substantial increase in fees in this area is the relatively high costs that are associated with eldercare. On October 1, 2002, 125,200 retired persons had home-help service in their own homes. At the same time, approximately the same number lived permanently or temporarily in special housing. The cost per recipient of care in one's own residence came to SEK 182,400, while the corresponding cost for those in special housing came to SEK 445,700 kronor. ¹¹⁹

The high average costs are a result of a gradual shift in the main focus of eldercare to those requiring more care. There are still elderly persons who get significantly less care than the average reported above. However, it is important to point out that these more limited measures have only a small impact on the budget for eldercare. Given continued growth with scant resources and growing needs, the average cost of caring for the elderly tends to continue rising. Less can be spent on expanding and improving services and more has to be spent on those elderly requiring substantial resource inputs in the form of nursing care.

This continuing shift in activities is a contributing factor in limiting future prospects for more substantial fee-based funding. This is due to the fact that the costs per person receiving care will be so high that only a limited part of the costs can be funded by fees and that the service for which the fees are levied will increasingly have to do with nursing care and to a lesser extent with social services.

More Fee-Based Funding Requires More Fees

The possibilities of increasing the fees have been discussed in two areas in which the fees already contribute to the funding to some extent today, namely childcare and eldercare. One conclusion that can be made is that increased fee-based funding is not without problems. With a fee of 5 to 10 per cent, as in preschool and eldercare today, it is not surprising that relatively substantial fee hikes are required to achieve a significant improvement in the total resources. Such a rise in fees conflicts with the current aim of restraining fees charged for childcare and eldercare.

These restrictions will naturally not lessen if the aim is for fee increases in areas such as childcare and eldercare to provide addi-

¹¹⁹ The Swedish Association of Local Authorities (Svenska kommunförbundet [2003b]).

tional resources to other areas of activity. The fees charged for childcare and eldercare constitute the major part of the income from fees that the municipalities have at their disposal, but at the same time account for only 2.2 per cent of the municipalities' total costs. A doubling of these fees would mean that the municipalities' resources would only increase by 1.2 per cent¹²⁰.

In the baseline scenario for the Long-Term Survey, household private consumption per person is reckoned to increase by 40 per cent between 2003 and 2020, or an annual average increase of 2 per cent. The real resources for the services funded by taxes, calculated on a per capita basis, do not change during this period. A doubling of fees for childcare and eldercare may represent a relatively drastic fee increase, but even so it would only make room for a few percentage points more in municipal activities. If higher income from fees for childcare and eldercare is to contribute to county council medical services and to central government activities, such as improvements in education and the police, the relative importance of the additional resources will be even more limited. Considerably higher fee increases are required if public activities are to be able to keep in step with the services demanded that people are paying for with their own money.

Clearly, there are significant restrictions on increased fee-based funding for childcare and eldercare. There are probably similar and even stricter limitations in other activities that receive very little or none of their income from fees. Proposals for fees in new areas put forward in the debate usually do not result in any major addition to income.¹²¹

7.2.2 Fees Reduce Demand

Increased fee-based funding means that users pay for a greater part of welfare services. Increased fee-based funding may have several aims. The preceding section discussed the possibilities of obtaining more public revenue with the help of higher fees. Another reason for raising fees is to keep demand in check.

¹²⁰ The addition of resources is limited by the fact that the government grants paid to the municipalities as a compensation for the maximum childcare fee are stopped. If these government grants were to continue being paid the additional resources would be 2.2 per cent. ¹²¹ See Appendix 7 for a more detailed discussion about fee-based funding in different areas (SOU 2003:57).

Taxes and a very modest income from fees currently fund a considerable part of welfare services. This means that the welfare services receive relatively little of their funding from those who use them. Taxes differ from fees in that they are not linked to receiving a specific service in return. For a payment to be defined as a fee, something has to be obtained in return. From the user's perspective, the value of the service received in return for the payment of a fee must not be less than the fee. If others, in addition to those using the service, are obliged to make the same payment, that payment has to be considered a tax.

The choice between a tax and a fee determines who in the end will pay and thus is significant for demand. When taxes make up all the funding, demand will be greater than if the activity is partially or completely paid for with fees.

Some Examples of Demand Control Fees

Fees today are already being used to control demand. In many counties, there are differentiated patient fees that make it more expensive to visit an emergency department than a primary healthcare centre. In this way, one tries to steer patients to the proper institution for care and reduce the strain on the more expensive form of healthcare provided by a hospital emergency department. Studies of the impact of the design of the fee on the demand for healthcare show that fees clearly have a moderating effect on demand. This moderating effect is weaker for hospital treatment than for primary care and pharmaceutical treatment.

In some municipalities, the charge for childcare previously was designed in such a way that it was relatively more expensive for children to be in childcare early or late in the day. The intention in doing so was to control the number of children present at various times of the day in such a way that the staff available could be used as efficiently as possible. With the introduction of the maximum charge, this type of charge has declined markedly in importance in childcare. The use of different forms of time-related charges has declined after the reform, and the alternatives now available are chiefly for full- or part-time care.

A third area with demand control fees is dental care benefits. There is a special subsidy for dental checkups for persons between the ages of 20 and 29 intended to promote preventive dental care by making it relatively inexpensive.

Even though there are relatively few examples and their effects are difficult to assess, it is important to use the fees as a means to achieve greater efficiency in the production of welfare services and especially to avoid designing fees in such a way that they result in inefficiencies.

