2 Main features of the Norwegian tax system

2.1 Introduction

Taxes are necessary to fund public services and transfers, and should be structured to promote high output and efficient resource allocation. The tax system should not impose unnecessarily high administrative costs on taxpayers and authorities. Taxes also have a counter-cyclical effect. The tax system contributes to automatic stabilisation of the economy as tax revenues increase during an economic upturn and decline in a downturn.

The description of the tax system is based on the rules for 2016. Figure 2.1 shows aggregate central, regional and local government tax estimates for 2016. The figure illustrates the data in Table 1.7[1] and shows that the main sources of tax revenues are tax on ordinary income from individuals, value added tax and employers' social security contributions.

The various taxes can be classified as either direct taxes or indirect taxes.

Direct taxes include, among other, income tax from individuals and businesses, net wealth tax and recurrent tax on immovable property. Direct taxes account for 69 pct. of overall tax revenues in 2016. 58 pct. of this is in the form of income tax from individuals, including employee's social security contributions and bracket tax, whilst 14 pct. is in the form of income tax from enterprises, including the petroleum industry. Corporate tax revenues from mainland enterprises account for 7 pct. of tax revenues from the mainland economy.

Indirect taxes include value added tax, excise duties, customs duties and sectoral taxes, and account for 31 pct. of overall tax revenues. Value added tax accounts for 20 pct. of overall tax revenues, whilst excise taxes account for 8 pct. Customs duties are a minor component of the public revenues.

2.2 Guidelines for an efficient tax system

The tax system influences labour supply, consumption, savings and investments. It is therefore important that the tax system is designed on the basis of a set of fundamental principles ensuring that resources are allocated as efficiently as possible in the economy. This can be achieved by

- first making use of taxes that promote better resource allocation (for example environmental taxes);
- thereafter employing neutral taxes that do not influence the choices made by producers and consumers (for example taxes on the economic rent in the petroleum and hydropower sectors); and
- finally using distortionary taxes to achieve sufficient revenues to finance public goods and services and to realise redistribution objectives.

The economic costs resulting from distortionary taxation should be kept as low as possible. Since the 1992 tax reform, the tax system has been based on the principles of broad tax bases, low rates and symmetrical treatment of income and expenses. This reduces the costs of taxation, and is conducive to the equal treatment of taxpayers. Broad tax bases, covering all types of income, are a prerequisite for the equal taxation of persons with equal income, and for ensuring that the progressivity of tax rates will result in improved distribution. The changes to the tax system resulting from the 1992 tax reform and changes in subsequent years, extended the tax base, thus narrowing the gap between taxable income and actual income.

[1] cf. The English translation of chapter 1 of Prop. 1 LS (2016-2017) Taxes 2017.

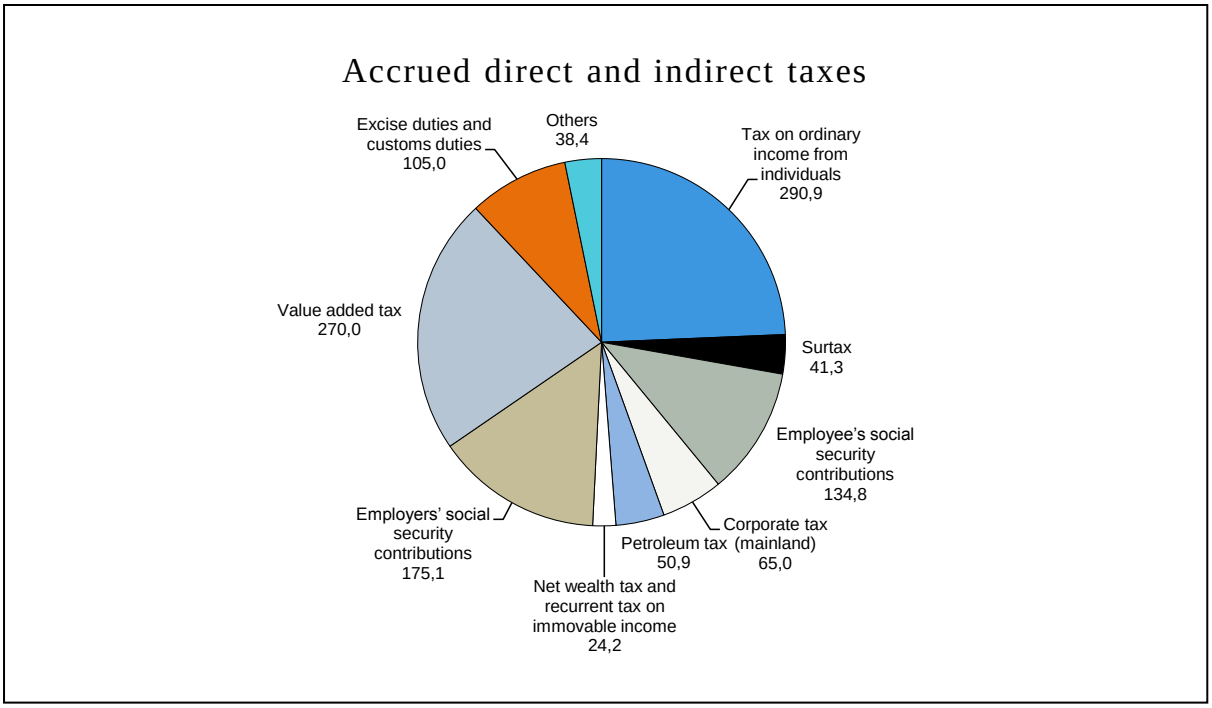

Figure 2.1 Accrued direct and indirect taxes. Central, regional and local government. Estimates for 2016. NOK billion. Source: Ministry of Finance.

The principle of broad tax bases was again supported in the 2006 tax.reform. This principle has also underpinned the consensus in the Storting on a new tax reform in the spring of 2016

Exemptions and special schemes that deviate from the general rules make the tax system less efficient and more administratively complex and challenging. Other taxes need to be increased in order to keep tax revenues at the same level, and the economic costs of taxation tend to increase more than proportionally with tax rate increases. If it is desirable to support a specific activity or specific group, measures on the expenditure side of the budget are often less costly and more targeted. Revenues from individual taxes should, as a main rule, not be targeted for specific forms of expenditure, as such restrictions prevent efficient prioritisation of funds via the expenditure side of the budget.

In some cases, different tax objectives may conflict. Consequently, various considerations need to be balanced against each other when designing the tax system. In general, no single tax should target multiple objectives.

In Norway, public funding of extensive welfare programs makes it necessary to raise substantial tax revenues. However, some taxes are also intended to serve other important purposes beyond raising government revenues. These include, in particular, income redistribution, as well as health and environmental considerations.

The tax system contributes to redistribution by, among other things, an increasing average tax burden as income increases. Taxation of wage income will tend to reduce labour supply, and the tax system should, insofar as possible, promote good decisions with regard to labour force participation, education and career choices. Empirical research indicates that the labour supply of low-income groups is more responsive to changes in hourly wages after tax than is the labour supply of high-income groups.

People with the lowest incomes pay little or no tax. Consequently, changes to the tax system are of little significance to this group. Many people with a persistently low income are not working. The tax rules should as far as possible be designed to reduce disincentives to work. The interaction between

benefits and tax rules has a major impact on incentives to return to work or to increase working hours for people who receive social security benefits as compensation for (temporary) loss of wage income resulted by health problems or unemployment. One of the tax and welfare policy challenges is balancing income protection considerations against work incentive considerations. This is illustrated in Box 2.1, showing that there may in some cases be little economic gain from working rather than claiming social security benefit.

Environmental taxes contribute to more appropriate pricing of environmentally-harmful activities and motivate individuals and companies to more environmentally-friendly behaviour. Moreover, the use of environmental taxes is consistent with the polluter pays principle. Revenues from environmental taxes can be used to strengthen welfare schemes and public services or to reduce other taxes.

Business taxation should principally focus on raising government revenues, without impeding sound commercial activity. Making the taxation of all actual income as consistent and uniform as possible makes resource allocation less susceptible to, for example, tax-motivated investments. Taxed profits should correspond to actual profits. This also enhances a broad tax base, thus enabling tax rates to be kept lower.

Predictability should also be emphasised in business and capital taxation. Instability may impair business investment and reduce profits.

Box 2.1 Work incentives depend on both the tax system and the benefit system

Work incentives are influenced by both tax rates on labour and any net transfers received by individuals. The Norwegian income protection system (primarily the National Insurance Scheme) comprises a number of transfer schemes that serve to provide people who do not work, for various reasons, with a subsistence income. Examples are disability benefits and unemployment benefits. Such benefits are often discontinued fully or partly, when a person takes up a job, and hence such discontinued benefits serve as an additional «tax» on labour. The effective average tax on labour is often calculated to illustrate the implications of this in terms of work incentives. The effective tax rates reflect both tax and the net transfers foregone when a person moves into employment. Such rates are useful, but they need to be interpreted with caution. In general, these calculations only reflect transfer levels. Other aspects of these schemes, such as the extent to which benefits are subject to time limits and activity requirements for recipients, will also influence work incentives.

Figure 2.2 presents some average effective tax rates on labour when a person moves from unemployment to full employment in the Nordic countries (2014 data). The respective calculations are for a single parent with two children and a couple with two children, where one parent stays at home. The figure shows that the effective tax rate on labour can be high. A single parent at 67 pct. of average earnings and with two children will in Norway in effect be taxed at about 80 pct. of gross wage income when the loss of unemployment benefit is taken into account.

Box 2.1 continues

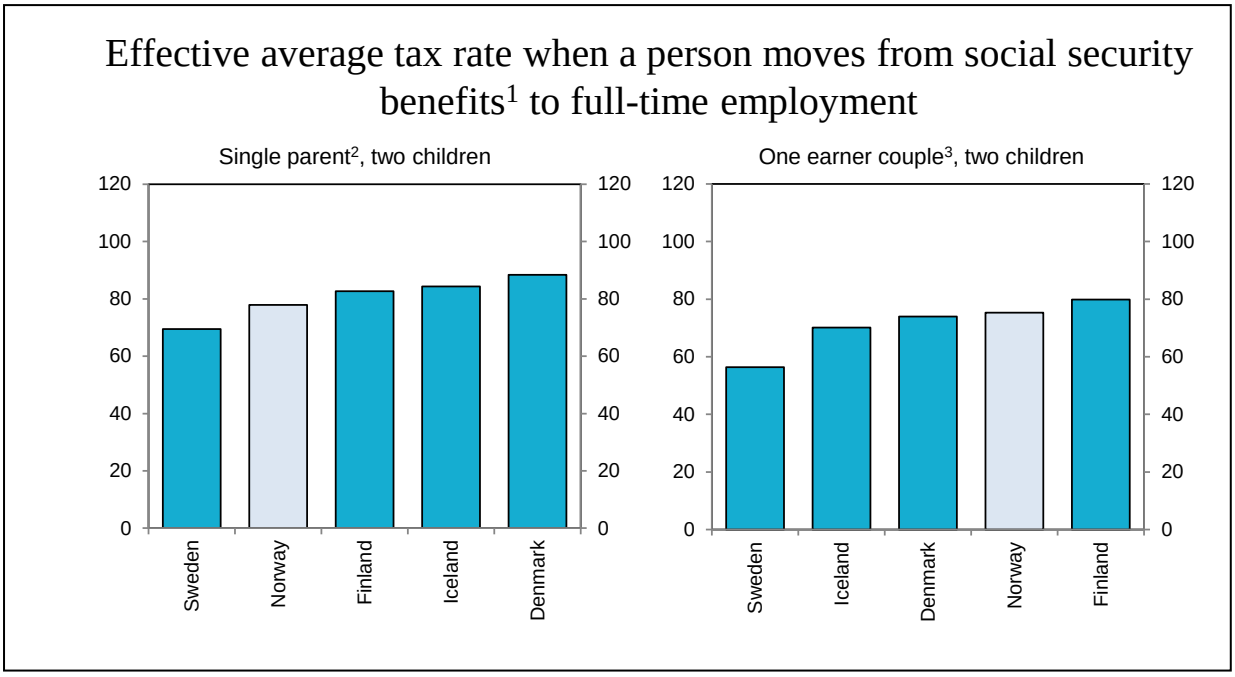

Figure 2.2 Effective average tax rate when a person moves from unemployment benefits to full-time employment. 2014. Percent.

1 The calculations are based on unemployment benefits in the various countries as calculated in OECD Tax and Benefit 2014. The benefit responds to the payment in the first year of unemployment.

2 Based on 67 pct. of the average wage in the various countries, in calculating both the benefits and the amount of the wage income from full employment.

3 Based on 100 pct. of the average wage in the various countries, in calculating both the benefits and the amount of the wage income when moving into full employment. The spouse/cohabitant is assumed to stay at home.

Sources: OECD and the Ministry of Finance.

