

8 The Swedish tax system: summary and policy proposals

This report provides a critical overview of the current Swedish tax system. It shows how deviations from the principles of tax neutrality and uniformity create a number of tax distortions, and it provides quantitative estimates of the loss of economic efficiency caused by the most important distortions. Against this background, the report offers a number of tax reform proposals that could eliminate or at least reduce the various distortions without eroding public revenue. In the following, we summarize the main insights and policy proposals from each chapter in the report.

Chapter 1: The Swedish tax system in international context

The first chapter considers the current Swedish tax system in the context of international tax policy trends. The chapter summarises the recent policy trends in OECD countries in the following way:

- The ratio of total tax revenue to GDP has been fairly stable
- There has been a trend away from personal income tax towards social security contributions
- Top marginal personal tax rates have fallen considerably, but the average tax rate paid by the average worker has hardly changed
- Statutory corporate income tax rates have also fallen substantially, but the ratio of corporate tax revenue to GDP has been relatively stable as the corporate tax base has expanded
- There has been a move away from the imputation system of dividend tax relief in Western Europe towards simpler systems involving reduced personal tax rates on dividends

- The share of revenue coming from VAT has risen, but the revenue share of excises has fallen even more, so the share of total revenue stemming from consumption taxes has fallen
- The revenue from environmental taxes has slightly declined relative to GDP
- The total revenue from property taxes has been rather stable relative to GDP, although several countries have abolished their taxes on net wealth

Whereas the total tax-to-GDP ratio has been roughly constant in the OECD area as a whole, Sweden has reduced the total tax burden by several percentage points in recent years, in part by lowering the tax burden on labour. As a consequence, Sweden has been overtaken by Denmark as the country with the highest ratio of taxes to GDP. Nevertheless, Sweden still taxes labour income more heavily than most other OECD countries. Like Denmark, Sweden stands out by relying more heavily on the personal income tax than the average OECD country. Social security taxes and the VAT generate about the same share of total revenue in Sweden as in the average Western European EU country, whereas specific consumption taxes, property taxes and the corporate income tax all contribute a smaller fraction of total revenue in Sweden than in the EU15 area.

Chapter 2: The Tax Reform of the Century

To provide some historical perspective on current Swedish tax policy, Chapter 2 describes the background for and main elements of the great Swedish tax reform of 1991, often referred to as the Tax Reform of the Century. The reform was very ambitious, involving a combination of tax rate cuts and tax base broadening amounting to about 6 percent of GDP. The 1991 reform was also remarkable in other respects. It was the culmination of a long process of investigation in which alternative blueprints for tax reform were carefully studied by various government committees involving academic tax experts, civil servants, politicians and representatives of the most important interest groups. During this long process of detailed analysis, the key players in the Swedish tax policy debate reached a high degree of consensus concerning the main weaknesses of the old tax system and the most promising

directions for tax reform. Hence the Tax Reform of the Century was guided by a clear set of principles which ensured a high degree of consistency in the implementation of the reform. The consequences were almost revolutionary. For example, the statutory corporate income tax rate was roughly cut in half, but the resulting revenue loss was fully offset by a broadening of the corporate tax base. Moreover, the tax reform involved all the major parts of the tax system, including the personal and corporate income tax, social security taxes, the VAT, and property taxes.

The tax reform of 1991 introduced the blueprint that has now become known as the Nordic dual income tax which separates the taxation of capital income from the taxation of other income. The dual income tax combines progressive taxation of labour and transfer income with a relatively low proportional tax on capital income. A low flat tax rate on capital income was adopted as a simple way of compensating for the fact that the capital income tax is levied on the nominal rather than the real return to saving. It was also introduced to pave the way for a significant broadening of the capital income tax base and a move towards a more uniform taxation of the various forms of income from capital, including capital gains. The flat capital income tax rate was set at 30 percent, in line with the corporate income tax rate, whereas the top marginal personal tax rate on labour income ended up at 51 percent.

The guiding principles of the Tax Reform of the Century were *neutrality* and *uniformity* of taxation. The reform was remarkable for the zeal with which it pursued these goals. Apart from motivating a dramatic broadening of the bases for capital income taxation and business income taxation, adherence to the principles of neutrality and uniformity also meant that several other types of income that had previously been tax-free or tax-favoured became subject to tax at standard rates. In a similar way, the Value Added Tax became much more broadly based, and a uniform VAT rate on all (taxable) goods and services was adopted.

This drive towards neutrality and uniformity of taxation was not only seen as a way of improving economic efficiency; it was also perceived as a way of ensuring a more equitable tax system. Subjecting all forms of income and consumption to tax at the standard rates strengthened horizontal equity, that is, the principle that taxpayers with the same ability to pay should pay the same amount of tax. It was also argued that the base-broadening

measures of the tax reform promoted the goal of vertical equity, i.e., the principle that taxpayers with a greater ability to pay should foot a larger tax bill. The argument was that, in practice, the many deductions and special provisions in the old tax system tended to benefit the rich and sophisticated taxpayers who had better opportunities for tax planning.

The politicians behind the tax reform were thus keen to emphasize that it would be distributionally neutral, despite the large cut in marginal tax rates and the extensive broadening of tax bases. Subsequent empirical studies suggest that the reform did in fact have very little impact on the total amount of redistribution of personal annual incomes.

In a long run perspective, the greater neutrality in the taxation of different savings vehicles improved the allocation of savings. But perhaps the greatest achievement of the 1991 tax reform was the reduction of the average and marginal tax burden on labour (which was extremely high before the reform) combined with a higher average and marginal effective tax rate on housing investment (which was heavily subsidised by the old tax system). Even with very conservative assumptions on the responsiveness of labour supply to taxation, the cut in marginal tax rates significantly reduced the loss of economic efficiency from the taxation of labour.

However, these long run efficiency gains did come at a short term cost. In the short run the improved incentives for financial saving and the heavier tax burden on investment in housing and other consumer durables reduced the aggregate demand for goods and services, thereby exacerbating the serious recession of the early 1990s.

