

10. Corporate tax, revenues and avoidance¹

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Summary

- Corporate tax revenues fell sharply in the recession. Receipts were lower in 2011–12 than previously expected and they are not forecast to rise again until 2016–17. This is the result of a combination of discretionary cuts to the main tax rate and weak expected growth in taxable profits. By 2017–18, revenues are forecast to be at their lowest level as a share of national income and total receipts since 1984–85.
- The large fall in corporate revenues across the recession was caused mainly by a sharp fall in financial sector receipts and there remains uncertainty about how strongly they will recover.
- There has been renewed attention on corporate tax avoidance. The UK attempts to tax profits that are *created* in the UK. These can be hard to measure and firms have an incentive to manipulate ‘UK profit’ to avoid tax. How much is lost to corporate tax avoidance is not known.
- Some of the difficulties in defining and tackling tax avoidance, which are both conceptual and practical, are inherent to the current tax system and arise from the way it attempts to measure profits created in the UK. A more radical change in the corporate tax system – for example, moving to a common European tax base – therefore merits consideration.
- Taxation of North Sea oil and gas has been an important source of revenue for successive UK governments. Revenues were relatively high following the recession (due to a spike in the oil price and an increase in the tax rate) but are forecast to decline as production falls.
- North Sea companies are subject to tax at over double the main statutory corporate tax rate. This is implemented in a way that distorts investment decisions. The tax regime is unnecessarily complex and creates additional uncertainty by changing too frequently.

10.1 Introduction

There has been a growing public debate around corporate tax issues and specifically around concerns that tax avoidance, especially by multinational companies shifting profits out of the UK, is reducing corporate tax revenues. However, there are disagreements over what constitutes avoidance. These arise partly from a lack of understanding about what the UK is trying to tax and partly because it can be conceptually hard to define tax avoidance. It is also unclear how much revenue is lost as a

¹ The Green Budget 2013 is funded by the Nuffield Foundation

result of UK firms shifting profits offshore, not least because there are no good measures of this. This chapter seeks to provide the context for the debate – including how much is currently raised from corporation tax and how this has evolved – and to set out some of the complexities that arise in identifying and dealing with some forms of tax avoidance.

The UK government currently raises around 7% of its total revenue from corporation tax. Notwithstanding significant volatility, this share showed no obvious downward trend in the period from the 1980s to the start of the 2008–09 recession despite the fact that the main rate of corporation tax has been reduced substantially (from over 50% to 28%) over that period. The trend stands in contrast to long-running concerns that corporate tax revenues will decline as governments compete for investments by offering lower tax burdens and as the income from corporate activities becomes more mobile. There is some evidence that part of the robustness of UK corporate revenues over this period has resulted from an increased share of corporate profits in national income, and particularly from growth in the size of the financial sector.

Corporate tax receipts fell sharply following the recession and are expected to continue falling until 2016–17, when they are still forecast to be below their 2011–12 level. Revenues from the financial sector fell particularly sharply between 2008 and 2010 and there is uncertainty over how quickly the sector will recover. Current forecasts suggest that financial sector revenues will remain at only half of their previous 2006–07 high in 2017–18. This history and forecasts of corporate tax revenues are discussed in Section 10.2.

Section 10.3 discusses the taxation of multinationals and issues around profit shifting to avoid tax. There are a number of ways in which firms may seek to reduce their UK tax liability that are legal but might be deemed to fall outside the spirit of the law. However, tax avoidance can be difficult both to define conceptually and to identify in practice. This is not a new problem. Governments and international organisations – notably the OECD – have long discussed and tried to design policy solutions to prevent ‘aggressive’ tax planning. The government has said that more resources at HM Revenue and Customs (HMRC) are being committed to tackling tax avoidance. The effectiveness of this remains to be seen.

The government has made creating ‘the most competitive corporate tax regime in the G20’ a central tenet of its corporate tax strategy and has lowered tax rates substantially to this end. This works to reduce the incentives for firms to move either real activities or paper profits out of the UK. However, tax competitiveness is a moving target, the benefits of which could be offset if other countries were to enact similar policies.

Many of the opportunities for tax avoidance stem from the system used to allocate profits to countries. Firms produce separate accounts for each country they operate in and set the prices associated with any transactions that happen within the company but across a tax border. Multinational companies face opportunities to manipulate the apparent location of profits and costs and the intra-group prices in order to reduce tax payments. A more radical approach to this type of avoidance may therefore be appropriate. For example, the European Commission has proposed a common consolidated corporate tax base that would require firms to calculate their Europe-wide profits and allocate taxing rights to countries using a formula based on the location of real activities.

North Sea companies face high tax burdens; for some investments the marginal tax rate is 81% and in all cases firms face a rate double that of the main statutory corporate tax rate.

North Sea oil and gas production has been an important source of revenue for the UK, although the amount raised in the last two decades is substantially below the peak in the mid-1980s. During the recession, revenues were buoyed by a high oil price, but looking further forward they are forecast to decline as a result of declining production and a falling global oil price.

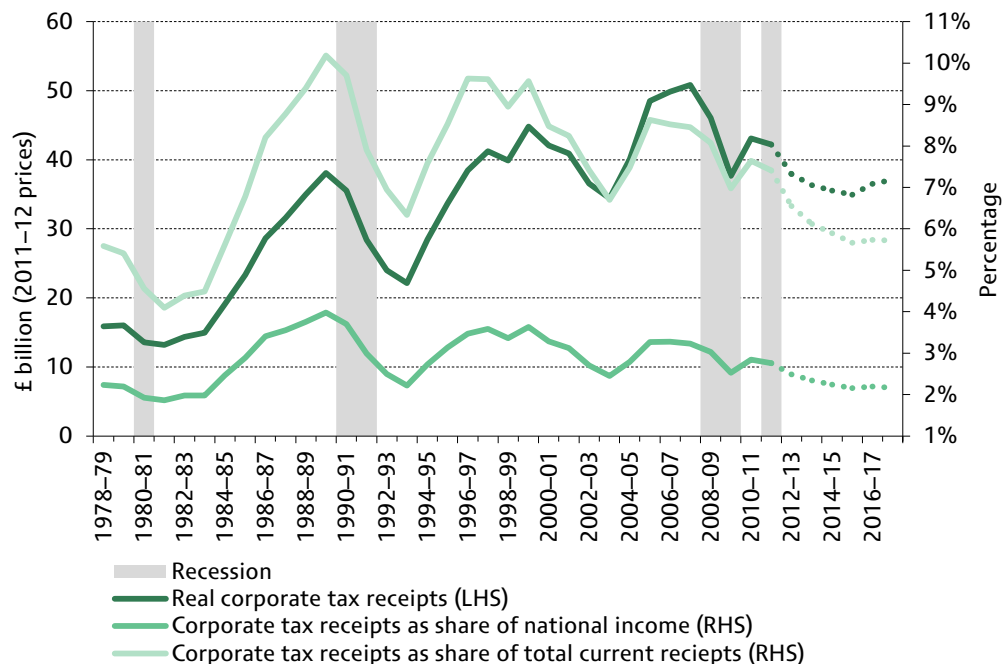
High tax rates need not be distortionary but this relies on the appropriate design and administration of the tax system. As the tax system stands, North Sea companies are subject to a complex regime that has changed many times and can distort investment decisions. Section 10.4 considers the taxation of North Sea companies, while Section 10.5 concludes.

10.2 Corporate tax revenues

In 2011–12, corporation tax net receipts were £42.2 billion. This represented a fall from the pre-crisis high of £46.3 billion in 2007–08 but an increase compared with the low of £35.8 billion in 2009–10.

Figure 10.1 shows real corporate tax receipts (in 2011–12 prices) as well as the share of corporate tax receipts in total receipts and in national income over the past three decades. Real corporate tax receipts were higher in 2011–12 than in all years before 1999.² Over the past three decades, corporate tax revenues have represented between 2% and 4% of national income and between 4% and 10% of total tax receipts.

Figure 10.1. Corporate tax receipts



Sources: IFS Fiscal Facts data (<http://www.ifs.org.uk/fiscalFacts/fiscalAggregates>). Figures for 2012–13 onwards from table 4.6 of Office for Budget Responsibility, *Economic and Fiscal Outlook*, December 2012 (<http://cdn.budgetresponsibility.independent.gov.uk/December-2012-Economic-and-fiscal->

² Note that onshore corporate tax revenues were particularly low in the early 1980s. In 1981–82 corporate tax receipts (in 2011–12 prices) were £13.2 billion but excluding North Sea revenues were just £2.2 billion. Note that trends shown in Figure 10.1 look comparable if North Sea revenues are excluded.

[outlook23423423.pdf](#)). Real corporate tax receipts deflated using 2011–12 GDP deflator. National income (GDP) and GDP deflator from http://www.hm-treasury.gov.uk/data_gdp_fig.htm.

Corporate tax receipts are one of the most volatile forms of government revenues; over time, they vary substantially more than total receipts or national income. Corporate tax revenues are affected by changes in total output of the economy, and particularly by the size and profitability of the financial sector and North Sea companies.

Forecast receipts are weak

The Office for Budget Responsibility (OBR) forecasts that total net receipts from corporation tax will fall (in both nominal and real terms) in each of the next three years. They are not forecast to increase again until 2016–17. In 2017–18, they are forecast to be £42.0 billion – slightly less than in 2011–12 and at their lowest level as a share of national income and total receipts since 1984–85.³

A significant part of weak growth in nominal receipts is explained by lower offshore receipts, which are forecast to fall by two-thirds from £9.2 billion in 2011–12 to £3.1 billion in 2017–18 (£2.7 billion in today's terms) – see Section 10.4. But there is also relatively weak growth forecast in onshore receipts, which are projected to increase from £33.8 billion in 2011–12 to £39.7 billion in 2017–18 (£35.1 billion in today's terms).⁴ The growth in nominal onshore receipts (17%) over the next six years is low relative to forecast growth in nominal total current tax receipts (29%) and nominal national income (27%) over the same period.

Resulting from weak profits and taxable income growth ...

Figure 10.2 shows the forecasts for growth in corporate tax receipts, profits and taxable income and for both onshore private non-financial companies (PNFC) and companies in the financial sector. The difference between growth in profits and growth in taxable income will represent the effect of accumulated losses, as well as any changes to the tax base or the composition of taxpayers (for example, whether more profit comes from companies associated with higher capital allowances). The difference between growth in taxable income and growth in receipts will be largely affected by policy change.⁵

From 2013–14, growth in receipts is driven largely by growth in onshore, non-financial profits. Growth in profits in the onshore, non-financial sectors is expected to be 2% this year (2012–13), but to accelerate to almost 8% in 2014–15 and 2015–16 and almost 9% in 2016–17. Financial sector profits are also forecast to grow by 2% this year, but in contrast to grow by only 2.5% in each of the three years to 2015–16 and by only 4.1% in 2016–17.

