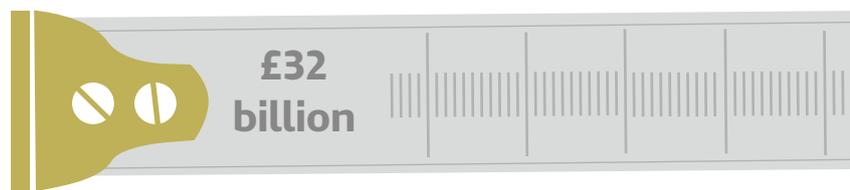


# Measuring tax gaps 2012

Tax gap estimates for 2010-11



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# Introduction

This statistical release presents estimates of net tax gaps for 2010-11 in HMRC administered taxes. It has been produced by Government analysts working within HMRC, in line with the values, principles and protocols set out in the Code of Practice for Official Statistics.

Estimating the scale of, and trends in, net tax gaps is difficult and a relatively untested area of work for governments in the EU and around the world. HMRC has developed estimates for the main direct and indirect taxes that it believes are the best possible, based on the information available.

There are many sources of potential error and uncertainty in these estimated tax gaps. A summary of the methodological and data issues for each tax gap estimate is outlined in the document. More detail on data sources and methods is set out in a separate document 'Methodological Annex for Measuring Tax Gaps.' Many of the 2009-10 and 2010-11 estimates are provisional and subject to revision. This is because they are produced using external data that is regularly revised and compliance data which takes many years to finalise.

HMRC is looking to improve the quality, timeliness and presentation of statistics on tax gaps. We welcome feedback on this publication from businesses, academic experts and other interested parties. To comment on the report or methodologies used, please contact:

Kerry Booth	<a href="mailto:kerry.booth@hmrc.gsi.gov.uk">kerry.booth@hmrc.gsi.gov.uk</a>	020 7438 8449
Heather Whicker	<a href="mailto:heather.whicker@hmrc.gsi.gov.uk">heather.whicker@hmrc.gsi.gov.uk</a>	020 7438 6566

# 1. Summary

## Key findings

- The latest estimate of the tax gap is for 2010-11. The overall tax gap in 2010-11 is estimated to be £32 billion which is 6.7 per cent of tax liabilities.
- The overall tax gap time series, 2004-05 to 2010-11, has been revised down substantially following significant changes to the VAT gap estimates.
- The overall tax gap has increased slightly between 2009-10 and 2010-11 from £31 billion to £32 billion. This change is largely due to:
  - increase in the VAT gap by £1 billion (Chapter 2)
  - reduction in GB diesel tax gap by £0.4 billion (Chapter 5)
  - increase in the LBS CT tax gap by £0.3 billion (Chapter 7).
- When expressed as a percentage of tax liabilities, the tax gap fell from 7.1 per cent to 6.7 per cent between 2009-10 and 2010-11.
- A large amount of new operational and external data has been received since the tax gap estimates were published in September 2011. As a result, the overall tax gap in 2009-10 has been revised down from £35 billion to £31 billion, causing the percentage tax gap to fall from 7.9 per cent to 7.1 per cent. There are a number of factors contributing to this revision, with the main changes listed below:
  - reduction in the VAT gap of £2.8 billion. The entire VAT gap time series has been revised down substantially following significant changes to the ONS National Accounts figures on which the calculation is based (Chapter 2)
  - reduction in the gap for inaccurate Self Assessment returns from individuals of £1.3 billion (business £0.9 billion, non business £0.4 billion). This is largely a result of having operational data for a later year than was available at the time of the previous publication as well as methodological improvements (Chapter 6)
  - reduction in the Corporation Tax gap for small and medium-sized businesses of £1.2 billion. This is a result of using operational data for 2009 instead of 2006 as well as methodological improvements (Chapter 7)
  - increase in Income Tax, National Insurance Contributions, Capital Gains Tax avoidance of £0.4 billion. This is a result of having operational data for a later year than was available at the time of the previous publication as well as using an improved methodology (Chapter 6)
  - increase in non-declaration of income and capital gains by individuals who do not receive returns of £0.6 billion. This is a result of having operational data for a later year than was available at the time of the previous publication as well as using an improved methodology (Chapter 6)
  - increase in the Large and Complex businesses Corporation Tax gap of £0.4 billion. This is a result of an improvement in the methodology since the previous publication (Chapter 7).
- The breakdown of the tax gap by taxpayer behaviour in 2010-11 is broadly the same as previously published.
- The largest component of the 2010-11 tax gap is from IT, NICs and CGT which accounts for 45 per cent (Figure 1.2).
- Nearly half of the 2010-11 tax gap can be attributed to small and medium-sized businesses, with around one quarter from large businesses.

## Overview

- 1.1 This section discusses the tax gap across HMRC-administered taxes<sup>1</sup>. The tax gap is defined as the difference between tax collected and the tax that should be collected (the theoretical liability). The theoretical tax liability represents the tax that would be paid if all individuals and companies complied with both the letter of the law and HMRC's interpretation of the intention of Parliament in setting law (referred to as the spirit of the law). The tax gap estimate is net of the Department's compliance activities.
- 1.2 An equivalent way of defining the tax gap is the tax that is lost through non-payment, use of avoidance schemes, interpretation of tax effect of complex transactions, error, failure to take reasonable care, evasion, the hidden economy and organised criminal attacks.

## Estimate of the overall tax gap

- 1.3 Overall the total tax gap is estimated to be £32 billion in 2010-11. This equates to around 6.7 per cent of the estimated total tax liability<sup>2</sup> for 2010-11. Table 1.1 shows estimates for the tax gap for 2009-10 (revised) and 2010-11 across HMRC administered taxes. The estimates show an increase in the tax gap of around £1 billion from 2009-10 to 2010-11. This increase is mainly due to increases in the VAT rate from 15 per cent to 17.5 per cent in January 2010 and to 20 per cent in January 2011.
- 1.4 All of the tax gap estimates shown are subject to error. The main sources of error are random errors due to sampling and systematic errors due to assumptions used to derive the estimates. Where possible the range within which the true estimates would be expected to lie has been estimated. However for some taxes and components it has not been possible to provide a robust estimate of the error margin.
- 1.5 The estimates shown in Table 1.1 differ in terms of the robustness of the estimate and the frequency with which they are updated. This is indicated using a colour coding system. All methodologies are subject to review which could result in revisions to the published estimates.
- 1.6 The estimates of the excise tax gaps shown in Table 1.1 are for excise duty only. They differ from the excise tax gap estimates in Chapters 3 to 5 which include VAT.

1 This report excludes the tax gap impact of tax credits and does not include Council Tax and Business Rates as these are administered by local authorities.

2 Total tax liability is defined as the tax gap plus the amount of tax actually received.

## Results and tables

**Table 1.1: Tax gaps for HMRC administered taxes – 2009-10 (revised) and 2010-11 (£ billion)**

Tax	Component	Point estimates (£ billion) <sup>1,2,4</sup>		Percentage tax gap <sup>3</sup>	
		2009-10 revised	2010-11	2009-10 revised	2010-11
<b>Indirect taxes<sup>5</sup></b>					
Value Added Tax (VAT)		8.6	9.6	10.8%	10.1%
Spirits duty		0.1	0.2	4%	5%
Beer duty		0.4	0.4	9%	10%
Cigarette duty		1.2	1.0	11%	9%
Hand rolled tobacco duty		0.5	0.5	42%	38%
Great Britain diesel duty		0.5	0.1	3%	1%
Great Britain petrol duty <sup>6</sup>		N/A	N/A	N/A	N/A
Northern Ireland diesel duty <sup>7</sup>		0.1	0.1	12%	25%
Northern Ireland petrol duty <sup>6,7</sup>		N/A	0.0	N/A	13%
Other indirect taxes <sup>8</sup>		1.0	1.0	6%	5%
<b>Total indirect taxes</b>		<b>12.3</b>	<b>12.9</b>	<b>9.0%</b>	<b>8.4%</b>
<b>Direct taxes</b>					
Income Tax, National Insurance Contributions, Capital Gains Tax	Individuals in Self Assessment	4.6	4.4		
	Business taxpayers	4.2	4.0		
	Non-business taxpayers	0.4	0.4		
	Large partnerships in Self Assessment <sup>9</sup>	0.7	0.8		
	Small and medium employers (PAYE) <sup>10</sup>	0.9	0.8		
	Large employers (PAYE)	2.0	2.1		
	Avoidance	1.9	2.1		
	Non-declaration of income and capital gains by individuals not in Self Assessment	0.9	1.0		
	Ghosts <sup>11</sup>	1.3	1.3		
	Moonlighters <sup>12</sup>	1.8	1.9		
	<b>Total</b>	<b>14.1</b>	<b>14.4</b>	<b>5.6%</b>	<b>5.5%</b>
Corporation Tax	Businesses managed by the Large Business Service	1.1	1.4		
	Avoidance	0.9	1.1		
	Technical issues	0.3	0.3		
	Large and Complex businesses	1.3	1.2		
	Small and medium-sized businesses	1.4	1.4		
	<b>Total</b>	<b>3.8</b>	<b>4.1</b>	<b>9.6%</b>	<b>8.8%</b>
Other direct taxes	Inheritance tax	0.2	0.2		
	Stamp duties <sup>13</sup>	0.5	0.6		
	Stamp duty land tax	0.2	0.3		
	Shares stamp duty	0.3	0.3		
	Petroleum revenue tax	0.02	0.03		
	<b>Total</b>	<b>0.8</b>	<b>0.8</b>	<b>6.5%</b>	<b>4.6%</b>
<b>Total direct taxes</b>		<b>18.7</b>	<b>19.3</b>	<b>6.2%</b>	<b>5.9%</b>
<b>Total tax gap</b>		<b>31</b>	<b>32</b>	<b>7.1%</b>	<b>6.7%</b>

■ Developing methodology, estimate updated annually

■ Experimental methodology, not updated annually and illustrative indicators for gaps with no direct measure

- 1 The overall tax gap is rounded to the nearest £1 billion. Other estimates are rounded to the nearest £100 million or the nearest £50 million if they are less than £100 million.
- 2 As in 'Measuring Tax Gaps 2011' the estimates cover all sources of revenue loss including non-payment.
- 3 Tax gap as a proportion of theoretical liability which is defined as the tax gap plus the amount of tax actually received.
- 4 The tobacco and beer methodologies produce a range within which the true value is expected to lie. The point estimate shown is the mid point of this range. The point estimate shown for the other tax gaps is the estimate produced directly by applying the methodology.
- 5 The excise tax gap estimates are for excise duty only and show duty loss as a percentage of revenue due. They therefore differ from estimates in Chapter 3 which include VAT and show the illicit market share.
- 6 Estimates for Great Britain petrol duty are considered to be zero. Estimates of NI petrol duty were not possible for 2009-10. See Chapter 5 for details.
- 7 Estimates for Northern Ireland diesel and petrol duty are estimates for the non UK duty paid share which includes legitimate cross border shopping. They are therefore not true estimates of the tax gap which will be substantially smaller.
- 8 Other excise duties, customs duties, environmental taxes, Insurance Premium Tax.
- 9 Large partnerships are defined as those with five or more partners.
- 10 Small and medium-sized employers are defined as businesses with 250 or fewer employees that are not part of a complex group.
- 11 'Ghosts' are defined as individuals who have earnings from employment or self-employment and fail to declare any of this income - see Chapter 6 for more details.
- 12 'Moonlighters' are defined as individuals who pay tax on their main job through PAYE but have a second job or additional income from self-employment - see Chapter 6 for more details.
- 13 Estimates for the components of the Stamp Duties gap are not available prior to 2009-10 as a new methodology was introduced to estimate the gap for Stamp Duty Land Tax from 2009-10.