In summary, the tax reform of 1991 represented a bold experiment in tax policy based on a clear set of principles that led to a much more consistent tax system. Although the timing of the reform turned out to be unfortunate by tending to worsen a serious recession, there are strong reasons to believe that the Tax Reform of the Century contributed to a more efficient allocation of resources in the long run without sacrificing the goal of equity in taxation.

Chapter 3: Trends in Swedish tax policy since the Tax Reform of the Century

Chapter 3 briefly reviews the most important tax policy changes since the early 1990s. The new design for the Swedish tax system emerging from the grand tax reform of 1991 has stood the test of time in several important ways. In the sphere of personal income taxation, the basic principles of the dual income tax have by and large been maintained. The introduction of an Earned Income Tax Credit in 2007 was an important innovation in the taxation of labour income. The EITC was mainly intended to stimulate labour force participation, whereas the marginal tax rate cuts included in the 1991 reform were more focused on the goal of increasing the hours worked by those already employed. Yet both of these policy measures aimed at increasing total labour supply, so in this sense they are quite consistent.

In the area of corporate income taxation Swedish policy makers have stuck to the important principle of combining a broad tax base with a relatively low tax rate, rather than trying to fine tune the level and composition of business investment through various special deductions and allowances that would require a higher tax rate to generate the same revenue. Still, it is highly doubtful whether the various tax concessions granted to active owners of closely held corporations since the 1991 tax reform have improved the neutrality of the tax system towards the choice of alternative forms of business organization.

Recent years have witnessed a move towards reduced social security taxes for selected groups in the labour market and the introduction of a tax credit for the purchase of household-related services. These tax policy changes might be seen as an unwarranted departure from the principles of uniform taxation underlying the Tax Reform of the Century. However, as argued in chapters 5 and 6 of the report, there may be a good theoretical case for policies of this kind, even if the specific design of the current policies may be less than optimal.

The most important departures from the principles of the 1991 tax reform have been the move towards a differentiated VAT, the introduction of an additional surtax on high-income earners (the värnskatt), and the substantial tax subsidy to investment in owner-occupied housing implied by the 2008 property tax reform. The analysis in chapters 5 through 7 of this report strongly suggests

that these breaks with the principles of the 1991 tax reform were unfortunate and should be reconsidered.

Chapter 4: The deadweight loss from taxation in Sweden

When evaluating the need for a restructuring of the tax system, policy makers need to have some idea of the seriousness of the economic distortions caused by the various taxes. Chapter 4 seeks to provide such information by estimating so-called marginal deadweight losses from the most important taxes in Sweden. The marginal deadweight loss is the difference between the amount that would be needed to compensate taxpayers for a rise in some tax rate and the government's net revenue gain from the tax hike. As the chapter explains, the marginal deadweight loss created by an increase in some tax rate is equal to the degree of self-financing (*DSF*) associated with a cut in this tax rate. The *DSF* is defined as the fraction of the initial static revenue loss which is recouped as the various tax bases expand due to the behavioural responses to the lower tax rate. The method of calculating degrees of self-financing developed in Chapter 4 allows for the interaction among tax bases, i.e., the fact that an expansion (contraction) of one tax base has positive (negative) spillover effects on other tax bases. Our analysis also accounts for the different impacts of residence-based taxes on saving (such as the personal capital income tax) and source-based taxes on investment (e.g. the corporation tax).

We calculate degrees of self-financing associated with a cut in the marginal effective tax rates on 1) labour income, 2) consumption, 3) business income (taxed under the source principle), and 4) savings income (taxed under the residence principle). Our calculations are based on recent national income accounts data and revenue data for Sweden, and our benchmark estimates of the *DSF* assumes an elasticity of taxable labour income which is a bit conservative in the light of recent empirical estimates of this parameter for Sweden. When calibrating the interest elasticities of savings and labour supply about which relatively little is known, we exploit the links between these elasticities and the elasticity of taxable labour income implied by economic theory.

Given the set of benchmark parameter values that we considered to be most plausible, we estimate that a cut in consumption taxes

will generate a dynamic revenue gain of about 16 percent of the initial static revenue loss. An across-the-board cut in the marginal tax rate on all labour income is found to have a degree of self-financing of about 24 percent, and a cut in the business income tax is estimated to have a *DSF* close to 30 percent, while the *DSF* generated by a cut in the savings income tax is found to be 36 percent.

In all the scenarios considered, we find that the *DSF* associated with a cut in indirect taxes on consumption is lower than the *DSF* for the three other tax instruments included in our analysis. The reason is that part of the consumption tax base is inelastic, since a part of aggregate consumption is financed out of public transfers to retirees and other individuals who have permanently left the labour market so that their labour supply does not respond to a change in the consumption tax rate.

When the initial marginal effective tax rate on business income is positive, we also find that a business income tax cut (e.g. a cut in the corporate income tax rate) will always have a higher *DSF* than a cut in the labour income tax rate. The explanation is that in a small open economy with perfect capital mobility, the business tax cut induces a capital inflow and a resulting rise in domestic investment which continues until the benefit from the tax cut has been fully passed on to domestic workers through a rise in real wages. Just like a labour income tax cut, a business tax cut therefore stimulates labour supply, but in addition it generates a capital import which expands the business income tax base further, thereby inducing a larger dynamic revenue gain than the dynamic gain from a labour income tax cut with the same static revenue cost.

Since a lower *DSF* indicates a lower marginal efficiency loss from taxation, our finding that indirect consumption taxes have a lower *DSF* than other taxes might seem to call for a shift from direct to indirect taxation. However, the reason for the low marginal deadweight loss from consumption taxes is that they are partly paid by individuals outside the labour force whose labour supply does not respond negatively to a higher consumption tax rate. Most of these individuals have relatively low current incomes. Moreover, an indirect consumption tax cannot account for the specific circumstances of the individual taxpayer, whereas the progressive personal labour income tax is based on the taxpayer's ability to pay. Concerns about equity may therefore make a shift

from direct to indirect taxation undesirable even though such a shift would improve economic efficiency.