Corporate tax revenues tend to fall relatively quickly in a recession and recover with a delay. The delay is caused partly by the build-up of losses during a recession that can be carried forward and offset against profits that arise when growth resumes. Losses have contributed, and are expected to contribute, to lower taxable income (and therefore

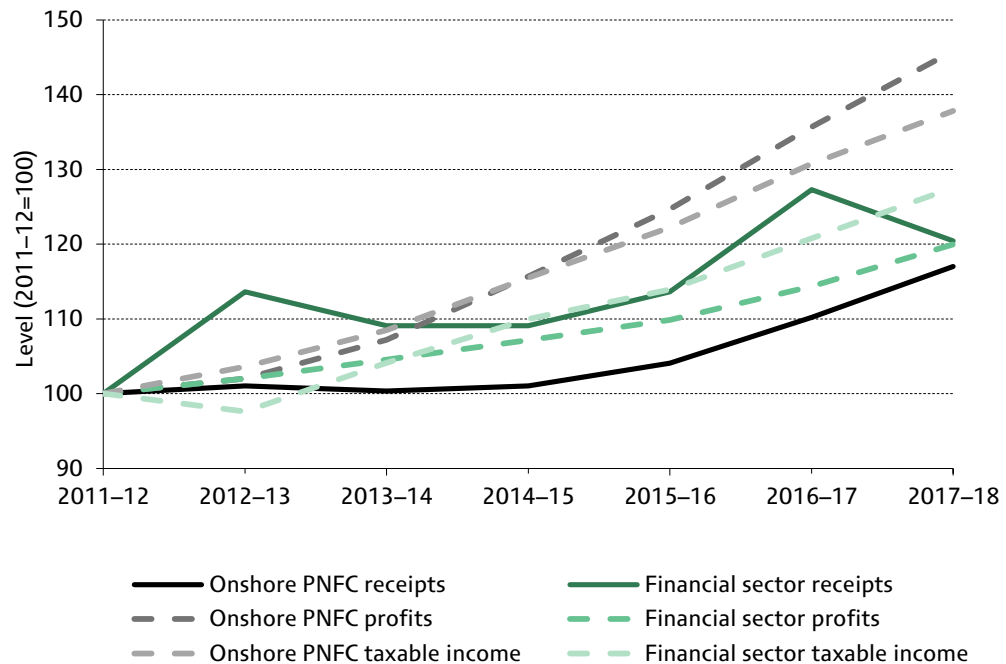
³ For corporate tax receipts forecasts, see table 4.6 of OBR, *Economic and Fiscal Outlook*, December 2012 (<http://cdn.budgetresponsibility.independent.gov.uk/December-2012-Economic-and-fiscal-outlook23423423.pdf>).

⁴ These figures do not include the negative effect of corporate tax credits.

⁵ This difference will also be affected by, for example, corporate tax repayments and by the composition of growth in the tax base (e.g. whether from companies subject to the main corporate tax rate).

lower receipts) in coming years. This has been particularly important for the financial sector this year and for industrial and commercial companies going forward.

Figure 10.2. Growth in profits, taxable income and receipts



Source: OBR, *Economic and Fiscal Outlook*, December 2012 (<http://cdn.budgetresponsibility.independent.gov.uk/December-2012-Economic-and-fiscal-outlook23423423.pdf>) – table 4.1 for profits and taxable income and table 4.6 for receipts. OBR, *Economic and Fiscal Outlook: Fiscal Supplementary Tables*, December 2012 (available at <http://budgetresponsibility.independent.gov.uk/economic-and-fiscal-outlook-december-2012/>), table 2.5 for financial sector receipts. Author's calculations.

... and policy change

The growth in receipts is also affected by policy change. The main rate of corporation tax is 24% in 2012–13 and will, under current policy, be reduced to 23% in 2013–14 and 21% in 2014–15. In addition, the annual investment allowance is being increased temporarily (from £25,000 to £250,000 for two years starting 1 January 2013) and the Patent Box is being introduced from April 2013. Changes to the tax rate contribute to weak growth in receipts relative to taxable income in 2013–14 and 2014–15.

Receipt forecasts revised down

The 2011–12 receipts were slightly lower (by £0.3 billion) than expected in March 2012 partly as a result of lower receipts from industrial and commercial companies.

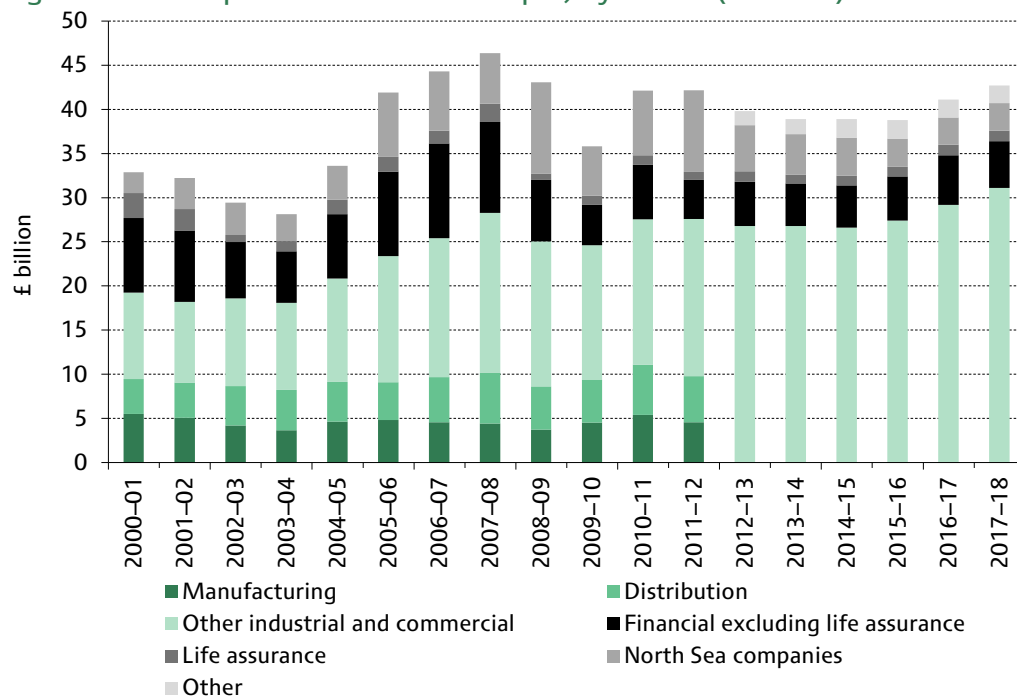
The latest OBR forecast (December 2012) has revised down forecasts for receipts going forward. Notably, the 2012–13 receipts were revised down by £4.9 billion compared with the previous March forecast. About half of the downgrade is attributable to North Sea companies, and the other half primarily to lower expected receipts from industrial and commercial companies. After 2012–13, there is now lower expected profit growth and higher losses for financial sector and industrial and commercial companies. In 2016–17, forecasts have been revised down by £6.8 billion, a small part of which (£0.9 billion) is

attributable to the additional 1% cut to corporation tax, announced in the December 2012 Autumn Statement and to be introduced in April 2014.⁶

Corporate tax by sector

Figure 10.3 shows nominal net corporate tax receipts by sector. The industrial and commercial sector (which includes manufacturing and distribution) provides the largest corporation tax revenues – 65% of receipts in 2011–12 – and is forecast to account for much of the growth in corporate tax receipts going forward.

Figure 10.3. Corporation tax net receipts, by sector (£ billion)



Notes: Corporation tax net receipts are the amount collected in a financial year, net of tax credits. Receipts can relate to liabilities in earlier financial years. In the forecast years (2012–13 to 2017–18), the light green bars refer to all industrial and commercial (i.e. including manufacturing and distribution) companies. ‘Other’ is mainly unallocated receipts.

Source: HMRC, table 11.1A (available at <http://www.hmrc.gov.uk/statistics/ct-receipts.htm>).

Financial sector revenues: previously strong but weak going forward

The financial sector grew strongly in the decade up to 2008–09 and contributed over 20% of corporate tax revenues.⁷ This is double the size of the financial sector in national output: in 2009, the financial sector represented 10% of gross value added.⁸

Corporate tax receipts from the financial sector have fallen sharply following the recession. They came in at £4.4 billion in 2011–12, down from a high of £10.7 billion in 2006–07. By 2011–12, the share of the financial sector in corporate tax receipts had fallen from 26% in 2001–02 to 11%. The substantial fall in receipts from financial sector

⁶ For discussion, see paragraphs 4.75–4.78 of OBR, *Economic and Fiscal Outlook*, December 2012 (<http://cdn.budgetresponsibility.independent.gov.uk/December-2012-Economic-and-fiscal-outlook23423423.pdf>).

⁷ For a discussion of growth in the financial sector, see S. Burgess, ‘Measuring financial sector output and its contribution to UK GDP’, *Bank of England Quarterly Bulletin*, 2011 Q3 (<http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/qb110304.pdf>).

⁸ Author’s calculation using ONS, *Blue Book 2012*, series KLV9 (finance and insurance) and ABML.

companies was largely offset by the relative strength of receipts from North Sea companies in 2010–11 and 2011–12. (North Sea taxation and revenues are discussed in Section 10.4.)

The OBR forecasts that financial sector receipts in 2017–18 will be £5.3 billion – that is, only half of their previous peak. However, there is considerable uncertainty over the rate of recovery of financial sector profits.

The bank levy

The government has taken steps to raise more revenue from part of the financial sector. In the June 2010 Budget, the Chancellor announced the introduction of the bank levy⁹ – a tax on certain equity and liabilities of banks and building societies.¹⁰ One of the stated aims is to ‘ensure that the banking sector makes a fair contribution ... reflecting the risks it poses to the financial system and the wider economy’.¹¹

The 2011–12 receipts from the bank levy – the first the government has received – were £1.8 billion. The government has announced that it plans to raise at least £2.5 billion each year. The OBR forecasts that revenue raised by the levy will also be £1.8 billion in 2012–13 and will increase to £2.8 billion in 2013–14.¹² Taken together with corporation tax receipts, the OBR forecasts that, in 2017–18, £8.1 billion will be raised from the financial sector. However, this is still £2.6 billion less than the previous peak of financial sector corporate tax receipts alone.

Historically, revenues have been higher than expected

It has long been predicted that corporate tax receipts will fall as firms exploit opportunities to shift taxable profit offshore (which may be increasing if income is becoming more mobile) and as governments take policy measures to reduce the corporate tax burden with a view to maintaining tax competitiveness vis-à-vis other countries.

The main rate of corporate tax in the UK has more than halved from over 50% at the start of the 1980s to 24% in 2012–13. Similarly, the small companies’ rate (currently applicable to firms with profits under £300,000) has fallen from 40% in 1980 to 20% today.¹³ Despite this, corporate tax revenues have remained relatively high. As shown in Figure 10.1, notwithstanding the volatility, real corporate tax receipts increased over the period from the 1980s until the start of the crisis. The share of those revenues in either national income or total tax revenues showed no obvious downward trend before the crisis.

⁹ Note that the bank levy is not included in the corporate tax receipts discussed above.

¹⁰ The bank levy applies to UK banks and building society groups, foreign banks and banking groups operating in the UK and UK banks in non-banking groups for periods of account ending on or after 1 January 2011. For full details, see <http://www.hmrc.gov.uk/budget-updates/autumn-tax/bank-levy-manual.pdf>.

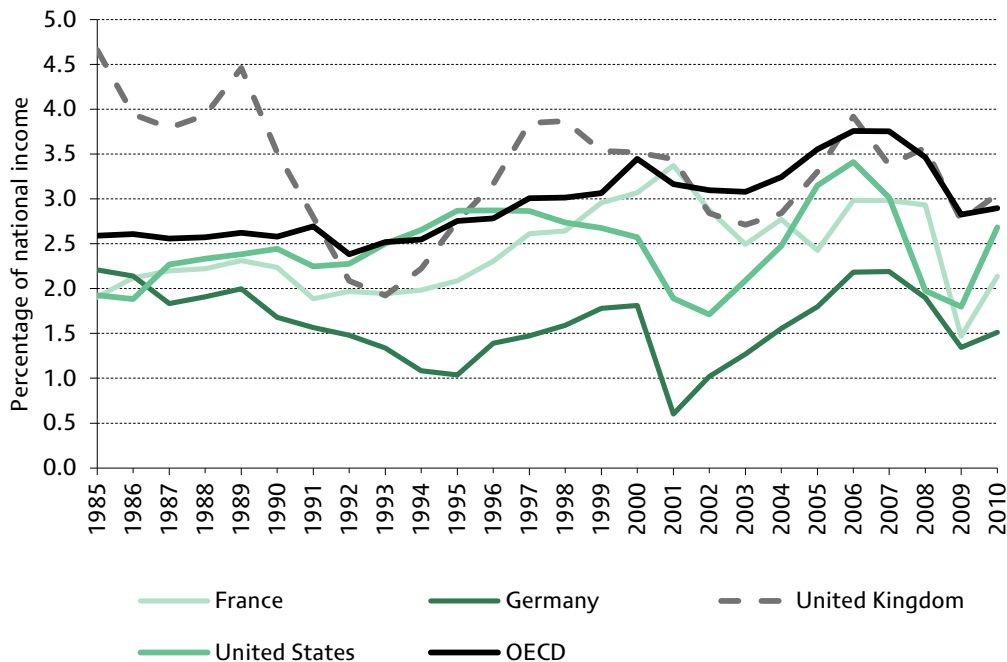
¹¹ See <http://www.hmrc.gov.uk/budget2012/tiin-0899.pdf>. This document also describes the series of rate changes and sets out the government’s intention to raise £2.5 billion.