## Historical time series of the tax gap

- 1.7 Table 1.2 shows the overall tax gap and the tax gaps by head of duty as a percentage of total tax liability. There has been a steady reduction in the percentage tax gap since 2004-05. The tax gap as a percentage of tax liabilities gives a better measure of compliance over time because it takes out some of the effects of inflation and changes to tax rates.
- 1.8 A historical time series of the tax gap from 2004-05 to 2010-11 is shown in Table 1.3. In monetary terms, the tax gap increased from £33 billion to £35 billion in the three years up 2006-07 before falling back to £31 billion in 2009-10 and rising again in 2010-11 to £32 billion.
- 1.9 There is a break in the tax gap time series after 2008-09 as up to that point estimates for direct tax gaps are all based on actual data for those years. For subsequent years illustrative projections have been produced for most components, as actual data is not available for the years required. These estimates are projected assuming stable compliance behaviour and using the latest trend in tax receipts or liabilities for the appropriate tax.

**Table 1.2: Tax gaps for HMRC administered taxes - 2004-05 to 2010-11 (percentage tax gap)<sup>1,2</sup>**

Tax	Percentage tax gaps						
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Value Added Tax (VAT)	9.8%	13.1%	11.6%	10.5%	12.4%	10.8%	10.1%
Excise duties and other indirect taxes	8.7%	7.8%	8.6%	7.5%	7.1%	6.3%	5.5%
Income Tax, National Insurance Contributions, Capital Gains Tax	6.3%	5.5%	5.4%	5.5%	4.5%	5.6%	5.5%
Corporation Tax	15.2%	10.7%	10.3%	8.4%	9.0%	9.6%	8.8%
Other direct taxes	8.4%	7.2%	7.5%	7.5%	10.6%	6.5%	4.6%
<b>Total tax gap</b>	<b>8.2%</b>	<b>7.9%</b>	<b>7.6%</b>	<b>7.0%</b>	<b>7.0%</b>	<b>7.1%</b>	<b>6.7%</b>

- Percentage tax gaps show the tax gap as a proportion of theoretical liability which is defined as the tax gap plus the amount of tax actually received. Estimates have been rounded to the nearest 0.1 per cent.
- Actual estimates are shown for direct tax gaps up to 2008-09. For subsequent years illustrative estimates have been projected by using the year on year change in tax liabilities or receipts as appropriate.

**Table 1.3: Tax gaps for HMRC administered taxes - 2004-05 to 2010-11 (£ billion)<sup>1,2</sup>**

Tax	Point estimates (£ billion)						
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Value Added Tax (VAT)	7.9	11.0	10.2	9.6	11.3	8.6	9.6
Excise duties and other indirect taxes	4.6	4.1	4.6	4.2	4.0	3.7	3.3
Income Tax, National Insurance Contributions, Capital Gains Tax	13.6	12.8	13.4	14.6	11.8	14.1	14.4
Corporation Tax	6.0	5.0	5.1	4.3	4.3	3.8	4.1
Other direct taxes	1.2	1.3	1.6	1.6	1.6	0.8	0.8
<b>Total tax gap</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>34</b>	<b>33</b>	<b>31</b>	<b>32</b>

- The overall tax gap is rounded to the nearest £1 billion. All other estimates are rounded to the nearest £100 million.
- Actual estimates are shown for direct tax gaps up to 2008-09. For subsequent years illustrative estimates have been projected by using the year on year change in tax liabilities or receipts as appropriate.

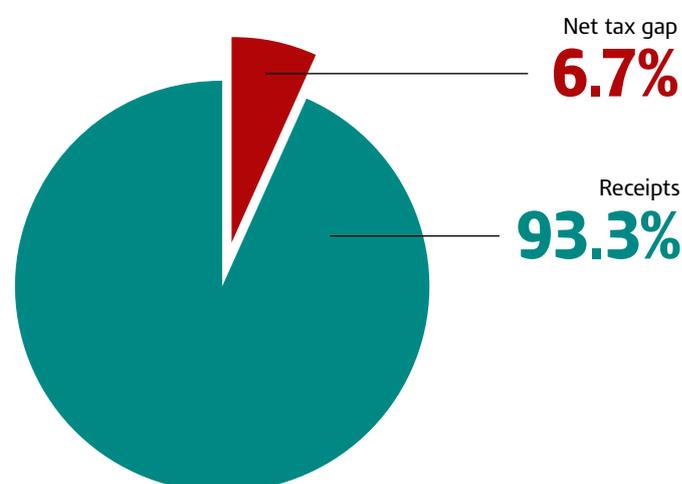
## Tax gap in context

1.10 As shown in Figure 1.1 the percentage tax gap for 2010-11 is 6.7 per cent, which suggests that around 93 per cent of the tax due is paid.

## Revisions

1.11 Estimates for many of the tax gap components have been revised since those published in 'Measuring Tax Gaps 2011'. Table 1.4 describes the revisions and the reasons for them.

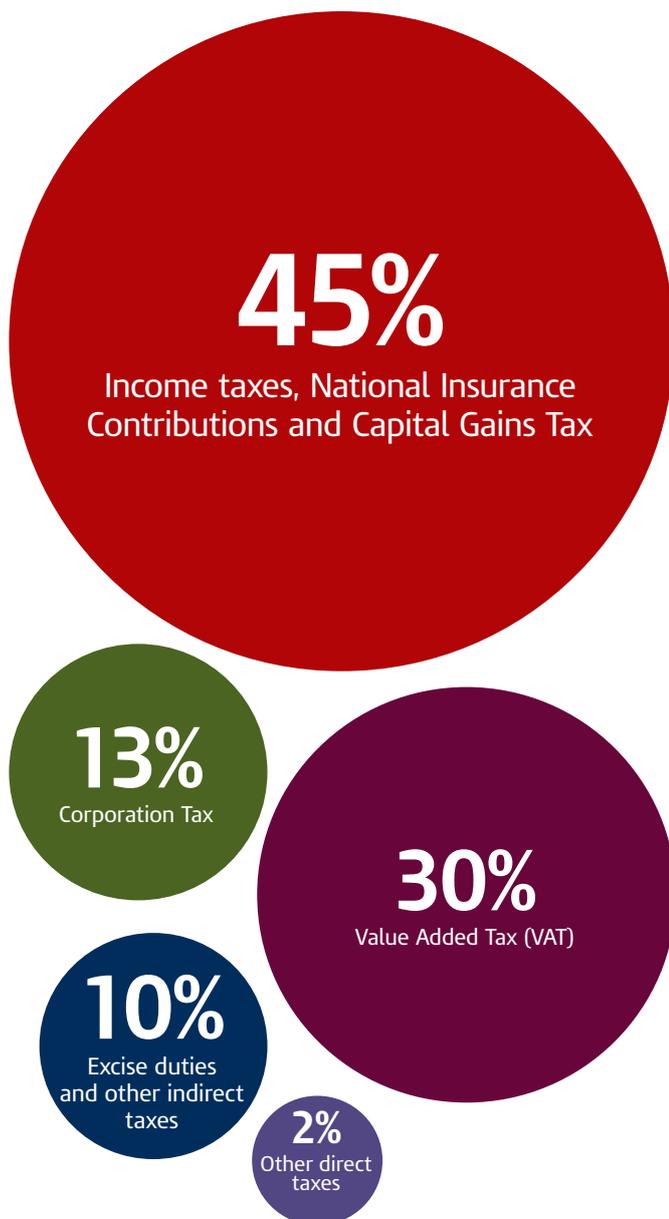
**Figure 1.1: Net tax gap compared to total cash receipts in 2010-11**



## Tax gap by head of duty

1.12 As shown in Figure 1.2, the two largest components of the overall tax gap in 2010-11 were the combined tax gap from Income Tax, National Insurance Contributions and Capital Gains Tax at 45 per cent of the total and the VAT gap at 30 per cent. This reflects the fact that the majority of tax receipts fall under these tax heads, 55 per cent under IT, NICs and CGT, and 19 per cent under VAT.

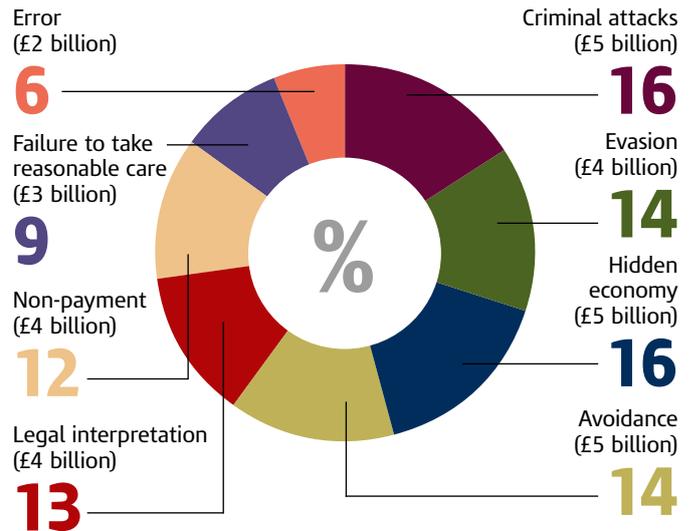
Figure 1.2: Tax gap for 2010-11 by head of duty



## Tax gap by behaviour

1.13 Figure 1.3 sets out the estimated composition of taxpayer behaviours within the overall tax gap for 2010-11. These estimates involve some management assumptions and judgement and can only be used to give a broad indication of behaviours. This picture is largely unchanged from 2009-10.