Free services may lead to excess demand and to queues that make the service less accessible to those with the greatest need. Fees that are too high may result in less care at an early stage, with higher costs to society at a later stage. For example, there has been a discussion about whether higher fees for home-help service in eldercare reduce the demand, and thus in the long term, lead to increased demand for special housing, which is considerably more expensive for society. The introduction of a maximum charge in eldercare has reduced the importance of this issue and probably the municipalities' decision on the right to subsidised help in the home is a greater restriction than the design of the fees.

Distribution Considerations Set Limits on the Fees

The chances of designing fees to improve efficiency without the emergence of undesirable distribution effects are fairly limited. The same can be said of the prospects for a marked increase in funding these services with fees instead of taxes, as well as the possibilities of achieving a noticeable reduction in demand with the help of fees. There is little prospect of achieving significantly higher efficiency, higher revenue or lower demand without also having unwanted distribution effects.

One important argument for tax-funded welfare services is that these services will be available to everyone in need of them. To continue to improve and develop welfare services will require considerable additional resources in the long term. There is little chance of bringing this about under the current fee system without important distribution policy consequences. Households with weak finances are especially at risk of being affected.

One way to avoid these negative distribution effects would be to confine the fee increases to groups with relatively good incomes. For example, this would involve more income related charges and protection against high costs. Proposals of this sort can be found in

Appendix 7 of this Survey.¹²² However, there are a number of problems with such limits. One is that the additional resources generated by the fee increases would in that case be even scanter. Another problem is the increasing marginal effects, and thus the associated economic costs on (not least) the labour supply that would be the consequence of such a differentiation.

To summarise, it does not appear possible to use fees to fund an extensive expansion of public activities without profound consequences for the distribution of these services.

7.3 Alternative Funding Possibilities

Section 7.2 analysed the prospects of generating greater resources for publicly provided welfare services with higher fees. This section analyses the possibilities of instead trying to get additional resources by including more private solutions. This refers especially to an increased element of private activity in two areas. In the first instance, it refers to the inclusion of more private solutions in the social insurance systems and in the second instance, to more privately funded welfare services.

7.3.1 Alternative Solutions in the Social Insurance Systems

As mentioned earlier, social insurance systems have a number of characteristics that distinguish them from other public activities. The systems are funded by fees to a greater extent than by taxes, and primarily bring about a lifetime income redistribution rather than a redistribution between different income groups. The purpose of social insurance is to insure against loss of income. As the premium payment is linked to the wage size, the systems' revenues and expenses tend to develop in a relatively similar fashion. Rising real wages means that both premium payments and the incomes to be insured will gradually rise over time. However, for the insurance systems to maintain an equilibrium between income and costs, everyone's prospects of earning a living by working must be relatively stable over time. If the risks of a loss of income change, the premiums and/or the benefit terms will need to be reviewed.

¹²² SOU 2003:57.

Real Changes Assume Changes to Terms and Regulations

A fundamental feature of the social insurance systems is that the insurance is to be not only obligatory, but also the same for everyone. The systems do not take into consideration the different risks of a loss of income that may exist between different groups in the labour market. Therefore everyone pays the same percentage of their earnings in premiums.

The foremost reason for public management of these insurance systems is that the design chosen is difficult to achieve using private solutions. Even if it were possible to maintain current principles in an insurance system entirely under private management, the question of what then had actually been achieved would remain. It is difficult to see that resources would automatically be freed up to be used for other tax-funded activities.

For a privatisation of the social insurance systems to lead to significantly lower costs, the shift in responsibility would have to be combined with an adjustment of the terms and benefit levels.

A basic principle of the current insurance system is the principle of uniformity, that is, everyone who is insured is to pay the same premium irrespective of risk. If responsibility for the insurance systems is to be transferred to social partners, the chances of differentiating premiums between different contractual sectors will be higher. In the event, it would mean that groups in the labour market having a higher risk of unemployment, illness and parental leave would have to pay higher premiums than they do today. Irrespective of whether the employer or employee paid the higher premium, there would be less left in the wallet of someone in a high risk group.

In recent decades, social insurance systems have been modified on a number of occasions, most often becoming more restrictive. Benefit levels have been lowered and qualifying periods have been introduced. A sick-pay entitlement period has been made part of health insurance. These changes mean that the individuals must pay some of the cost themselves. If the trend in this direction continues, it may free up more tax revenue for use in another activity. Premiums would thus fund the social insurance systems to a greater extent. One possible potential savings is for the social insurance systems to fund themselves without the aid of tax revenue.

Less insurance protection could thus free up some room for other public activities. Whether or not shifting responsibility for the schemes would have the same result is less clear. In that case, the transfer would have to be accompanied by changes in the terms, regulations, and instruments of control. It is difficult to see how much advantage could be gained without a reduction in the financial provisions for groups in the labour market that run a high risk of illness and unemployment. Strong income redistribution policy arguments can be made against such a change.

In 2002 households received a total of SEK 126.4 billion in sick pay and unemployment benefits. This corresponds to not quite 20 per cent of the costs of public consumption, that is, the costs of publicly provided services that are exclusively financed by taxes. Relatively substantial reductions in insurance benefit payments are therefore required to achieve a more pronounced increase in public consumption.

In this connection, it should also be pointed out that the tax revenues freed up in this way are of a one-off nature. A gradual increase in the demand for welfare services requires resources that grow over time. A shift to more self-funding of social insurance can, however, only be made once.

Current Trends Have to Be Halted

In the baseline scenario in the Long-Term Survey, the burden on the social insurance systems (with the exception of the pension system) is assumed to be relatively unchanged in the years to come. The assumptions in the calculations respecting greater labour force participation among immigrants and older people involve some limitations on social insurance liabilities for these groups. A trend showing no change in the burden placed on the social insurance systems as assumed in the baseline scenario is the opposite to the developments thus far. Instead an increasing percentage of the population, including those of working age, have come to rely on the social insurance systems for their principal source of income. This trend would have to be reversed in order for resources to be redistributed from the general insurance systems to the production of welfare services.