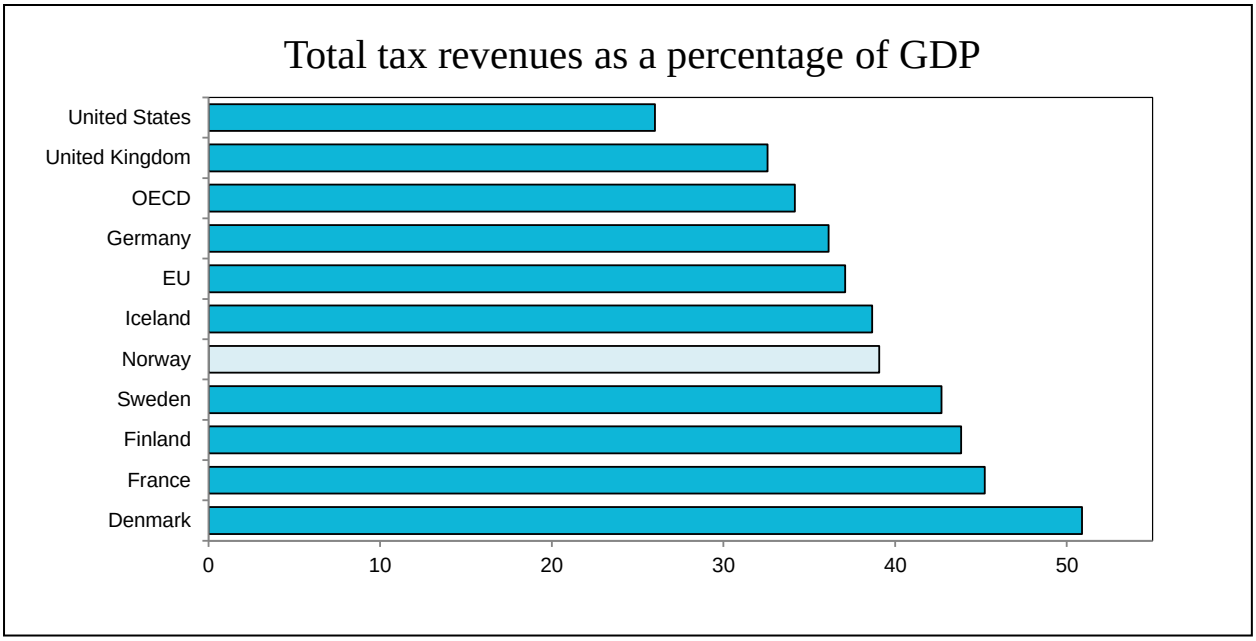

Figure 2.3 Tax revenue as a percentage of GDP in selected countries, EU and OECD[1]. 2013. Percent.

Sources: OECD Revenue Statistics and Eurostat.

Non-weighted average. Data for the OECD are from 2013.

Industries exploiting natural resources may generate extraordinary profits in the form of economic rent. It is important to ensure that society receives a large proportion of such extraordinary profits. Revenues for neutral taxes, such as taxes on economic rents, will, when taken in isolation, reduce the need for distorting taxes. Norway levies special taxes on profits from the petroleum industry and hydropower plants. The petroleum tax system and the State's Direct Financial Interest (SDFI) channel a large proportion of the high income from the continental shelf to the State, without preventing economically profitable investments from being made. SDFI functions as a cash flow tax on each field, but its income is not formally classified as tax revenues.

Figure 2.3 compares the tax revenues of various countries as a percentage of their gross domestic product (GDP) and provides a rough indication of differences in the size of their public sectors and differences in their overall tax levels. Such a comparison neither takes account of other revenue sources than tax, nor that the proportion of tax revenues will vary somewhat depending on factors such as the extent to which public pension and social security payments are taxable. The figure shows that Norway and the other Scandinavian countries have a relatively high overall tax level. This reflects, among other things, comprehensive public welfare schemes. Norway has a highly unusual industrial structure, characterised by considerable production in the petroleum sector. If one had only focused on the mainland economy, the tax level would have been somewhat higher than the tax level in the economy as a whole. The reason for this is that the petroleum revenues via SDFI accrue directly to the State, and hence are not subject to taxation.

Since 1985, tax revenues in Norway have varied between 39 and 44 pct. of GDP. In Sweden, the tax to GDP ratio has ranged from 43 to 50 pct., whilst it has been between 44 and 51 pct. in Denmark. Over the same period, the average OECD tax revenue share has varied between 32 and 34 pct. of GDP.

The greater mobility of capital, goods and services implies that the significance of different taxation between countries may increase. Norway needs good general tax rules to retain and attract business activities and capital. However, location decisions depend on more than tax. Political stability, good

infrastructure, access to highly qualified labour, well-functioning financial markets, property rights, as well as a stable and predictable regulatory framework, are also important determinants of the overall framework conditions for doing business.

2. 3 Direct taxes

2.3.1 Income tax for individuals

Rate structure and tax base

The income tax for individuals is calculated on two different tax income bases. Firstly, a flat tax rate of 25 pct. is paid on «ordinary income» less the personal allowance and certain special allowances. Ordinary income comprises all taxable income (wages including taxable benefits in kind, social security benefits, pensions, net income from self-employment, taxable income from shares and other forms of capital income), less the basic allowance, deductible losses and expenses such as debt interest, etc., parental allowance and other allowances. Levying a flat tax rate on a net tax base ensures that all deductions are of equal tax value and makes the taxation of capital symmetric, i.e. income (gains) and costs (losses) are taxed at the same rate.

Secondly, the employee's social security contribution and the bracket tax are paid on so-called «personal income», which comprises gross wage income, social security benefits and pension income, without deductions. Imputed personal income for self-employed persons is also included in «personal income».

High-income earners pay a larger proportion of tax on their incomes than do low-income earners. Such progressivity is achieved through minimum allowances and the tax rate structure of the bracket tax. Box 2.2 shows how marginal and average tax rates increase with higher wage income. The highest marginal tax rate on wage income, excluding employers' social security contributions, is 46.9 pct. in 2016. If employers' social security contributions are included, the highest marginal tax rate reaches 53.5 pct. Figure 2.4 shows the highest marginal tax rate on wage income in selected countries. Employee contributions for the funding of employee social security ("trygdeavgift" in Norway) are included in the figure, whilst employer contributions for the funding of employee social security ("arbeidsgiveravgift" in Norway) are excluded. The figure shows that the highest marginal tax rate in Norway is at a comparable level with the highest marginal tax rate in countries such as Germany and the United Kingdom, whilst some of the other Nordic countries have higher marginal tax rates on wage income

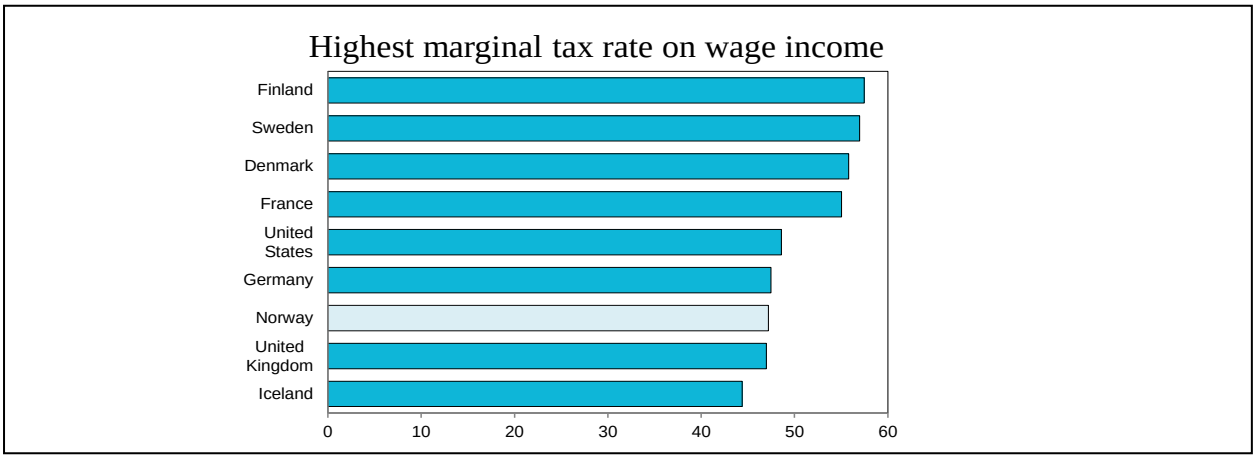

Figure 2.4 Highest marginal tax rate on wage income, excluding employer contributions for the funding of employee social security. Selected countries in 2015. Percent

Source: OECD Tax database.

Box 2.2 Calculation of tax on wage income

The marginal tax rate is the tax rate applicable to the last krone earned by a taxpayer. The marginal tax rate influences his or her choices with regard to how much to work. A high marginal tax rate may weaken employees' incentives to work more. Such labour supply distortions imply that resources are allocated less efficiently. The higher the tax rates, the greater are these distortions.

Average tax is tax as a proportion of taxable income. Under a tax system characterised by basic allowances, as well as other allowances and a progressive rate structure, the marginal tax rate is always higher than the average tax rate for the same income level, and those with the highest incomes pay the largest proportion of their income in tax.

The figures below show marginal tax rates and average tax rates, respectively, on wage income under the 2016 rules.

Figure 2.5 shows that the marginal tax rate varies with the income level. The tax rate is nil up to the tax-free threshold. Employee's social security contribution is thereafter paid at a levelling rate (25 pct.). The levelling rate is used until it becomes more beneficial to pay employee's social security contribution at the general rate of 8.2 pct. on the total wage income. When wage income exceeds the sum of the personal allowance and the basic allowance (43 pct. of income), the taxpayer starts to pay tax on ordinary income (25 pct.). As long as the basic allowance is calculated as a rate of income and the income is below the first bracket tax threshold, the marginal tax rate is 22.45 pct. (8.2 pct. + 25 pct. * (1 – 0.43)). The rate in bracket 1 of the bracket tax increases the marginal tax rate by 0.44 percentage points to 22.89 pct. When the taxpayer has a sufficiently high income to obtain the maximum basic allowance, the marginal tax rate is 33.64 pct. (8.2 pct. + 25 pct. + 0.44 pct.). The marginal tax rate increases to 34.9 pct. in bracket 2, 43.9 pct. in bracket 3 and 46.9 pct. in bracket 4.

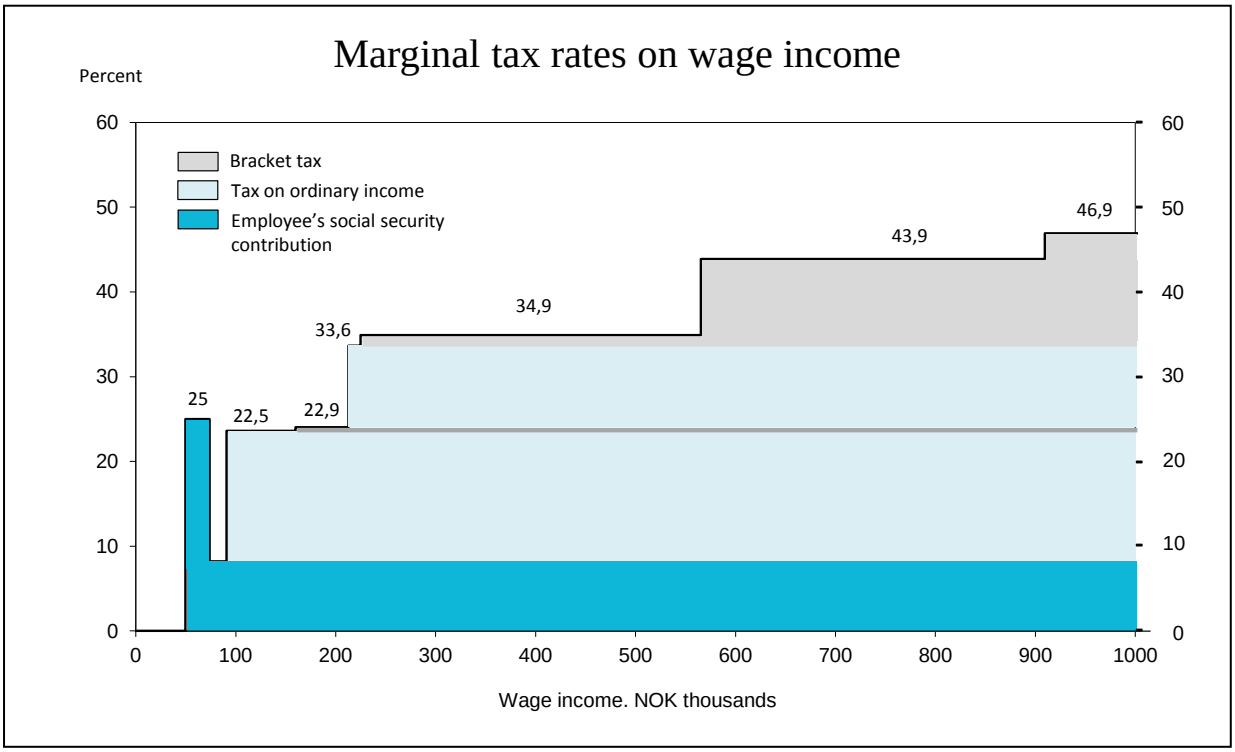

Figure 2.5 Marginal tax rate on wage income (excluding employers' social security contribution). 2016 rules for a wage earner in tax class 1 with only wage income and standard reliefs. NOK thousands.