¹² See table 4.6 of OBR, *Economic and Fiscal Outlook*, December 2012 (<http://cdn.budgetresponsibility.independent.gov.uk/December-2012-Economic-and-fiscal-outlook23423423.pdf>).

¹³ The main corporate tax rate was 52% in 1980. The main reductions were to 45% in 1984, 40% in 1985, 35% in 1986 and 30% in 1999. There have been gradual reductions to 24% in 2012. See HMRC, table A.6 (<http://www.hmrc.gov.uk/statistics/ct-receipts/table-a6.pdf>).

Other countries have had similar experiences. Figure 10.4 shows that OECD countries have also seen volatile corporate tax receipts, but no downward trends in the share of those receipts in national income. In fact, corporate tax revenues have tended to be higher as a share of national income in the UK than in France, Germany and the US, which have higher headline corporate tax rates. For example, over the five years up to 2010, the UK raised an average of 3.3% of national income in corporation tax. In contrast, France and the US raised around 2.5% of national income and Germany 1.8%.

Figure 10.4. Corporate tax revenue as a share of national income



Note: The OECD series is an unweighted average of OECD countries.

Source: OECD revenue statistics (measure 'Tax revenue as percentage of GDP' for '1200 Corporate', available at <http://stats.oecd.org>).

Previous analysis by IFS researchers examined the possible causes of relatively high corporate tax revenues in the UK over the period from 1980 to the early 2000s. They presented evidence suggesting that the primary explanation was an increase in the share of corporate profits in national income and particularly the growth in the size, and likely profitability, of the financial sector.¹⁴ It is worth noting that once the current forecasts out to 2017–18 are included, it starts to look as if there is possibly a downward trend in corporate tax receipts as a share of national income and of current receipts since the mid-1990s. This holds for onshore and offshore revenues.

10.3 Taxation of multinationals and avoidance

Corporate tax payments are highly skewed. In 2010–11, the largest 0.7% of companies (by tax payable) accounted for around 70% of corporate tax receipts. The largest 0.1% of

¹⁴ M. Devereux, R. Griffith and A. Klemm, 'Why has the UK corporation tax raised so much revenue?', *Fiscal Studies*, 2004, 25, 367–88. The authors find little role for tax base broadening in maintaining corporate tax revenues.

taxpayers accounted for over half of corporate tax receipts.¹⁵ This is not that surprising: the large companies that earn the majority of profit also pay the largest amount of tax.

However, in recent months, much attention has been given to the possibility that some large multinational companies are avoiding tax by manipulating down how much taxable profit is recorded in the UK. This is part of a longer-running concern that, as firms' real activities and the associated income become more mobile, governments might have to expect to raise less from corporate tax, both because of increased opportunities for avoidance and as a result of countries competing to attract real activities with lower taxes.

This section discusses what the UK corporate tax system aims to tax and the particular difficulties that arise in measuring multinational firms' profits and allocating them to tax jurisdictions. Firms' activities are often highly integrated across countries – this is a key commercial advantage to operating as a multinational company – and in such cases it is difficult to determine how much of the resulting profit can be attributed to any one country. We go on to consider the ways in which firms may be able to avoid tax and discuss the rules that aim to prevent this. We focus on the types of avoidance associated with multinational companies shifting profits (as opposed to, say, exploiting loopholes in the rules around allowances available in the UK).

What is avoidance?

Tax avoidance commonly involves exploiting 'loopholes' – boundaries between activities that are and are not taxed (or are taxed at different rates) or favourable interpretations of uncertainty in tax legislation. Opportunities for avoidance also arise because it can be difficult (both conceptually and practically) to define 'UK profits'. Broadly, firms can reduce UK taxable profits by increasing the deductions allowable from taxable income and/or by shifting income to a lower-tax jurisdiction.

HM Revenue and Customs (HMRC) defines tax avoidance as 'bending the rules of the tax system to gain a tax advantage that Parliament never intended. ... It involves operating within the letter but not the spirit of the law'.¹⁶ One of the reasons why avoidance is hard to characterise precisely and is subject to much debate is that not everyone agrees on, nor feels compelled to adhere to, the 'spirit' of the law.

The term tax avoidance is used to encompass a wide spectrum of activities. At one end, firms may reorganise or relocate their real activities in response to the incentives in the tax system. Such behavioural responses may be larger than the government expected but arguably are not avoidance. Towards the other end of the spectrum, firms may manipulate intra-group prices, undertake wholly artificial transactions or establish tax haven companies. It is these strategies that are frequently characterised as 'aggressive' or 'abuse' forms of tax avoidance that attract the most opprobrium.

¹⁵ Author's calculations using HMRC, table 11.6 (available at <http://www.hmrc.gov.uk/statistics/ct-receipts.htm#4>). The largest 0.7% (0.1%) of firms represent 6,293 (869) firms with a tax liability greater than £500,000 (£5,000,000). Many small and medium companies pay no tax at all, either because they make no profit or because they have sufficient allowances or previous losses to offset their tax liability.

¹⁶ See <http://www.hmrc.gov.uk/statistics/tax-gaps/mtg-2012.pdf>. Similarly, the OECD definition of tax avoidance is 'the arrangement of a taxpayer's affairs that is intended to reduce his tax liability and ... is usually in contradiction with the intent of the law it purports to follow'; see OECD, *Glossary of Tax Terms* (http://www.oecd.org/document/29/0,3343,en_2649_34897_33933853_1_1_1_1,00.html, accessed January 2012).

Avoidance can result in less tax revenue being collected than was planned. It can also create distortions between different companies or different investments if some have greater ability to avoid taxes.

Two notes on corporate tax

There are two broad issues to bear in mind when considering corporate taxation.

First, corporation tax is a particularly distortionary form of taxation that can work to reduce investment. This is especially the case for internationally mobile investments because firms will consider tax when choosing where to locate real activities. The Mirrlees Review noted that, in principle, it would be efficient to tax relatively mobile activities at a lower rate in order to avoid deterring mobile activities while allowing a higher rate to be supported on less mobile activities.¹⁷ Avoidance behaviours are one way that de facto lower rates on more mobile income are achieved. (The Patent Box to be introduced in April – see below – is one way to try to achieve this directly.) In this case, there may even be benefits to the UK from avoidance opportunities if the lower tax rates achieved on mobile activities – for example, through profit shifting – mean that more real activity is in the UK than would otherwise be the case. But, of course, there are many costs too, including the inefficiencies that arise from tax planning, the distortions between activities and the potential revenue loss.¹⁸

Second, the ultimate incidence of corporate tax always lies with households and is borne either by the owners of capital (in the form of lower dividends), by workers (in the form of lower wages) or by consumers (in the form of higher prices). We do not know with any precision who is made worse off as the result of the corporation tax. However, estimates suggest that, because capital tends to be much more mobile than workers or consumers, a significant share of the burden of corporate tax tends to be shifted to domestic factors – and specifically labour.¹⁹ In other words, there is reason to believe that at least a part, and in some cases a large part, of the corporation tax that companies are subject to is ultimately passed on to workers in the form of lower wages.

UK corporate tax base: what are we trying to tax?

The UK operates a source-based corporation tax that broadly aims to tax profits that are created in the UK.²⁰ This can be distinct from, although is often related to, profits that arise from the sale of products in the UK, some of which will be attributable to activities that take place outside the UK.

UK resident companies (those that are incorporated in the UK or are managed and controlled from the UK)²¹ are subject to corporation tax on their profits from UK trading

¹⁷ See page 12 of J. Mirrlees et al., *Tax by Design: The Mirrlees Review*, Oxford University Press for IFS, 2011 (<http://www.ifs.org.uk/mirrleesReview/design>).

¹⁸ There is an academic literature on the costs and possible benefits of tax planning. See, for example, D. Dharmapala, 'What problems and opportunities are created by tax havens?', *Oxford Review of Economic Policy*, 2008, 24, 661–79, which considers the role of tax havens, and references therein.

¹⁹ Workers may receive lower wages as a result of the corporation tax because (i) a lower level of capital investment results and this reduces labour productivity and therefore wages and/or (ii) the effect of lower after-tax profits feeds directly into lower wages. See, for example, W. Arulampalam, M. Devereux and G. Maffini, 'The direct incidence of corporate income tax on wages', Oxford University Centre for Business Taxation, Working Paper 07/07, 2007, and references therein.

²⁰ All industrial countries operate source based corporation taxes (i.e. those based on identifying the source of profits, rather than the residence of shareholders or the location of customer). However, there are important differences in the precise tax base, including whether countries seek to tax foreign-source income.

²¹ UK resident is defined at <http://www.hmrc.gov.uk/manuals/intmanual/intm120200.htm>.

and investment activities and capital gains. Some profits or capital gains may result from offshore sales, and in these cases a credit is given for any foreign tax paid. Foreign dividends (arising, for example, from the activities of an offshore subsidiary) have been exempt from UK corporation tax since 2009.²² Resident companies may also now irrevocably elect to exempt their foreign branch profits. Companies not resident in the UK but operating here pay corporation tax on their UK profits.

There are allowances that reduce taxable income

All companies can make use of a number of allowances and deductions that reduce taxable income; these do not constitute tax avoidance (unless manipulated purely with a view to reducing tax liability). Notably, in calculating taxable profits (the tax base), companies immediately deduct current expenditure (such as wages, raw materials and interest payments). They do not deduct the cost of investment expenditure, but instead make deductions in accordance with capital allowances (for example, there are allowances for expenditure on plant and equipment).²³ Some companies will also be eligible for additional allowances such as research and development (R&D) tax credits. Companies that make a trading loss may offset that loss against total current profits (which may include chargeable gains as well as a trading loss), profits earned in the previous year or profits in any of the following years in which they continue to trade. Under group relief, certain losses may be transferred between related companies.²⁴

A low corporate tax bill is not in itself therefore evidence of tax avoidance. Even if income appears high, there may be genuinely low UK taxable profits if a firm has relatively high current expenditures or can offset the effects of large investment expenditures or losses. The UK tax bill can also be appropriately relatively low compared with declared income if that income is the result of genuinely non-UK activities.

Measuring 'UK profit'

One of the challenges of a source-based corporation tax is to ascertain where profits are created; that is, to calculate the share of a multinational firm's profits that are created in the UK and that should therefore be taxed here. This can be difficult both conceptually, because it can be hard to assign profits that are contingent on activities in multiple countries, and practically, because firms face incentives to arrange and report their activities in such a way as to minimise their tax liabilities.

There is often no clear, principled definition of UK profit

Consider the following example. Imagine that a company located in the Netherlands creates and owns the intellectual property for a new technology (or a service, or a brand). A related UK company (i.e. both companies are part of the same group) markets and sells a product that embodies the technology in the UK. Royalties are paid from the UK company to the Dutch company. The royalty should reflect the value of the technology

²² The exemption of foreign dividends was introduced in June 2009. See R. Griffith, H. Miller and M. O'Connell, 'Business taxation', in R. Chote, C. Emmerson, D. Miles and J. Shaw (eds), *The IFS Green Budget: January 2009*, IFS Commentary 107, 2009 (<http://www.ifs.org.uk/budgets/gb2009/09chap12.pdf>) for a discussion.