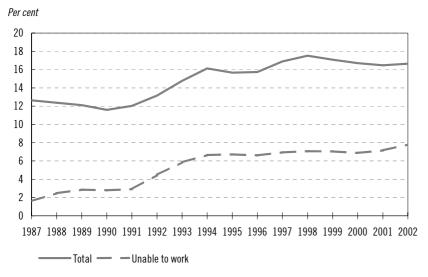
¹²³ The amount includes central government payments for health insurance, occupational injury insurance, early retirement pensions, unemployment insurance, labour market education (AMU) grants, activity support and other forms of labour market support.

The economic crisis in the early 1990s brought with it a marked reduction in employment. The number of unemployed increased and a large number of persons also ended up completely excluded from the labour market. A subsequent improvement in economic conditions and a gradual increase in the demand for labour have resulted in an increased number of employed persons and fewer unemployed. However, the number of persons excluded from the labour market has not declined. In 1993 21 per cent of those aged 16 to 64 were completely excluded from the labour market. In 2002 this percentage had increased to 22 per cent. Thus more are outside the labour market today than in the year that the economic crisis was at its worst.

The expansion of the education system accounts for some of the increase in the number of persons not in the labour force. The number of places in university and the opportunities for regular and supplementary upper secondary school education have increased substantially in the past ten years. These education programmes are the main cause of the continued decline in the labour force participation in younger age groups.

In older age groups (25 to 64 years of age), the drop in labour force participation is largely explained by an increase in perceived ill-health. There has been a considerable increase in those who state in Statistics Sweden's Labour Force Survey that they are not in the labour market due to inability to work (see diagram 7.3).

Diagram 7.3 Persons Not in the Labour Force as a Percentage of the Population Aged 25–64



Source: SCB [a].

The increase in the percentage of those unable to work has been especially widespread among those who are older. For those aged 55 to 64, the percentage has increased from about 5 per cent at the end of the 1980s to 20 per cent for women and 15 per cent for men. For women and men aged 25 to 54, the percentage of those unable to work has increased from 1 to 5 per cent. Even among young people, there is a relatively sharp increase in the percentage registered as unable to work.

At the same time that an increasing number of people are giving inability to work as a reason for being out of the labour market, fewer older workers (aged 55–64) are saying that they are giving up income from work of their own free will. Among women in the 55 to 64 age group, this percentage has fallen from 32 per cent in 1987 to 10 per cent in 2002. For men in the same age group, a drop from 20 to 10 per cent has been recorded. In other words, there has been a marked shift in the reasons given by persons in older age groups for not being in the labour market. There has been a parallel increase in the burden on the social insurance systems.

In addition to the higher percentage of persons who are unable to work, there has been an increase in recent years in absences due to illness among those that have a job. During an average week in 1997, 2.4 per cent of those employed, according to Statistics Sweden's Labour Force Survey, were absent from work the entire week because of illness. In 2002 this percentage had increased to 4.1 per cent. In relative numbers, this means an increase in this category of absence due to illness by almost 70 per cent.

In this Survey, it has been assumed that increased productivity and rising real incomes lead to an increased demand for leisure. In the calculations, this is expressed in the form of a steady decline in the gainfully employeds' working hours (0.2 per cent a year). However, the percentage of employed persons in the working age population is assumed in the calculations to remain unchanged. The increased demand for leisure is thus entirely met by gradually shorter contractual working hours.

Appendix 5 of the Long-Term Survey has a discussion about how demands for a better working environment seem to increase in line with improvements in the material standard of living. Given this development, it may be increasingly difficult to maintain the incentive to work when there are various types of functional impairments or discomfort working. If the working environment in this respect cannot keep pace with increasing demands, the labour supply might consequently decline. In the calculations made for the scenarios in the Long-term Survey, this factor and its possible consequences for the labour supply have not been taken into consideration.

Changes Probably Needed

The main issue in section 7.3.1 has been what resources privatisation could free up from the social insurance systems with the aim of improving the conditions for the production of welfare services. One conclusion is that a privatisation of the current social insurance systems cannot solve the public sector's long-term funding problems. The possible gains that can be made are of a one-off nature and do not provide the scope for the steadily growing additional resources that are necessary.

However, changes in the insurance systems may need to be made irrespective of the issue of the future funding of the welfare sys-

tems. The demands made of the social insurance systems have continued to grow. The systems are the principal means of support for an increasing number of people. In the past 10 to 15 years, there has been a clear trend to more perceived ill-health. This has resulted in increasingly longer certified sick leave among the employed and an increase in the number of persons who have retired on a disability pension.

To strengthen the incentive to work, the Survey estimates that the social insurance systems would need further tightening. A continuation of the upward trend in the number of working age persons having the social insurance systems as their principal source of income could make it much more difficult to fund these systems as well as to safeguard other public activities.

7.3.2 Funding Alternatives for the Welfare Systems

The high degree of tax funding of welfare services is the result of policy decisions. The ultimate aim of this policy is to allocate welfare services such as healthcare, social services and education according to need, not ability to pay. This section describes a possible future development that goes in the opposite direction, that is, welfare services are funded to a greater extent with the users' own money.

If revenue for public activities cannot be improved, there are in principle two possibilities remaining to bridge the gap between demand and supply. One possibility is for the public sector to choose to stop providing certain activities. Another possibility is that the tax-funded service is redefined to offer a basic package of services and people will have the option of using their own money to supplement this basic supply with their own voluntary payments.