Another robust finding is that the *DSF* for a source-based business income tax like the corporation tax is always higher than the *DSF* for the labour income tax when the initial marginal effective tax rate on business investment is positive. In that case the corporation tax works in part like a labour income tax and partly as a selective tax on the use of capital inputs in domestic production. By lowering the marginal effective tax rate on investment to zero and recovering the revenue loss through a higher tax on labour income, policy makers can avoid the distortion to the use of capital inputs without making workers worse off. To put it another way, since the marginal deadweight loss for the business income tax is larger than that for the labour income tax, it is efficient to shift from the former to the latter tax, and since the burden of the business income tax falls on workers anyway, there is no negative impact on income distribution from such a tax shift.

However, the prescription of a zero effective tax rate applies only to the *normal* return to business investment, that is, the return on the marginal investment which is just barely worth undertaking. As stressed in Chapter 4, intra-marginal profits arising from location-specific rents can be taxed without distorting investment incentives. Chapter 7 of the report explains how the taxation of the normal return can be separated from the taxation of rents in practice.

As a final policy observation, the sensitivity analysis in Chapter 4 indicates that even though there is considerable uncertainty regarding the *DSF* for the savings income tax, the *DSF* for this tax is larger or at least as large as the *DSF* for the other taxes, unless the uncompensated interest elasticity of saving takes an implausibly large negative value. This suggests that the Swedish dual income tax system which allows the statutory (marginal) capital income tax rate to be lower than the marginal labour income tax rate promotes economic efficiency by avoiding an excessively high marginal deadweight loss from the taxation of savings income.

For a proper interpretation of the results presented in Chapter 4, it is important to be clear about the nature and the time horizon of the policy experiments considered. The estimated degrees of self-financing relate to a long time horizon where the economy has fully adjusted to the changes in tax rates. In particular, while our

assumption of perfect international capital mobility may be a reasonable approximation in the long run, it may take considerable time for the domestic capital stock to adjust fully to a change in tax rates, since there are costs of installing new capital equipment, and since firms cannot easily shift their operations and productive assets across borders. In the short and medium term (physical) capital is therefore only imperfectly mobile, so in the shorter run a part of the burden of a source-based business tax on the normal return will be borne by the owners of business assets.

Further, when considering the effects of a change in the labour income tax, Chapter 4 assumes an identical change in the marginal tax rate on all labour income, from the first to the last krona earned. The chapter does not consider the specific effects of changing the marginal tax rate for top income earners. As the analysis in Chapter 6 makes clear, the degree of self-financing associated with such a policy experiment will be higher than the *DSF* for an across-the-board change in the marginal tax rate for all workers.

In a similar way, when analysing changes in the marginal tax rates on business income and savings income, Chapter 4 implicitly assumes that the tax rate changes applied uniformly to all forms of investment and saving, respectively. In so far as a change in the average value of the effective marginal tax rate stems from a selective tax rate change applying only to certain forms of investment or savings, there will be additional distortions that were not accounted for in our measures of marginal deadweight losses. Chapter 7 explains how one may quantify these additional efficiency losses from non-uniform taxation.

The measure developed in Chapter 4 of the *DSF* for a change in the effective indirect tax rate on consumption likewise assumes that the tax rate change applied equally to the consumption of all goods and services. If the change in the tax rate applies only to certain goods and services, there will be additional effects on economic efficiency which are explored in Chapter 5.

Chapter 5: Taxes on consumption and pollution

Chapter 5 considers the design of indirect taxes, including taxes on polluting activities. Because they are impersonal, indirect taxes are generally inferior instruments for the redistribution of income

compared to the progressive personal income tax and targeted income transfers. Yet indirect taxes may serve a useful role as a supplementary source of revenue that helps to avoid an “overburdening” of the income tax. Indirect taxes are also an important means of internalizing negative spillover effects from consumption and production (so-called negative externalities), including external environmental effects, and they may help to address problems of myopia and self-control relating to certain forms of addictive unhealthy consumption.

Optimal tax theory also suggests that a differentiated structure of indirect tax rates can help to alleviate the negative impact of taxation on labour supply. However, the information needed to implement the theoretically optimal differentiated indirect tax rate structure is not and probably never will be available. For this and a number of other reasons, including administrative simplicity, we argue that a general indirect tax such as the VAT should be uniform across all goods and services. Our quantitative analysis suggests that a move from the current differentiated Swedish VAT to a uniform VAT could generate a gain in economic efficiency somewhere between $\frac{1}{2}$ and 1 percent of total private consumption. At the same time we acknowledge the case for a reduced fiscal burden on certain household-related market services which are very close substitutes for home-produced services or for services delivered from the underground economy. A reduced effective tax rate in this area may be implemented through a tax credit for the purchase of household-related services, as currently practised in Sweden, or through a direct subsidy to maximise transparency.

In the field of excise taxation we do not find a case for significant changes in the level of the traditional “sin” taxes on tobacco and alcohol in Sweden. In particular, though recent research on optimal sin taxes in the presence of self-control problems could justify very high excises on tobacco and alcohol, the possibilities for Swedish consumers to engage in cross-border shopping leaves little scope for higher taxes on these products.

The other Swedish excises consist mainly of environmentally-related taxes. To implement the Swedish targets for reduction of greenhouse gas emissions in a cost-effective manner, we argue that the carbon tax on firms not covered by the EU Emissions Trading Scheme should in principle be uniform across industries if Sweden is committed to attaining her target for emission reductions regardless of the policies pursued by other countries. However, a

reduced tax rate for firms exposed to foreign competition may be warranted as a temporary policy if foreign governments can soon be expected to implement more ambitious climate policies, since there would then be a long-term basis for maintaining some carbon-intensive production on Swedish soil. For firms covered by the EU Emissions Trading Scheme we see little reason to maintain a Swedish carbon tax, since a price of carbon is already established in the European market for carbon allowances. Ideally, the carbon tax rate on the non-ETS sector should equal the average price of carbon emission permits to ensure a minimisation of the total cost of reducing Swedish CO₂-emissions. If the resulting carbon tax rate is not sufficient to attain the target for Sweden's emission reductions, the Swedish government could make up for the balance by purchasing carbon emission permits and handing them in to the European Commission. If EU rules do not allow such a cost-effective way of curbing global greenhouse gas emissions, the cost of attaining the target for emissions reduction will be higher than necessary.