Figure 1.3: Tax gap for 2010-11 by behaviour



**Table 1.4: Explanation of behaviours**

<b>Criminal Attack</b>	Organised criminal gangs undertake co-ordinated and systematic attacks on the tax system. This includes smuggling (e.g. of alcohol/tobacco), VAT repayment fraud and VAT Missing Trader Intra-Community (MTIC) fraud.
<b>Evasion</b>	Tax evasion is illegal activity, where registered individuals or businesses deliberately omit, conceal or misrepresent information in order to reduce their tax liabilities.
<b>Hidden Economy</b>	<p>This definition of the hidden economy reflects sources of undeclared economic activity, and consists of undeclared activities of both 'ghosts' whose entire income is unknown to HMRC, and 'moonlighters' who are known to HMRC in relation to part of their income but have other source(s) of income unknown to HMRC.</p> <p>The hidden economy is the non-declaration of an entire source of hidden income, whereas evasion is the deliberate understatement of a declared source of income.</p>
<b>Avoidance</b>	<p>Tax avoidance is bending the rules of the tax system to gain a tax advantage that Parliament never intended. It often involves contrived, artificial transactions that serve little or no commercial purpose other than to produce a tax advantage. It involves operating within the letter but not the spirit of the law.</p> <p>Tax avoidance is not the same as legitimate tax planning. Legitimate tax planning involves using tax reliefs for the purpose for which they were intended. For example, claiming tax relief on capital investment, saving in a tax-exempt ISA or saving for retirement by making contributions to a pension scheme are all legitimate forms of tax planning.</p>
<b>Legal Interpretation</b>	Legal interpretation relates to the potential tax loss from cases where HMRC and individuals or businesses have different views of how, or whether, the law applies to specific and often complex transactions. Examples include the correct categorisation of an asset for allowances, the allocation of profits within a group of companies, or VAT liability of a particular item. In these situations the customer will have an alternative view of the law and of how it applies to the facts in their case to that held by HMRC.
<b>Non-Payment</b>	<p>For direct taxes, non-payment refers to tax debts that are written off by HMRC and therefore result in a permanent loss of tax – mainly as a result of businesses becoming insolvent. It does not, therefore, include debts that are eventually paid.</p> <p>VAT non-payment differs as it is based on the difference between new debts arising and debt payments (see Chapter 2).</p>
<b>Failure to Take Reasonable Care</b>	Failure to take reasonable care results from customers' carelessness and/or negligence in adequately recording their transactions and/or in preparing their tax returns. Judgments of 'reasonable care' should consider and reflect customers' knowledge, abilities and circumstances.
<b>Error</b>	Errors result from mistakes made in preparing tax calculations, completing returns or in supplying other relevant information, despite the customer taking reasonable care.

## Tax gap by customer group

- 1.14 It is estimated that nearly half of the 2010-11 tax gap can be attributed to small and medium-sized businesses and around one quarter from large businesses. The remainder is evenly split between criminals and individuals.

## Methodology and data issues

- 1.15 Methodology and data issues are set out in more detail in the relevant chapters of this report; here is a brief summary.

### VAT gap

- 1.16 The VAT gap is calculated using a top-down approach. This uses Office for National Statistics (ONS) National Accounts data to calculate the theoretical total VAT liability (VTTL) in the UK economy, which is defined as the amount which would be collected in the absence of any fraud, avoidance, debt or other losses. The difference between actual cash receipts and this theoretical amount of VAT is assumed to be the VAT gap.
- 1.17 The estimate for the VAT gap is £9.6 billion in 2010-11, which represents 10.1 per cent of the estimated VTTL.
- 1.18 Estimates are available for the proportion of the VAT gap that is attributable to debt and MTIC. It is estimated that MTIC fraud contributes between £0.5 billion and £1.0 billion and debt contributes about £0.9 billion to the VAT gap in 2010-11.

### Excise tax gaps

- 1.19 A top down approach uses external data on consumption of the relevant products to calculate the tax gap for the excise system. This includes revenue gaps for spirits, beer, cigarettes, hand rolling tobacco (HRT) and hydrocarbon oils (diesel and petrol). The excise tax gaps are estimated to be £3.3 billion of duty losses in 2010-11. The detailed results in Chapters 3 to 5 show estimates inclusive of VAT losses.

## Direct tax gaps

- 1.20 It has not been possible to develop a top-down approach for direct taxes. This is because independent data sources on income and assets are not sufficiently comprehensive or detailed to enable a robust estimate of tax liability to be calculated. More detail on the issues is contained in an HMRC research paper<sup>3</sup> on the feasibility of a top-down approach to direct tax gaps.
- 1.21 Direct tax gap estimates are produced using bottom-up methods. This means that components of the tax gap are estimated using departmental sources, such as surveys, administrative and operational data.
- 1.22 The bottom-up method is less comprehensive than the top-down method used for indirect tax gap estimates, because by its nature much of the gap arises from activities that are deliberately concealed. In addition bottom-up methods are based on compliance activity which, can in some cases, take years to complete. Therefore the under-reporting elements of the direct tax gap estimates typically apply to earlier periods than those from the top-down methods. To produce an estimate of the overall tax gap these estimates have been projected to 2010-11, where necessary.
- 1.23 The tax gap for direct taxes is estimated to be £19.3 billion in 2010-11. This comprises £14.4 billion for Income Tax, National Insurance Contributions and Capital Gains Tax, £4.1 billion for Corporation Tax and £0.8 billion for other direct taxes.

## Revisions

- 1.24 Estimates for some of the tax gap components have been revised since those published in 'Measuring Tax Gaps 2011', due to improvements in the data available, the methodologies used and projections based on more recent years. Table 1.5 summarises the revisions and the reasons for them.

3 <http://www.hmrc.gov.uk/research/taxgap-workingpaper.pdf>

**Table 1.5: Revisions methodology and tax gap estimates for earlier years**

Tax gap component	Revisions
Value Added Tax (VAT)	<ul style="list-style-type: none"> <li>The 2009-10 estimates of the VAT gap, and consequently the total tax gap, have been revised downwards by £2.8 billion. This is a result of significant changes to the systems, methodology and analysis used to construct the National Accounts, published by the Office for National Statistics (ONS). The impact of these changes resulted in downward revisions to total expenditure in all years back to 1997.</li> <li>For 2008 onwards, the estimates were also revised due to the incorporation of new data sources. As the ONS National Accounts data are a key component of the VAT gap estimates, these changes led to a significant reduction in VAT Theoretical Tax Liability (VTTL) and hence the VAT gap.</li> <li>A preliminary estimate for 2011-12 will be published at the time of the autumn and spring publications of the Economic and Fiscal Outlook. It will be incorporated into the total tax gap in 'Measuring Tax Gaps 2013'.</li> </ul>
<b>Excise duties</b>	
Alcohol	<ul style="list-style-type: none"> <li>The 2009-10 estimates have been revised for both spirits and beer as the Living Costs and Food survey data were not available at the time of publishing 'Measuring Tax Gaps 2011'. Estimates for revenue loss in beer have also been updated for all years.</li> </ul>
Tobacco	<ul style="list-style-type: none"> <li>Estimates for the tax gap in 2009-10, which previously included a forecast for cigarette and HRT consumption in the fourth quarter, have been revised since the last publication. Additionally, there have been small revisions to estimates from 2008-09 as more up-to-date data on under-reporting rates became available.</li> </ul>
Oils	<ul style="list-style-type: none"> <li>Estimates have been revised. This is due to revised input data for distances driven, fuel efficiency, information on heavy goods vehicles and the amount of fuel delivered in the UK.</li> </ul>
<b>Income Tax, National Insurance Contributions, Capital Gains Tax</b>	
Self Assessment	<ul style="list-style-type: none"> <li>2004-05 to 2007-08 have been revised due to the settlement of more enquiries relating to those years.</li> <li>2008-09 has been revised due to using actual data rather than being projected from the 2007-08 estimate.</li> <li>2009-10 has been revised as it is now projected from the 2008-09 estimate rather than the 2007-08 estimate.</li> <li>Projections are made assuming stable compliance behaviour, using the year on year change in relevant tax liabilities. Estimates were previously projected using GDP.</li> </ul>
Employer compliance	<ul style="list-style-type: none"> <li>2004-05 to 2008-09 has been revised due to the settlement of more reviews.</li> <li>2009-10 has been revised as it now uses actual data rather than is projected from the 2008-09 estimate.</li> <li>Projections are made assuming stable compliance behaviour, using the year on year change in relevant tax liabilities. Estimates were previously projected using GDP.</li> </ul>
Avoidance	<ul style="list-style-type: none"> <li>2009-10 data has been revised to reflect improved classification of risks. An uplift has been applied to reflect unidentified avoidance risks.</li> </ul>

Tax gap component	Revisions
Hidden economy	<ul style="list-style-type: none"> <li>The estimate for non-declared income and capital gains by individuals not in Self Assessment has been updated for 2009-10 using later information, third party information and an improved methodology.</li> </ul>
<b>Corporation Tax</b>	
Businesses managed by the Large Business Service	<ul style="list-style-type: none"> <li>All estimates have been revised due to the introduction of an uplift factor (see Chapter 7).</li> <li>2004-05 to 2007-08 has been revised due to the closure of more risks, better estimates of tax under consideration on LBS' case management system and the incorporation of further quality assurance checks into the methodology.</li> <li>2008-09 has been revised as it is now estimated from case management data rather than projected from 2007-08.</li> <li>2009-10 has been revised as it is now estimated using 2008-09 data instead of 2007-08 data.</li> <li>Projections are made assuming stable compliance behaviour, using the year on year change in LBS CT tax receipts. Estimates were previously projected using GDP.</li> </ul>
Large and Complex businesses	<ul style="list-style-type: none"> <li>2009-10 has been revised as it is estimated from the updated tax under consideration estimate for 2008-09 for businesses managed by the LBS.</li> </ul>
Small and medium-sized businesses	<ul style="list-style-type: none"> <li>2004 to 2006 has been revised due to the settlement of more enquiries relating to those years.</li> <li>2009-10 has been revised as it is now projected from 2009 rather than 2006 figures.</li> </ul>
<b>Other direct taxes</b>	
Inheritance Tax	<ul style="list-style-type: none"> <li>There has been a methodological change to the percentage of 2009-10 liabilities that is estimated to be tax gap. It has been increased from 10 per cent to 17.5 per cent.</li> </ul>

## 2. Estimating the VAT Gap

### Key findings

- The VAT gap is estimated at £9.6 billion in 2010-11. This equates to around 10.1 per cent of the estimated total VAT liability (VTTL). This estimate consists of:
  - £0.5 billion to £1.0 billion of MTIC fraud
  - £0.9 billion of VAT debt.
- The VAT gap has increased between 2009-10 and 2010-11 from £8.6 billion and £9.6 billion. This change is largely due to an increase in the standard rate of VAT to 17.5 per cent.
- Excluding VAT debt, the VAT gap estimate excluding debt has remained broadly stable between 2007-08 and 2010-11 at around 8 and 10 per cent of VTTL. (Figure 2.1).
- The high VAT gap in 2006-07 at 11.6 per cent can be attributed to MTIC (missing trader intra community) fraud following a peak in activity in 2005-06.
- The peak in the VAT gap at 12.4 per cent in 2008-09 can be attributed to the downturn in the economy that led to an increase in VAT debt and insolvencies.
- In 2010-11, approximately 70 per cent of net VTTL is from household consumption with the remaining proportion from consumption by the exempt, government and housing sectors (Figure 2.2).
- Restaurants and hotels, recreation and culture and transport are the largest contributors to the household sector. This is consistent with the estimates of the VAT gap in previous years (Figure 2.3).
- Since ‘Measuring Tax Gaps 2011’, there have been two publications of the Blue Book data by the Office of National Statistics (ONS) that have now been incorporated into the ‘Measuring Tax Gaps 2012’ publication. These updates resulted in a downwards revision to the VAT gap in all years. In particular, 2009-10 saw a reduction in the VAT gap of £2.8 billion (Figure 2.4).