Further Priority Reductions

The first possibility means that tax revenue would be re-allocated from certain activities that have been assigned a lower priority to benefit other areas that are to be funded by taxes in future. Thus room would be created for improvements and further development. However, for these areas to be able to continue to grow, ad-

ditional activities will, in time, need to be assigned a lower priority. In this way, the same tax revenue will fund fewer and fewer activities than it does today.

Such a trend can already be discerned, not least in the central government budget. The expenditure areas that have experienced large cuts are central government support for housing construction and the military. Another activity in which private solutions have become all the more prominent is surveillance and security. Today security firms are responsible for tasks that previously were considered police undertakings. Infrastructure projects are also being increasingly funded by means other than taxes. A general lack of resources is making the funding of projects that only a certain part of the country or a certain group in society is expected to benefit from more difficult. Several infrastructure projects have therefore been financed on the understanding that in the future, users will pay a fee. In a situation in which there are limits to what can be funded with taxes, this may be the only possible way of proceeding with urgently needed investments.

Municipalities and county councils have also been forced to reassess their priorities. Eldercare is one example that was discussed previously. Fewer and fewer retired persons will be provided with less lighter services in the form of home-help service. Resources will have to go more to those elderly needing extensive care. Patients will be required to pay for certain medical treatments and operations. Dental care is another area in which private funding has assumed a larger role as public subsidies have declined.

Scant resources and growing needs mean that in time additional reductions will be necessary. In this process, there will gradually be fewer and fewer areas that can be funded only with taxes. Thus in future, there will be progressively fewer possibilities of reducing services

During the next twenty years, household income is estimated to increase substantially. Rising incomes will improve the chances of funding a greater percentage of the welfare services privately. But even though households will be more able to pay, there are important areas in which it may be difficult for several reasons to reconcile a clawback of public undertakings with the aims of preserving a welfare society. A society in which it was not possible for all children to be provided with a basic education or the seriously ill could not get help because they lacked the financial resources could hardly be described as a welfare state. There is a common commit-

ment to core welfare services and this commitment simply cannot disappear.

The problem is that these core services are quite extensive. Medical care, basic education, childcare and eldercare are responsible for the majority of the tax-funded services produced. In these areas, it is easy to understand why public commitments should be extensive. The same is true for other important, but somewhat less cost intensive services such as the police, the public prosecution system and social services. If so, this means that continuing to reduce public services would rather have to involve finding components within various activities that can be eliminated. However, it is difficult to conduct "simple" reductions that have economic substance. It seems to be most difficult to make cuts in the areas that have the highest costs.

In healthcare, there is constant discussion of priorities in line with the appearance of new methods of treatment. This discussion of public sector priorities is likely to continue and in future, more areas may be taken out of the public sector services if there are insufficient resources.

In schools it is more difficult to discern any development that would mean eliminating parts of the activity. Another possibility is the introduction of special fees for services ancillary to teaching. One indication of such a trend is that more municipalities have started charging for school meals in upper secondary school. In many other countries where tuition is free, parents pay for both school meals and teaching materials.

In preschool and childcare, there are important efficiency reasons arguing in favour of publicly funded childcare so that a large labour supply can be maintained. However, the extent to which childcare should be subsidised is an issue on which there can be many different views.

Even in eldercare, a rearrangement of priorities in the past ten years has given greater priority to individuals needing more extensive care and sometimes even medical care. The percentage of the elderly provided with less intensive services at home has gradually declined. This trend is likely to continue if resources are scant in future.

Supplementary Funding – An Alternative

One possibility for achieving a more lasting solution to this dilemma of assigning priorities may instead be to limit public commitments vertically. In principle this means that for each activity, a ceiling is established on what should be a shared commitment funded by taxes. Individuals may arrange their own supplements beyond this limit. Such an arrangement would mean that also in the future, current welfare services could be chiefly funded by taxes. However, more room is provided for supplementing this taxfunded basic service with private funding. Thus a safety valve is created to provide an outlet for the steadily increasing demand. In line with rising household income and the growth of supplementary markets, money will increasingly be channelled to that part of the welfare services funded directly by households. Such a solution means that it will become possible for demand for and access to welfare services to grow at the same pace.

At present, tax funding of the welfare services is mainly done by subsidies paid to those supplying these services. For a greater degree of direct funding by households to supplement the tax-funded basic service, the subsidies should probably be partially reorganised so that they go more directly to those entitled to these subsidies. This involves providing households with grants earmarked for buying certain services. As before, the support can be based on need. The difference is that even those who choose other (and more expensive) solutions will receive these subsidies. In this way it will be easier to preserve acceptance for the taxes levied.

With earmarked grants, it is also possible to some extent to control demand that cannot be met with a purely tax-funded system. However, elsewhere there are fewer possibilities of converting subsidies to grants. The impact on income redistribution and efficiency can vary. The growth of alternative solutions will be made easier in those areas with earmarked grants.

Converting the subsidies to grants also means that positions can be taken respecting what forms of private solutions are to be encouraged. With earmarked grants, the increased demand can be steered to solutions that mean that the services will be supplied by professional actors. Thus the prospects are better for preserving the tax base and the quality of the services that are increasingly funded using private means.

However, one obvious problem is that the room for greater private demand will not be the same in all households. Those households with better finances will have a greater chance of buying more and better additional services than those households that are worse off. However, such a development can hardly be avoided if the additional resources are to come about in a private and voluntary way. This is true irrespective of whether these additional resources are realised through increases in fees, elimination of activities, or the encouragement of private supplementary solutions.