²³ The rate and type of capital allowance vary according to the types of capital expenditure. Capital allowances may be claimed in the year that they accrue, carried forward to set against future profits or carried back for up to three years. See section 3.6 of J. Browne and B. Roantree, *A Survey of the UK Tax System*, IFS Briefing Note 9, 2012 (<http://www.ifs.org.uk/bns/bn09.pdf>).

²⁴ UK companies are not required to file consolidated accounts; all file separate tax returns. However, there are certain cases where losses may be offset against the profits of other companies in the same group.

(i.e. how important the technology is in the creation of the UK profits). If the technology is very important (implying that the source of the profit is largely the activities in the Netherlands), then the royalty payments will be high and the UK taxable profits relatively low. This would be the correct outcome under the UK tax system and would not constitute avoidance (arguably, this would also not be avoidance even if the real activity were initially located in the Netherlands as a result of a more favourable tax regime).

Difficulties arise because it is not necessarily clear what value the royalty should take, and therefore where profits are created and should be taxed. If the product were contingent on the technology (such that there would be no sales without the technology), then arguably all profits arising from UK sales could be attributed to the technology (and therefore to the Dutch company). However, the activities of the UK firm were important in making the sales, so it seems reasonable that at least some part of the profit should accrue to the UK. In cases where activities (in this example, the technology and the services of the UK firm) are complementary, it is difficult to ascertain the value of one independently of the other. This creates uncertainty over how much income should be allocated to different countries for tax purposes.

Similar issues arise for all transactions – for example, loans, charges for the use of headquarter services, the purchase of intermediate goods – that take place within a company but across the borders of tax jurisdictions. All require a price (which is often not observed in the market) to be placed on the transaction.

The tax system allocates profits through the arm's length principle

The corporate tax system seeks to have the transfer price of intra-group transactions set on an arm's length principle; that is, set as if the transaction were taking place between two unrelated parties. This is enforced through transfer pricing rules, discussed below. The arm's length principle is effectively the mechanism through which the tax system allocates profits to countries.

The key difficulty with the arm's length principle is that the transactions it pertains to are taking place between related companies, not between third parties, such that there is no observable market price. As the above example illustrates, in some cases it is not even clear conceptually what an arm's length price is. This can be a common problem when firms' activities are highly integrated across countries. And in practice, firms – which usually have more information and resources than tax administrations – have scope to take advantage of uncertainty around the correct transfer price in order to gain a tax advantage.

Avoidance

Firms may manipulate 'UK profit' to avoid tax

In the above example, where a firm is making a royalty payment for the use of a technology, there is an incentive to locate the intellectual property in a low-tax jurisdiction such that the related profits are taxed at a lower rate. If all of the activities related to the creation of intellectual property are located in the lower-taxed country, this is unlikely to be viewed as tax avoidance. However, firms may arrange their activities in such a way that profits are arguably shifted from a higher-taxed location to a lower-taxed one. For example, a firm may invent a new technology in a relatively high-tax country but finance and manage that activity from a lower-tax country with a view to having any

resulting income taxed at the lower rate.²⁵ Similarly, a firm may sell intellectual property to a subsidiary in a low-taxed country – typically before the related technology has been commercialised and while the value is still hard to measure and arguably low – with a view to reducing the tax payable on profits that subsequently accrue. Firms may also be more aggressive in manipulating their tax liabilities. For example, there is an incentive to manipulate royalty payments such that more profit accrues in the more favourable tax regime and less profit accrues in the less favourable regime.

These issues are particularly acute with respect to intellectual property because there is often not a clear geographical location associated with the creation of new ideas and it is difficult to assign arm's length prices to new technologies that are not traded on the market. As a result, the income from intellectual property is particularly mobile. However, similar issues arise with respect to any intra-group payment.

More generally, because countries operate separate tax bases, there are various other ways in which firms can reduce their tax bills in a (relatively) high-tax country by increasing the deductions used in that country and increasing the profits declared in a (relatively) lower-tax jurisdiction. For example, a firm may make an intra-group loan from a subsidiary in a low-tax country to a subsidiary in a high-tax country. The interest payments will be deductible from taxable profit in the high-tax country and taxable in the low-tax country. The loan may be for the genuine commercial purpose of undertaking new investment or purely with an end to reducing tax liability. The tax savings will be increasing in the rate of interest charged (which will be set according to the arm's length principle and subject to the same difficulties outlined above). Another possible strategy would be for a firm to organise its affairs so as to allocate shared expenses (such as headquarter services, or marketing) to a relatively high-tax country while allocating sales to a relatively low-tax country.

Typically, as tax avoidance behaviours get more aggressive, the location of income becomes more divorced from genuine commercial activities. The Anti-Avoidance Group at HMRC lists a number of factors ('signposts') that are commonly associated with tax avoidance. They include arrangements that have tax implications but not economic consequences or commercial motivations, those that rely on a tax reduction to produce a significant post-tax profit, and those that involve contrived or artificial activities. Effectively, the signposts are a restatement that the income, expenditures and losses that form the UK tax base should be proportionate to the economic activity and value creation that occurs in the UK.²⁶

Rules to prevent avoidance

There are a number of rules in place that explicitly attempt to prevent tax avoidance through what is considered inappropriate profit shifting. The main examples are summarised in Box 10.1. The most important are the transfer pricing rules, which enforce the arm's length principle and aim to prevent firms from avoiding tax by manipulating the prices of intra-group transactions.

²⁵ There are rules that aim to prevent firms from holding intellectual property in locations where there is no real activity. However, the location of intellectual property (which will be related to where it is managed and financed as well as to where a new idea is created) is hard to ascertain.

²⁶ See <http://www.hmrc.gov.uk/avoidance/aag-risk-assessing.htm>.

Box 10.1. Main anti-avoidance rules

Transfer pricing rules

The price of a transaction (e.g. the sale of an input or the licence for the use of a technology, brand or service) between two related companies is called a transfer price. According to the internationally recognised ‘arm’s length principle’, the transfer price should be set as if the transaction were occurring between two unrelated parties. Transfer pricing legislation aims to ensure that this is the case (i.e. that firms do not manipulate transfer prices to gain a tax advantage). Firms are required to provide documentation demonstrating that they are operating in line with the arm’s length principle.

Thin capitalisation

Thin capitalisation rules are effectively the branch of transfer pricing that deals with financial transactions. They seek to apply the arm’s length principle to company funding decisions. A UK company is ‘thinly capitalised’ if it has more debt than it would have been able to borrow had it been acting independently of connected parties. Excessive debt opens the possibility of a tax advantage as a result of the deductions available for related interest payments.

The worldwide debt cap

For large groups in which UK companies hold a significant amount of debt, there is a worldwide debt cap that limits the tax deductions available for intra-group financing expenses. The aim is to ensure that UK companies are not holding excessive debt and claiming higher financing expenses than those that apply to the overall group.

Controlled foreign companies (CFC) rules

CFC rules define the set of subsidiaries of UK firms that are located offshore but deemed to be subject to tax in the UK. They aim to prevent firms artificially shifting income to lower-taxed jurisdictions. The UK regime focuses on identifying passive income – income resulting from non-commercial activities, that can be divorced from real activity and easily moved for tax purposes – that is located in a country where the tax liability is less than three-quarters what it would have been had the activity taken place in the UK.

The CFC rules were completely rewritten in 2012 following extensive consultation and the move, in 2009, to an exemption system for the taxation of foreign-source income (the UK no longer attempts to tax foreign dividends; this is what is meant by a move towards a territorial tax system).

Specific anti-avoidance rules

There are also many rules that apply to specific avoidance schemes and that are added to as the government uncovers new schemes. Specific tax avoidance schemes and arrangements are required to be disclosed to HMRC, which may then take action to reduce loopholes or ambiguity. The government is taking further measures to extend the disclosure schemes to improve the details that HMRC receives^a and is introducing a general anti-abuse rule (see Box 10.2).

^a For information on revisions to the Disclosure of Tax Avoidance Schemes regime, see http://www.hm-treasury.gov.uk/d/disclosure_of_tax_avoidance_schemes.pdf. This was included in the HMRC consultation document, *Lifting the Lid on Tax Avoidance*, 2012 (<http://www.hmrc.gov.uk/avoidance/tax-avoidance-schemes.pdf>).

In seeking to determine transfer prices, many governments follow the international standards set out by the OECD,²⁷ although they differ in the precise methods used to set arm's length prices, what documentation they require from firms and how they penalise non-compliance.²⁸

That a firm follows the transfer pricing rules, and that an arm's length price is agreed with a tax administration, does not of course mean that the correct allocation of profits has been achieved. This is because, for the reasons discussed above, it can be hard both conceptually and in practice to determine accurately what the arm's length price is (and therefore where profits should be taxed).

In cases where HMRC (or any other European tax administration) disagrees with the transfer price that a firm has declared, it can seek to settle this through negotiation, arbitration or possibly litigation. There are also legal procedures in place to settle transfer pricing disputes that arise from a disagreement between European governments (because a change in a transfer price that increases tax in one country may reduce it in another or lead to the double taxation of some income). In practice, the absolute number of disputes is small compared with the number of related party transactions and legal disputes between countries have been taken to court in only a handful of cases. Firms are required to prepare documentation that would allow them to establish a transfer price if challenged. In practice, the tax administration often lacks the information necessary to identify when a transfer price is being manipulated. And, in almost all cases, it will have less information than the company declaring the prices, and fewer financial resources in the case of a legal dispute.

The OECD remains at the forefront of international efforts to reduce tax avoidance, both by calling for increased cooperation and information exchange between countries and by working to improve further the effective administration of transfer prices.²⁹ The UK participates in such activities. During the 2012 G20 meeting, the Chancellor George Osborne made a joint statement with the German finance minister Wolfgang Schäuble calling for increased international cooperation to close loopholes in international tax standards.³⁰

However, there is a limit to how much more can be achieved through the arm's length system. Due to its nature, there will always be the difficulty that prices are not observed and may not even exist conceptually, such that they are open to manipulation.

One policy option is country-by-country reporting. This would require companies to declare openly what they earned and spent in each country they operated in.³¹ This would not help to determine the allocation of profits, but, by increasing transparency, could help reduce avoidance by putting more pressure on companies to defend where their profits are created. This would require international support to operate effectively.

²⁷ The OECD has set out guidelines on the use of the arm's length principle to achieve a fair division of taxing profits – OECD, *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations*, 2010 (<http://www.oecd.org/ctp/tp/guidelines>).

²⁸ The characteristics of transfer pricing rules and how the application differs across countries are discussed in T. Lohse, N. Riedel and C. Spengel, 'The increasing importance of transfer pricing regulations – a worldwide overview', Oxford University Centre for Business Taxation, Working Paper 12/27, 2012.

²⁹ See, for example, <http://www.oecd.org/ctp/aggressivetaxplanning/>.

³⁰ See http://www.hm-treasury.gov.uk/chx_statement_051112.htm.

³¹ Country-by-country reporting is already in place for the extractive industries. For a summary, see pages 26–33 of http://www.pwc.com/en_GX/gx/tax/publications/assets/pwc-tax-transparency.pdf.

How much is lost to avoidance?

Measuring avoidance is a difficult exercise because it requires an estimate of how much tax 'should' have been paid. In relation to profit shifting, measuring the correct amount of tax is subject to the same definitional problems described above: it can be hard to define conceptually what UK profit is, and parties differ in their interpretation of the law. There is no agreed and comprehensive list of actions that constitute tax avoidance. In addition, we do not directly observe firms' actions or how their real activities are split across countries. Using the available information, it can be hard to distinguish between genuine commercial activities and those undertaken to avoid tax.