Our discussion of energy taxes suggests that energy taxes collected purely for revenue purposes should be levied only on households and should be concentrated on those energy products that are most inelastic in demand in order to minimise the deadweight loss. Energy taxes aimed at internalizing externalities should be levied on firms as well as households and should reflect the marginal social costs created by the externalities. A separate target for energy savings lacks an economic rationale, but if it is maintained, it calls for an additional "energy savings tax" levied on all firms and households in proportion to all of their energy use in whatever form. A separate target for the share of renewable energy surces in total energy use likewise lacks a clear rationale when externalities can be fully corrected through Pigovian taxes on carbon and energy. If such a target is nevertheless maintained, there is a case for reduced (possibly zero) energy tax rates on renewable energy sources.

In the area of road transport we suggest that (part of) the existing energy taxes on gasoline and diesel and (some of) the recurrent taxes on motor vehicles could be gradually replaced by road-pricing systems in relevant locations as the necessary technology matures and the costs of operating such systems fall. This would be a natural follow-up on the positive experience with the Stockholm congestion tax.

The final part of Chapter 5 discusses the popular double dividend hypothesis that a shift from other taxes towards green taxes will not only improve environmental quality but will also create a “second dividend” in the form of reduced tax distortions in the labour market. If true, this could motivate higher green taxes than would be warranted on purely environmental grounds. However, we saw that in general there will be no second dividend in the form of increased employment and non-environmental welfare, since a green tax reform just involves a shift from direct to indirect taxes on labour. A green tax reform will stimulate employment only if it succeeds in shifting the tax burden away from workers towards other groups, but such a shift can also be achieved through a general switch from direct to indirect taxation that does not involve higher green taxes. Green tax reforms should therefore be undertaken because they improve the environment and not in the expectation that they will yield significant non-environmental gains.

Chapter 6: The taxation of labour income

Chapter 6 discusses the optimal design of taxes on labour income when the government worries about economic efficiency (the total “size of the pie” available to society) as well as equity (the distribution of the pie). We identify a number of factors that should be taken into account if policy makers want to trade off the goal of equity against the goal of efficiency in a rational manner. These factors include the distribution of earnings capacities across taxpayers and the impact of taxation on the various margins of labour supply as well as society’s valuation of income gains for the different income groups.

In particular, we note that the outcome of the optimal trade-off between equity and efficiency will depend very much on the way work efforts respond to a change in tax rates. If labour force participation is insensitive to economic incentives whereas the work efforts of those already employed is not, we find that the optimal tax-transfer system in an egalitarian society involves generous transfers to people outside the labour market combined with a rapid phase-out of transfers to low-income wage earners as they raise their labour income.

By contrast, if labour force participation responds significantly to the net income gain from employment whereas the effort of those already employed is not very sensitive to a lower tax on the last krona earned, it may be optimal to encourage labour force participation through an Earned Income Tax Credit (jobbskatteavdrag) even though the resulting revenue loss will require higher marginal tax rates than would otherwise be needed.

Given the considerable uncertainty regarding labour supply responses at the different margins as well as uncertainty regarding the distributional goals of policy makers, it is difficult to evaluate the social gain or loss from a reshuffling of the labour income tax burden across taxpayers. However, our analysis does suggest that even on rather conservative assumptions regarding behavioural responses, the very high marginal effective tax rate of about 75 percent at the upper end of the Swedish income distribution means that an abolition of the värnskatt imposed on high-income earners will more than fully pay for itself via the dynamic increase in the tax base. In such a situation there is no trade-off between equity and efficiency since the net revenue gain will enable the government to make everyone better off. Our analysis therefore leads us to suggest that the värnskatt be abolished.

Despite the uncertainty regarding the responsiveness of the tax base to a lower marginal tax rate, the risk involved in such a policy experiment is limited because of the relatively small revenue from the värnskatt. Moreover, in contrast to earlier findings, our analysis indicates that the degree of self-financing (*DSF*) in case of an abolition of the värnskatt would be higher than the *DSF* associated with an increase in the income threshold for the progressive central government income tax or an increase in the income level where social security benefits are capped.

Our description of current tax rules also shows that the Earned Income Tax Credit (jobbskatteavdraget) as well as the standard deduction (grundavdraget) vary with income in a complex manner which may be hard to grasp for the ordinary taxpayer. In particular, we note that the standard deduction reduces the base for calculating the EITC in a way that neutralizes the effect of the income-dependency of the standard deduction for wage earners. Hence the income-dependency of the standard deduction only matters for the average tax rate imposed on recipients of transfer incomes, since transfers affect the base for the calculation of the income-dependent standard deduction. The latter fact implies that

a change in the taxpayer's transfer income may influence the size of his EITC in a manner which may not be immediately clear to him. As a consequence of this complexity, the incentives embodied in the effective marginal tax rate schedule are probably hard for taxpayers to figure out, and hence they may not (fully) respond to these incentives in the way intended by policy makers. Since the effect of the standard deduction on the average and marginal tax rates of wage earners is fully offset by the way in which the EITC is designed, it seems desirable to simplify the personal labour income tax through a replacement of the current income-dependent standard deduction by an identical flat deduction for all taxpayers. The implications of this simplification for the distribution of income among transfer recipients may have to be countered through appropriate adjustments of the rates of transfer.

Chapter 7: The taxation of income from saving and investment

The way a country allocates its savings and investment can have important effects on its living standard. If the tax system causes capital to be channeled to low-productive uses, national income will be lower than it could have been. Chapter 7 identifies a number of tax distortions to the pattern of saving and investment in Sweden. The main distortions to the savings pattern stem from the lenient taxation of retirement saving and saving channelled into owner-occupied residential property. The tax subsidies to these forms of saving are estimated to generate a total deadweight loss of about 6½-10½ billion SEK measured in 2008 prices. The deferral of capital gains tax until the time of realization causes a further distortion by generating a tax preference for assets whose returns accrue mainly in the form of capital gain, and by hampering portfolio reallocation towards assets with a higher social (pre-tax) return.