Source: Ministry of Finance.

Box 2.2 continued

Figure 2.6 shows that the average tax rate is considerably lower than the marginal tax rate.

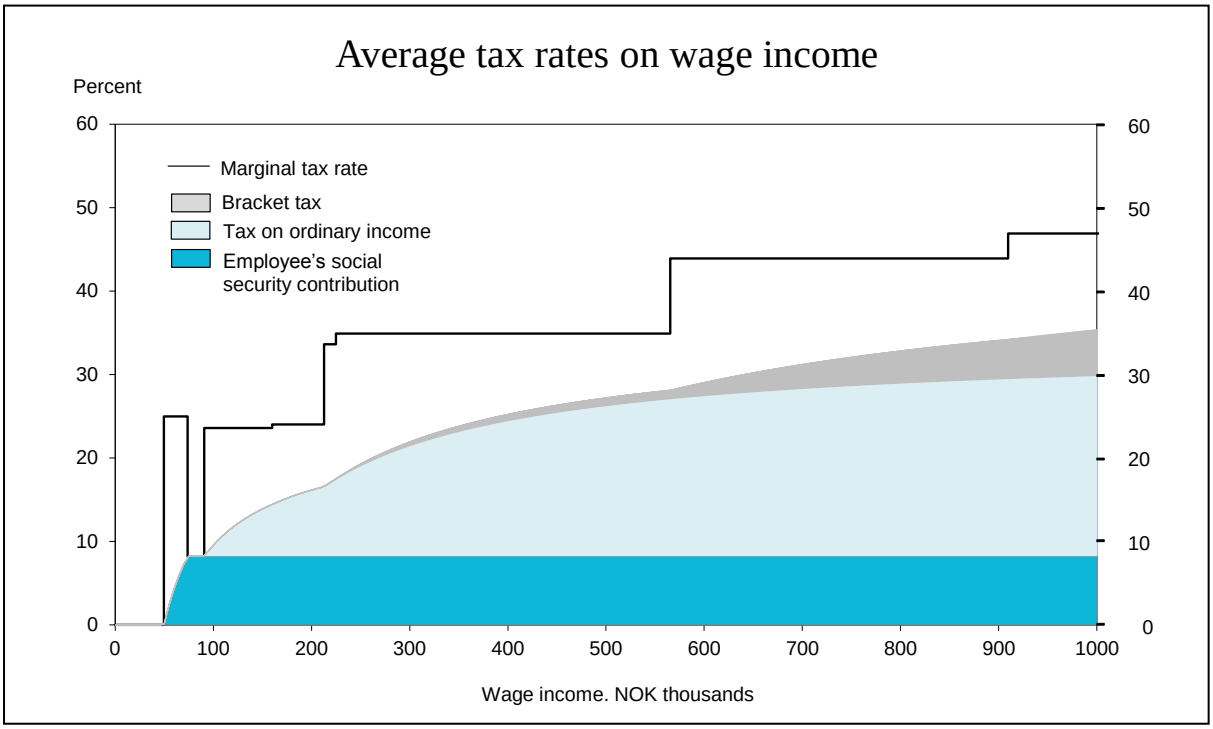

Figure 2.6 Average tax rate on wage income (excluding employers' social security contribution). 2016 rules for a wage earner in tax class 1 with only wage income and standard reliefs. NOK thousands.

Source: Ministry of Finance.

Tax on pension income

Special tax rules for pensioners and recipients of some social security benefits result in less tax payments for these groups than wage earners. Social security contributions on pensions are lower than on wages. On the other hand, the basic allowance is somewhat lower for pension income than for wage income.

A special non-refundable tax credit for pension income is granted to those on contractual early retirement pension (AFP) and ordinary retirement pension, which results in no tax being paid on any pension income up to the level of the minimum state pension, and in less tax being paid on pension income than on wage income above that level. The tax credit is reduced with regard to pension income in excess of the minimum state pension, thus implying that the difference between the tax on pension income and the tax on wage income declines as the pension income increases.

Figure 2.7 shows tax, under the 2016 rules, as a proportion of pension income for single recipients of contractual early retirement pension (AFP)/ordinary retirement pension, respectively, and wage income for wage earners in class 1. It has been assumed that taxpayers have no other income than wage income and pension income, respectively. It is also assumed that the taxpayers can claim no other deductions than the standard reliefs. The tax on a NOK 250,000 retirement pension represents 10 pct. of the pension income, whilst tax as a proportion of a corresponding amount of wage income comes to 19 pct.

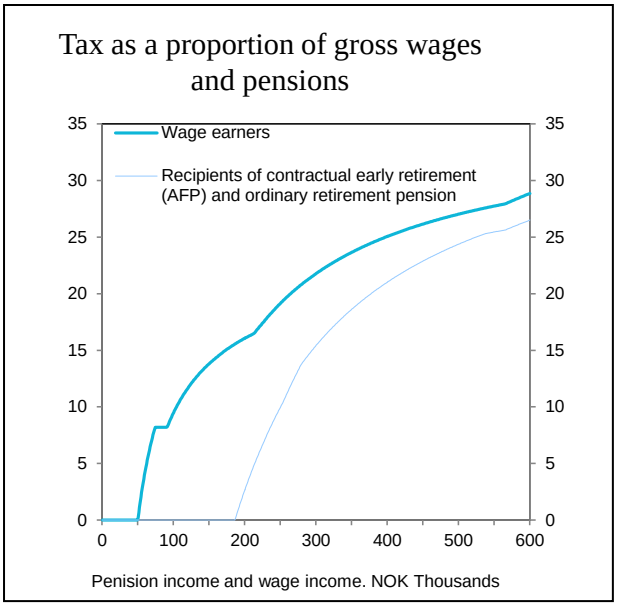

Figure 2.7 Proportion of tax at various gross income levels for wage earners and recipients of contractual early retirement pension (AFP) and ordinary retirement pension, respectively, under the 2016 rules[1]. Percent.

[1] It has been assumed that the taxpayers are singles and taxed in class 1, that they have no other income than wage income and pension income, respectively, and that they can claim no other deductions than the standard reliefs.

Source: Ministry of Finance.

Tax on income from shares earned by individuals

The shareholder model was introduced with the tax reform of 2006 and is intended to ensure that the highest marginal tax rates on wage income and income from shares are about the same. When the difference between marginal tax rates on income from shares and wage income are minor, there is little to be gained from representing what is actually income from work as income from shares in order to reduce one's tax burden. Weakening incentives for such income shifting was one of the main objectives behind the tax reform of 2006.

The shareholder model implies that income from shares in excess of a risk-free return allowance, earned by personal shareholders, is taxed on the part of the owner. Income from shares in excess of the risk-free return allowance is first multiplied by an upwards adjustment factor, and thereafter added to ordinary income. The upwards adjustment factor makes it possible to put the effective tax rate on income from shares at a specific level, irrespective of the tax rate on ordinary income. The upwards adjustment factor was introduced in 2016 to counteract stronger incentives for income shifting as the result of the tax rate on ordinary income being reduced from 27 to 25 percent. For 2016, the upwards adjustment factor is 1.15.

The main purpose of the risk-free return allowance is to prevent distortions in investments and financing decisions as the result of dividend taxation. In general, the risk-free return allowance is calculated as the cost of the share multiplied by a risk-free rate of return. The risk-free rate of return shall reflect the return after tax on a risk-free investment.

If the income from the share is less than the risk-free return allowance, any unused risk-free return allowance is added to the risk-free return base for the subsequent year. In practice, this means that any unused risk-free return allowance is carried forward with interest. Unused risk-free return allowance is specific to each share, and can be deducted against later dividends and gains on the share.

It is, for practical reasons, the owner of a share as at 31 December who is granted the risk-free return allowance calculated for the relevant year. Upon selling the share, the seller can deduct any previously unused risk-free return allowance from any capital gains. In the event of a loss, the entire loss is deductible against ordinary income. Any unused risk-free return allowance will lapse.

Tax on income from self-employment

Owners of sole proprietorships are taxed under the self-employment model, whilst those holding ownership interests in entities assessed on a partnership basis (general partnerships, limited partnerships and others) are taxed under the partnership model. Both of these models are based on the same premise as the taxation of income from shares, i.e. that income not exceeding a

risk-free return on the invested capital (the risk-free return allowance), shall only be taxed once as ordinary income. This has contributed to a high degree of uniformity in the taxation of different types of business entities.

The profits of entities assessed on a partnership basis are taxed as ordinary income on the part of the owners as they accrue. In addition, any distributed partnership profits in excess of the risk-free return allowance are taxed anew as ordinary income on the part of owners who are natural persons.

Income from a sole proprietorship in excess of the risk-free return allowance is taxed as imputed personal income and is subject to bracket tax and employee's social security contribution. Hence, imputed personal income is taxed continuously. Income from shares, on the other hand, is not taxed as ordinary income until the time of dividend payment or realisation. This difference has to do with sole proprietorships not being separate legal entities. Consequently, the distribution of funds will only represent a transfer of funds within the owner's own financial sphere.

The self-employed pay a higher social security contribution than do wage earners on their income from self-employment. On the other hand, the self-employed do not pay employer's social security contributions on their personal income. However, in some cases the self-employed receive lower social security benefits than wage earners. Self-employed fishermen pay employee's social security contributions at a medium rate (like wage earners), but are also subject to a product tax.

2.3.2 Corporate taxation

Company profits are taxed as ordinary income at a flat rate of 25 pct. in 2016. Losses can be carried forward and deducted from subsequent profits. The corporate tax system puts a special emphasis on the principles of equal treatment of different investments, forms of funding and types of legal entities, as well as the symmetrical treatment of income (gains) and costs (losses). This implies, among other things, that taxable profits should, to the extent possible, match actual company profits. «Durable and significant» assets shall be capitalised under various asset groups and depreciated at rates intended, in principle, to reflect their expected annual depreciation.

The exemption method implies, as a main rule, that companies are exempted from the taxation of dividends and gains on shares, etc. Mirroring this, there is no right to deduct corresponding losses. The purpose of the exemption method is to prevent chain taxation in the corporate sector, i.e. that dividends and gains on shares held by companies are taxed several times.

Employers in both the private sector and the public sector are required to pay employers' social security contributions on wage costs. The rate of employers' social security contribution depends on where the enterprise is located.

The corporate tax rate in Norway remained unchanged at 28 pct. over the period 1992 – 2013. The rate was reduced to 27 pct. in 2014 and again to 25 pct. in 2016. A corporate tax rate of 25 pct. approximates the OECD average, but is somewhat above the EU average, cf. Figure 2.8.

The effective taxation of companies will also depend on the tax base. The effective average tax rate is paid tax as a proportion of a company's actual profits. The effective rate is lower than the statutory tax rate if there are given tax deferrals on investment returns, for example through generous depreciation rules. The effective average tax rate is the key variable when a company decides which country to invest in for tax reasons. The effective marginal tax rate is the key variable when a company decides the level of investment.

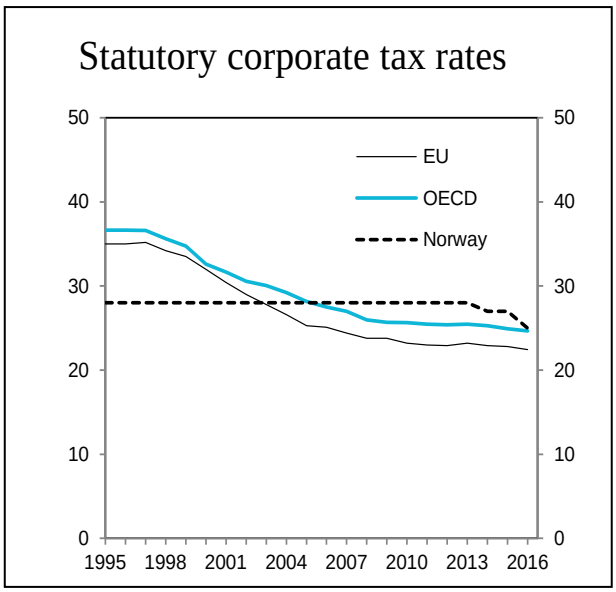

Figure 2.8 Statutory corporate tax rates in Norway, the EU, and the OECD[1]. 1995-2016. Percent.

[1] Non-weighted average for the EU and the OECD. The EU data encompass the countries that were members as of 1 July 2016 (EU-28).

Sources: OECD, Eurostat, KPMG and the Ministry of Finance.