There are educated guesses but no one knows

HMRC has produced analysis of the UK tax gap – the difference between the amount of tax that should have been paid and the amount that was actually paid. The total tax gap measure covers all HMRC-administered taxes and distinguishes between the various reasons that tax is not collected – avoidance, legal interpretation (where HMRC and a business disagree on how tax law applies in a specific case), evasion, customer error, the hidden economy and criminal attacks.³² HMRC recognise that this is a difficult exercise and will be subject to error.

The HMRC analysis estimates a £4.1 billion corporate tax gap in 2010–11. This compares with total net corporate tax receipts of £42.1 billion (and therefore implies that £46.2 billion should have been collected). In calculating the corporate tax gap for large companies, HMRC essentially uses internal knowledge on where there are risks that tax is not being paid and on the estimated size of those risks. The measure is geared towards cases involving disclosed avoidance schemes or genuine uncertainty over the correct tax treatment. Importantly, the method will not capture most of the tax that is lost when firms shift profits offshore. For example, agreed-upon transfer prices may represent a certain degree of avoidance but will likely not be identified as a risk by HMRC, such that the tax consequence is not captured in the measured tax gap. This is a key criticism of the HMRC measure and means that it almost certainly underestimates how much tax would have been paid in the UK if there were no avoidance. However, it should be noted that it is hard to imagine how some avoidance behaviours discussed above could be accurately measured.

Attempts have been made to quantify the effect of profit shifting by considering the difference between the amount of tax paid as declared on firms' accounts and an estimate of the tax due.³³ Such measures tend to make assumptions about how much taxable profit was made in the UK and how much tax 'should' have been paid, and do not directly account for the deliberate elements in the structure of the tax system that mean that tax liabilities can be reduced (such as capital allowances, the R&D tax credit and loss carry-forwards) or the genuine commercial reasons why tax may be paid in other jurisdictions. As such, while estimates have suggested much larger tax gaps for the UK's largest companies than those implied by the HMRC analysis, they are likely overstated (possibly by a wide margin).

³² HMRC, *Measuring Tax Gaps 2012* (<http://www.hmrc.gov.uk/statistics/tax-gaps/mtg-2012.pdf>). The document discusses how the measured tax gap has changed in recent years. See table 1.4 for a definition of behaviours and table 1.1 for figures following in the text.

³³ See *The Guardian's* (2009) analysis of the UK's largest companies (<http://www.guardian.co.uk/business/series/tax-gap>) and TUC, *The Missing Billions*, 2008 (<http://www.tuc.org.uk/touchstone/missingbillions/1missingbillions.pdf>).

In summary, we don't know how much corporate tax is lost to the UK as a result of tax avoidance. This is partly because there is no accepted definition of exactly what constitutes 'avoidance' and partly because we lack full information about the activities of firms. Importantly, even if we knew that information and could calculate the tax lost to avoidance, it would not be right to assume that, were all avoidance opportunities to be completely removed, the UK would be able to collect that full amount. We would expect higher taxes to feed through, at least to some degree, to lower investment and changes in prices such that genuine UK profits may be lower. To the extent that the corporate tax affects prices or wages, or the location of firms' activities (and therefore jobs), there may also be lower receipts from income taxes or VAT.

Actions in this parliament

In 2011, the government published a document setting out its strategy on tax avoidance and highlighting a desire to remove avoidance opportunities.³⁴ The main new rule due to be introduced in Finance Bill 2013 is the General Anti-Abuse Rule (GAAR).³⁵ This is a broad principle-based rule designed to help prevent the use of 'abusive' tax avoidance schemes (it does not speak specifically to issues around profit shifting). See Box 10.2.

Reducing tax avoidance requires that the rules in place are effectively enforced. This in turn requires an adequately resourced tax administration. In the context of overall cuts to HMRC's budget, the government has said that additional resources are being devoted to reducing tax avoidance, and specifically to increasing HMRC's transfer pricing capabilities.³⁶ How effective this will be remains to be seen. The government should consider attempting to evaluate the benefits of increasing the resources devoted to reducing tax avoidance.

A more competitive tax regime

In the year it took office, the government announced a package of corporate tax reforms aimed at creating 'the most competitive corporate tax regime in the G20' – i.e. at reducing UK tax rates below those of other countries with a view to attracting more activity.³⁷ This is related to tackling tax avoidance to the extent that a lower UK tax burden reduces firms' incentives to shift profits to lower-tax jurisdictions.

A key part of the package is a large reduction in the main corporate tax rate, from 28% when the government took office in 2010 to 24% today and further to 23% in 2013–14 and 21% in 2014–15. The UK now has the lowest rate in the G7. At the start of 2012, the

³⁴ HM Treasury and HMRC, *Tackling Tax Avoidance*, March 2011 (http://cdn.hm-treasury.gov.uk/2011budget_taxavoidance.pdf).

³⁵ For a discussion of the process underlying the introduction of a GAAR, see http://www.hm-treasury.gov.uk/tax_avoidance_gaar.htm. Note that 'GAAR' commonly refers to a general anti-avoidance rule. The UK rule refers to 'abuse' because of its focus on identifying artificial and abusive tax arrangements.

³⁶ For information on cuts to the HMRC budget, see table 1 of HMRC, *Annual Report and Accounts 2011–12*, June 2012 (<http://www.hmrc.gov.uk/about/annual-report-accounts-1112.pdf>). The 2010 HMRC spending settlement included '£900 million of investment to address the tax gap and tackle tax avoidance and evasion' – see paragraph 2.133 of HM Treasury, *Spending Review 2010*, October 2010 (http://cdn.hm-treasury.gov.uk/sr2010_completereport.pdf). The 2012 Autumn Statement earmarked £77 million for HMRC 'to enhance its risk assessment capability for large multinational companies and increase HMRC's transfer pricing specialist resources' – see paragraphs 1.139 and 1.176 of HM Treasury, *Autumn Statement*, December 2012 (http://cdn.hm-treasury.gov.uk/autumn_statement_2012_complete.pdf).

³⁷ See HM Treasury, *Corporate Tax Reform: Delivering a More Competitive System*, 2010 (http://www.hm-treasury.gov.uk/corporate_tax_reform.htm). The measures, most of which have now been enacted, included a series of cuts to the main statutory tax rate, a cut to the small profits rate, the introduction of a Patent Box and modifications to the CFC rules.

main rate (26%) was the 7th lowest in the G20 but only the 18th lowest in the OECD, such that there are more OECD countries with a lower rate than a higher one.³⁸ By 2014, and assuming that other countries do not cut rates by as much as the UK, the UK can expect to have moved up the rankings of the G20 and OECD countries. Of course, the statutory rate is only one measure of the competitiveness of the corporate tax regime; some of the benefits of the lower rate have been offset by a broader tax base.

Box 10.2. General Anti-Abuse Rule

The basic idea of a GAAR is to provide a generic and ‘overarching’ defence against tax avoidance that does not require constant legislation to tackle specific loopholes individually and as they arise. It will apply to other taxes as well as corporation tax, including income tax, National Insurance contributions and capital gains tax. In essence, a GAAR recognises that tax legislation is not comprehensive in setting out Parliament’s intent of what should be taxed – some of the complexities may not even have been considered when the legislation was written – and, as a result, opportunities for avoidance can still arise notwithstanding the multiplicity of specific anti-avoidance rules.

The introduction of the GAAR follows the recommendations of a recent report, commissioned by the government, that concluded that ‘a moderate rule which does not apply to responsible tax planning, and is instead targeted at abusive arrangements, *would* be beneficial for the UK tax system’.^a Effectively, the aim of the GAAR is to prevent the tax consequences (as prescribed by existing legislation) of an action that can be identified as abusive. One of the key difficulties in practice is the characterisation of the distinction between ‘reasonable tax planning’ and ‘abusive’ activities. There is likely to be uncertainty over how this will affect firms’ ability to tax plan, at least until the GAAR has been observed in operation.

By extending the boundary defining which activities are covered by anti-avoidance legislation, the GAAR should assist HMRC in preventing certain kinds of avoidance behaviours without having to write new legislation each time a new scheme is uncovered. However, this will only be the case for a narrow range of activities. As noted in a report by the IFS Tax Law Review Committee, ‘A GAAR may have a role to play as a line in the sand and as an aid to construction by the courts, but overseas experience and the review in this paper ... suggest that a GAAR is no more the solution than any of the other approaches’.^b

^a Paragraph 1.7 of G. Aaronson, *GAAR Study*, November 2011 (http://www.hm-treasury.gov.uk/d/gaar_final_report_111111.pdf).

^b Paragraph 3.4 of T. Bowler, ‘Countering tax avoidance in the UK: which way forward?’, Tax Law Review Committee, Discussion Paper 7, 2009 (<http://www.ifs.org.uk/comms/dp7.pdf>).

³⁸ For details of rankings and discussion of effective tax rates, see K. Bilicka and M. Devereux, *CBT Corporate Tax Ranking 2012*, Oxford University Centre for Business Taxation, June 2012 (<http://www.sbs.ox.ac.uk/centres/tax/Documents/reports/CBT%20Tax%20Ranking%202012.pdf>).

In April 2013, the government will introduce a much lower, 10%, rate of corporate tax for the income derived from patents. The so-called Patent Box, which may be viewed as a way to tax a more mobile form of income more lightly, works to make the UK a more attractive location for an important and mobile form of intellectual property income.³⁹

The UK is not the first country to introduce a special regime for intellectual property income. Policies similar to the Patent Box are already in place in Belgium, Luxembourg, the Netherlands and the Swiss canton Nidwalden. This adds pressure on the UK to stay competitive and prevent firms shifting profits, and possibly real activities, to these locations. However, if more governments follow this path, there could effectively be a 'race to the bottom' in which no government gains.

Reduced incentives for avoidance but lower revenue

A lower tax burden on income earned and declared in the UK reduces incentives to shift such income offshore. The size of this effect, though, is unknown and may be limited if firms are already achieving much lower tax rates by shifting profits out of the UK. Even under estimates that attempt to account for a reduction in profit shifting, the Treasury forecasts that revenue will be lower as a result of the tax rate cuts. For example, the additional 1 percentage point cut to the main statutory rate in 2014–15, that was announced in the December 2012 Autumn Statement, is forecast to reduce revenues by £785 million in 2015–16, rising to £875 million in each of 2016–17 and 2017–18.⁴⁰ The Patent Box is estimated to cost £720 million in 2014–15, rising to £910 million in 2016–17, and probably higher once the full effect of the policy is realised.⁴¹ The Patent Box also creates an additional boundary between income that is, and is not, eligible for the lower tax rate, which provides opportunities for avoidance and will need to be policed.

Of course, the government does not care only about the revenue it raises; it also values the real activities that may be attracted as a result of lower taxes. A lower headline rate of corporation tax will likely make the UK a more attractive place for real investments. The effect of the Patent Box is less clear because it targets income, which firms can separate from real activities, and provides only weak incentives to undertake additional innovation.⁴²

To the extent that other countries respond to the UK's policy moves by also seeking to increase tax competitiveness – and many countries are reforming their corporate tax systems with this goal – any positive impact from increased activity in the UK could be reduced. Tax competitiveness is a moving target, and tax competition between countries is one of the key factors behind long-running predictions that corporate tax revenues will decline.

³⁹ For a discussion of the Patent Box, see R. Griffith and H. Miller, 'Corporate taxes and intellectual property', in M. Brewer, C. Emmerson and H. Miller (eds), *The IFS Green Budget: February 2011*, IFS Commentary 117, 2011 (<http://www.ifs.org.uk/budgets/gb2011/11chap10.pdf>).

⁴⁰ See page 13 of http://cdn.hm-treasury.gov.uk/as2012_policy_costings.pdf.