On the investment side, the source-based business income tax (mainly the corporation tax) works like a combination of a labour income tax and a tax on capital input into domestic production. The corporation tax therefore tends to be more distortionary than the labour income tax. In addition, the taxation of business income distorts the choice between alternative forms of business organization, between debt and equity, and between short-lived and long-lived assets. We estimate that the combined deadweight

loss from the tax distortions to the choice of organizational form and to the debt-equity choice could amount to more than 32 billion SEK in 2008 prices; a huge distortion compared to the 83 billion SEK corporate tax revenue in that year.

To address the inefficiencies in the taxation of savings income, we propose the following reform measures:

- Tax all returns to financial saving (including the return to institutional saving) at a common rate of 25 percent.
- Replace the current municipal property tax, the current tax on realized capital gains on owner-occupied residential property and the stamp duties on transactions in such property by a flat property tax rate of 1 percent on a realistic assessment of the market value of the property.
- Tax all capital gains on listed shares on an accruals basis and tax the unrealized gains on unlisted shares resulting from the retention of corporate profits on a current basis, with an obligation for the company to pay the tax on the shareholder's behalf.

The replacement of the existing property taxes by the proposed 1 percent tax on residential property values will provide a roughly neutral tax treatment of financial savings and savings invested in owner-occupied housing, given a 25 percent capital income tax rate. The revenue gain from the first two measures above is estimated to be about 17 billion SEK (2008 level).

To reduce tax distortions to the level and pattern of business investment, we propose a business tax reform along the following lines:

- Introduce an Allowance for Corporate Equity (ACE) in the form of a deduction for an imputed normal return to equity.
- Reform the 3:12 rules to secure that any income up to a cap given by the normal return to business equity (the ACE) is taxed only once at the capital income tax rate, regardless of whether it is paid out (or realized as a capital gain) or not. Income above the normal return should be taxed as labour income when it is realized in the form of a dividend or a capital gain, with a credit for the corporation tax already paid.

- Liberalize the rules for offset of business losses, e.g. by allowing business losses to offset other tax liabilities for the same year such as VAT, Pay-As-You-Earn income tax and fringe benefits tax.
- Reduce the corporate income tax rate from the current 26.3 percent to 25 percent, corresponding to the proposed capital income tax rate.

Our analysis shows that the introduction of an ACE would in principle eliminate the tax distortion to the choice between debt and equity and among different business assets. It would also eliminate the tax distortion to the input choice between labour and capital in the small open Swedish economy. The proposed reform of the 3:12 rules would ensure a roughly identical tax treatment of closely held companies and proprietorships, thus eliminating the distortion to the choice between these two closely substitutable forms of business organization.

The revenue loss from an ACE allowance for corporate equity is estimated to be 8-9 billion SEK in 2008 prices, and the cut in the corporate tax rate from 26.3 to 25 percent is estimated to generate an additional revenue loss of about 4 billion SEK. According to our calculations, the total revenue loss from the corporate tax reform could easily be financed by the proposed changes in the taxation of savings income.

Summary of policy proposals

The analysis in this report indicates that, without eroding public revenue, the long run standard of living in Sweden could be raised through a comprehensive tax reform that reinstates and further develops the sound principles of tax neutrality and uniformity underlying the great tax reform of 1991. In particular, we propose a reform including the following elements:

Indirect taxation

- The VAT should be levied at the same rate on all goods and services. The uniform VAT rate could be set at a level generating the same net revenue as today. According to

prevailing estimates, it would only require a minor public expenditure to compensate vulnerable low-income groups for the rise in the VAT rate on foodstuffs.

- Energy taxes collected purely for revenue purposes should be levied only on households and should be concentrated on energy products that are most inelastic in demand. Energy taxes aimed at countering negative environmental effects should be levied on firms as well as households and should reflect the marginal social costs created by the negative externalities.
- The existing taxes on gasoline could be gradually replaced by road-pricing systems in relevant locations as the necessary technology matures and the costs of operating such systems decrease.

Taxation of labour income

- The värnskatt levied on top incomes should be abolished. Even on conservative assumptions regarding the taxpayers' behavioural responses to tax rates, the värnskatt is likely to cause a net loss of public revenue when its negative impact on the size of the tax base is accounted for.
- The current rules for the calculation of the Earned Income Tax Credit (jobbskatteavdraget) interact with the rules for the standard deduction (grundavdraget) in a very complex manner which is likely to weaken the positive incentive effects of the EITC. The rules could be simplified through a replacement of the current income-dependent standard deduction by an identical flat deduction for all taxpayers.

Taxation of income from saving and investment

- Align the tax rate on the (imputed) return to retirement saving (avkastningsskatten) with the ordinary personal capital income tax rate at a level of 25 percent.
- Replace the existing municipal property tax, the stamp duties and the existing capital gains tax on owner-occupied housing by a new 1 percent property tax on a realistic assessment of the property.

- Align the corporate income tax rate with the capital income tax rate at the level of 25 percent.
- Introduce an Allowance for Corporate Equity (ACE) in the form of a deduction for an imputed normal return to the equity of companies.
- Reform the 3:12 rules to secure that any income up to a cap given by the normal return to business equity (the ACE) is taxed only once at the capital income tax rate, and that income above that level is taxed in the same way as income from proprietorships.
- Liberalize the rules for offset of business losses.

Table 8.1 summarises our estimates of the effects of the main reform proposals on total tax revenue and on economic efficiency. The first column shows the so-called static revenue effects, defined as the effect on tax revenue in case taxpayers do not change their behaviour in response to the change in the tax rules. We see that in this case the reform proposals will be roughly revenue neutral, generating only a slight net revenue gain of about ½ billion SEK.