### Results and tables

2.1 Table 2.1 shows the estimated net total VAT liability (VTTL), net VAT receipts and the estimated VAT gap for years 2006-07 to 2010-11.

**Table 2.1: Estimated VAT gap (£ billion)<sup>1</sup>**

	2006-07	2007-08	2008-09	2009-10	2010-11 <sup>2</sup>
Net VTTL	87.8	91.5	91.2	80.0	94.9
Net VAT receipts <sup>3</sup>	77.6	82.0	79.8	71.4	85.3
<b>VAT gap (point estimate)</b>	<b>10.2</b>	<b>9.6</b>	<b>11.3</b>	<b>8.6</b>	<b>9.6</b>
of which MTIC fraud	2.0-2.5	1.0-1.5	1.0-1.5	1.0-1.5	0.5-1.0
of which debt		0.9	2.4	1.8	0.9
<b>VAT gap (per cent)<sup>4</sup></b>	<b>11.6%</b>	<b>10.5%</b>	<b>12.4%</b>	<b>10.8%</b>	<b>10.1%</b>

1 The amounts are rounded to the nearest £0.1 billion

2 A proportion of the 2010-11 VTTL estimate is based on projected rather than actual expenditure

3 Net VAT receipts are expressed net of payments and re-payments

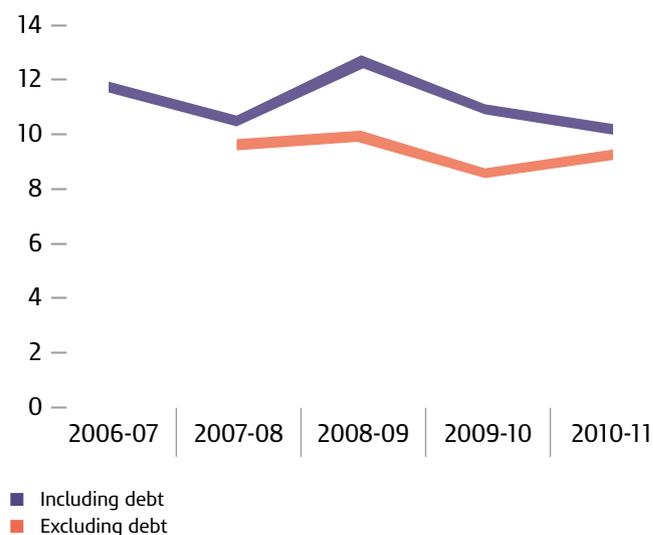
4 The VAT gap as a percentage of VTTL has been rounded to the nearest 0.1 per cent

- 2.2 One component of the VAT gap is VAT debt – the amount of VAT declared by businesses but not yet paid to HMRC. Table 2.1 shows the VAT gap peaked in 2008-09 at 12.4 per cent. This was the result of an increase in VAT debt from £0.9 billion in 2007-08 to £2.4 billion in 2008-09 brought on by the economic downturn. The level of debt has returned to the pre-recession level of £0.9 billion in 2010-11.
- 2.3 The high VAT gap in 2006-07 at 11.6 per cent can be attributed to MTIC (missing trader intra community) fraud following a peak in activity in 2005-06. The level of MTIC fraud has declined over the last five years with an estimate of around £0.5 billion to £1.0 billion in 2010-11.
- 2.4 The value of the VAT gap in cash terms fluctuates over the period 2008-09 to 2010-11 due to changes in the standard rate of VAT over this period. The VAT gap expressed as percentage of VTTL provides a like-for-like comparison excluding the impact of any rate change.

Date of introduction	Standard rate (%)
1 December 2008	15.0
1 January 2010	17.5

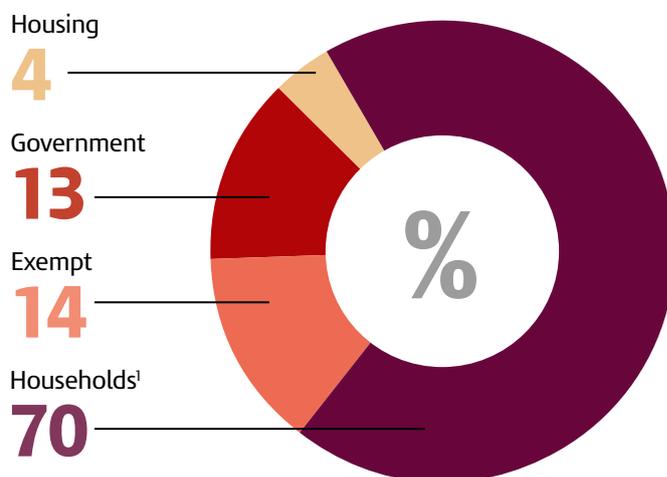
- 2.5 Net theoretical liability for the calendar year is compared to the cash receipts for the corresponding financial year. Assuming a three-month lag between the economic activity and the payment to HMRC of the associated VAT.
- 2.6 Figure 2.1 shows that the underlying VAT gap estimate excluding debt has remained broadly stable between 2007-08 and 2010-11 at around 8 and 10 per cent of VTTL.

**Figure 2.1 VAT gap estimates including and excluding debt (per cent)**



- 2.7 Figure 2.2 shows each sector's contribution to the VTTL in percentage terms, with household consumption contributing approximately 70 per cent in 2010-11. This is consistent with the estimates of the VAT gap in previous years.

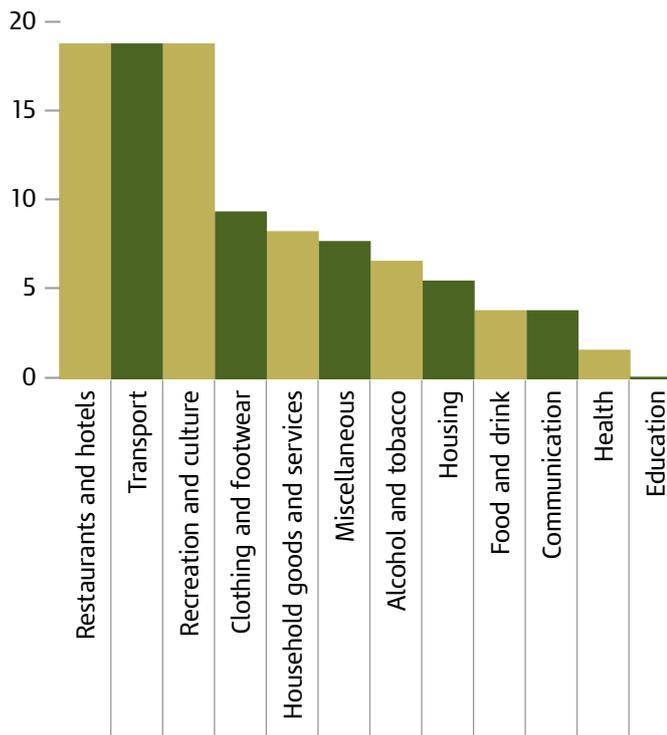
**Figure 2.2: VAT-able expenditure components of the VTTL in 2010-11 (per cent)**



<sup>1</sup> Households component also includes estimates of expenditure by non-profit institutions serving households. Figures to the nearest 1 per cent. As a result components may not appear to sum

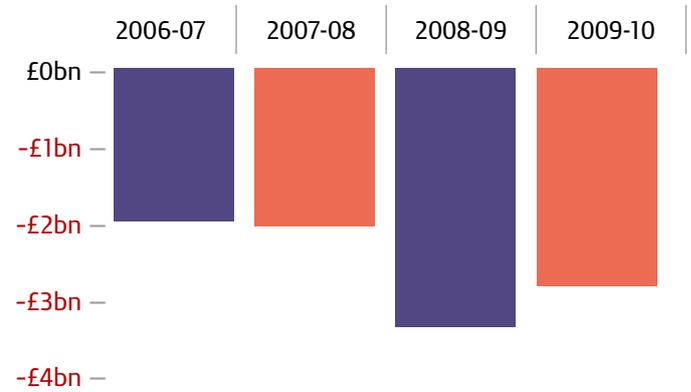
2.8 Estimates of the contribution to the household sector in percentage terms of each relevant expenditure component for 2010-11 are given in Figure 2.3. Restaurants and hotels, recreation and culture and transport are the largest contributor to the household sector. Again, this is consistent with the estimates of the VAT gap in previous years.

**Figure 2.3: VAT-able expenditure for the household sector in 2010-11 (per cent)**



2.9 The impact of revisions made to the VAT gap estimates since last year's publication 'Measuring Tax Gaps 2011' are given in Figure 2.4. These updates resulted in a downward revision to the VAT gap in all years. In 2008-09 and 2009-10 the VAT gap saw a reduction of £3.2 billion and £2.8 billion respectively. More details can be found in the methodology and data issues section.

**Figure 2.4: Revisions to the VAT gap estimates since Measuring Tax Gaps 2011 (£ billion)**



## Methodology and data issues

2.10 The total level of VAT losses is measured by comparing the net theoretical tax yield with actual VAT receipts. The difference between these amounts is known as the VAT gap.