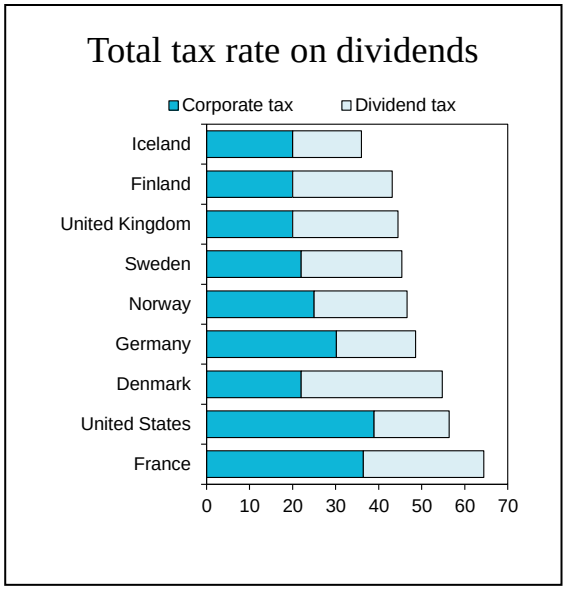

Figure 2.9 Total marginal tax rate on dividends on the part of companies and their owners in selected countries in 2016. Percent.

Source: OECD

Table 2.1 shows statutory tax rates and calculated effective average and marginal tax rates in selected countries in 2014. Effective tax rates are calculated on the basis of a hypothetical investment offering a fixed return, etc., and take into account both statutory tax rates and key parts of the tax base (depreciation rates, etc.). The calculation assumes a hypothetical investment across selected investment opportunities, with such investment being funded partly by equity and partly by debt.

Company profits are also taxed on the part of their owners, by way of dividend and capital gains taxation, cf. Section 2.3.1. Figure 2.9 shows the total statutory marginal tax rate on dividends on the part of companies and their owners in selected countries in 2016.

Petroleum taxation

There is a considerable extraordinary profit (economic rent) associated with the extraction of oil and gas. Income from petroleum extraction is therefore subject to a special tax on top of the ordinary tax on profits. The rate of special tax is 53 pct. in 2016.

In principle, petroleum taxation is based on the rules governing ordinary corporate taxation. However, the tax base for income from the sale of crude oil is determined using administratively determined norm prices, i.e. tax benchmark prices. All relevant operating costs are deductible, and exploration costs are expensed as incurred. Investments are depreciated over six years. In addition, uplift (investment-based extra depreciation) is deducted to determine the special tax base. If the company incurs a loss, such loss and any unused uplift can be carried forward with interest. If a company never earns a sufficient taxable profit, the State will refund the tax value of loss when the company terminates activities on the Norwegian shelf.

Table 2.1 Statutory and calculated effective corporate tax rates in 2014. Percent

Country	Statutory tax rate	Effective average tax rate	Effective marginal tax rate
Ireland	12.5	14.4	13.2
Finland	20.0	18.4	14.4
United Kingdom	21.0	22.4	25.3
Switzerland	21.2	18.6	12.4
Sweden	22.0	19.4	14.5
Denmark	24.5	22.2	16.9
Austria	25.0	23.0	18.4
The Netherlands	25.0	22.6	16.9
Greece	26.0	24.1	19.8
Canada	26.5	24.8	23.7
Norway	27.0	25.1	21.1
Portugal	30.0	27.1	20.8
Italy	30.9	24.0	6.9
Germany	31.0	28.2	22.5
Belgium	34.0	26.7	6.9
Spain	35.3	32.6	34.1
Japan	35.7	37.7	40.4
United States	37.9	36.5	34.3
France	38.9	39.4	35.8

Sources: European Commission and ZEW Mannheim (TAXUD/2013/CC/120).

Consequently, the system is designed to give companies certainty with regard to the utilisation of the full value of their tax allowances. Certain future tax allowances shall be valued using a risk-free rate, net of ordinary tax. Valued at a risk-free rate of interest, the value of the investment-based allowances (depreciation, uplift and interest allowances) exceeds the investment costs, cf. Prop. 150 LS (2012–2013), section 5.4. Hence, the investment allowances are high compared to a neutral resource rent tax.

SDFI, through which the State takes a direct financial interest in licences, is also an important source of State revenues from the continental shelf. SDFI has the same characteristics as a field-specific cash flow tax, with the State covering its portion of

investments and operating costs on an ongoing basis and receiving the same portion of the income.

Figure 2.10 shows the composition of central government revenues from petroleum activities. Revenues have increased over time as the result of higher production.

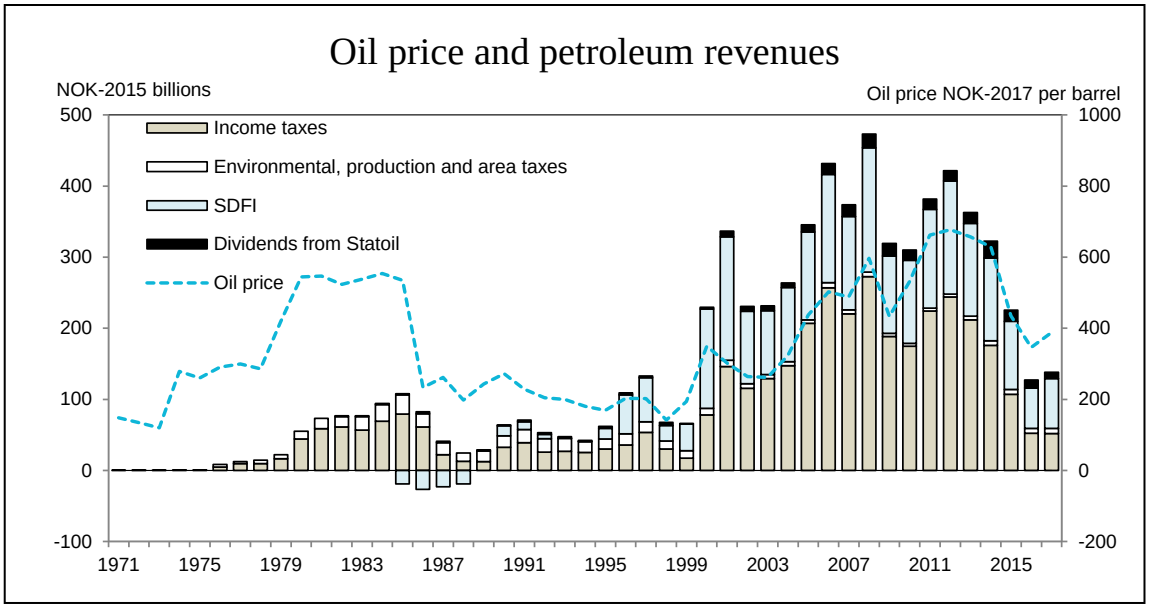

Figure 2.10 T otal net central government revenues from the petroleum sector and oil price developments. NOK-2017 prices.

Source: Ministry of Finance.

Higher oil prices have also resulted in higher profits, and thus in higher revenues for the State. Correspondingly, government revenues from the petroleum industry decline considerably when prices are low. The revenues of the State are based on the net profits from these activities, and hence central government revenues will automatically adjust to changes in oil prices and changes in industry profitability.

Power plant taxation

The profits of power generators are taxed as ordinary income, in the same manner as for other enterprises. In addition, hydropower plants are subject to a central government tax on economic rent. The rate of the economic rent tax is 33 pct. for 2016. Power plants with generators below 10 MVA are exempted from the economic rent tax. The economic rent is calculated as a standardised market value of the power generated (actual power generated multiplied by spot market prices), less operating expenses, licence fees, recurrent tax on immovable property, depreciation and uplift. The uplift is calculated as the risk-free return on the written-down value of the operating assets. Companies have full certainty that the tax value of the investment allowances under the economic rent tax will be paid out. Negative economic rent income in one power plant can be coordinated with positive economic rent income in other power plants within the same consolidated tax group. Moreover, the tax value of any negative economic rent income following coordination between power plants is paid out. Consequently, the uplift determined on the basis of a risk-free rate ensures that the net present value of the tax deductions corresponds to the investment cost, and that profitable projects do not become unprofitable after the economic rent tax.

Power generators are also subject to a natural resource tax (paid to local and regional government) of 1.3 øre per kWh. Natural resource tax is deductible, krone by krone, against the tax assessed by central government. In addition, power generators pay a licence fee and (normally) a recurrent tax on immovable property to the municipalities and the county municipalities hosting them. They must also have to yield power to such municipalities under special licence conditions.

Taxation of shipping companies

Since the 2007 tax year, companies taxed as shipping companies have been exempted

from tax on shipping income, and only pay a tonnage tax. The tonnage tax is an annual tax calculated on the basis of the net tonnage of ships, the rate of which varies between different tonnage intervals. The rate may be reduced for ships, etc., that meet environmental requirements stipulated by the Norwegian Maritime Authority.

2.3.3 Taxation of assets

Net wealth tax

Individuals pay net wealth tax at a rate of 0.85 pct. on their taxable net wealth, i.e. gross wealth less debt, in excess of a basic allowance of NOK 1.4 million in 2016. Spouses are granted one basic allowance each. The net wealth tax makes the overall taxation of individuals even more progressive than the income taxation in isolation. This is illustrated by Figure 2.11.

The taxable value of assets is in principle equal to their market value. Residential properties and other immovable properties are however valued well below market value. On average, commercial property other than power plants, agricultural property and forestry property are valued at 80 pct. of estimated market value in 2016. The taxable value of a primary dwelling (the residential property in which one lives) is 25 pct. of estimated market value, whilst it is 80 pct. for secondary dwellings (residential property other than the primary dwelling, which are not commercial property or holiday homes). A safety valve is intended to ensure that no primary dwelling or holiday home has a taxable value in excess of 30 pct. of the market value documented by the taxpayer. The safety valve for commercial property and secondary dwelling is 96 pct.

The proportion of people paying net wealth tax has been reduced in recent years due to increases in the minimum allowance. It is estimated that about 11 pct. of taxpayers will pay net wealth tax in 2016, cf. Figure 2.12. The average amount of tax on the part of those who pay net wealth tax has increased over the period.

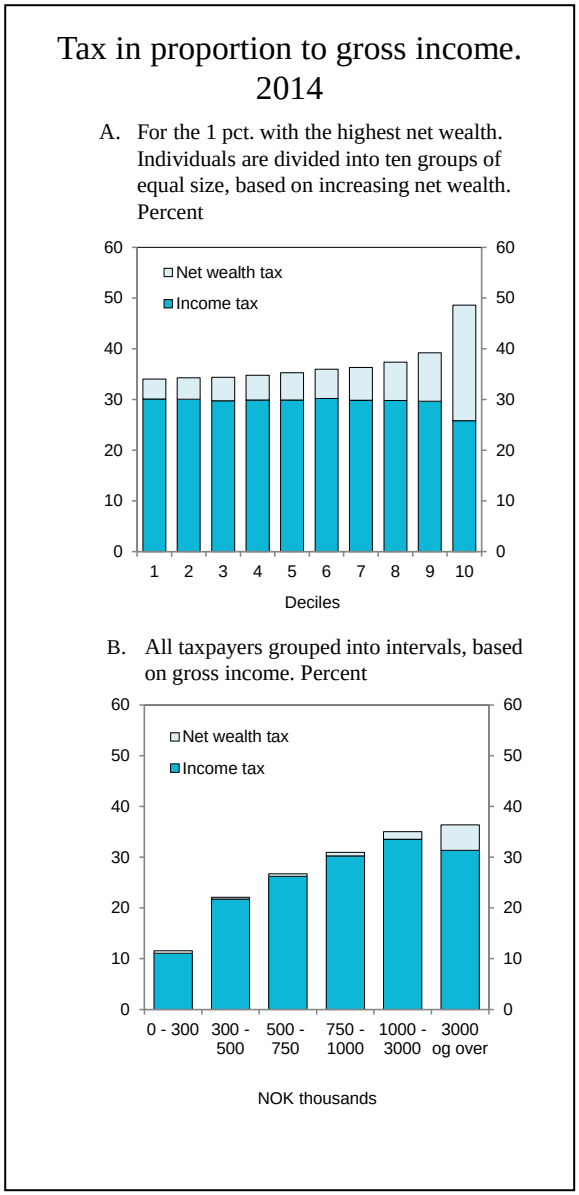

Figure 2.11 Tax as a proportion of gross income in 2014. Percent.
Sources: Statistics Norway and the Ministry of Finance.