Columns 2 and 3 report the so-called dynamic revenue effects, that is, the effects on revenue caused by the changes in taxpayer behaviour triggered by the new tax rules. As we explain in the report, these dynamic revenue effects also reflect the effects of the tax changes on economic efficiency. For example, if a taxpayer responds to a lower tax rate by working more, the rise in tax revenue generated by his extra work effort implies a welfare gain for society, since it provides additional public funds that can be used for the benefit of all taxpayers (by contrast, the “dynamic” gain in the taxpayer’s own after-tax income is not a net welfare gain since it just compensates him for his extra effort).

Column 2 in Table 8.1 shows the dynamic revenue gains arising from a move to uniform/neutral taxation in the various areas. The proposed property tax rate is chosen such that housing services will be taxed at roughly the same rate as all other goods and services. Further, as Chapter 7 explains, the introduction of an Allowance for Corporate Equity will mean that all corporate investments are taxed at the same effective marginal rate no matter whether they are financed by debt or equity, and regardless of the type of asset in which the company invests. Under the current discriminatory system of taxation, high-taxed activities must have a relatively high

value to be able to compete with low-taxed activities. A move to uniform taxation therefore means that consumers and firms substitute away from activities with a lower value towards activities with a higher value. As a consequence, the tax base expands, thereby generating the “dynamic” revenue gains indicated in column 2. The magnitude of these gains depends on the degree to which consumers are ready to change their pattern of consumption and the degree to which firms are willing to change their choice of production technologies and modes of investment finance in response to the changes in relative prices and costs caused by the tax changes. This responsiveness of taxpayer behaviour to changing relative prices and costs is captured by various so-called substitution elasticities which are subject to a great deal of uncertainty. The estimates in column 2 of Table 8.1 are based on substitution elasticities which are deemed to be plausible in the light of empirical economic research, but it must be stressed that the numbers are quite tentative, given the limited knowledge of their exact size.

With this important proviso, the second column in Table 8.1 indicates that the proposed moves towards uniform taxation would generate a total long-run revenue gain of more than 27 billion kronor as taxpayers adapt their behaviour to the new tax system. This revenue gain will accrue only gradually, since it will take some time for taxpayers to adjust their patterns of consumption, saving and investment. The uniform tax treatment of debt and equity ensured through an Allowance for Corporate Equity is seen to generate a dynamic revenue gain of more than 7 billion SEK as companies shift from debt-financed investments with a relatively low pre-tax rate of return to equity-financed investments with a higher pre-tax return. On top of this gain in public revenue, the higher average productivity of corporate investment ensured through the ACE also generates a more than 21 billion SEK increase in private after-tax incomes, so the total efficiency gain from a more productive allocation of the corporate capital stock is estimated to be roughly 27½ billion SEK.

Table 8.1 Effects of the main reform proposals on public revenue and economic efficiency (billion SEK, 2008 level)

Reform element	1. Static revenue effect	Dynamic revenue effects (efficiency effects)			5. Total net effect on revenue
		2. Effect of move to uniform taxation	3. Effect of change in level of taxation	4. Total dynamic revenue effect	
Move to uniform VAT	0	+9.4 ²	0	+9.4	+9.4
Abolition of värnsskatt	-3.3 ¹	0	+3.1 ^{6,a} to +6.2 ^{6,b}	+3.1 to +6.2	-0.2 to +2.9
Move to uniform 25% savings income tax	+3.0	+3.4 ³	-0.8 ^{7,a} to -1.1 ^{7,b}	+2.3 to +2.6	+5.3 to +5.6
Property tax reform	+13.8	+7.4 ⁴	-1.1 ^{8,a} to -2.2 ^{8,b}	+5.2 to +6.3	+19.0 to +20.1
Allowance for Corporate Equity	-9.0	+7.2 ⁵	+1.6 ^{9,a} to +2.7 ^{9,b}	+8.8 to +9.9	-0.2 to +0.9
Cut in corporate income tax rate to 25%	-4.0	0	+0.7 ^{9,a} to +1.2 ^{9,b}	+0.7 to +1.2	-3.3 to -2.8
Total effect	+0.5	+27.4	+3.5 ^a to +6.8 ^b	+30.9 to +34.2	+31.4 to +34.7

¹. Revenue loss net of increase in consumption tax revenue. The gross revenue loss is 4.4 billion SEK.

². Estimated from formula (B.4) in Chapter 5.

³. Estimated from formula (B.9) in Chapter 7.

⁴. Estimated from formulas (B.18) and (B.23) in Chapter 7.

⁵. Calculated as a 25% corporate tax rate times the aggregate productivity gain of 28.6 billion SEK estimated to follow from a neutral tax treatment of debt and equity (see Chapter 7).

⁶. Estimated from formula (B.13) in Chapter 6.

⁷. Calculated as the DSF for the savings income tax estimated in Chapter 4 multiplied by the static revenue effect in column 1.

⁸. Calculated as the DSF for the consumption tax estimated in Chapter 4 multiplied by the static revenue effect in column 1.

⁹. Calculated as the DSF for the business income tax estimated in Chapter 4 multiplied by the static revenue effect in column 1.

^a. Assuming an elasticity of taxable income equal to 0.1.

^b. Assuming an elasticity of taxable income equal to 0.2.

Source: Calculations by the author, based on the analysis in chapters 4 through 7.

Column 3 of Table 8.1 shows the estimated dynamic revenue effects occurring as taxpayers change their behaviour in response to the changes in the level of taxation stated in the first column in the table. The move to a uniform VAT does not generate any revenue effect of this kind since the new uniform VAT rate is chosen to ensure that the average *level* of value-added taxation is unchanged. In the other parts of the tax system the dynamic revenue effects of the change in the level of taxation depend on the elasticity of taxable income which measures the sensitivity of the tax base to a change in the effective marginal tax rate. This elasticity reflects all sorts of behavioural responses to taxation such as changes in labour supply, education and training, savings and investment as well as changes in tax planning activities and tax evasion etc. The smaller

numbers in column 3 are based on a conservative assumption that the elasticity of taxable income is only 0.1, meaning that a 1 percent increase in marginal after-tax income induces a 0.1 percent increase in the tax base.