2.11 The VAT gap methodology uses a 'top-down' approach which involves:

- gathering data primarily from the Office for National Statistics (ONS) detailing the total amount of expenditure in the economy that is subject to VAT
- estimating the rate of tax on that expenditure based on commodity breakdowns of the expenditure data to derive the gross VTTL
- the gross VTTL in the economy is built up from the five expenditure components: household consumption, capital expenditure on housing, government expenditure, charities expenditure and expenditure of the partially exempt businesses
- subtracting any legitimate refunds (deductions) occurring through schemes and reliefs to arrive at the net VTTL
- subtracting actual VAT receipts from the net VTTL
- assuming that the residual element, the gap, is the total VAT gap, including fraud, debt and other losses.

- 2.12 The estimates rely on National Statistics produced by the ONS. This release includes data available up to 24 September 2012. Data are consistent with United Kingdom National Accounts – The Blue Book, 2012 edition, published on 31 July 2012.
- 2.13 The next release of the Blue Book is scheduled for 31 July 2013 and the Consumer Trends data, which also feeds into the VAT gap model, are released on a quarterly basis in September, December, January and March. For the exact date of release please refer to the UK Statistics Publication Hub.
- 2.14 A preliminary estimate for 2011-12 also relies on the publication of revised forecasts for the UK economy by the Office for Budget Responsibility. Therefore, preliminary estimates of the VAT gap for 2011-12 will be published at the time of the autumn and spring publications of the Economic and Fiscal Outlook. For the exact date of release please refer to the HMRC website.
- 2.15 An estimate of the VAT gap for 2011-12 will be incorporated into the total tax gap and published as part of the ‘Measuring Tax Gaps 2013’ publication, along with updated estimates of the VAT gap for the previous four years and will be revised annually.
- 2.19 VAT gap estimates are incorporated annually into the total tax gap as part of the ‘Measuring Tax Gaps’ publication. These estimates will be subject to further revision as more data becomes available and methodological improvements are implemented.

## Debt and MTIC VAT fraud

## Revisions

- 2.16 The ONS National Accounts data are a key component of the VAT gap estimate, which account for roughly one third of HMRC’s total tax gap. ONS are continuously working to improve the quality of the National Accounts data and its processes. They are currently part way through a work programme designed to meet their international obligations to introduce a new European System of Accounts (ESA10) by 2014.
- 2.17 As part of this work programme, the 2011 edition of the Blue Book contained significant changes to the systems, methodology and analysis used to construct the National Accounts. The changes resulted in downward revisions to total expenditure in all years back to 1997, leading to a reduction in VAT Theoretical Tax Liability (VTTL) and hence VAT gap estimates in those years.
- 2.18 As well as the significant changes made to the National Accounts processes, the 2008-09 estimates onwards were also revised due to the incorporation of new data sources. More information on the impact of the National Accounts revisions on the VAT gap estimates can be found in the ‘Provisional VAT Gap estimates’ published by HMRC in November 2011.
- 2.20 Estimates are available for the proportion of the VAT gap that is attributable to debt and MTIC. It is estimated that debt contributes about £0.9 billion and MTIC fraud contributes between £0.5 billion and £1.0 billion to the VAT gap in 2010-11.
- 2.21 Whereas for direct taxes, where non-payment is equated to debt written off, for VAT, debt is defined as the difference between new debts arising and debt payments. Debt is estimated using statistics from the Departmental Trade Register (DTR) with adjustments made to exclude MTIC debt and to reflect the deferral of payments under the Time To Pay arrangements. As a consequence of data quality issues, the debt contribution can only be measured from 2007-08.
- 2.22 MTIC VAT fraud is an organised criminal attack on the EU VAT system in which fraudulent traders acquire goods VAT free from EU Member States. They charge VAT on their onward sale and go “missing” to avoid paying the VAT charged to the relevant tax authorities. The most serious form of the fraud – known as carousel fraud – involves a series of contrived transactions within and beyond the EU, with the aim of creating large unpaid VAT liabilities and in some cases invalid VAT repayment claims.
- 2.23 The method used to produce MTIC estimates of attempted fraud and its impact on VAT receipts is based on operational evidence. It is not appropriate to reveal details of the methodology used to provide MTIC fraud estimates, as to do so may have a detrimental effect on compliance activity.
- 2.24 The method used to provide MTIC fraud estimates is currently under review, and as a result the estimates have not been updated since revised VAT gap estimates were published on 29 November 2011. It is likely that this work will lead to further improvements in the method and consequent revisions to these estimates.

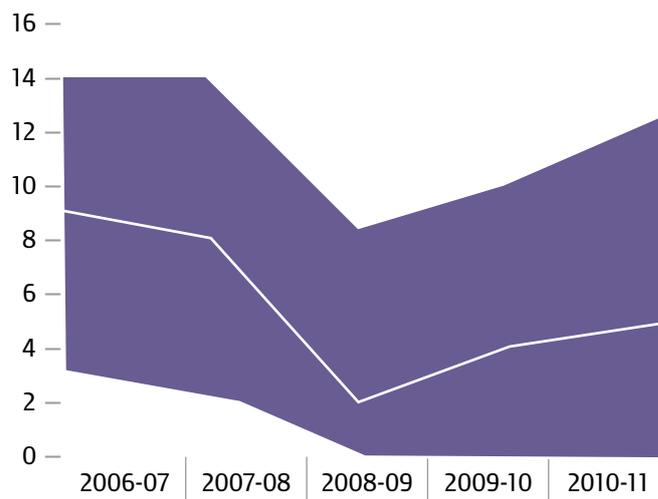
# 3. Alcohol

## Key findings for spirits

- The spirits illicit market share is 5 per cent in 2010-11, with associated revenue losses of £230 million.
- The illicit market share for spirits shows a decreasing trend from 9 per cent in 2006-07 to 2 per cent in 2008-09, followed by an increasing trend to 5 per cent in 2010-11. This is a decrease of 4 percentage points over the period.

## Results and tables for spirits

**Figure 3.1: Spirits: Illicit market shares – mid point estimate and confidence intervals (per cent)<sup>1</sup>**



<sup>1</sup> Negative numbers have been truncated at zero

**Table 3.1: Spirits: Illicit market share and associated revenue losses**

	2006-07	2007-08	2008-09	2009-10 <sup>2</sup>	2010-11 <sup>1</sup>
<b>Illicit market shares (per cent)<sup>3</sup></b>					
Upper estimate	14%	14%	8%	10%	13%
Mid point estimate	9%	8%	2%	4%	5%
Lower estimate <sup>6</sup>	3%	2%	–	–	–
<b>Associated revenue losses (£ million)<sup>4,5</sup></b>					
Upper estimate	550	550	310	410	610
Mid point estimate	320	310	80	140	230
Lower estimate <sup>6</sup>	90	70	–	–	–

<sup>1</sup> Figures for 2010-11 are provisional

<sup>2</sup> Figures for 2009-10 have been revised

<sup>3</sup> Figures independently rounded to the nearest 1 per cent

<sup>4</sup> Includes both duty and VAT

<sup>5</sup> Figures independently rounded to the nearest £10 million

<sup>6</sup> Negative numbers have been truncated at zero and - indicates figures are negligible

3.1 Further tables on spirits, showing a breakdown of UK market share, UK revenue and volumes can be found online in the ‘Measuring Tax Gap 2012’ tables in Excel.

## Methodology and data issues for spirits

- 3.2 The spirits tax gap estimate is produced using a top-down methodology; total consumption is estimated, from which legitimate consumption is subtracted, the residual being the illicit market.
- 3.3 Total consumption is estimated using the Living Costs and Food Survey (LCF). Legitimate consumption is based upon the returns to HMRC from the volumes of alcohol on which duty have been paid. The details of the methodology are presented in the separate methodological annex paper.
- 3.4 For spirits, the central estimate is best interpreted as an indicator of long term trend in the illicit market share rather than a precise estimate of the level or year-to-year changes. The confidence intervals indicate the potential size of fluctuations in the estimates due to sampling error. They do not take account of any systematic tendency to over or under estimate the size of the tax gap that might arise from the modelling assumptions.

### Revisions

3.5 The LCF survey only becomes available around 18 months after the survey period. For this reason, estimates for 2011-12 are not yet available and some elements of the 2010-11 estimates have been produced using forecasts. Therefore, estimates for 2010-11 should be considered provisional. In addition, the estimates for 2009-10 have been revised with new data.

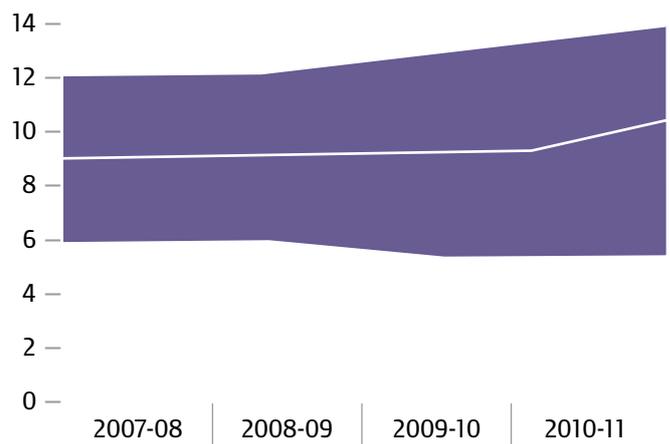
## Key findings for beer

- The beer illicit market share is 10 per cent in 2010-11, with associated revenue losses of £550 million.
- The illicit market share in beer shows a generally level trend from 2007-08 to 2010-11, of between 9 per cent and 10 per cent.

## Results and tables for beer

The beer tax gap lower estimates are included for the first time in ‘Measuring Tax Gaps 2012’, however, they have been previously published in ‘Improved Beer Tax Gap: Lower Estimate’. The methodology used to produce the beer estimates is still being developed and will continue to be improved.

**Figure 3.2: Beer: Illicit market shares - upper, lower and implied mid point estimate (per cent)**



**Table 3.2: Beer: Illicit market share and associated revenue losses<sup>6</sup>**

	2006-07	2007-08	2008-09	2009-10 <sup>2</sup>	2010-11 <sup>1</sup>
<b>Illicit market shares (per cent)<sup>3</sup></b>					
Upper estimate	13%	12%	12%	13%	14%
Implied mid point	No data	9%	9%	9%	10%
Lower estimate	No data	6%	6%	5%	5%
<b>Associated revenue losses (£ million)<sup>4,5</sup></b>					
Upper estimate	700	650	650	700	800
Implied mid point	No data	500	450	500	550
Lower estimate	No data	300	300	250	300

1 Figures for 2010-11 are provisional

2 Figures for 2009-10 have been revised

3 Figures independently rounded to the nearest 1 per cent

4 Includes both duty and VAT

5 Figures independently rounded to the nearest £50 million

6 Lower and mid point estimates are not available for years before 2007-08

3.6 Further tables on beer, showing a breakdown of UK market share, UK revenues and volumes can be found online in the ‘Measuring Tax Gap 2012’ tables in Excel.