⁴¹ For most recent policy costing, see <http://www.hmrc.gov.uk/budget2012/tiin-0726.pdf>. The policy is being phased in over five years; the 10% rate will be applied to 60% of qualifying patent income in 2013, rising to 100% from April 2017. The initial estimate of the long-run revenue cost was £1.1 billion (see <http://www.hmrc.gov.uk/tiin/tiin726.pdf>).

⁴² For a discussion of the Patent Box proposal, see section 10.4 of R. Griffith and H. Miller, 'Corporate taxes and intellectual property', in M. Brewer, C. Emmerson and H. Miller (eds), *The IFS Green Budget: February 2011*, IFS Commentary 117, 2011 (<http://www.ifs.org.uk/budgets/gb2011/11chap10.pdf>).

A different method of calculating UK profits

Many of the difficulties in tackling tax avoidance stem from the type of corporate tax system currently in operation and the methods for allocating profits to countries. Firms are required to produce separate tax accounts for each country they operate in (declaring where costs are incurred and profits earned) and to set transfer prices on transactions that happen within companies. Multinational companies face opportunities to manipulate (at least the paper) location of activities and the intra-group prices in order to reduce tax payments.

A more radical solution, then, is to adopt a different corporate tax system.⁴³ One possibility is to move to a system that is able to consider the whole of a multinational company's activities (rather than look at its activities in each country separately). The basic idea is to require firms to produce an account of their total activities (profits and costs) in all (or a subset of) countries they operate in and to use information on the location of real activities (sales, assets and employment, for example) to allocate taxing rights to individual jurisdictions. This is often called a unitary approach. It is akin to the approach taken within the US at the state level: total US tax liability is allocated to individual states according to a formula based on sales, assets and payroll.

A European common consolidated corporate tax base

The European Commission, having long supported more harmonised corporate taxation in Europe, has suggested a common consolidated corporate tax base (CCCTB). This would require companies to calculate their total EU profits (net of losses) based on a single set of rules that defined the tax base. There would need to be common rules for taxing foreign income and for dealing with profit shifting to countries outside the EU. One important implication of a CCCTB is that losses made in one country could be offset against profits made in others.

Once total profits had been calculated, a formula would be used to allocate profits to individual countries.⁴⁴ The formula would be based on the geographical distribution of the company's economic activity – likely on the distribution of employees, assets and sales across countries.⁴⁵ Countries would be free to choose the rate at which they taxed their share of profits.

The key advantage from a single (common consolidated) tax base is that income and deductions would be declared together and there would be no need to price transactions that happened within a company but across European countries. This would remove the opportunities for firms to separate costs and profits, or to manipulate transfer prices or financing structures to shift profits within the EU. The distribution of profits (and

⁴³ For a discussion of other alternative tax systems, see A. J. Auerbach, M. P. Devereux and H. Simpson, 'Taxing corporate income', in J. Mirrlees et al. (eds), *Dimensions of Tax Design: The Mirrlees Review*, Oxford University Press for IFS, 2010 (<http://www.ifs.org.uk/mirrleesreview/dimensions/ch9.pdf>).

⁴⁴ The EU Commission's proposal is discussed at http://ec.europa.eu/taxation_customs/taxation/company_tax/common_tax_base/index_en.htm. The CCCTB is also discussed in section 10.5.5 of R. Griffith, J. Hines and P. B. Sørensen, 'International capital taxation', in J. Mirrlees et al. (eds), *Dimensions of Tax Design: The Mirrlees Review*, Oxford University Press for IFS, 2010 (<http://www.ifs.org.uk/mirrleesreview/dimensions/ch10.pdf>).

⁴⁵ See Commission of the European Communities, Common Consolidated Corporate Tax Base Working Group, 'CCCTB: possible elements of the sharing mechanism', Working Document CCCTB/WP060/doc/en, 2007 (http://ec.europa.eu/taxation_customs/resources/documents/taxation/company_tax/common_tax_base/ccctb_wp060_en.pdf).

therefore taxing rights), as dictated by the formula, could be made to relate to measures of real economic activity and could be less open to manipulation.

A CCCTB does not remove all of the problems associated with the current system, however. Countries would set their own tax rates, such that there could still be competition between countries to attract activities. In fact, this could intensify because countries would no longer be able to attract companies using (less visible) differences in the tax base. Tax rate differences would still lead to distortions as to where firms located the elements of real activities that feature in the formula. This would be particularly problematic were the formula to include intangible assets, which are an increasingly important element of firms' activities but can also be hard to attach a geographical location to. There would be some new distortions created by opportunities for firms to take advantage of the consolidated base (for example, firms with profits in high-tax countries may have incentives to acquire loss-making firms in low-tax countries). And, of course, there would still be opportunities to shift profits outside the EU; the CCCTB extends, but does not remove, the boundary across which the tax base is calculated.

The CCCTB is a live proposal but remains divisive. The move would represent a substantial administrative challenge with a number of technical issues to be worked out. It would also face a political challenge. Initially, the EU Commission proposed to make the CCCTB optional such that companies could elect to remain under the current system. Under such a system, only those firms that would expect to face lower taxes under the CCCTB would presumably elect to be taxed in that way. This affects the revenue consequences of the reform. Research has found that total European revenue would fall if firms could elect into the CCCTB but would increase if it applied to all firms.⁴⁶ The EU Parliament has since called for the proposed CCCTB to be mandatory (after a transition period). A CCCTB would also affect the distribution of revenues, with some countries gaining and others losing, in part depending on the exact nature of the formula. The research cited above suggests that the UK would likely see an increase in revenue under a variety of formulas and assumptions. The countries that are estimated to lose include the smaller European countries that have a relatively high tax take compared with measures of real activity that feature in the formula.

10.4 Taxation of North Sea oil and gas

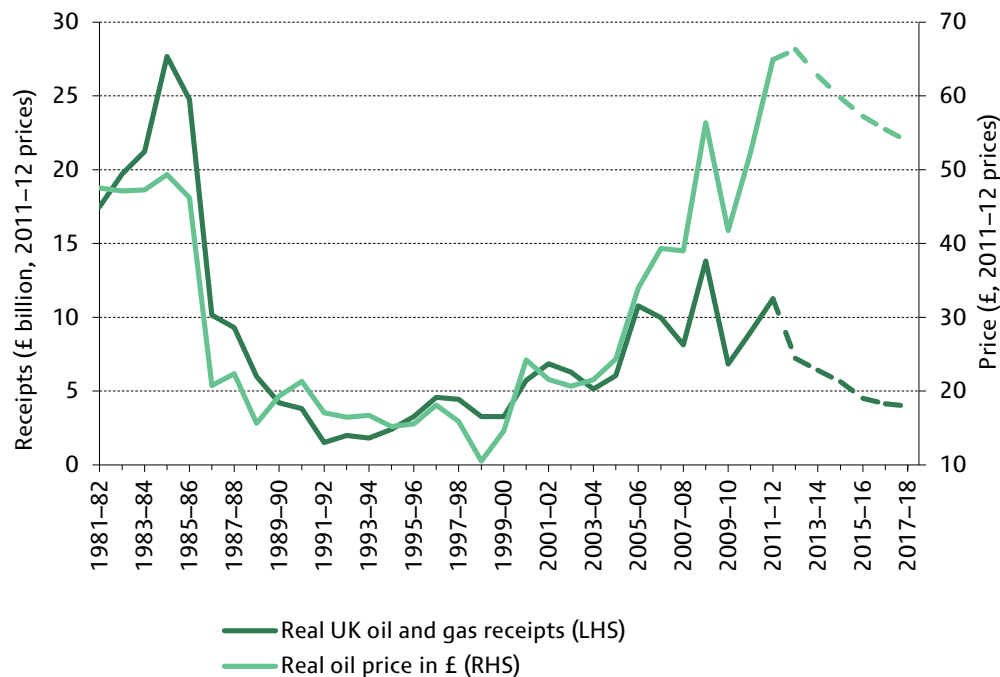
Revenues from North Sea companies

In 2011–12, total revenues from North Sea companies were £11.3 billion. In real terms, revenues peaked in 1984–85 and have declined substantially since – see Figure 10.5.

The oil price has a large influence on revenues raised from North Sea companies and is one of the key contributing factors that make these revenues among the most volatile. The sharp fall in revenues in 1986–87 and the upward trend that started in the early 1990s are both largely attributable to a corresponding fall and then steady increase in the

⁴⁶ For discussion and estimation of the effects of a CCCTB, see M. Devereux and S. Loretz, 'The effects of EU formula apportionment on corporate tax revenues', Oxford University Centre for Business Taxation, Working Paper 07/06, revised version, 2008 (http://www.sbs.ox.ac.uk/centres/tax/Documents/working_papers/WP0706.pdf).

Figure 10.5. Receipts from UK oil and gas production and the oil price



Note: Forecasted oil price assumes same growth in nominal £ per barrel as assumed by OBR, *Economic and Fiscal Outlook*, December 2012 (<http://cdn.budgetresponsibility.independent.gov.uk/December-2012-Economic-and-fiscal-outlook23423423.pdf>).

Source: Oil and gas revenues from HMRC, table 11.11 (available at <http://webarchive.nationalarchives.gov.uk/20121204171544/http://hmrc.gov.uk/statistics/prt.htm>). Receipts figures for 2012-13 onwards from table 4.6 of OBR, *Economic and Fiscal Outlook*, December 2012 (<http://cdn.budgetresponsibility.independent.gov.uk/December-2012-Economic-and-fiscal-outlook23423423.pdf>). Oil price from World Bank Pink Sheet 2012 (series 'Crude oil, average \$ per barrel'); converted to sterling using annual exchange rates (<http://stats.oecd.org>, measure 'National currency per US dollar'). Both deflated using 2011-12 GDP deflator (http://www.hm-treasury.gov.uk/data_gdp_fig.htm).

oil price. Similarly, changes in receipts following the recession, and notably the spikes in 2008-09 and around 2011, have closely followed oil prices.⁴⁷

Since the early 2000s, however, the oil price has increased more quickly than revenues. This is largely due to the offsetting effects of declining production since the end of the 1990s. Oil production has fallen by 65% from a high of 150 million tonnes in 1999 to just 52 million tonnes in 2011. Gas production has fallen by 60% from a high of around 40 billion therms in 2000 to 16 billion therms in 2011.⁴⁸ Expenditure by North Sea companies reached a high in the early 1990s and has also fallen since then, although with a recent increase in 2006-08.⁴⁹

North Sea revenues also peaked as a share of total current receipts in 1984-85, before falling in line with real revenues. Since the early 1990s, receipts from North Sea oil and gas have represented, on average, 1% of total UK tax receipts (varying between 0.4% and

⁴⁷ In contrast, the increase in revenues in 2005-06 and 2006-07 was the result of a change in the instalment regime for North Sea companies, which acted to bring revenue forward, as well as an increase in the supplementary charge.