However, the recent empirical studies reviewed in Chapter 4 suggest that a more realistic value of the elasticity of taxable income in Sweden would be 0.3 to 0.4. Nevertheless, in order not to err on the optimistic side, the larger numbers in column 3 of Table 8.1 assume an elasticity of taxable income equal to 0.2 which is still somewhat conservative in the light of recent empirical evidence for Sweden. In any case, we see that even with the low elasticity of 0.1, the dynamic net revenue gain from taxpayer responses to the changes in the level of taxation will be around 3½ billion kronor. The property tax reform will raise the price of housing services and will therefore work in part like a higher tax on consumption which erodes real wages, thereby discouraging labour supply. This is the reason for the estimated dynamic revenue loss from the property tax reform in the third column of Table 8.1. Note that this loss is smaller than the dynamic revenue gain from the move to a uniform taxation of housing and other forms of consumption (compare columns 2 and 3), so on balance the property tax reform improves economic efficiency. It might be thought that there is also a dynamic revenue loss from the fact that the higher property tax reduces the property tax base by weakening the incentive to invest in owner-occupied housing. However, this revenue loss is recouped through an increase in the revenue from the savings income tax, as taxpayers increase their financial saving at the expense of their housing investment. Since the effective tax rate on financial saving and housing investment is the same after the property tax reform, this change in the allocation of household wealth has no net impact on public revenue.

The fourth column in Table 8.1 simply adds up the dynamic revenue effects reported in columns 2 and 3. As already mentioned, this total dynamic revenue gain is an indicator of the gain in economic efficiency generated by the tax reform. We see that the total estimated gain amounts to more than 30 billion SEK, corresponding to roughly 1 percent of GDP. Even when we account for the considerable uncertainty regarding the various elasticities describing taxpayer behaviour, this estimate suggests that the proposed restructuring of the Swedish tax system would significantly improve the performance of the Swedish economy.

The fifth and final column in Table 8.1 adds the static and the dynamic revenue gains to obtain a measure of the total net revenue gain from the reform. The net revenue impact of the total reform package almost fully reflects the dynamic revenue gain which may be used in various ways. For example, the government could reduce public sector debt to improve the long-run sustainability of the public finances; it could increase the provision of public services or public transfer payments to selected groups, or it could reduce the level of taxation. If the latter route is chosen, it is of course important that taxes be cut in a way which does not compromise the principles of tax neutrality and uniformity that have generated the revenue gains in the first place. Since the dynamic revenue gains are of uncertain size and only materialize gradually over time, they should not be spent until they have actually accrued.

Are the efficiency gains obtained at the expense of equity?

It is natural to ask whether the large gains in economic efficiency reported in Table 8.1 can be reaped without creating a more unequal distribution of disposable incomes? In itself, the proposal to abolish the värnskatt clearly benefits the richest taxpayers who currently pay this tax. According to estimates by the Swedish Ministry of Finance, this part of the reform package would increase the average disposable income of the richest 10 percent of taxpayers by an amount of 5575 SEK per year (2010 level), while leaving the net incomes of other taxpayers unchanged. However, the analysis in Chapter 6 suggests that the dynamic revenue gain from an elimination of the värnskatt will almost certainly exceed the static revenue loss. In that case all taxpayers would benefit, even though the distribution of disposable incomes would become more unequal. To counter the tendency towards greater inequality, the government could choose to spend the net revenue gain in a way that favours low-income groups.

The third column of Table 8.2 below shows how the proposed cut in the ordinary capital income tax rate would affect average disposable income at various income levels. The table groups taxpayers into ten income groups (deciles) according to the size of their earned income (taxerad förvärvsinkomst = income from work + income from transfers). Income decile no. 1 includes the poorest 10 percent of all taxpayers while decile no. 10 encompasses

the richest 10 percent of taxpayers. We see from Table 8.2 that the cut in the capital income tax will have a very limited impact on disposable incomes. In percentage terms, the biggest changes in net incomes occur in the bottom and in the top decile. Taxpayers in the first decile include many pensioners with limited earned income but non-negligible capital income from savings accumulated during their working career. The high share of capital income in total income explains why taxpayers in this group experiences the largest percentage change in their average disposable income (0.75 percent). Taxpayers in the top decile for earned income are still active in the labour market but have typically been able to accumulate substantial wealth due to their high earned income. On average these taxpayers will experience a gain of 0.6 percent in their disposable income. For the other income groups, the cut in the capital income tax rate has a negligible impact on disposable income, since they typically have rather little net capital income, as their positive income from capital is more or less offset by their deductions for interest expenses.

Note that the numbers in Table 8.2 do not include the effect of the proposed rise in the tax rate on the (imputed) income from retirement saving (avkastningsskatten) from 15 to 25 percent. This element in the tax reform package will most likely have a progressive distributional impact, since low-income groups undertake very little saving for retirement to supplement their public pensions. Figure 8.1 illustrates the relationship between earned income and retirement savings in private individual accounts (thus the figure does not include occupational pension schemes mandated by collective bargaining agreements (tjänstepensioner)). The figure documents that individual retirement savings are made mainly by high-income earners.

Table 8.2 Distributional effects of the proposed change in the capital income tax and in the property tax (2010 income levels)

Income decile	Average earned income before tax ¹	Average individual disposable income	Change in individual disposable income ² as a result of	
			Cut in capital income tax from 30% to 25%	Rise in property tax rate to 1% ³
1	24 309	67 081	500 (0.75%)	-655 (-0.98%)
2	98 764	107 879	356 (0.33%)	-503 (-0.47%)
3	141 439	133 625	551 (0.41%)	-893 (-0.67%)
4	178 338	153 765	293 (0.19%)	-1092 (-0.71%)
5	212 513	179 144	306 (0.17%)	-1592 (-0.89%)
6	246 216	206 959	207 (0.10%)	-1875 (-0.91%)
7	280 306	232 682	139 (0.06%)	-1925 (-0.83%)
8	320 125	264 526	175 (0.07%)	-2669 (-1.01%)
9	379 304	312 495	483 (0.15%)	-3852 (-1.23%)
10	620 204	487 182	2889 (0.59%)	-6979 (-1.43%)

¹Average value of "taxerad förvärvsinkomst".