3.10 A number of beer frauds are not included in this methodology as it is difficult to estimate them. This is one of the reasons it is a lower bound estimate. These include smuggled beer, diversion of foreign produced beer and counterfeit beer.

## Methodology and data issues for beer

### Upper estimate

3.7 The beer tax gap upper estimate is produced using a top-down methodology; total consumption is estimated, from which legitimate consumption is subtracted, the residual being the illicit market.

3.8 Total consumption is estimated using the Living Costs and Food Survey (LCF). Legitimate consumption is based upon the returns to HMRC from the volumes of alcohol on which duty have been paid. The details of the methodology are presented in the separate methodological annex paper.

### Lower estimate

3.9 The beer tax gap lower estimate is produced using a bottom-up methodology. This means estimates of illicit beer are made directly, using departmental data. The bottom-up methodology is less comprehensive than the top-down methodology, as it does not cover all types of fraud. The lower estimate includes only estimates of the diversion of UK produced beer and drawback fraud.

### Implied mid point

3.11 The implied mid point estimate is calculated as the average of the upper and lower estimates. It is only intended as an indicator of long term trend – the true tax gap could lie anywhere within the bounds.

3.12 The upper and lower estimates should be interpreted as indicators of long term trend, rather than precise estimates of the level or of year-to-year changes. They do not take account of any systematic tendency to over or under-estimate the size of the tax gap that might arise from the modelling assumptions.

### Revisions

3.13 The LCF survey only becomes available around 18 months after the survey period. For this reason, estimates for 2011-12 are not yet available and some elements of the 2010-11 estimates have been produced using forecasts. Therefore, estimates for 2010-11 should be considered provisional. In addition, the estimates for 2009-10 have been revised with new data.

## Key findings for other alcohol

- Wine is the largest sector of the alcohol market for which a tax gap is not calculated.
- The estimated tax gap from other alcohol products for 2010-11 is £0.4 billion.

## Methodology and data issues for other alcohol

- 3.14 For the unmeasured alcohol tax gaps, the average percentage loss from the measured alcohol tax gaps has been applied to the receipts of the unmeasured alcohol tax gaps. This methodology covers: wine, cider, perry and spirits-based ready-to-drink (RTDs).
- 3.15 The methodology for estimating the tax gap for other alcohol taxes is the same as published in 'Measuring Tax Gaps 2011'. In 2010-11, a revenue loss of 10 per cent was applied to alcohol which results in an estimated tax gap of £0.4 billion.
- 3.16 The average percentage revenue loss should not be considered as an estimate of the true percentage loss as this is unknown. The indirect taxes are very different from one another in their nature, each being subject to different rules. The true percentage tax gaps are therefore likely to vary widely across the various taxes.

## Methodology and data issues for wine

- 3.17 HMRC has attempted to calculate wine fraud in a similar way to the published spirits and beer fraud estimates, that is, creating an estimate where the illicit market is the difference between legitimate consumption and clearances. However, this was not credible, mainly due to the availability of reliable data to estimate the total consumption of wine in the UK.
- 3.18 The Living Costs and Food Survey (LCF) reports expenditure on wine. Translating this into volumes is difficult due to the different categories of wine duty and the wide spread in price per bottle. This survey also excludes expenditure at events where the consumer does not pay, for example, corporate functions and weddings where significantly more wine is consumed than beer and spirits, making this a particular problem for wine calculations.
- 3.19 Research is ongoing on the available data and methodologies to address this issue. However, if the level of fraud in wine is comparable to that found in spirits and beer then the wine duty tax gap estimate would be of the order of £0.3 billion.

## 4. Tobacco

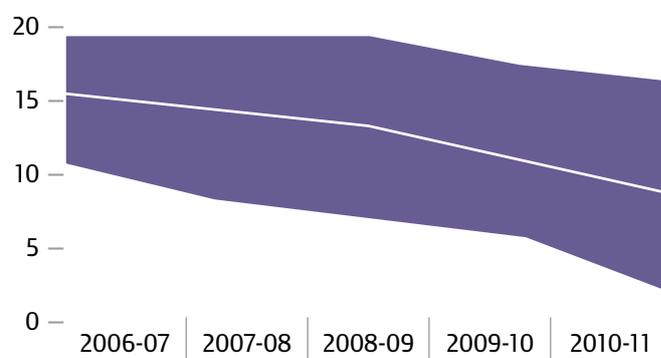
### Key findings for cigarettes

- The illicit market share for cigarettes was estimated to be 9 per cent in 2010-11, with associated revenue losses of £1.2 billion.
- There has been a decreasing trend in the cigarette illicit market share. The level in 2010-11 was 6 percentage points lower compared with 2006-07.

### Results and tables for cigarettes

The mid point estimate should be interpreted as an indicator of long term trends rather than a precise estimate of year-to-year changes.

**Figure 4.1: Illicit market share for cigarettes - upper, lower and mid point estimate (per cent)**



**Table 4.1: Illicit market share and revenue losses for cigarettes<sup>1</sup>**

	2006-07	2007-08	2008-09	2009-10	2010-11
<b>Illicit market shares (per cent)</b>					
Upper estimate	19%	19%	19%	17%	16%
Mid point estimate	15%	14%	13%	11%	9%
Lower estimate	11%	8%	7%	6%	2%
<b>Associated revenue losses (£ million)<sup>2</sup></b>					
Upper estimate	2,400	2,400	2,400	2,300	2,100
Mid point estimate	1,900	1,700	1,600	1,500	1,200
of which:					
VAT	400	300	300	300	200
Duty	1,500	1,400	1,300	1,200	1,000
Lower estimate	1,300	1,000	800	600	300

<sup>1</sup> Figures are independently rounded to the nearest 1 per cent or £100 million

<sup>2</sup> Includes both duty and VAT

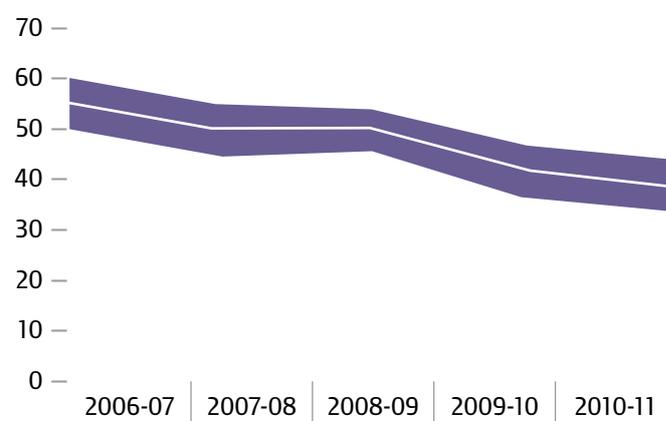
## Key findings for hand rolling tobacco (HRT)

- The illicit market share for HRT was estimated to be 38 per cent in 2010-11, with associated revenue losses of £660 million.
- These latest mid point estimates show a downward trend in the last five years, with the illicit market share reducing from 55 per cent in 2006-07.

## Results and tables for HRT

The mid point estimate should be interpreted as an indicator of long term trends rather than a precise estimate of year-to-year changes.

**Figure 4.2: Illicit market share for HRT – upper, lower and mid point estimate (per cent)**



**Table 4.2: Illicit Market Share and revenue losses for HRT<sup>1</sup>**

	2006-07	2007-08	2008-09	2009-10	2010-11
<b>Illicit market shares (per cent)</b>					
Upper estimate	60%	55%	54%	47%	44%
Mid Point estimate	55%	50%	50%	42%	38%
Lower estimate	50%	45%	46%	37%	33%
<b>Associated revenue losses (£ million)<sup>2</sup></b>					
Upper estimate	920	810	930	810	810
Mid point estimate	780	690	800	680	660
of which:					
<i>VAT</i>	180	160	170	140	150
<i>Duty</i>	610	530	630	540	510
Lower estimate	650	570	680	550	520

<sup>1</sup> Figures are independently rounded to the nearest 1 per cent or £10 million

<sup>2</sup> Includes both duty and VAT

4.1 Further tables on cigarettes and HRT, showing a breakdown of UK market share and volumes can be found online in the ‘Measuring Tax Gap 2012’ tables in Excel.

## Methodology and data issues for cigarettes and HRT

- 4.2 The estimates are produced using a top-down methodology; that is total consumption is estimated, from which legitimate consumption is subtracted, the residual being the illicit market.
- 4.3 The estimates are presented as lying within a range defined by the upper and lower estimates. A mid point of this range is also shown. The range provides an indication of the size of potential systematic errors due to under-reporting, and of the sampling error associated with the consumption estimates.

4.4 The Methodological Annex document contains details on the methodology used. There have been no changes this year to the models used to estimate the tax gap for cigarettes and HRT.

## Revisions

- 4.5 Estimates of the illicit market share for cigarettes and HRT rely on data from the General Lifestyle Survey (GLF), which only becomes available around 12 months after the survey period. For this reason, estimates for the tax gap in 2009-10, which previously included a forecast for tobacco consumption in the fourth quarter, have been updated since the last publication. Additionally, there have been small revisions to estimates from 2008-09 as more up-to-date data on underreporting rates from the Health Survey for England (HSE) became available.

# 5. Hydrocarbon Oils

## Key findings for GB diesel and petrol

- The GB diesel illicit market share lies within the range of 0 to 4 per cent in 2010-11, with associated revenue losses between £0 and £700 million.
- The illicit market share in GB diesel shows a generally level trend from 2006-07 to 2009-10, between 3 per cent and 4 per cent. This is followed by a reduction to 1 per cent in 2010-11.

## Results and tables for GB diesel

The reduction to 1 per cent in 2010-11 may not be a true reflection of the illicit market share due to the sensitivity of the modelling assumptions when the tax gap is small.

**Table 5.1: GB diesel: Illicit market share and associated revenue losses<sup>2</sup>**

	2006-07	2007-08	2008-09	2009-10	2010-11 <sup>1</sup>
<b>Illicit market shares (per cent)<sup>3</sup></b>					
Upper estimate	6%	5%	6%	6%	4%
Mid point estimate	4%	3%	4%	3%	1%
Lower estimate <sup>6</sup>	2%	1%	1%	–	–
<b>Associated revenue losses (£ million)<sup>4,5</sup></b>					
Upper estimate	950	900	1,150	1,000	700
Mid point estimate	600	500	700	550	150
Lower estimate <sup>6</sup>	250	100	200	50	–

1 Figures for 2010-11 are provisional

2 Figures for previous years have been revised

3 Figures independently rounded to the nearest 1 per cent

4 Includes both duty and VAT

5 Figures independently rounded to the nearest £50 million

6 Negative numbers have been truncated at zero and - indicates figures are negligible

5.1 Further tables on GB diesel, showing a breakdown of UK market share and volumes can be found online in the ‘Measuring Tax Gap 2012’ tables in Excel.