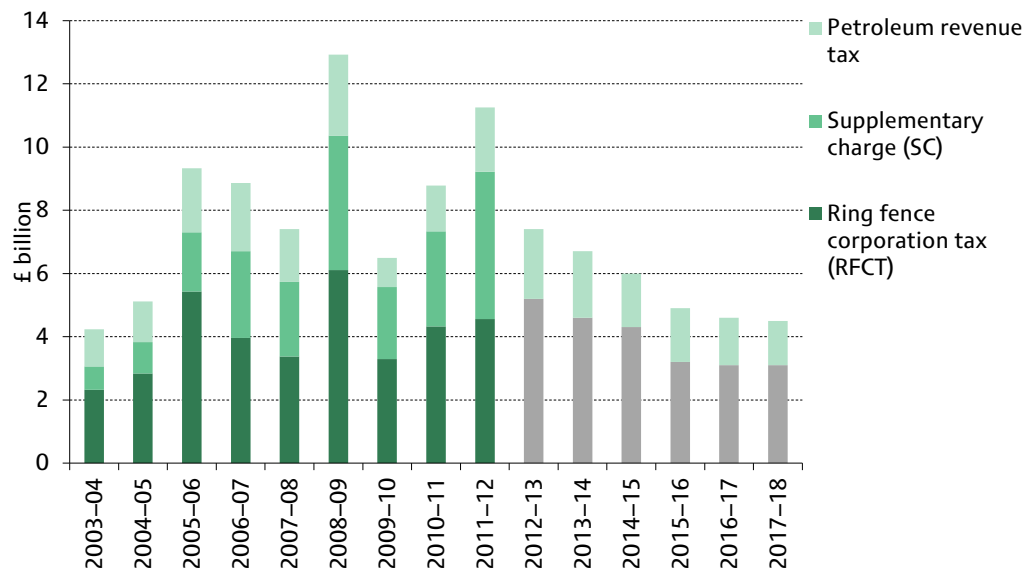
⁴⁸ Projections of oil and gas production are made by the Department of Energy and Climate Change. Actual and forecast production is discussed at <http://og.decc.gov.uk/assets/og/data-maps/chapters/production-projections.pdf>. The latest projections can be seen in table 4.1 of OBR, *Economic and Fiscal Outlook*, December 2012 (<http://cdn.budgetresponsibility.independent.gov.uk/December-2012-Economic-and-fiscal-outlook23423423.pdf>).

⁴⁹ For figures, see <http://og.decc.gov.uk/assets/og/data-maps/appendices/ukcs-i-and-e-chart.pdf>.

2.4%). It is worth noting that, in the context of the forthcoming referendum on independence, North Sea revenues would have accounted for nearly half of Scottish tax revenues in the mid-1980s, and would still have accounted for 15% of revenues in 2010–11.⁵⁰

Figure 10.6 shows UK revenues for the most recent period according to the taxes they arise from (details on the tax system are given in Box 10.3 below). Of the total revenues raised from North Sea companies in 2011–12 (£11.2 billion), £4.6 billion (41%) came from the ring fence corporation tax, £4.7 billion (41%) from the supplementary charge and £2.0 billion (18%) from the petroleum revenue tax. The supplementary charge has become a more important source of revenue over the last decade as a result of the increases in the rate (from 10% in 2002 to 20% in 2006 to 32% in 2011).⁵¹

Figure 10.6. Receipts from UK oil and gas production, by tax (£ billion)



Source: Data up to and including 2011–12 from HMRC, table 11.11 (available at <http://webarchive.nationalarchives.gov.uk/20121204171544/http://hmrc.gov.uk/statistics/prt.htm>). Forecasts from 2012–13 from table 4.6 of OBR, *Economic and Fiscal Outlook*, December 2012 (<http://cdn.budgetresponsibility.independent.gov.uk/December-2012-Economic-and-fiscal-outlook23423423.pdf>).

North Sea revenues fell sharply in 2009–10, before increasing in each of 2010–11 and 2011–12 as a result of a rising oil price and an increase in the supplementary charge. As noted in Section 10.2, the increase in North Sea corporation tax (ring fence corporation tax and supplementary charge) in these years largely offset the fall in revenues associated with the financial sector.

Revenue forecast to fall

Oil and gas revenues are forecast to fall to £7.4 billion in 2012–13 (over a third lower than in 2011–12) and to £4.5 billion in 2017–18. A large part of this decrease is the result of a fall in corporation tax revenue from £9.2 billion in 2011–12 to £5.2 billion in 2012–

⁵⁰ For a discussion of the share of North Sea revenues in total Scottish revenues and their importance for the public finances of an independent Scotland, see D. Phillips and P. Johnson, *Scottish Independence: The Fiscal Context*, IFS Briefing Note 135, 2012 (<http://www.ifs.org.uk/publications/6444>).

⁵¹ The increase in the supplementary charge was costed to raise £1.8 billion in 2011–12, rising to £2.2 billion in 2012–13. See <http://www.hmrc.gov.uk/budget2011/tiin6133.pdf>.

13 and to £3.1 billion in 2017–18. This will see revenues fall from 2.0% to 0.6% of total tax receipts.

Declining revenues are partly the result of lower production. Both oil and gas production are forecast to continue to fall across the period to 2017–18 (and by more than previously forecast in Budget 2012). Oil and gas production in 2012 is forecast to have fallen substantially (by 12%) as a result of higher maintenance and a gas leak in one of the fields.⁵² By 2017, oil production is forecast to have fallen by 16% (to 44 million tonnes) and gas production by 15% (to 13.7 billion therms) compared with 2011.⁵³

Revenues are also likely to be depressed as the result of a falling oil price – the OBR forecasts that the oil price will fall by 17% between 2011 and 2017⁵⁴ – and a large rise in capital expenditure, the allowances for which work to reduce tax liability. The loss of revenue is of some importance in a UK context. It would, of course, be a much more important issue for an independent Scotland.

Why and how to tax North Sea oil and gas differently

North Sea companies' activities are subject to a different tax regime from other corporate activities. In particular, they face much higher marginal tax rates (over double the rate of the other corporate activities).

The rationale for relatively high tax rates on oil and gas extraction is that it produces large economic rents – profits that are over and above the normal rate of return that is required to make a project viable (which includes all costs of exploration and production and a risk premium). This is commonly the case with finite natural resources for which demand is high and extraction costs are relatively cheap. The government has an incentive to share in these economic rents not only because it can, but also because the rents arise from a depletable national resource that the government owns (on behalf of current and future citizens) and grants access to.⁵⁵ A large-scale review of the Australian tax system concluded that a rent-based tax is the most appropriate for non-renewable resources expected to generate significant economic rents.⁵⁶

However, there are two necessary conditions for tax not to distort investment decisions.

First, the tax must only be levied on economic rents. A rent-based tax, which can be achieved in various ways, requires that, in net present value (NPV) terms, the full cost of an investment is exempt from tax. To the extent that the tax system does not fully exempt the cost of investment (i.e. that it taxes the normal rate of return), there will be

⁵² See paragraph 4.20 of OBR, *Economic and Fiscal Outlook*, December 2012 (<http://cdn.budgetresponsibility.independent.gov.uk/December-2012-Economic-and-fiscal-outlook23423423.pdf>).

⁵³ These figures do not include any impact from new sources of UK shale gas, the scale of which is unknown.

⁵⁴ The OBR forecasts (based on prices implied by futures markets in November 2012) that the price of a barrel of oil will fall from £69.2 (\$111) in 2011 to £57.4 (\$92) in 2017.

⁵⁵ The Petroleum (Production) Act 1934 states that all oil and gas in Great Britain and its territorial sea belongs to the Crown.

⁵⁶ Rent-based taxes tend to produce a more variable source of revenue, and one that is collected at a later date, than under a corporation tax. Rent-based taxes may also have higher administration and compliance costs because they require a measure of economic rents. An important distinction between types of rents taxes is how they treat losses. The Australian review recommends the use of a cash-flow tax. For a discussion of the taxation of non-renewable resources, see chapter C1 of *Australia's Future Tax System* (http://www.taxreview.treasury.gov.au/content/FinalReport.aspx?doc=html/Publications/Papers/Final_Report_Part_2/Chapter_c1.htm).

distortions, the effect of which is increasing in the tax rate, and some marginal investments will be deterred.

Second, the tax rate must be constant. Investment will be deterred if the rate at which (future) profits are taxed is expected to be greater than the tax rate at which (current) costs are deductible. Specifically, there will be some marginal projects that are not viable if future profits are taxed at a higher rate than that at which costs are currently deductible.⁵⁷ In addition, it is important that firms do not face uncertainty about future tax rates. This is particularly important for large long-term investments such as those made to extract oil and gas.

The current UK system

There have been many changes to the taxation of North Sea companies' profits over time, including changes to the types of tax levied, the rates and allowances, and the timing of payments.⁵⁸ Changes have not affected all activities equally: many changes have applied only to fields given consent after a certain date or to certain types of investment.

Companies currently engaged in oil and gas extraction activities in the UK or on the UK Continental Shelf (UKCS) are subject to up to three profit-based taxes. All are subject to ring fence corporation tax (at a rate of 30%) and the supplementary charge (at a rate of 32%). The profits of individual fields given consent before 16 March 1993 are additionally subject to petroleum revenue tax (PRT), which is levied at 50% and is deductible when calculating the ring fence corporation tax and the supplementary charge. This means that some investments face a tax rate of 81%.⁵⁹ Box 10.3 describes the tax regime, including the range of investment and decommissioning allowances available.

Box 10.3. Taxes levied on the profits of UK oil and gas extraction

Ring fence corporation tax (RFCT)

The ring fence corporation tax is effectively the standard corporation tax levied on a measure of a company's total 'ring-fenced' profits that excludes certain deductions, notably losses from other activities and excessive interest payments. The ring fence prevents firms using reliefs or allowances from other activities to reduce the taxable profits from oil and gas extraction.

Until Finance Act 2007, RFCT was levied at the same rates as standard corporation tax. North Sea activities have since been exempted from rate changes such that the main rate of RFCT remains at 30%. The small profits rate for North Sea oil companies is 19%. (For non-ring-fenced activities, the rates in 2012–13 are 24% and 20% respectively.)

⁵⁷ Consider an example project that costs I and raises a stream of revenue equal to R in NPV terms. The project will be undertaken as long as the NPV of the return (i.e. $R-I$) is non-negative. If costs are deductible at rate t and firms expect profits to be taxed at a higher rate, $\tau > t$, then the expected NPV of the project is $(1-\tau)R - (1-t)I = (1-t)(R-I) - (\tau-t)R$. For a marginal project where $R = I$, the NPV will be negative and, as a result, marginal investments will not be undertaken.

⁵⁸ For example, companies operating in the North Sea were originally (when operations began in the 1970s and until 1 January 2003) required to pay a royalty – set as an annual percentage of the value of production – to the government in recognition of its ownership of the resources.

⁵⁹ Consider an equity-financed investment in a field that is subject to PRT that yields a £100 profit. The PRT charge will be £50. The ring fence corporation tax and supplementary charge will then be levied on £100–£50 such that the tax charge is £31 (i.e. 62% of £50). The overall tax bill is £81 (i.e. an 81% tax rate).

Supplementary charge (SC)

The supplementary charge is levied on an almost identical measure of taxable profit as RFCT except that financing costs are not deductible. The SC was introduced at a rate of 10% for profits accruing after 17 April 2002. The supplementary rate was increased to 20% for profits arising on or after 1 January 2006 and to 32% for profits arising after 23 March 2011.

Allowances

There are many allowances, the nature and availability of which depend on the type of activity undertaken (e.g. whether it relates to exploration, development or decommissioning), the date an investment was undertaken and the characteristics of the oil field.^a

Most (but not all) new capital expenditure on oil and gas extraction, including on plant and machinery, is eligible for a 100% first-year allowance. 100% first-year allowances are also available for most expenditure relating to the appraisal and exploration of fields under either the Research & Development Allowance or the Mineral Extraction Allowance. Investments in plant, machinery and buildings that do not qualify for the first-year allowances are eligible for the types of depreciation allowances provided under the general corporation tax.

For fields developed after April 2009, there are Field Allowances that reduce the taxable profit liable to the supplementary charge. Field Allowances were introduced with a view to reducing the impact of the supplementary charge on new commercially marginal fields and therefore incentivising development. The size of the reduction depends on the characteristics of the field – its size and depth and the pressure and temperature of the oil. For example, small oil or gas fields are eligible for an allowance of up to £75 million that reduces on a straight-line basis as the size of the field increases.^b

For companies involved in exploration or development that have insufficient taxable income against which to offset all available allowances, there is a Ring Fence Expenditure Allowance that allows an additional 10% per annum to be added to the value of any unused expenditure carried forward (this increased from 6% in January 2012).