However, a publicly funded basic level of services that can be supplemented with privately paid services does not need to be in conflict with the principles of general welfare policy. In parts of the social insurance systems, a division of funding into private and public components is now accepted. The public commitment given pensions is clearly limited, but at the same time, those who want to supplement their public pension with their own pension savings may do so. In most cases there are also supplementary services provided through contractual agreements in the labour market. The majority of employees are also covered by supplementary health and unemployment insurance agreed by the social partners in the labour market.

The advantage with a vertical limitation is the establishment of a permanent ceiling on the costs to be allowed for shared commitments in various areas. In other alternatives, these limitations have to be changed over time. However, experience from earlier reforms shows that it requires extensive work to achieve the changes that create this long-term stability.

7.4 New Funding Requires New Objectives

Under existing principles, welfare services are to be provided in case of need and paid for according to capacity to pay. For these reasons, the welfare services are tax funded to a considerable extent and largely provided by public authorities such as the central government, the municipalities and the county councils.

In line with rising household income, it is likely that demands for more and better welfare services will increase. For welfare services to be able to grow at the same rate as other demand and production while upholding the declared objectives requires greater resources with the current objectives. If the tax funding of certain welfare services is partly or entirely replaced by fees, the demand for these services will fall. Negative effects may also result in terms of reduced efficiency as well as in an undesirable redistribution of income. This is true irrespective of whether or not the reduced demand is a result of a cessation of public responsibility or if tax funding is weakened through the increased use of fees in the current system.

It was noted earlier in this chapter that the base for the fees charged today is quite limited. Raising the existing fees may thus not generate any significant increase in total additional resources for the welfare services as a whole. A greater element of income related fees is one possible way of limiting the demand shortfall that may occur with more fee-based funding, but at the same time, such a fee structure would limit the additional revenue even more. In addition there would be the negative impact on the labour supply that increased marginal effects are bound to bring.

Another possibility is a greater element of private funding in addition to the funding provided by taxes. Such a solution means that a limit is established on what the public undertaking may cost in the future as well as on what the privately funded services may offer in addition to the basic package of services. A definition of the tax-funded activities as a limited basic package with the option that anyone who so wishes may supplement this package with private funding creates a safety-valve for an increased demand in addition to the tax-funded services. One advantage of this alternative is that the level of public welfare services currently provided can be maintained across the entire line of services. This alternative entails less risks for recurring reviews than a strategy of entirely or partly replacing taxes by fees in one area after the other.

But an increased element of voluntary payments means that the demand for welfare services will be determined by the contents of the individual's wallet to an increased extent. This would be in conflict with the fundamental objective that welfare services are to be provided according to need, irrespective of ability to pay, and equality of access and equivalence in the services provided are to be guaranteed. This conflict is unavoidable, if an increased demand for welfare services is to be satisfied in the long run. This holds true irrespective of whether taxes are gradually replaced by fees or if voluntary payments are allowed to supplement a tax-subsidised basic service.

Summary

The Welfare Systems - A Future Challenge

The aim of the Long-Term Survey is to provide a basis for economic policy and to generate a debate on how the policy should be designed. This time the Survey focuses on the future possibilities of preserving a well-functioning public welfare system. One critical issue is how the demand for *welfare services* such as education, healthcare and social services is to be met in the coming years.

The welfare systems were primarily developed for reasons of income distribution: to make life better for the most disadvantaged, to reduce income disparity, to provide protection in case of too great a loss of income. The goal of the welfare services is to guarantee everyone access to these services when needed and irrespective of their ability to pay. For these reasons, the welfare services are chiefly tax funded.

Security for everyone and the absence of large gaps in incomes are objectives that have broad support in Swedish society. One important task of this Long-Term Survey is to shed light on alternative actions that can contribute to the preservation of the principles of the general welfare policy.

Developments up to 2020 - Tight Limits for the Welfare Systems

The scenarios prepared by the Long-Term Survey are the starting point for its analysis of the conditions for continued public funding of the welfare systems. The scenarios provide a picture of economic development, primarily up to 2020. The Survey's *baseline scenario* is based on economic developments that are mainly in line with developments in recent decades.

In the baseline scenario, GDP grows an average of 1.8 per cent a year between 2002 and 2020, compared with an average growth of 2.0 per cent a year between 1970 and 2002. The lower growth results when the increase in the number of working age persons ends, a result which contributes to a decline in the number of hours worked.

Household disposable incomes and consumption expenditures will grow more rapidly than GDP. One reason contributing to this favourable trend is that the tax levy does not increase because the tax rates in the calculations are assumed to remain unchanged. That household consumption expenditures are growing faster than incomes means that household savings are declining, a decline that is a result of future shifts in the age composition of the population.

In the baseline scenario, that part of consumption that is tax funded is assumed to change in line with the demographic developments. This means that resources for public consumption, of which welfare services are a considerable part, grow at approximately the same rate as the number of people in various age groups. The basis chosen thus means a modest requirement, namely that the resources for public activities such as education, healthcare and social services will be unchanged on a per capita basis between 2002 and 2020.

One striking feature of the projections is the change that will take place in the growth of private versus public consumption. In the next few decades, private consumption will grow to an extent not seen since the 1950s and 1960s. At the same time, the public sector is expected to continue to grow at approximately the same rate as it did in the 1990s, a period that many associate with savings and cost cutting.

That the economic growth does not provide room for a greater increase in that part of consumption that is tax funded is due to the considerably faster rate at which the cost per service produced is growing compared with the unit costs of other production. This relative rise in the cost of public activities is a consequence of the relatively limited prospects in this part of the economy for continuing productivity improvements, that is, that more can be produced with a given amount of resources.