## Methodology and data issues for GB diesel and petrol

5.2 The GB diesel tax gap estimates are produced using a top-down methodology; total consumption is estimated, from which legitimate consumption is subtracted, the residual being the illicit market.

5.3 Estimates of GB diesel and petrol consumption are derived from a number of data sources including sample surveys, vehicle testing and administrative data.

5.4 Petrol is considered to be less vulnerable to illicit activity than diesel, because of the low demand from commercial sectors and the flammable nature of the product. Therefore, the illicit market share

in GB petrol is assumed to be negligible and this assumption lies behind the calculation for GB diesel.

5.5 The mid point estimate is best interpreted as an indicator of long term trends in the illicit market share rather than a precise estimate of the level or year-to-year changes. The confidence intervals indicate the potential size of chance fluctuations in the estimates due to sampling error. They do not take account of any systematic tendency to over or under-estimate the size of the tax gap that might arise from the modelling assumptions.

## Revisions

5.6 Some elements of the 2010-11 estimates have been produced using forecasts. Therefore, estimates for 2010-11 should be considered provisional.

5.7 Various input data have been revised historically, including: distances driven, fuel efficiencies, information on heavy goods vehicles and the amount of fuel delivered in the UK. These updates have revised estimates for previous years.

## Key findings for Northern Ireland (NI) diesel

- The NI diesel non UK duty paid market share is 25 per cent in 2010-11, with associated uncollected revenue of £160 million.
- The non UK duty paid market share in NI diesel shows a decreasing trend from 39 per cent in 2006-07 to 25 per cent in 2010-11, with an uncharacteristically low estimate of 12 per cent in 2009-10.

## Results and tables for NI diesel

- 5.8 The non UK duty paid (NUKDP) market includes both the illicit market and legitimate cross border shopping consumed in Northern Ireland.
- 5.9 Analysis suggests that the low level of the non UK duty paid market share in 2009-10 may be predominantly due to a reduction in the amount of cross border shopping done by Northern Ireland residents in the Republic of Ireland. This is thought to be an anomaly peculiar to that year and is likely caused by a smaller price differential between the two countries in 2009-10, making it less cost effective for NI residents to cross border shop their fuel.

**Table 5.2: NI diesel: Non UK duty paid market share and associated uncollected revenue<sup>2</sup>**

	2006-07	2007-08	2008-09	2009-10 <sup>6</sup>	2010-11 <sup>1</sup>
<b>Illicit market shares (per cent)<sup>3</sup></b>					
Upper estimate	43%	35%	30%	18%	30%
Mid point estimate	39%	31%	25%	12%	25%
Lower estimate	35%	26%	20%	7%	21%
<b>Associated uncollected revenue (£ million)<sup>4,5</sup></b>					
Upper estimate	220	200	170	100	190
Mid point estimate	190	160	140	70	160
Lower estimate	160	130	100	30	120

1 Figures for 2010-11 are provisional

2 Figures for previous years have been revised

3 Figures independently rounded to the nearest 1 per cent

4 Includes both duty and VAT

5 Figures independently rounded to the nearest £10 million

6 The low level of the non UK duty paid market in 2009-10 is believed to be due to a reduced level of cross border shopping

5.10 Further tables on NI diesel, showing a breakdown of UK market share and volumes can be found online in the 'Measuring Tax Gap 2012' tables in Excel.

## Methodology and data issues for NI diesel

5.11 Estimates of Northern Ireland diesel and petrol consumption are based on the average consumption per vehicle in Great Britain. Details of the methodology are given in the separate methodological annex paper.

5.12 The estimates for Northern Ireland relate to the non UK duty paid market, rather than the illicit market. The non UK duty paid market includes both the illicit market and legitimate cross border shopping consumed in Northern Ireland. The two markets cannot currently be separated as HMRC does not have an estimate of cross border shopping between Northern Ireland and the Republic of Ireland (RoI).

5.13 The central estimate is best interpreted as an indicator of long term trends in the NUKDP market share rather than a precise estimate of the level or year-to-year changes. The confidence intervals indicate the potential size of chance fluctuations in the estimates due to sampling error. They do not take account of any systematic tendency to over or under-estimate the size of the NUKDP market that might arise from the modelling assumptions.

## Revisions

- 5.14 Some elements of the 2010-11 estimates have been produced using forecasts. Therefore, estimates for 2010-11 should be considered provisional.
- 5.15 The changes to the input data and methodology for the Great Britain models affect the average consumption in Great Britain, which is an input for the Northern Ireland models. Consequently the time series for Northern Ireland has been revised.

## Key findings for NI petrol

- The NI petrol non UK duty paid market share is 13 per cent in 2010-11, with associated uncollected revenue of £50 million.
- The non UK duty paid market share in NI petrol shows a generally decreasing trend from 16 per cent in 2006-07 to 13 per cent in 2010-11. There is no estimate for 2009-10 due to issues with cross border shopping.

## Results and tables for NI petrol

- 5.16 The non UK duty paid (NUKDP) market includes both the illicit market and legitimate cross border shopping consumed in Northern Ireland.
- 5.17 The non UK duty paid market share could not be estimated in 2009-10 because there was a significant change in cross border shopping behaviour between Northern Ireland and the Republic of Ireland. The reason for this change in behaviour is thought to be that the price differential between the two countries was at a low level throughout 2009-10.

**Table 5.3: NI petrol: Non UK duty paid market share and associated uncollected revenue<sup>2</sup>**

	2006-07	2007-08	2008-09	2009-10 <sup>6</sup>	2010-11 <sup>1</sup>
<b>Illicit market shares (per cent)<sup>3</sup></b>					
Upper estimate	20%	23%	20%	No data	17%
Mid point estimate	16%	19%	16%		13%
Lower estimate	12%	15%	12%		9%
<b>Associated uncollected revenue (£ million)<sup>4,5</sup></b>					
Upper estimate	70	90	80	No data	70
Mid point estimate	60	70	60		50
Lower estimate <sup>5</sup>	40	50	40		30

1 Figures for 2010-11 are provisional

2 Figures for previous years have been revised

3 Figures independently rounded to the nearest 1 per cent

4 Includes both duty and VAT

5 Figures independently rounded to the nearest £10 million

6 The non UK duty paid market share could not be estimated in 2009-10 due to a significant change in cross border shopping behaviour

- 5.18 Further tables on NI petrol, showing a breakdown of UK market share and volumes can be found online in the 'Measuring Tax Gap 2012' tables in Excel.

## Methodology and data issues for NI petrol

- 5.19 Estimates of Northern Ireland diesel and petrol consumption are based on the average consumption per vehicle in Great Britain. Details of the methodology are given in the separate methodological annex paper.
- 5.20 The estimates for Northern Ireland relate to the non UK duty paid market, rather than the illicit market. The non UK duty paid market includes both the illicit market and legitimate cross border shopping consumed in Northern Ireland. The two markets cannot currently be separated as HMRC does not have an estimate of cross border shopping between Northern Ireland and the Republic of Ireland.
- 5.21 The central estimate is best interpreted as an indicator of long term trends in the NUKDP market share rather than a precise estimate of the level or year-to-year changes. The confidence intervals indicate the potential size of chance fluctuations in the estimates due to sampling error. They do not take account of any systematic tendency to over or under-estimate the size of the NUKDP market that might arise from the modelling assumptions.
- 5.22 To produce a NI non UK duty paid estimate, the cross border shopping of Republic of Ireland residents must be removed from the clearances to be consistent with the estimate of total consumption of petrol for NI residents. There is currently no way to remove this Republic of Ireland consumption from the estimate, which means that the non UK duty paid market due to UK residents cannot be calculated.

- 5.23 The reason for the change in behaviour in 2009-10 is thought to be that the price differential between the two countries was at a low level throughout that time. This meant that there was very little incentive for Northern Ireland residents to buy their fuel in the Republic of Ireland, leading to lower than normal levels of cross border shopping. For some months petrol was less expensive in Northern Ireland than in the Republic, which gave the residents of the Republic an incentive to buy their petrol in the North, leading to negative cross border shopping.

### Revisions

- 5.24 Some elements of the 2010-11 estimates have been produced using forecasts. Therefore, estimates for 2010-11 should be considered provisional.
- 5.25 The changes to the input data and methodology for the Great Britain models affect the average consumption in Great Britain, which is an input for the Northern Ireland models. Consequently the time series for Northern Ireland has been revised.

## Key findings for Petroleum Revenue Tax

- The illustrative tax gap is £30 million.
- This is an increase from 2009-10 due to increased receipts.

**Table 5.4: Petroleum Revenue Tax – illustrative tax losses (£ million)**

	2006-07	2007-08	2008-09	2009-10	2010-11
<b>Revenue losses</b>					
Illustrative upper estimate	60	45	80	30	45
Illustrative mid point	40	30	50	20	30
Illustrative lower estimate	20	15	30	10	15

## Methodology and data issues for Petroleum Revenue Tax

- 5.26 An illustrative indicator of the tax gap from Petroleum Revenue Tax (PRT) has been produced using expert opinion of PRT specialists. Given the narrowly defined extent of the tax (limited to oil

producing fields developed before April 1993), the small number of businesses involved and HMRC's compliance approach of six-monthly reviews; a range of between 1 per cent and 3 per cent of receipts has been used to calculate an illustrative tax gap. This produces an estimate of between £15 million and £45 million in 2010-11.

# 6. Estimating the direct tax gap - Income Tax, National Insurance Contributions and Capital Gains Tax

## Key findings

- In 2010-11 the total estimated tax gap for IT, NICs and CGT was £14.4 billion, which was £0.3 billion higher than 2009-10. This consisted of:
  - £5.2 billion from individuals and large partnerships in Self Assessment
  - £2.9 billion from employers (PAYE)
  - £2.1 billion from avoidance
  - £4.2 billion from the hidden economy.
- The tax gap for IT, NICs and CGT accounts for 45 per cent of the overall tax gap in 2010-11.
- The estimates for both individuals in Self Assessment and small and medium employers are generated from the latest results of HMRC's random enquiry programmes. All the direct tax random enquiry programmes (Self Assessment, Employer Compliance and Corporation Tax) have shown a decrease in the tax gap in the latest available year. Initial investigations suggest that the largest cause of the decrease is the recession which reduced income and profit levels and hence the amount of tax due. Improved customer compliance may also contribute to the decrease.