There are also a number of reliefs available for the costs of decommissioning a field, which requires removing all structures and ensuring that the seabed is pollution free and safe for shipping and fishing. In the case where there are losses after accounting for the cost of decommissioning a field, the loss can either be carried back or, if this is insufficient, be offset against profits in another field.^c

Petroleum revenue tax (PRT)

The petroleum revenue tax was introduced in 1975. It is now only oil and gas fields given development consent before 16 March 1993 that are liable for the tax.

PRT is a cash-flow tax (essentially giving full relief for expenditures as they occur) assessed every six months and levied at a rate of 50% on profits at the level of individual oil or gas fields. Allowances for the costs of developing and running a field cannot be used against the profits of other fields. PRT is a deductible expense when calculating the taxable profit liable for RFCT and the SC.

^a Information on allowances can be found at <http://www.hmrc.gov.uk/manuals/otmanual/OT25999.htm>.

Where it is possible that more than one relief can be claimed, companies are able to elect which relief to use.

^b For information on Field Allowances, see <http://www.hmrc.gov.uk/manuals/otmanual/ot21415.htm>.

^c For information on decommissioning, see <http://www.hmrc.gov.uk/manuals/otmanual/OT28000.htm>.

Distorts some investment decisions

Petroleum revenue tax was explicitly designed with the goal of being non-distortionary. It exempts the full cost of investment with a view to taxing only the economic rents. As such, its high rate should not deter marginal investments. However, companies are additionally subject to the ring fence corporation tax and the supplementary charge, which, in contrast, do not allow the full deduction of all investment costs. Investment expenditures are subject to a series of capital allowances that dictate how much can be deducted for tax purposes. These depend on the type of investment. Not all investment costs are exempted in all cases. For example, financing costs are not deductible from the supplementary charge, and while many expenditures are eligible for 100% first-year allowances, that is not the case for all. Field Allowances are important in exempting investment costs from the supplementary charge. They vary across types of investment and have been designed mainly to target new marginal investments (for example, small oil fields or those in deep water). To the extent that tax is levied on the normal rate of return, marginal investment projects may not be undertaken.

Recent policies have reinforced distortions to investment, ...

In the March 2011 Budget, the supplementary charge was increased to 32%. Part of the rationale for the increase was to transfer to the government some of the benefits that North Sea companies can expect to gain as a result of high oil prices over the next five years.⁶⁰ However, using the supplementary charge for this purpose means that at least some North Sea investment decisions were distorted.

Initial analysis by HMRC set out that, while the increased supplementary charge may affect the viability of some marginal investments, it did 'not expect a significant impact on investment or production in the forecast period'.⁶¹ However, the oil and gas industry were vociferous opponents to the move.⁶² Research simulating the impact of the Budget 2011 changes also suggested that they could lead to a substantial reduction in oil production, coming largely from reductions in the number of incremental projects undertaken.⁶³

Partly in order to offset the impact of the increased rate of supplementary charge, the government has since increased the scope and generosity of Field Allowances, which work to reduce the amount of profit on which firms are liable to pay tax. Notably, they have been extended to encompass brown field sites.⁶⁴ Even if the government has reached a set of policies that work to raise revenues while limiting investment distortions, the process of getting there – i.e. of increasing the rate and later trying to offset some of the effect through changes in allowances – could have been better managed.

... created added uncertainty about the tax rate

The government announced the increase in the supplementary charge alongside a Fair Fuel Stabiliser (FFS) under which higher taxes on North Sea profits are used to fund cuts

⁶⁰ 'Government still expects that average post-tax profits per barrel will be higher over the next five years than the last five' – see <http://www.hmrc.gov.uk/budget2011/tiin6133.pdf>.

⁶¹ See <http://www.hmrc.gov.uk/budget2011/tiin6133.pdf>.

⁶² See, for example, <http://www.oilandgasuk.co.uk/adisturbingbudget.cfm>.

⁶³ A. Kemp and L. Stephen, 'The effects of Budget 2011 on activity in the UK Continental Shelf', University of Aberdeen, North Sea Study Occasional Paper 120, April 2011 (http://aura.abdn.ac.uk/bitstream/2164/2080/1/nsp_120.pdf).

⁶⁴ Specifically, a Brown Field Allowance will be available for the development (after 7 September 2012) of previously unaccessed reserves in an existing field. See Finance Act 2012.

to fuel duties at times of high oil prices.⁶⁵ Importantly, the government has set out that were the price of oil to move below a £45 per barrel trigger point on a sustained basis, the supplementary charge would be reduced again towards 20% (although there are no details on how the size of the reduction would relate to the oil price).⁶⁶

Linking the tax rate to the price of oil adds uncertainty to the tax system, especially because the government has not set out exactly how they are linked. Were oil prices to fall substantially, a lower tax rate would limit the impact of the price change on firms' net returns. However, if firms expect that the rate of the supplementary charge (which is partly levied on the normal rate of return) may increase as a result of future rises in the oil price (such that it is higher than the rate at which costs are currently deductible), then some investments may be deterred.

However, oil prices are not set to fall even close to the trigger point before 2017–18 (see above), so the increase in the supplementary charge appears to be like a de facto permanent tax increase.

That the supplementary charge was introduced and increased twice in the last decade raises concerns of further surprise tax increases. The lack of stability in the tax burden and the expectation of further rises in future may work to deter investment (although we do not know how important this effect is empirically). In the June 2010 Budget, the government recognised 'the importance of a stable and fair UK oil and gas tax regime that provides certainty for businesses' and set out its intention to 'take forward discussions with the industry to ensure the regime encourages continuing investment and the exploitation of remaining resources'.⁶⁷ The increase in the supplementary charge was then announced without warning just nine months later. This is not the first government to have openly acknowledged the importance of a stable tax regime, only to increase taxes later without warning.⁶⁸ In fact, the taxation of North Sea companies has been subject to many changes since the regime began in the 1970s. Companies, especially those undertaking large long-term investments, value certainty.

... and left decommissioning more certain but at a tax disadvantage

The rate against which tax relief for decommissioning expenditure is granted has been restricted to 20% (i.e. not increased to 32% in line with the rate of supplementary charge). The rationale given was that allowing relief against the higher rate would incentivise accelerated decommissioning. That is, if relief were granted at the new rate, then – to the extent that firms did not think this new higher rate was permanent – they would face an incentive to bring forward decommissioning costs.⁶⁹ However, because the

⁶⁵ A brief discussion of the Fair Fuel Stabiliser can be found at <http://www.ifs.org.uk/publications/5503>.

⁶⁶ The £45 a barrel trigger point is set to be equivalent to \$75 a barrel. The point is reviewed every three years and an assessment of whether it is met made on the first working day of every February from 2013. (See Written Ministerial Statement, 21 March 2012, <http://www.publications.parliament.uk/pa/cm201212/cmhansrd/cm120321/wmstext/120321m0001.htm>.)

⁶⁷ See paragraph 1.85 of HM Treasury, *Budget 2010*, June 2010 (http://www.hm-treasury.gov.uk/2010_june_budget.htm).

⁶⁸ For example, following a number of changes in 2002, including the introduction of the supplementary charge, the government of the day stated that it felt it had established a system with the right balance between revenues and investment incentives (paragraph 5.82 of HM Treasury, *Budget 2002: Economic and Fiscal Strategy Report*, April 2002, http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/media/4/1/Budget_2002.pdf). However, the same government changed the timings of ring fence corporation tax payments in 2005 and doubled the supplementary charge in 2006.

⁶⁹ See paragraph 1.149 of HM Treasury, *Budget 2011*, March 2011 (http://cdn.hm-treasury.gov.uk/2011budget_complete.pdf).

increased rate of the supplementary charge looks permanent, this effectively acts to reduce the relief available for decommissioning costs. There is no clear reason why the relief for decommissioning should be given at a lower rate than that at which the related returns are taxed.

In a positive move, legislation will be introduced in 2013 under which the government will be able to sign contracts with companies that provide certainty over the future relief they will receive when decommissioning assets.⁷⁰ Providing companies with such certainty is forecast to raise revenue solely by increasing investment in and production of oil and gas (i.e. raising revenue without directly imposing a higher tax burden on firms).⁷¹

Policymaking could be better

The taxation of North Sea companies has undergone many incremental changes by many governments. The result is a system that incorporates distortions, is unduly complex and lacks a clear design.

A government may find it difficult to redesign the whole system. And to the extent that investment decisions have been based on the current system, this would not necessarily be desirable. However, a government looking to enact changes can, and should, seek to set out a clear strategy for what it is aiming to achieve and how it thinks oil and gas extraction should be taxed. For example, if the government wishes to link the rate of the supplementary charge to the oil price with a view to extracting the rents associated with higher oil prices, it should set out how the two will be linked and whether the benefits are deemed sufficient to outweigh any distortions to investment decisions.

In considering policy change, any benefits (for example, additional revenue) should be weighed against the costs of reducing stability and certainty and possibly additional complexity. The introduction of contracts that specify future decommissioning relief is a good example of how additional certainty can improve investment incentives and, as a result, strengthen the public finances.

10.5 Conclusions

There have long been suggestions that governments can expect to see corporate tax revenues fall as income becomes more mobile (and therefore avoidance opportunities are increased) and as governments lower rates in a bid to maintain competitiveness. The surprise over the last three decades has been that corporate tax revenues, while volatile, have remained robust. However, part of this was likely the result of high revenues from North Sea companies in the 1980s (now much less important and declining) and a growing financial sector in the 1990s and 2000s (now subject to uncertainty following the financial crisis). Therefore, the same concerns are likely to remain as governments continue to reduce rates (in the UK's case, from 28% to 21% in this parliament) in a bid to attract mobile activities.

This government, like many others before it, faces the challenge of preventing corporate tax avoidance. The actions of multinational firms to reduce UK taxable profit have

⁷⁰ The government plans to consult on the precise form of such contracts with a view to introducing legislation in Finance Bill 2013. See paragraph 2.125 of HM Treasury, *Budget 2012*, March 2012 (<http://www.hm-treasury.gov.uk/budget2012.htm>).

⁷¹ Revenue is forecast to be £245 million in 2013–14. See page 12 of *Budget 2012 Policy Costings*, March 2012 (http://cdn.hm-treasury.gov.uk/budget2012_policy_costings.pdf).

attracted public scorn. The government has signalled its willingness to continue to engage with the OECD on improving the transfer pricing rules that dictate how profits are allocated to countries. It has also earmarked some HMRC resources to deal specifically with tax avoidance. However, there is a limit to what can be achieved in the current system. To the extent that many of the opportunities to shift profits arise from the fact that firms are able to declare profits and costs in different countries and must attach prices (that aren't observable in the market) to intra-group transactions, a more radical change in the corporate tax system merits consideration.

The European Commission has suggested moving to a common consolidated corporate tax base. This has the key advantage that income and deductions would be declared together and there would be no need to price transactions that happened within a company but across European countries. Taxing rights could be allocated to countries in a way that was more closely linked to real activities. However, this would not remove all of the problems associated with the current system – for example, there would still be opportunities to shift profits outside the EU. Politically, one of the key difficulties is that some countries would stand to lose substantial revenues as a result of the move.

North Sea companies have proved an important source of revenue for the UK. However, the receipts from oil and gas extraction are forecast to fall in line with declining production. The tax system applied to North Sea companies' activities is complex and changes too often. High tax rates need not be distortionary, but they are if levied on the normal rate of return. This is the case for at least some North Sea investments because the corporate tax does not allow the full deduction of all investment costs. The complexity of the current UK system is the result of incremental developments over decades. Policy going forward should at least aim not to make the system more complex or distortionary and preferably should try to make future changes more predictable in order to reduce uncertainty.