A fundamental problem is that as a rule, more public activities imply more staff. Production in other activities can grow without the need for a corresponding increase in the size of the staff. Higher productivity in the business sector, and thus higher wages

in the labour market generally, will certainly give rise to increased tax revenue, but will also lead to higher wages for public employees and hence greater costs to the central government, the municipalities and the county councils. The economic growth consequently does not provide automatic scope for more public activity. To increase the scale or the quality of public services therefore generally requires a tax increase. Another possibility is an increase in the hours worked in the private sector. However, historically the trend has gone in the opposite direction, which makes tax increases even more necessary.

Growing Demands for Healthcare, Social Services and Education

One question posed by the Survey is whether it is reasonable to expect that people will be content with no change, generally speaking, in the consumption of welfare services when the consumption of other goods and services is growing in quality and scale. The Survey has not found any support for such an assumption. On the contrary, historical experience and comparisons with developments in other countries indicate that it is reasonable to expect that the demand for education, healthcare and social services increases when material welfare improves.

In this context, the growth in the baseline scenario can be described as an extremely moderate increase in the services that are tax funded. In the short term, such a development may be possible, but in the long term, problems will appear. In time, the demand for welfare services will increasingly exceed what can be supplied with no changes in taxes. After 2015 demographic changes make the problem even more acute. At that time, the number of people above the age of 64, and especially those in the over 80 age group, will rise sharply in relation to the working age population. As a result there will be a growing need for health- and eldercare Therefore, with very limited room for raising the standard of service, the problematic growth that is anticipated in the next 10 to 15 years will become still more difficult in the long term.

For the welfare services to be able to grow in line with the demand, either more public welfare services must be produced with a given amount of resources, or the resources for this production must be allowed to increase. According to the Survey, there is

some potential for productivity improvements in public activities, but this potential is not large enough to enable the welfare services to grow at the rate required with the help of productivity improvements alone.

For the welfare services to be able to grow in line with other consumption, those providing the services must be supplied growing real resources. One of the main messages in this Survey is that it will become increasingly more difficult to supply these additional resources using taxes. Future improvements in the welfare services will have to be linked to alternative funding possibilities to a greater extent.

The Survey examines a few alternatives for funding the further expansion of the welfare services. In principle, there are four alternatives available:

- higher taxes
- higher growth
- higher productivity in public activities
- more alternative funding for the welfare systems

Deferring or foregoing measures that could boost the funding for the welfare systems would lead to a growing unsatisfied demand for welfare services. This, in turn, would lead to the further growth of solutions parallel to the established welfare systems. In the long term, such a development could reduce confidence in the public systems and the will to fund the welfare systems with taxes.

The following sections describe the four alternatives examined by the Survey.

Higher Taxes

In the baseline scenario, tax rates are assumed to remain unchanged in future. As a result, tax revenue will in principle be sufficient to maintain the current quality and quantity of services in public activities up to 2020. Under the first alternative discussed, the tax levy would gradually rise and consequently increase public sector resources

However, most taxes are associated with costs to society in that they give rise to tax wedges. The costs of tax revenue need to be weighed against the benefit to society that the public expenditures give rise to. A tax increase is efficient as long as the marginal utility of increased public expenditure is greater than the marginal cost of the tax revenue.

The economic costs of taxes change over time. The continuing internationalisation is one factor that helps increase the cost of taxes. This relationship applies especially to tax bases such as the consumption of goods and services and the taxation of capital.

The largest tax source in Sweden is the tax on labour. This tax base is not particularly mobile internationally, but raising taxes on labour in order to generate tax revenues for the welfare system is by no means without problems. An increase in taxes tends to lead to an increase in leisure (or in unpaid housework). Such a development has a negative impact on various tax bases, not least on the taxation of earned income.

The increased demand for welfare services has thus far been managed to some extent with higher municipal and county council taxes. The municipalities and county councils together have raised taxes an average of one krona in 2003 and 2004. The tax increases have been carried out at a time of relatively favourable demographic developments.

In future the demographically driven demand will grow at a faster rate. Under these circumstances, funding through additional tax increases cannot be ignored. Residents of a municipality may accept tax increases in line with increases in their own income. The opposite is also possible if residents instead feel that the public sector is not delivering what is expected of it. In that event, they may be less willing to pay taxes.

A broader local government tax base cannot make much of a contribution to funding the welfare services. There are, in principle, no unused tax bases in Sweden. Therefore, such a measure would only mean a redistribution of central government tax revenues to local governments. A broader local government tax base may be desirable for other reasons, for example, if its aim is to increase the local governments' tax base in order to reduce their dependence on central government grants.

All in all, it is the Survey's judgement that continuing to raise the tax levy cannot fund the growth of the welfare systems in the long term. However, there is a risk that this is what will happen in the next few years. The local governments have the greatest responsibility for welfare services but bear only a small part of the economic costs of local tax increases.

Higher Growth

The possibility of making it easier to fund the welfare systems through higher growth is the second alternative examined in the Survey. Two scenarios with higher growth help illustrate this possibility.

In one scenario, higher growth is realised through more rapid productivity growth in the private sector. The higher growth helps boost public sector revenue owing to the positive growth in wages, and thus tax receipts. However, the higher growth also leads to increased expenditures on the part of the public sector. Two different factors contribute to this.

First, public employees' wages represent a large part of the costs in the public sector. Faster productivity growth in the business sector creates scope for higher wages in this part of the economy. Wages also have to be raised in the public sector to enable it to recruit and retain labour in the future too. The faster wage growth in the business sector therefore gives rise to faster wage growth in the public sector as well.