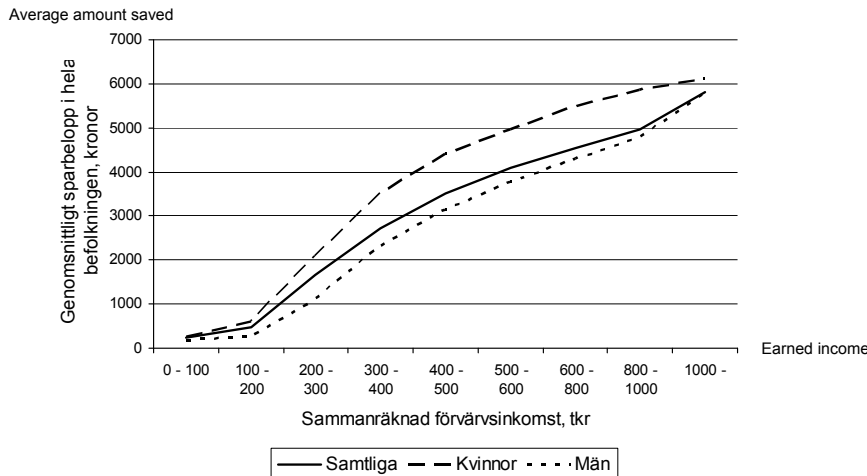
²The numbers without brackets are absolute changes measured in SEK; the numbers in brackets measure the percentage change in average individual disposable income.

³The property tax is assumed to be calculated as 1% of the fair market value which is equal to 4/3 of the current assessed property value (taxeringsvärdet). The numbers reflect the increased property tax on owner-occupied villas (småhus), excluding condominiums and farm houses.

Source: Calculations based on the FASIT model undertaken by the Ministry of Finance.

It should also be stressed that Table 8.2 does not include the effects of the proposed tightening of the taxation of capital gains on shares through the elimination of the deferral of tax until the time of realization of the gain. Capital gains on shares are an important part of total capital gains which are very unequally distributed across taxpayers. For example, in 2007 taxpayers with an earned income between 280,000 and 300,000 SEK scored an average net capital gain of around 17,400 SEK; taxpayers with earned incomes between 500,000 and 1,000,000 SEK obtained an average net capital gain of about 71,500 SEK, while those with earned incomes above 1,000,000 SEK benefited from an average net capital gain of 512,600 SEK (Tax Statistical Yearbook of Sweden 2009, p. 124). These numbers suggest that a tighter capital gains tax will be strongly progressive in its distributional impact, thus offsetting the distributional effect of the abolition of the värnskatt.

Figure 8.1 Distribution of retirement savings in individual savings accounts, 2008¹



¹ Distribution across the whole population. Source: Bergström et al. (2010, Figure 3.3)

Moreover, the last column of Table 8.2 shows that the proposed increase in the property tax rate to 1 percent of the current market value of the property will tend to imply a larger percentage fall in disposable income the higher taxpayer’s earned income. An exception to this rule is the first decile which includes many retirees with a low earned income relative to the value of their property. However, for the bottom decile we see that the average absolute increase in the annual property tax burden is a relatively small amount of 655 kronor. For the average taxpayer in the first decile, this increase in the property tax burden is offset by a cut in the capital income tax bill of about 500 kronor. By contrast, for taxpayers in the upper income deciles we see from Table 8.2 that the rise in the property tax bill is considerably higher than the fall in the capital income tax bill.

Apart from the rise in the property tax rate, the proposed property tax reform includes an abolition of the stamp duties and capital gains taxes on transactions in owner-occupied housing, so the numbers in the last column of Table 8.2 overstate the increase in the net tax burden on home-owners. Overall, the numbers above indicate that the net effect on income distribution of the abolition

of the värnskatt and the changes in the various capital taxes will be quite small, since many of the effects tend to offset each other, and since the total amount of tax reshuffling is limited.

This conclusion is unlikely to change when we allow for the distributional effects of the proposed reform of corporate income taxation. One might think that the Allowance for Corporate Equity and the (small) cut in the corporate income tax rate to 25 percent will only benefit shareholders. However, in a small open economy like Sweden, a tax on the normal return to domestic corporate investment will tend to be fully shifted onto workers in the long run via a drop in investment which erodes real wages by reducing the productivity of labour (this point is explained in detail in chapters 4 and 7). By eliminating the tax on the normal return to corporate investment at the company level, the ACE eliminates this productivity-reducing effect of the corporation tax and paves the way for higher real wages. In the long run the distribution of the benefits from the ACE will therefore roughly coincide with the current distribution of labour income.

The modest cut in the corporate income tax rate will work as a combination of a cut in the tax on the normal return and a cut in the tax on “above-normal” profits on domestic investment. The first part of the tax cut works in the same way as the ACE and will thus benefit wage earners in the long run. The cut in the tax rate on above-normal profits will favour the owners of companies to a larger extent, but even this part of the tax cut will induce some increase in domestic investment so that part of the long-run benefit will be shared with domestic workers. In any case, the effects involved are small due to the small change in the corporate tax rate.

In the short run, the ACE and the cut in the corporate income tax rate will trigger some capital gain on shares that will redistribute income in favour of domestic shareholders. However, under the proposed capital gains tax reform these gains will be taxed immediately as they accrue, whereas the current capital gains tax regime allows deferral of tax until the time of realization.

When evaluating the distributional effects of the proposed tax reform, it is also important to keep in mind that the move towards greater uniformity and neutrality in taxation will ensure a broadening of the tax base that will allow the government to collect additional revenue at unchanged tax rates. If policy makers feel a need to compensate for some of the distributional effects of the tax changes, they can channel this additional revenue towards needy

groups through targeted transfers or tax cuts. More generally, a broad-based tax system collecting substantial revenues with a low loss of economic efficiency is the best safeguard of the welfare state arrangements that ensure an equitable distribution of income.