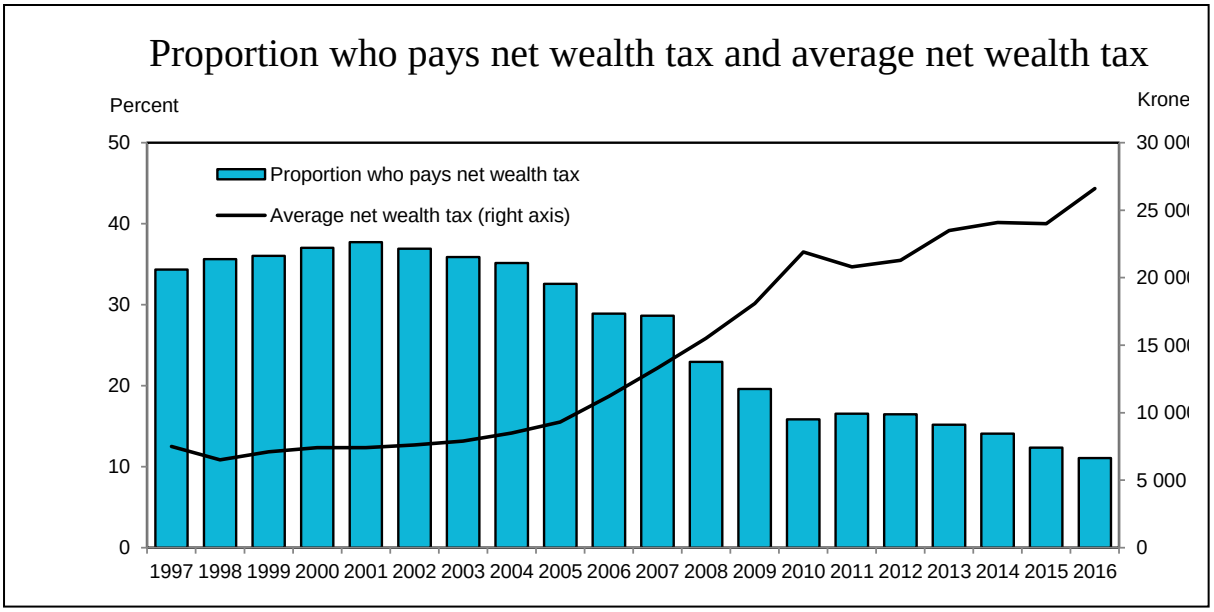

Figure 2.12 Proportion of people (resident in Norway and 17 years or older) paying net wealth tax[1] and average net wealth tax. 1997–2016. Estimates for 2015 and 2016. NOK-2016 prices

[1] Net wealth tax before any reductions as the result of the 80-percent rule (only relevant for the years 1997-2008).
Source: Statistics Norway.

Recurrent tax on immovable property

Recurrent tax on immovable property is levied by, and accrues in its entirety to, municipalities. Each municipality decides whether to levy property tax, within the limitations laid down in the Property Tax Act. The property tax rate, if any, shall be between 0.02 and 0.07 pct. of the valuation basis, to be determined by valuation every tenth year. The municipalities may also choose to use the net wealth tax bases in the valuation of residential property. 59 municipalities are exercising this option in 2016. Furthermore, the municipalities may choose to apply a discount in their valuation of properties. They may also apply a minimum allowance to reduce the valuation basis of residential properties From 2017, the municipalities may opt for exempting holiday homes from property tax. Recurrent property tax on power plants is governed by special valuation rules based on production value, subject to minimum and maximum limits.

As per 2016, 365 of 428 the municipalities had introduced recurrent tax on immovable property, of which 270 levied the tax on residential properties in all or part of the municipality. Total municipal property tax revenues were about NOK 11.2 billion in 2015, of which NOK 5.4 billion was property tax on residential property, including holiday homes. Figure 2.13 shows developments in overall municipal property tax revenues over the period 2005 – 2015.

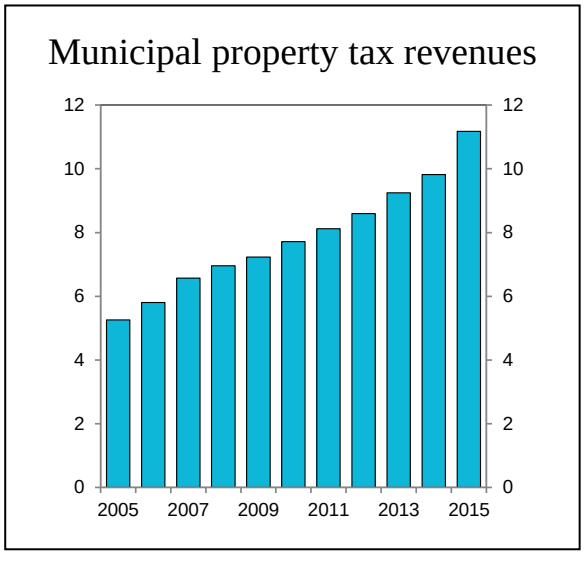

Figure 2.13 Municipal property tax revenues 2005 – 2015. Billion. NOK-2015 prices.

Source: Statistics Norway (KOSTRA).

Tax on property internationally

Box 2.3 provides an overview of property tax revenues in the OECD countries.

Box 2.3 Revenues from taxes on property in the OECD countries

The OECD tax statistics provide an overview of revenues generated by different types of taxes. Taxes on property include taxes pertaining to the use, ownership and transfer of real estate. Capital gains taxation is not included. In the case of Norway, municipal recurrent property tax, net wealth tax and stamp duty are all included.

For some countries, there may be a difference between the gross and net tax on property. This applies to, for example, the US, where many taxpayers can deduct any local property tax paid from their income tax base. The OECD figures are based on non-weighted averages of gross taxes.

Figure 2.14 shows revenues from taxes on property in selected OECD countries. Norway derives 2.8 pct. of its tax revenues from property, which is well below the OECD average of 5.6 pct. As mentioned, the estimate for Norway includes aggregate revenues from net wealth tax, and thus also includes tax on assets such as shares, etc. Revenues from tax on immovable property probably account for less than 2 pct. of overall tax revenues. In addition, Norway stands out internationally in granting unlimited deductibility of debt interest.

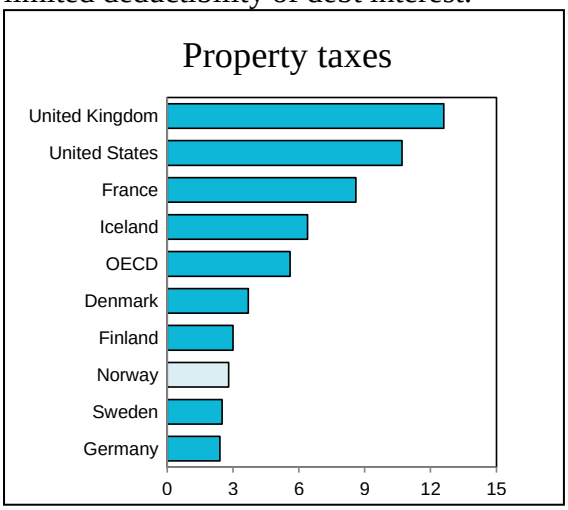

Figure 2.14 Property taxes. Percentage of total tax revenues. 2014 (OECD 2013).
Source: OECD Revenue Statistics Database.

2.4 Indirect taxes

2.4.1 Value added tax

Value added tax is a general tax on the domestic consumption of goods and services, intended to raise revenues for central government. Value added tax is collected and paid by the businesses that sell goods and services subject to value added tax. Value added tax is charged at all levels in the chain of distribution. Businesses collecting and paying value added tax qualify for tax deduction of tax on their inputsThe deduction of tax on inputs prevents the tax from being charged on taxable businesses throughout the chain of distribution, thus making value added tax a tax on the final consumption of goods and services. When the tax is charged on final consumption only, it does not result in production distortions.

The standard rate of value added tax in Norway is 25 pct. Denmark and Sweden also apply a standard rate of 25 pct. The rates in the Scandinavian countries are high by way of international comparison. In Norway, value added tax revenues as a proportion of GDP ishigher than the OECD average, but somewhat lower than in Denmark and Sweden. Box 2.4 compares value added tax regimes in various OECD countries.

Although the current value added tax is, as a main rule, a general tax on consumption, it is subject to various exemptions and reduced rates. In Norway, foodstuffs are subject to a reduced rate of 15 pct., whilst a number of services are subject to a reduced rate of 10 pct. Certain goods and services are exempted by way of so-called zero-rating, which implies full deductibility of value added tax on inputs, whilst no value added tax is charged on sales. A number of services fall outside the scope of the value added tax system, including financial services, health services and teaching. Businesses outside the value added tax system are granted no deductions in respect of any value added tax on goods and services procured by them.

The introduction of reduced rates and exemptions means that one moves away from a simple, general system with a uniform rate on all consumption of goods and services. Value added tax will thereby influence the composition of consumption and production, as well as the choice between internal production and external supplies in sectors exempted from value added tax. In addition, the administrative costs are higher. The value added tax system is not well suited for attending to distributional considerations, for supporting specific causes or for moving consumption in a desired direction. If, for example, one intended to reduce the consumption of goods that are considered harmful to individuals and to society, it will be more effective to use excise duties.

Box 2.4 Value added tax rates and bases in OECD countries

Value added tax has been introduced in more than 160 countries worldwide. On average, value added tax revenues account for one fifth of the overall tax revenues of the OECD countries.

OECD has compared the value added tax systems of its member countries, and the ability of such systems to raise revenues. This was done by comparing the actual value added tax revenues for a country with what such revenues would have been if all consumption, both private and public, had been subject to the standard rate applied in that country. If all consumption is taxed at the standard rate of value added tax, the value added tax revenues as a proportion of consumption will also be equal to the value added tax rate. A number of factors may cause the revenue proportion to be lower than such standard rate. For example, the design of the system, with the existing use of reduced rates and exemptions, serves to lower the revenue proportion. The revenue proportion may also be influenced by other factors like the effectiveness of tax collection and compliance, including the extent of tax planning, evasion and fraud. Although the revenue proportion needs to be interpreted with caution as an indicator of effectiveness in the value added tax system, and a loss of value added tax revenues may be caused by a number of factors, it may serve to illustrate how effectively the value added tax system works. Besides, the abolition of reduced rates and exemptions would mean that the same level of government revenues could be raised at a lower tax rate.

Figure 2.15 presents the standard value added tax rates for Norway, the OECD average and a selection of other countries. The figure also presents value added tax revenues as a proportion of consumption. The standard rate of value added tax is as high in Norway as in Denmark and Sweden, but value added tax revenues as a proportion of consumption is nonetheless somewhat lower. New Zealand has a very broad value added tax base with one uniform rate and few exemptions. Consequently, virtually all consumption is taxed at the standard rate, including public sector consumption.

Box 2.4 continues

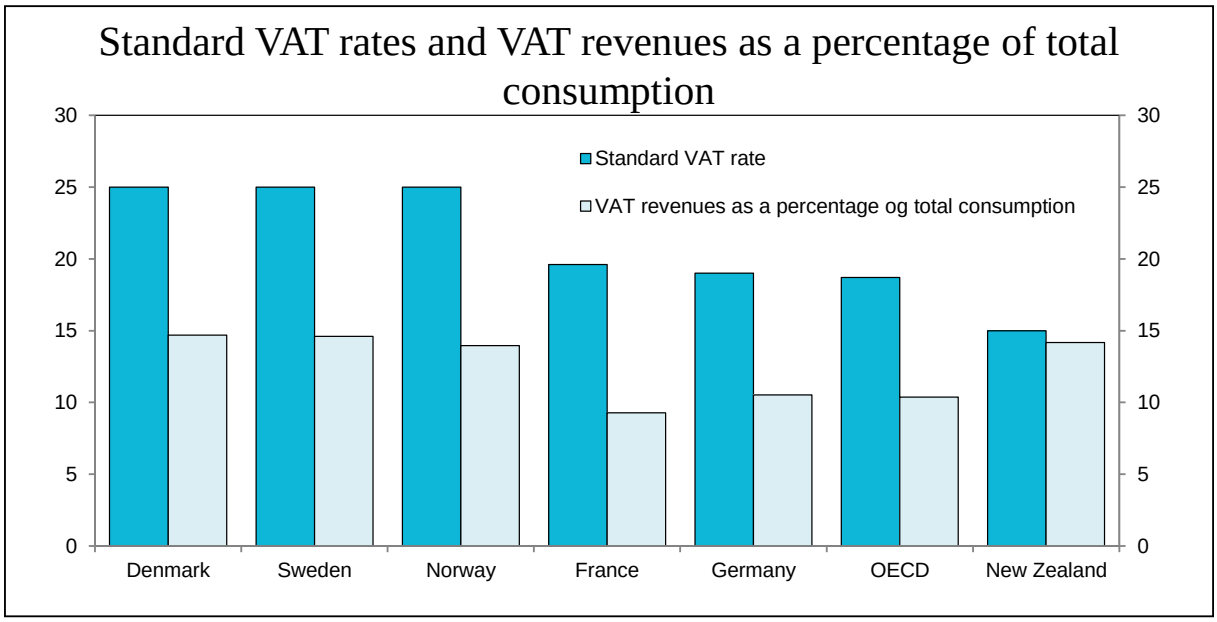

Figure 2.15 Standard value added tax rates and value added tax revenues as a percentage of total consumption. 2012
Sources: OECD (2014) Consumption Tax Trends and the Ministry of Finance.

2.4.2 Excise duties

Excise duties are intended to fund government expenditure, but are also used as instruments for pricing the social costs of using products that are environmentally harmful or hazardous to health.