Second, the major part of the public sector's other expenditures are to varying degrees automatically linked to growth and the general wage development. Monetary transfers to households are in many cases firmly linked to wage developments. These payments also increase when wages rise.

Higher growth through more rapid productivity growth in the business sector cannot therefore solve the public sector funding problem in the long term. The total net effect for the public sector is positive, but it is not especially large. However, economic growth means that society's total resources grow. The conditions for improved welfare in the broader sense are thus strengthened.

In the second alternative scenario, higher employment will result in higher growth. This type of growth has a much more positive impact on the public economy. The advantage of an employment-led growth is that it does not generate any increases on the public sector's cost side. On the contrary, expenditures may be reduced if the higher employment brings with it lower payments in the form of unemployment support and sickness pay. Growth has two positive effects in this case. It improves the public sector's income side and reduces its expenditures.

Higher employment in the business sector may thus make some contribution to increasing the scope for tax-funded welfare ser-

vices. The better the labour supply, and thus the growth in employment, the more scope there will be to improve welfare services. At the same time, it must be pointed out that the potential for employment-led growth in the form of unused labour has a limit. Increased employment in the business sector may make a significant contribution to funding the welfare services, but in the long term, other solutions to the public sector's funding problem will also be needed.

To achieve the growth in employment described in the alternative scenario will require measures that will lead to an increase in the labour supply and higher employment. The current trend is towards a smaller labour supply. To some extent, this decline is due to the decrease in the average working hours but in the past decade, the most important explanation has been that an increasing proportion of the population for various reasons has ended up outside the labour market. It is also due in part to an increase in the percentage of the population that is studying. Another large and growing group consists of those who are unable to work.

There is a clear trend to a declining labour supply even for the group usually considered the labour market's core group, namely men between 25 and 64 years of age. The percentage of students in this group has risen and an increasing number are not participating in the labour force because they consider themselves unable to work. At the same time, an earlier trend in the female labour supply to approach the male labour supply appears to have come to an end.

The Survey notes that there should be a potential for increasing the labour supply. This finding refers particularly to youths and persons with a foreign background. Measures to increase these groups' labour supply include better integration and greater efficiency in the education systems. However, measures directed at individual groups are not enough to halt the trend to working less. Instead general measures in the form of better incentives to work are needed.

Higher Productivity in Public Activities

A third possible way to increase the tax-funded production of welfare services is an improvement in the productivity of these activi-

ties. Such a development would mean that future resource requirements could be restrained.

There is no clear and coherent picture of productivity improvements in public activities during the 1990s. The principal reason is the extensive measurement problems, not least when it comes to estimating how the quality of the public services has changed over time. Consequently, there is a lack of proper knowledge on the effects that downsizing and other changes have had on the quality of welfare services. The lack of information and analyses of historical trends means that there is very little possibility of making forecasts for the future.

In recent decades, there has been a change in the forms of production of welfare services. There has been a trend to more competition and more private actors in the production of education, healthcare and social services. There is very little empirical research on private production and competition in welfare services in Sweden or under conditions similar to those in Sweden. What research there is indicates that the results have not been especially dramatic. The costs appear to have been pressed down a little, but this does not appear to have led to lower quality or segregation. The manner in which the increase in competition has affected administrative costs is, in principle, an unexplored area. Owing to this lack of information, it is not possible to assess the total impact of competition on productivity.

Even if there is no clear picture of the productivity developments in the welfare sector, there are arguments for improved productivity in future. Technical development, increased competition and better forms of governance and work are factors that may contribute to higher productivity. But the large element of direct contact between the individual and the provider of the service and the high degree of adaptation of the service to the individual are obvious limitations. It should be added that an extensive recruitment need, combined with a pronounced lack of trained staff, may weaken productivity, at least for a transitional period.

The Survey concludes that all in all, there is some potential for improving productivity in the public sector. This potential should be used to the greatest extent possible, but it is not large enough to solve the long-term funding problem of the public sector by itself.

More Alternative Funding for the Welfare Systems

The fourth alternative examined by the Survey is more elements of alternative financing. There are in principle two ways of achieving such an increase. The first possibility is making more extensive use of fees instead of taxes to fund the public systems. The other possibility is an increased element of private funding. Both possibilities are discussed in the Survey.

The fees currently charged for public services contribute relatively little to their financing. The importance of fees as a funding source varies between different services. The contribution from fees is in general significantly smaller in education and healthcare than in childcare and eldercare. The Survey examines the potential for additional fees in the latter two services. The Survey concludes that the potential is fairly small. The additional resources that can be freed up in this way are only sufficient for marginal improvements in the current activities. In particular, this is the case if future increases in fees for childcare and eldercare are to create room for additional resources for other public activities too.

The basis for the fees currently levied is strictly limited. Increasing the existing fees may thus not generate any significant total additional resources for the welfare services as a whole. To be able to provide any significant additional room for more and better welfare services, fees would also have to be levied on services that currently are free.

If the tax funding of certain welfare services is partly or entirely replaced by fees, there may be reduced demand for these services. This could give rise to undesirable distribution effects. A greater element of income related fees is one possible way of limiting the demand shortfall that may occur with more fee-based funding. The problem is that such a limitation might substantially reduce the additional resources that the higher fees are intended to provide. Moreover, a differentiation of the fees will result in increased marginal effects and thus costs to society.

The Survey also examines the consequences of increased private funding of the social insurance systems. One conclusion is that such a change in the current social insurance systems cannot solve the public sector's long-term funding problems. The possible gains that can be made are of a one-off nature and do not provide the scope for the steadily growing additional resources that are necessary for the continuing development of the welfare services.