Excise duties on specific products will, in contrast to general taxes on consumption, shift consumption away from taxed products. Hence, excise duties are suitable policy instruments for reducing the social costs associated with the use of products that are environmentally harmful or hazardous to health. Some excise duties are solely intended to raise central government revenues. Examples of such taxes are the stamp duty on sales of immovable properties and the re-registration tax on motor vehicles and trailers. Other excise duties are also intended to influence consumption or behaviour. This applies, first and foremost, to the environmental taxes and to the taxes on alcohol and tobacco.

The purpose of a tax has a bearing on its design. In order to limit the social costs of taxation, fiscally motivated taxes should not be levied on manufactured intermediate goods. Environmental taxes intended to put a price tag on an environmental problem should, on the other hand, encompass all sources of the environmental problem, and the tax rate should reflect the environmental damage.

Environmental taxes

Norway's first environmentally motivated tax was the tax on the sulphur contents of mineral oil, which was introduced in 1970. The use of environmental taxes did not become widespread until the late 1980s/early 1990s. Environmental taxes have subsequently been introduced in a number of areas.

Environmental taxes ensure that market prices reflect the social costs of environmentally harmful activities to a greater extent, and serve to limit their scope. The revenues from environmental taxes can be used to reduce other distortionary taxes.

The use of environmental taxes is consistent with the polluter pays principle. This principle implies that those using environmental goods should also pay the costs their environmentally harmful activities impose on society.

The cost of reducing emissions from environmentally harmful activities may

vary between different sectors of the economy, and the authorities do not have complete information as to the magnitude of such costs for different enterprises and households.

Box 2.5 The relationship between taxes and emission allowances

Environmental taxes put a price tag on the costs imposed on society by environmentally harmful activity. This makes it financially attractive for those involved to take steps to reduce emissions, by scaling back production, by changing production methods or by introducing abatement measures that cost less than the tax. By imposing a tax, the authorities put a price tag on polluting emissions, but do not directly control emission volumes. Under a cap-and-trade system, on the other hand, the authorities put a cap on emission volumes, whilst emission prices are determined in the market. The cost of the implemented abatement measures will nonetheless be determined by the emission allowance price established in the emission allowance market, and will depend on the supply of, and demand for, emission allowances.

An environmental tax and a cap-and-trade system will deliver the same emission reductions when the emission allowance price equals the tax. If the emission allowances are auctioned, such allowances can generate the same government revenues as the tax. This is because the residual emissions will correspond to the total volume of emission allowances. Hence, market participants will be willing to pay an emission allowance price equal to the tax. If the emission allowances are allotted free of charge, the authorities will forfeit these revenues and thus forgo the opportunity to reap further economic gains by reducing other taxes.

A correctly designed environmental tax will, for example, subhect all emission sources to one uniform tax rate. This facilitates decentralised decision-making that delivers environmental gains at the lowest possible social cost. Emission allowances are another cross-sectoral policy instrument that can have effects similar to those of environmental taxes. Emission allowances and taxes are discussed in further detail in Box 2.5.

When environmental taxes work as intended, they contribute to a reduction in environmentally harmful activity. This will reduce government revenues. This may explain some of the decline in revenues from environmental taxes in recent years. If environmental taxes are replaced by emission allowances that are not sold (free emission allowances), such revenues will decline further. Reduced revenues from environmental taxes may imply that other taxes need to be increased in order for tax revenues to be kept stable. Figure 2.16 compares environmental tax revenues in selected countries.

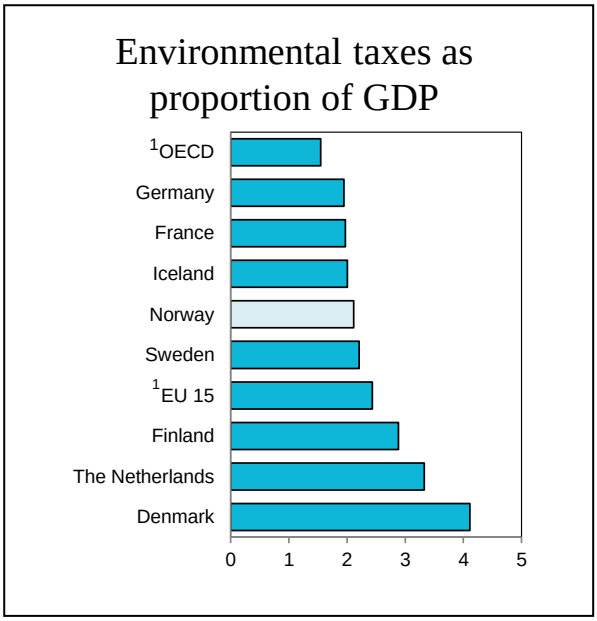

Figure 2.16 Revenues from environmental taxes as a proportion of GDP in various countries. 2013. Percent

[1] Weighted average.

Sources: Ministry of Finance and the OECD.

There may be various reasons why environmental taxes or cap-and-trade systems are not designed in a cost-effective manner. The reason is often a desire to protect particular groups or industries. Figure 2.17 shows the marginal cost of greenhouse gas

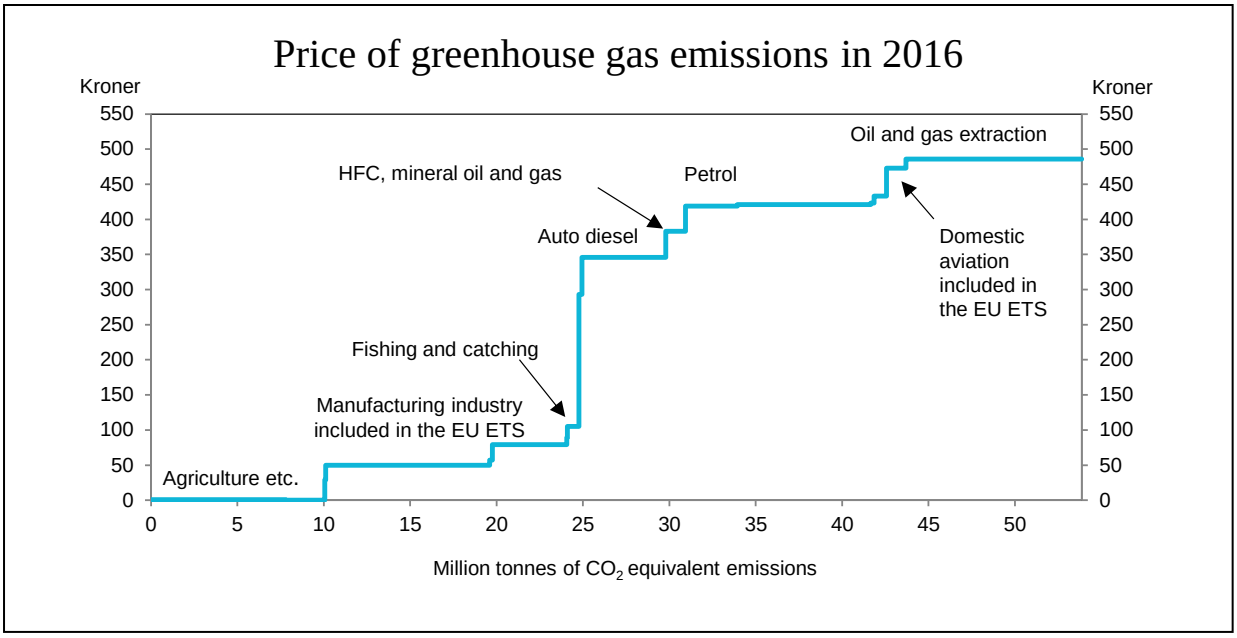

Figure 2.17 Price of greenhouse gas emissions in various sectors. Tax level in NOK per tonne of CO_2 equivalents in 2016 and an emission allowance price of NOK 50 per tonne of CO_2. Emission data for 2013

Sources: Statistics Norway, the Norwegian Environment Agency and the Ministry of Finance.

emissions in various sectors in Norway. Having diverging prices for greenhouse gas emissions increases the overall cost of reducing national emissions.

Environmental taxes on energy products are often additional to taxes that put a price on other social costs of such energy use. The environmental effect will reflect the aggregate level of taxes. The road usage tax on fuel also serves to curtail the consumption of petrol and diesel, and hence to reduce emissions ofi.e. CO_2. The base tax on mineral oil serves to prevent an environmentally undesirable transition from electrical heating to the use of heating oil.

There are, in addition to environmental taxes and energy taxes, other taxes that are fiscally motivated, whilst also serving environmental objectives. This applies to, for example, the motor vehicle registration tax, which is differentiated on the basis of, inter alia, CO_2 and NO_X emissions. Taxes on fuels and motor vehicles account for a large portion of the environmental taxes.

Taxes reflecting health considerations and social considerations

The consumption of goods other than environmental goods may also impose costs on society that are not reflected in their market prices. This is exemplified by the consumption of alcoholic beverages and tobacco products. The taxes on alcoholic beverages and tobacco products raise revenues for central government, but also mean that the prices of these products include, to a greater extent, the costs imposed on society when consuming them. These costs relate to the health expenses imposed on the public sector, as well as the negative external effects of smoking and alcohol consumption on others than those who consume these products.

In addition, there are costs associated with consumers themselves failing to pay sufficient attention to the long-term effects of their consumption, or ignoring undesirable effects. A high level of tax on consumer goods may increase the volume of cross-border shopping, smuggling and illicit distillation of alcohol. The health effects of taxation must be weighed against the social costs of the said activities.

2.4.3 Customs duties

Customs duties serve to protect domestic producers against international competition. Import duties normally result in more expensive goods for consumers and higher production costs for businesses. Besides, customs duties reduce trade volumes and prevent countries from fully utilising their comparative advantages in the production of goods and services. Trade in goods and services has enabled Norway to draw on its competitive advantages. Norway is currently one of the countries in the world with the lowest customs barriers for manufactured goods. Certain types of clothes and textiles are the only manufactured goods subject to customs duties.

Customs protection of agricultural goods is an important part of Norwegian agricultural policy. Import protection contributes toensuring that Norwegian agricultural goods are sold at prices stipulated in the Agricultural Agreement. Customs protection is a significant aspect of the overall support given to Norwegian agriculture. The customs duty rates for agricultural goods are highly variable, depending on the need for protection.

Maximum customs duty rates are laid down in international agreements. Norway has committed to reducing customs duty rates through several rounds of GATT/WTO[2] negotiations, most recently under the WTO 1994 Agreement. Apart from a certain reduction in customs duties on manufactured goods, the WTO Agreement entailed commitments with regard to market access, domestic subsidies and export subsidies for agricultural goods.

Like other industrialised countries, Norway grants preferential customs treatment to developing countries under the GSP (Generalized System of Preferences) scheme. The scheme involves individual industrialised countries granting developing countries improved market access for their goods. GSP is a unilateral scheme, and can in principle be revoked or amended.

[2] WTO (World Trade Organization) was established in 1995, replacing the former General Agreement on Tariffs and Trade (GATT) from 1947.

2.5 Fees and sectoral taxes

Central government service provision and execution of executive powers are normally funded by appropriations via the fiscal budget, but fees and sectoral taxes are used in some fields. In 2006, the Ministry of Finance laid down general provisions on central government funding by fees and sectoral taxes, which were revised in 2015. Fees may be introduced when the public sector performs a clearly defined service for those paying such fees, and payment is not made in respect of anything else or more. Consequently, the charging of fees that appropriately reflect costs is not classified as taxation. Sectoral taxes serve a broader purpose as a source of funding, and changes to the base or rate of sectoral taxes are therefore classified as part of the tax proposal. The provisions call for considerable caution to be exercised in the introduction of sectoral taxes to fund central government expenditure. Sectoral taxes may nonetheless be used to fund joint measures targeting an industry or sector if such taxes are paid by parties belonging to or closely affiliated with the relevant sector. The operations of a number of supervisory bodies are, for example, funded in full or in part by sectoral taxes.