But there are other reasons speaking in favour of changing the current social insurance systems. The demands made of the social insurance systems have continued to grow. In recent years, both the number of those absent due to long-term illnesses and the number of early retirees have increased. A continuation of the trend whereby the social insurance systems are the principal source of income for an increasing number of working age persons could make it much more difficult to fund these systems as well as to safeguard other public activities.

Another way of improving economic conditions is for the public sector to discontinue providing some welfare services completely. In that case, these services would be privately funded. However, it is difficult to conduct "simple" priority reductions of matters having more economic substance. It is most difficult to eliminate services in the most costly areas without compromising the fundamental objectives of the welfare state.

Another possibility that is examined is that the tax-funded service is limited to offering a basic package of services and people will have the option of using their own money to supplement this basic supply with their own voluntary payments. Such a differentiation would mean that the welfare services currently provided would be tax funded in the future also. However, more room is provided for supplementing this tax-funded basic service with private funding. Thus a safety valve is created to provide an outlet for the steadily increasing demand.

One problem with this solution and other solutions based on alternative funding is that the room for increased demand differs among households. Those households with better finances will have a greater chance of buying more and better additional services than those households that are worse off. Such a change could be perceived as being in conflict with the fundamental objective that welfare services are to be provided according to need, irrespective of ability to pay, and equality of access and equivalence in the services provided are to be guaranteed.

Welfare Systems in Transition

In the short and medium term, the central challenge is to achieve an increase in the labour supply and employment in the private sector. In this way, scope will be created to improve public services. It is the Survey's assessment that there is scope for a relatively substantial increase in the supply of labour and thus in employment. Measures to increase productivity should also be taken. The Survey concludes that there is some potential for improving productivity in the public sector. Higher economic growth stemming from increased productivity growth in the business sector could strengthen the basis for increased welfare through higher household income.

Broad-based efforts in a number of areas are required to make it possible to satisfy increased demand for public welfare services in the coming years. It is also urgent to continue deepening the analysis and the discussion of how the welfare services could continue to develop in the long run.

In the baseline scenario of the Long-Term Survey, economic growth is relatively high up to 2020. It makes rapid growth in household disposable income possible. Historical developments give reason to believe that people will continue to demand more and better welfare services in healthcare, social services and education. Favourable economic developments and increased ability to pay will strengthen the demand for increased quality in the welfare systems.

The Survey makes the assessment that in the long term, it would take changes in the welfare systems if they are to continue to meet increased and changed demand for welfare services in a system that is basically publicly funded, includes all individuals and has high ambitions for income distribution. For the welfare services to be able to grow in line with other consumption, those providing the services must be supplied growing real resources. For many reasons, it is likely to become increasingly difficult to fund increased demand by higher taxes without negative effects on the labour supply in particular and thus on economic growth.

To meet future challenges in welfare policy, the relatively favourable period in the next few years needs to be used for a broad-based political discussion about how to design alternative funding solutions: solutions that satisfy everyone's demands and values with respect to justice and quality while contributing to high em-

ployment and good economic growth. There are no simple and ready-made solutions. Therefore, analyses and preparations need to start now.

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- SOU 2004:70, *Tid och pengar dela lika?*, Appendix 13 to the Long-Term Survey 2003/04 by Widmalm, F., Fritzes, Stockholm.
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Appendices to the Long-Term Survey 2003/04

The appendices are not available in English

For more information, see www.regeringen.se/lu2003

No.	Title	Prepared by
1-2	Sveriges ekonomi – utsikter till 2020 (Sweden´s Economy – the Outlook to 2020)	Martin Hill and Jonas Norlin, Ministry of Finance
3	Regional utveckling – utsikter till 2020 (Regional Development – the Outlook to 2020)	NUTEK and INREGIA
4	Migration och integration – om framtidens arbetsmarknad (Immigration and Integration – the Future Labour Market)	Annika Århammar, Ministry of Finance
5	Kan vi räkna med de äldre? (Can we Count on Older Workers?)	Anders Bornefalk and Ola Yndeheim, Ministry of Finance
6	Sveriges konkurrensfördelar för export och multinationell produktion (Sweden's Competitive Advantage in Exports and Multi- national Production)	Patrik Gustavsson, FIEF and Ari Kokko, Stockholm School of Economics
7	Alternativ finansiering av offentliga tjänster (Alternative Financing of Welfare Services)	Sweden's Agency for Public Management

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8	Fördelningspolitikens mål och medel (Income Distribution Policy Objectives and Instruments)	Jan Bröms, formerly Chief Economist and Thomas Pettersson, Ministry of Finance
9	Fördelning ur ett livscykel- perspektiv (Income Distribution from a Life-Cycle Perspective)	Thomas Pettersson, Ministry of Finance and Tomas Pettersson, Statisticon AB
10	Utbildningens fördelning – en fråga om klass? (The Distribution of Education – A Question of Class?)	Anneli Josefsson and Lena Unemo, Ministry of Finance
11	Fördelningseffekter av miljö- politik (Distribution Effects on Environmental Policy)	Bengt Kriström et al., Swedish University of Agricultural Sciences
12	En jämställd föräldraförsäkring? (Equitable Parental Benefits?)	Fredrik Jansson, Elina Pylkkänen, Lizbeth Valck, Ministry of Finance
13	Tid och pengar – dela lika? (Time and Money – in Equal Parts?)	Frida Widmalm, Ministry of Finance
14	Vem tjänar på att arbeta? (Who Gains by Working?)	Bengt Eklind, Ministry of Health and Social Affairs, Mårten Hultin, Bettina Kashefi, Lars Erik Lindholm, Eva Löfbom and Kjell Nyman, Ministry of Finance