Some payment schemes imposed by central government are currently not included in the fiscal budget. A number of these payment schemes are similar to sectoral taxes inasmuch as these are used to fund joint measures for a sector or an industry. Use of the sectoral tax format, combined with incorporation in the fiscal budget of the expenditure associated with the provision of the relevant services, will serve to clarify, and promote transparency in, central-government mandated payment schemes. The Government is therefore proposing the incorporation in the fiscal budget for 2017 of, among other things, the

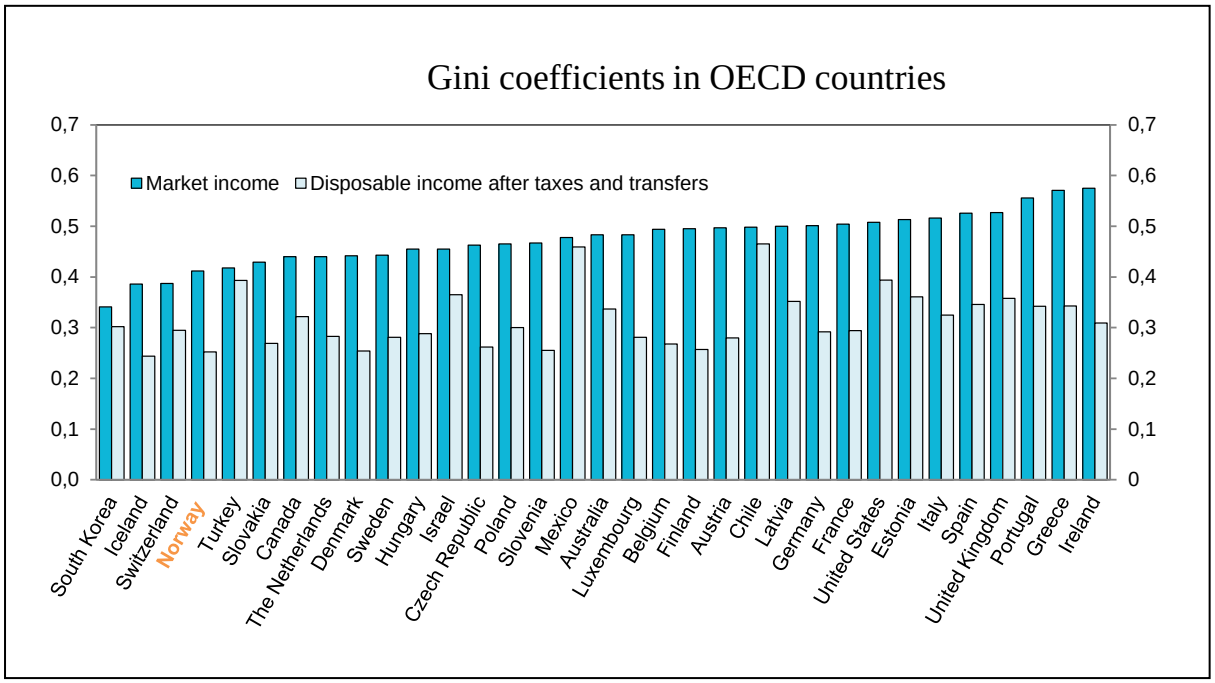

Figure 2.18 Gini coefficients for market income and disposable income after taxes and transfers. Equivalent income (OECD scale). 2014 or most recent available year

Source: OECD.

surcharge levied on the energy supply tariff for the Energy Fund and the research charge on agricultural products.

2.6 Distributional implications of the tax system

Chapter 7 of the National Budget for 2017 on Norway's follow-up on the UN sustainability goals discusses inequality and the quality of life. The distributional implications of the tax system are addressed below.

Income distributional implications of the taxation of individuals

Figure 2.18 shows inequality as measured by the Gini coefficient based on both market income and disposable income for OECD countries. The Gini coefficient takes a value between 0 and 1;the higher the Gini coefficient, the more inequality there is. Calculation of the Gini coefficient is often based on the income concept of «equivalent income». This income concept takes account of some household members having no income, as well as the economies of scale associated with people sharing a home. The latter implies that each member of a multi-person household is allocated a higher income that the actual income per person of such a household. Such higher income is deemed to be «equivalent» to the income of a single person (although the actual income is lower).

Figure 2.18 shows that transfers and taxes serve to considerably reduce inequality in most countries. Norway is amongst the countries with relatively low inequality at market income. Transfer schemes make a significant contribution to redistribution and reduce inequality in Norway. High labour force participation, relatively low unemployment and a relatively large extent of centralised wage bargaining are some of the reasons why Norway has small income differences, even before taxes and transfers. A well-developed, government-funded education system also makes a key contri-

bution to levelling social differences.[3] Major government transfer schemes provide protection against the loss of income due to illness, disability, old age and unemployment. These schemes contributed to a reduction in the Gini coefficient by 29 pct. in Norway in 2014. Taxes served to reduce the Gini coefficient by an additional 11 pct. Consequently, government transfers and taxes as a whole reduced the Gini coefficient by approximately 40 pct. in 2014, cf. Figure 2.19. Hence, the key redistribution contribution of the tax system is, more indirectly, via its funding of welfare benefits and income protection schemes. With the exception of a peak in 2005, which was caused by temporary tax adaptations upon the introduction of a dividend tax in 2006, income inequality has been relatively stable, although it has increased slightly over the 30-year period. The redistributional significance of the transfer and tax system has nonetheless been maintained throughout the said period.

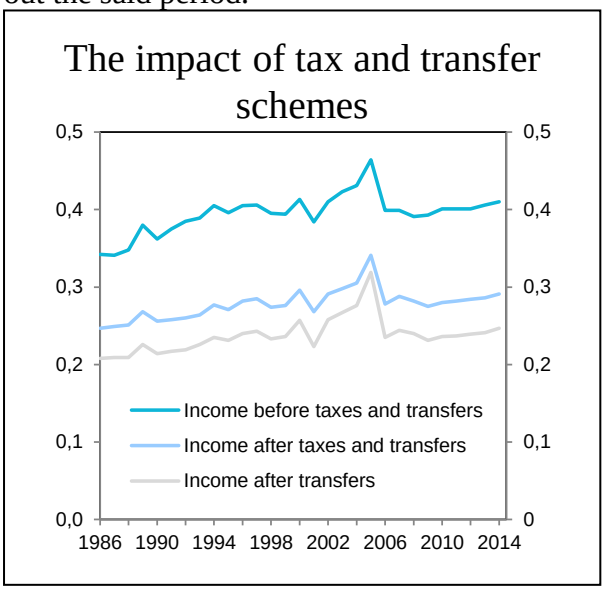

Figure 2.19 The impact of tax and transfer schemes on income distribution, as measured by the Gini coefficient. Equivalent income (EU scale). 1986 – 2014.

Source: Statistics Norway.

[3] OECD (2016) In It Together. Why less Inequality Benefits All. OECD Publishing, Paris.

As the tax load varies with income and net wealth level, the tax system also serves to directly redistribute the financial burden. Figure 2.20 shows average assessed tax as a proportion of gross income for different income groups.

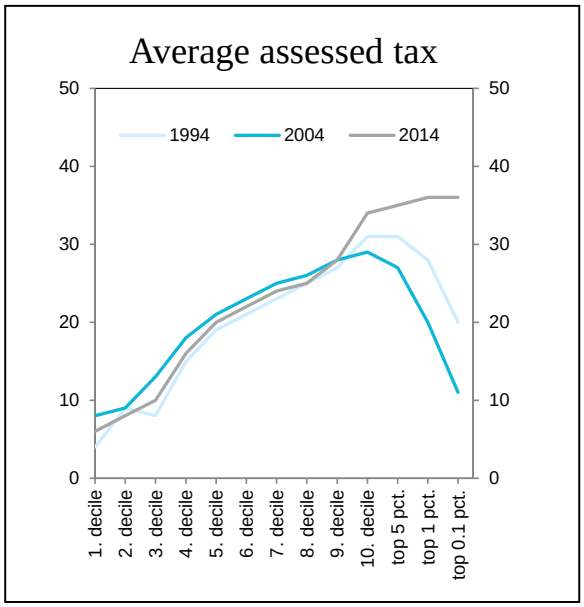

Figure 2.20 Average assessed tax as a proportion of gross income.

Source: Statistics Norway.

The progressivity of the tax system is clearly illustrated by the fact that average tax as a percentage of income increases with the income level. In 1994 and 2004, those with the very highest incomes paid a lower percentage of their income in tax compared to other high- and medium-income groups. This has been changed, especially after the introduction of the dividend tax in the 2006 tax reform.

Figure 2.21 shows estimates for total tax in 2016 and for tax reductions over the period 2013 – 2016. The figure shows that the tax system is clearly progressive both before and after the tax reductions in the period.. The tax reductions during the period represent a small portion of the overall tax level for the various income groups and have little effect on the progressiveness of the tax system.

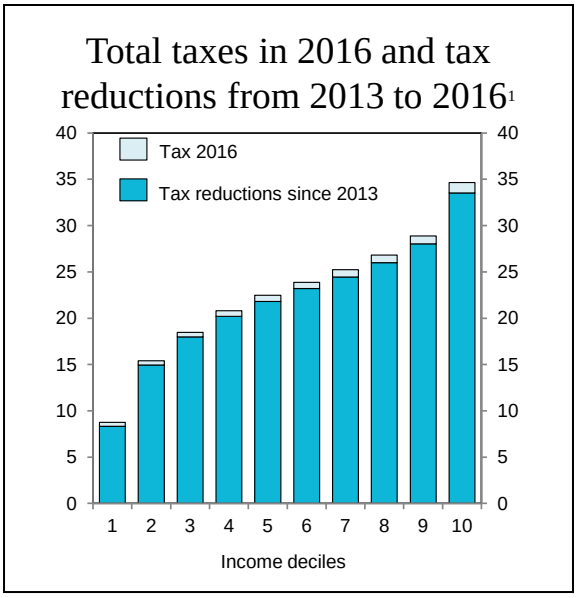

Figure 2.21 Total equivalent tax in 2016 and change in equivalent tax from 2013 until 2016 as a percentage of equivalent gross income, specified by income deciles. 2016 rules compared to 2013 rules extrapolated into 2016.

[1] The calculation encompasses tax changes that can be computed in the Statistics Norway tax model; LOTTE-Skatt, in a net amount of about NOK 15.4 billion. The computations have extrapolated the tax rules from 2013 to the 2016 level to estimate what tax would have been charged in 2016 under the 2013 rules. This is then compared to the tax rules for 2016. The calculations are more uncertain than the ordinary one-year analyses performed in connection with the budget proposals, but nonetheless provide an indication of the significance of the tax changes effected over the period 2013 – 2016.

Sources: Statistics Norway and the Ministry of Finance.

Income distributional implications of indirect taxes

When examining how the tax system influences household consumption opportunities and welfare, it may be relevant to take into account the fact that indirect taxes also influence consumption opportunities. Such calculations are performed on the Statistics Norway models LOTTE-Skatt and LOTTE-Konsum.

In Figure 2.22, the entire population has been ranked by ascending income (equivalent income) into ten groups of equal size (income deciles). Correspondingly, everyone has been allocated a share of the direct and indirect taxes paid by their household.

The figure shows that people with low consumption opportunities have a lower tax burden than people with high consumption opportunities. At the same time, indirect taxes contribute to weakening the progressivity of the tax system. This is partly because the calculations are based on gross household income. Persons with high gross incomes pay a larger proportion of their gross income in taxes than do persons with low gross income, and thus have a smaller proportion of their income available for consumption. It is income after tax (as well as savings) that can be consumed, and thus be subject to indirect taxes. Consequently, indirect taxes will constitute a smaller proportion of the gross income of a person with high gross income than that of a person with a low gross income. If the calculations were based on income after tax (disposable income), this tax burden would have been fairly equal across the various income groups. The total tax burden nonetheless increases for every income decile, also when calculated as a proportion of gross income.

2.7 Estimated tax expenditures and tax sanctions

The tax system includes a number of exemptions and special arrangements which contribute to reducing government revenues. Compared to taxation in accordance with the ordinary rules, these exemptions and special arrangements represent an advantage to those falling within their scope.

The Norwegian tax system is based on the principle that all income and assets should be taxed, and that tax bases should correspond to real, underlying values. Deviations from these principles may reflect political priorities .

Correspondingly, the tax system may feature tax sanctions, i.e. that some taxes are higher than would be implied by a general and uniform regulatory framework. Such additional taxation also reflects political priorities. One example is fiscal taxes on production inputs in the business sector.

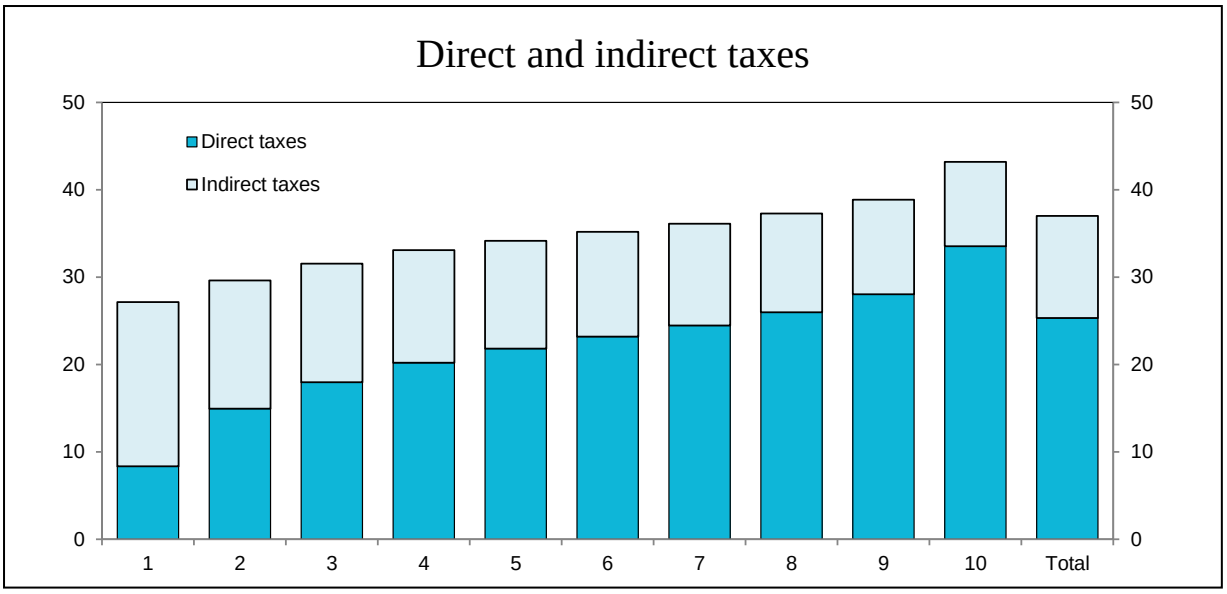

Figure 2.22 Direct and indirect taxes per person as a percentage of equivalent income. 2016 rules. Percent
Sources: Statistics Norway and the Ministry of Finance.

Unlike the corresponding measures funded via the expenditure side of the budget, the Storting does not decide the

level of tax expenditures and tax sanctions in the annual budgets.This chapter is therefore intended to provide supplementary information concerning the various policy measures and tools incorporated into the current tax provisions. The overview does not purport to be complete. Appendix 1 of the bill and draft resolution Prop. 1 LS (2016–2017) on taxes and customs duties in 2017provides a detailed overview of the tax expenditures and tax sanctions as calculated by the Ministry, as well as a more detailed analysis of tax expenditures.

The magnitude of tax expenditures and tax sanctions depends on how the benchmark system is defined. As a main rule, the general tax provisions are applied. In some areas one applies the main principles underpinning the design of the tax system, as established by the 1992 and 2006 tax reforms. Examples include depreciation rates, the taxation of housing and certain indirect taxes. As in most other countries, the Ministry uses the revenue-foregone method, i.e. the tax expenditures are estimated as the tax revenues foregone by government as the result of more lenient provisions than would be implied by the benchmark system. The calculations do not take behavioural changes into account. Consequently, the calculations will in many cases not represent a precise estimate of the actual revenue losses caused by tax expenditures.

Figure 2.23 shows the distribution of net tax expenditures in 2016 across different sources of taxation. The figure illustrates that exemptions in the value added tax system are the largest tax expenditure, accounting for about 28 pct. of overall tax expenditure. Exemptions from the taxation of residential property and holiday homes, account for about 27 pct. of overall tax expenditures.[4] Tax expenditures associated with the corporate taxation of petroleum activities account for about 14 pct. Tax expenditures relating to financial capital and pension savings account for about 7 pct. of the total, whilst the regionally differentiated employers' social security contributions and tax expenditures relating to wage income and pension income account for 10 and 8 pct., respectively.

[4] Stamp duty on the sale of freehold apartments is deducted from tax expenditure relating to homes.

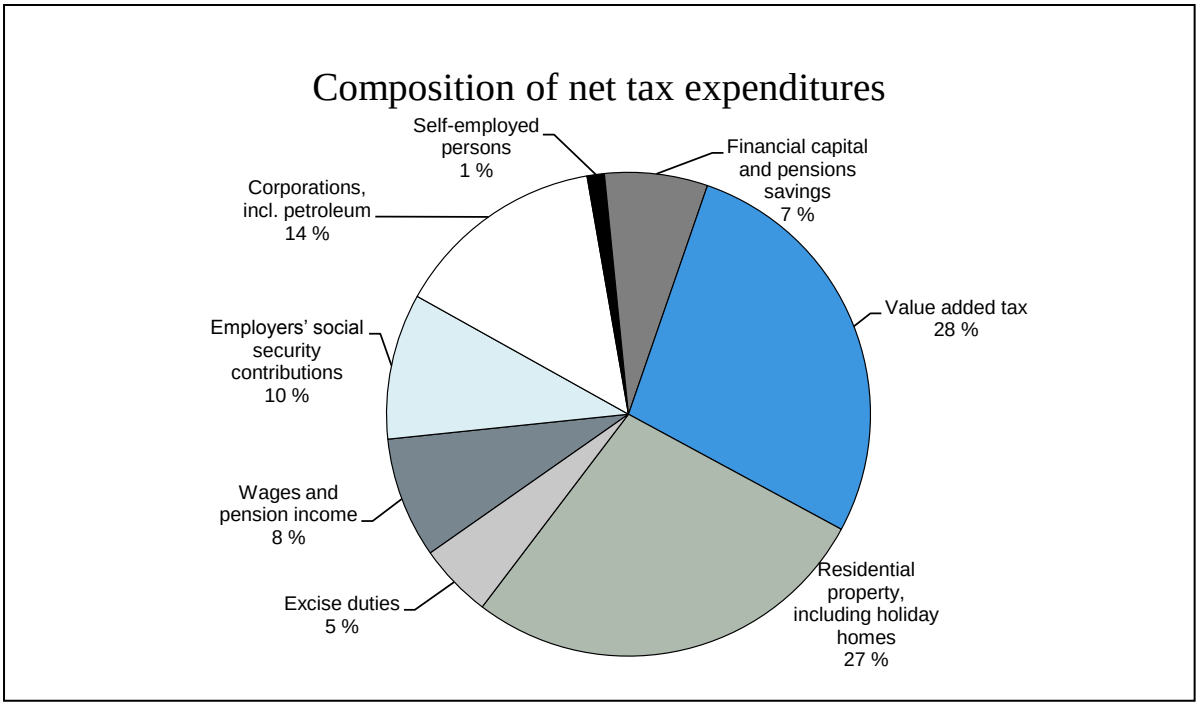

Figure 2.23 Net tax expenditures in 2016 by source of tax. Percent

Source: Ministry of Finance.

2.8 Revenue estimation methods

Changes to the tax rules will normally affect tax revenues. These revenue effects need to be distinguished from tax revenue changes caused by business cycle fluctuations. A sound basis for decision-making needs to include information on the revenue effects of proposed changes to the tax rules.

The Ministry of Finance estimates the revenue effects of tax changes by a number of different methods. The methods vary from sophisticated models to simple estimates based exclusively on statistics. Which method is used depends on which models have been developed, the data that are available and the deadline by which the estimates have to be prepared.

The calculation methods are summarised below.

2.8.1 Benchmark system and tax revenue benchmark

Benchmark system for tax rules

The revenue effects of changes to tax rules in a fiscal year are estimated by reference to a benchmark tax system. The benchmark system is characterised by taxes being kept unchanged in real terms from the year prior to the relevant fiscal year. This means that nominal thresholds and rates[5] under the tax rules are adjusted annually in line with estimates for the relevant growth factor, for example growth in consumer prices, wages, pensions or asset values.

The benchmark system for *direct taxes* is based on the tax rules applicable in the current year, with allowances and income thresholds under the general rate structure for personal taxation being, as a main rule, adjusted in line with estimated wage growth. A taxpayer who only qualifies for standard reliefs and whose ordinary income and personal income increase in line with estimated wage growth, will thus pay approximately the same average income tax

[5] Percentage rates, such as for example the value added tax rate and the employee's social security contribution rates, remain unchanged from the previous year under the benchmark system.

under the benchmark system as in the current year. Correspondingly, the net wealth tax threshold in the benchmark system is adjusted such as to make a person with an average net wealth composition pay the same net wealth tax under the benchmark system as in the current year, measured as a proportion of net wealth. Special allowances and some other personal taxation thresholds are adjusted in line with estimated inflation.

Under the benchmark system for *excise duties*, all per unit rates are adjusted in line with estimated inflation (changes in the consumer price index). Hence, the tax burden under this benchmark system remains unchanged in real terms. The benchmark system for *value added tax* is based on the current value added tax regulations.

Tax revenue benchmark

The tax revenues that would be generated if all taxes remained unchanged in real terms may be labelled the *tax revenue benchmark*. The tax revenue benchmark is determined by the benchmark system for the tax rules and by estimated tax base developments. Tax base projections are in turn based on factors such as estimated macroeconomic developments.

2.8.2 Revenue calculations not incorporating behavioural effects

The most basic form of revenue calculation assumes that the tax change has no influence on the behaviour of households and businesses. In such case, the revenue effect will only reflect the *direct effect* on tax revenues. The revenue effect of a tax rate change will, for example, be calculated as the tax base multiplied by the tax rate change.

For the fiscal year in which a tax rule is changed, revenue calculations that include only direct effects will in many cases provide a good approximation of the revenue effects, especially if there is little reason to assume that the change to the tax rules will occasion major short term behavioural changes or impact on other tax bases.

2.8.3 Revenue calculations incorporating behavioural effects

Changes to taxes and certain government expenditure items may influence government finances beyond the immediate, direct budgetary effect. This is because such changes may influence the behaviour of businesses and households. An increase in an excise duty will, for example, normally result in an increase in the price of the relevant goods, and thus a reduction in demand for such goods.

It is reasonable to assume that it will take time for changes to the taxation of wage income and pension income to induce behavioural changes with a permanent impact on labour supply. Many people have fixed working hours and are therefore unable to change these without finding a new job or renegotiating their existing employment contracts. In most cases it will, for such reasons, be of most relevance to incorporate the revenue effects in the budget without behavioural changes.

However, in some cases it may be relevant to include behavioural effects also in the first year. In general, financial adjustments occur quite swiftly, whilst changes in the real economy take more time. Dividends were, for example, more than halved from 2000 to 2001 as a result of the temporary dividend tax in 2001. Changes to indirect taxes may also have a fairly rapid impact on consumption. As a main rule, the Ministry therefore incorporates behavioural effects in the budget estimates for indirect taxes. In some cases it may also be appropriate to assume fairly swift adaptations to changes in the income tax for individuals. One example is the restructuring of pensioner taxation in 2011, which the Ministry assumed would have some impact on labour supply in the first year.

In some cases the adjustments may happen before the tax change has entered into effect. One example is the dividend tax introduced as part of the 2006 tax reform.

Many personal shareholders adapted to the announced dividend tax by distributing large tax-exempted dividends before the reform entered into effect. The extraordinary dividends distributed prior to the reform where to a large extent channelled back to the companies in the form of loans and new equity. This meant that shareholders converted retained profits, which would have become taxable upon distribution after the reform, to loans and new equity that could still be distributed without dividend taxation after the reform. Another example is the restructuring of the motor vehicle registration tax. When the budget proposal was made public in October 2006, it became evident that cars with low CO_2 emissions would be subject to lower registration tax after 1 January 2007, whilst cars with high CO_2 emissions would be subject to higher registration tax. This resulted in purchases of car types that would become subject to lower tax being deferred, whilst purchases of car types that would become subject to higher tax were accelerated.

A revenue calculation incorporating behavioural effects will normally only include the direct effect on tax revenues of the tax base being directly affected. The revenue calculation will thus take into account both such regulatory change and how the resulting behavioural changes on the part of households and businesses will influence the tax base.

In some cases one should take into account the fact that changes to one tax base will have behavioural effects that also influence other tax bases. The change to the tax regulations will in such cases have an indirect effect on tax revenues via a tax base that is not directly affected by such regulatory change. An increase in the tax on spirits, for example, will not only increase the price of spirits, and thus reduce demand for spirits. Such increase may also shift alcohol consumption away from spirits and towards wines and beers. Consequently, an increase in the tax on spirits may increase the revenues from the tax on wines and beers.

2.8.4 Effects of expansionary fiscal policy

All tax reductions need to be financed, sooner or later. This can be achieved by increasing other taxes, by reducing expenditure or by paying interest costs on government debt (or foregoing interest revenues as a result of lower net government assets). The behavioural effects of tax reductions may serve to reduce long-term funding needs. The funding of a tax reduction may also influence tax bases, as in the case of a reduction in government expenditure.

A tax reduction that is not financed may result in an increase in disposable income in the short run.[6] Higher private sector incomes may increase demand and economic activity. This will also result in higher tax revenues, thus reducing the initial weakening of the fiscal budget. The impact on activity will depend on factors such as the amount of spare capacity in the economy. The impact on activity will be minor during an economic boom, but may be major in times of recession. In any case, tax reductions need to be paid for over time, through higher tax revenues or reduced expenditure. This will, when taken in isolation, reduce demand for goods and services, thus counteracting the impact of the initial tax reduction on the activity level and the budget balance. A short-term demand increase resulting from unfinanced tax reductions should not be confused with permanent effects from behavioural changes. It is the permanent behavioural change that is relevant when examining whether a tax change is making the tax system more efficient or not. The impact of any expansionary fiscal policy on activity will normally be taken into account in the Ministry's model forcast for the entire fiscal budget.

[6] Increasing social benefits will, correspondingly, also increase private sector disposable income. Hence, demand effects are general implications of an expansionary fiscal policy, and are not specific to tax policy.