## Individuals and partnerships in Self Assessment

- In 2010-11 the total tax gap from individuals in Self Assessment of £4.4 billion was 18 per cent of SA tax liabilities (Table 6.1).
- The tax gap from business taxpayers contributes the majority of the total SA tax gap, with non-business taxpayers accounting for just £0.4 billion out of the £4.4 billion total tax gap (Table 6.2).
- The proportion of SA taxpayers that under-declared their tax liabilities fell from 34 per cent in 2004-05 to 27 per cent in 2008-09 (Table 6.3).
- Business taxpayers are more than twice as likely to under-declare their tax liabilities than non-business taxpayers (37 per cent compared to 16 per cent - compare Tables 6.4 and 6.5).
- In 2010-11 the total tax gap from large partnerships of £0.8 billion was 12 per cent of liabilities (Table 6.6).

## Small and medium-sized employers

- In 2010-11 the total tax gap from small and medium-sized employers of £0.8 billion was 1.0 per cent of SME tax liabilities (Table 6.7).
- The proportion of small and medium-sized employers failing to correctly operate their PAYE scheme has decreased from 41 per cent in 2005-06 to 26 per cent in 2009-10 (Table 6.8).

## Large employers

- In 2010-11 the total tax gap from large employers was 1.5 per cent of large employer liabilities or £2.1 billion (Table 6.9).

## Hidden economy

- The direct tax hidden economy estimate was £4.2 billion in 2010-11. This consists of moonlighters (£1.9 billion), ghosts (£1.3 billion) and non declaration of income and capital gains by individuals not in Self Assessment (£1.0 billion).

## Avoidance

- The avoidance tax gap for IT, NICs and CGT has increased from £1.9 billion in 2009-10 to £2.1 billion in 2010-11, due to an increase in the amount of avoidance risks.
- The estimated amount of IT, NICs and CGT avoidance for 2009-10 has been revised from £1.5 billion to £1.9 billion. This is due to improved classification of risks and the introduction of an uplift to reflect unidentified avoidance risks.
- The overall estimate for the avoidance tax gap, which also includes VAT and Corporation Tax avoidance, is £5 billion (Figure 1.3).

## Results and tables for individuals in Self Assessment (SA)

6.1 Estimates of tax gaps from incorrect returns in this section come from the Income Tax Self Assessment (ITSA) random enquiry programme and data on compliance yield and non-payment. The latest programme data available is for the 2008-09 tax year, with subsequent years projected forward based on the year on year change in liabilities.

- 6.2 Table 6.1 shows estimated tax gaps for SA taxpayers (excluding large partnerships) due to incorrect returns for the tax years 2006-07 to 2010-11.
- 6.3 The SA tax gap as a proportion of liabilities has remained broadly constant between 2006-07 and 2010-11 despite the gap falling from £6.5 billion in 2007-08 to £4.6 billion in 2008-09.
- 6.4 Non-payment has increased from £0.4 billion in 2008-09 to £0.9 billion in 2010-11 as a result of increased insolvencies caused by the recession.

**Table 6.1: Estimated Self Assessment tax gap (excluding large partnerships) (£ billion)<sup>1</sup>**

	2006-07	2007-08	2008-09	2009-10	2010-11
<b>Under-declared liabilities due to incorrect returns</b>					
Point estimate	5.8	6.5	4.6	4.8	4.4
Lower estimate	2.7	3.1	2.3	2.4	2.2
Upper estimate	10.9	12.1	8.3	8.7	7.8
Compliance yield <sup>2</sup>	0.6	0.9	0.9	0.8	0.8
Non-payment	0.4	0.4	0.4	0.6	0.9
<b>Net total tax gap</b>					
Point estimate	5.5	6.0	4.1	4.6	4.4
Lower estimate	2.4	2.7	1.8	2.1	2.2
Upper estimate	10.6	11.7	7.8	8.4	7.9
Total tax liabilities	29.0	31.9	25.6	26.9	24.3
<b>Proportion of liabilities</b>	<b>19%</b>	<b>19%</b>	<b>16%</b>	<b>17%</b>	<b>18%</b>

1 Figures rounded to the nearest £0.1 billion. As a result components may not appear to sum.

2 By period of settlement of enquiry.

6.5 Table 6.2 shows estimated tax gaps for SA taxpayers (excluding large partnerships) split by business and non-business taxpayers for the tax years 2006-07 to 2010-11.

6.6 Business taxpayers accounted for between 90 to 95 per cent of the net total identified tax gap between 2006-07 and 2010-11, except for 2007-08 when the level decreased to 81 per cent due to a significant rise in the tax gap from non-business taxpayers.

**Table 6.2: Estimated Self Assessment tax gap by type of taxpayer (£ billion)<sup>1</sup>**

	2006-07	2007-08	2008-09	2009-10	2010-11
<b>Under-declared liabilities due to incorrect returns</b>					
Net total tax gap	5.5	6.0	4.1	4.6	4.4
Business taxpayers	5.1	4.9	3.9	4.2	4.0
Non-business taxpayers	0.5	1.1	0.2	0.4	0.4

1 Figures rounded to the nearest £0.1 billion. As a result components may not appear to sum.

6.7 Table 6.3 shows the estimated proportion of incorrect SA returns leading to under-declaration of liabilities has fallen from 34 per cent to 27 per cent between the tax years 2004-05 to 2008-09.

6.8 The proportion of returns where the annualised under-declared liability was more than £0 but less than £1,000 fell from 23 per cent to 17 per cent over the period; the proportion where annualised under-declared liabilities exceeded £1,000 remained broadly stable at around 10 per cent.

**Table 6.3: Self Assessment returns with under-declared tax liability (per cent)<sup>1</sup>**

	2004-05	2005-06	2006-07	2007-08	2008-09
Proportion	34%	29%	29%	29%	27%
of which, under-declared liability per annum					
£1 to £500	16%	14%	14%	13%	12%
£501 to £1,000	7%	6%	5%	5%	5%
over £1,000	11%	9%	9%	11%	10%

<sup>1</sup> Figures rounded to the nearest 1 per cent. As a result components may not appear to sum.

6.9 The proportion of under-declarations shown in Table 6.3 can be further split by business and non-business taxpayers.

6.11 The proportion of incorrect SA returns from business taxpayers with under-declared tax liabilities has fallen for all levels of under-declarations.

6.10 Table 6.4 shows the estimated proportion of incorrect SA returns leading to under-declaration of liabilities for the tax years 2004-05 to 2008-09 for business taxpayers only.

**Table 6.4: Business taxpayers: Self Assessment returns with under-declared tax liability (per cent)<sup>1</sup>**

	2004-05	2005-06	2006-07	2007-08	2008-09
Proportion	53%	49%	44%	44%	37%
of which, under-declared liability per annum					
£1 to £500	22%	21%	19%	16%	15%
£501 to £1,000	12%	10%	9%	10%	7%
over £1,000	19%	18%	16%	19%	15%

<sup>1</sup> Figures rounded to the nearest 1 per cent. As a result components may not appear to sum.

6.12 Table 6.5 shows the estimated proportion of incorrect SA returns leading to under-declaration of liabilities for non-business taxpayers has stayed broadly stable between the tax years 2004-05 to 2008-09.

6.13 The level of incorrect SA returns with under-declared tax liabilities is lower for non-business taxpayers than business taxpayers because the majority of Income Tax paid by these non-business taxpayers is deducted at source under PAYE, leading to lower levels of incorrect SA returns.

**Table 6.5: Non-business taxpayers: Self Assessment returns with under-declared tax liability (per cent)<sup>1</sup>**

	2004-05	2005-06	2006-07	2007-08	2008-09
Proportion	15%	14%	15%	16%	16%
of which, under-declared liability per annum					
£1 to £500	10%	10%	10%	10%	9%
£501 to £1,000	3%	2%	3%	2%	2%
over £1,000	3%	2%	3%	4%	5%

<sup>1</sup> Figures rounded to the nearest 1 per cent. As a result components may not appear to sum.

## Results and tables for large partnerships in Self Assessment

6.14 Larger partnerships are not covered by the random enquiry programme, and therefore an illustrative tax gap is produced by assuming the tax at risk will represent a similar proportion of liabilities to all other SA taxpayers, as shown by the results of the random programme.

6.15 Table 6.6 shows the identified tax gap for large partnerships in Self Assessment has gradually increased to £0.8 billion in 2010-11 after a drop in line with total SA tax liabilities between the tax years 2007-08 to 2008-09.

**Table 6.6: Estimated tax gap for large partnerships in Self Assessment (£ billion)<sup>1</sup>**

	2006-07	2007-08	2008-09	2009-10	2010-11
<b>Under-declared liabilities due to incorrect returns</b>					
Point estimate	0.8	1.1	0.7	0.7	0.8
Lower estimate	0.7	0.9	0.6	0.7	0.7
Upper estimate	1.0	1.4	0.8	0.8	0.9
Compliance yield <sup>2</sup>	0.2	0.3	0.3	0.2	0.2
Non-payment	0.1	0.1	0.1	0.2	0.2
<b>Net total tax gap</b>					
Point estimate	0.7	1.0	0.6	0.7	0.8
Lower estimate	0.6	0.8	0.5	0.6	0.7
Upper estimate	0.8	1.2	0.7	0.8	0.9
Total tax liabilities	6.9	8.8	6.6	6.9	6.4
<b>Proportion of liabilities</b>	<b>10%</b>	<b>12%</b>	<b>9%</b>	<b>10%</b>	<b>12%</b>

<sup>1</sup> Figures rounded to the nearest £0.1 billion. As a result components may not appear to sum.

<sup>2</sup> By period of settlement of enquiry.

## Results and tables for small and medium-sized employers

6.16 Estimates of tax gaps from incorrect returns in this section come from the Employer Compliance random enquiry programme and data on compliance yield and non-payment. The latest programme data available is for the 2009-10 tax

year, with subsequent years projected forward based on the trend in liabilities.

6.17 Table 6.7 shows estimated tax gaps for small and medium-sized employers for the tax years 2006-07 to 2010-11.

**Table 6.7: Estimated tax gap for small and medium-sized employers (£ billion)<sup>1</sup>**

	2006-07	2007-08	2008-09	2009-10	2010-11
<b>Under-declared liabilities due to incorrect returns</b>					
Point estimate	0.9	1.0	0.6	0.5	0.5
Lower estimate	0.8	0.8	0.5	0.4	0.4
Upper estimate	1.0	1.1	0.6	0.5	0.5
Compliance yield <sup>2</sup>	0.4	0.3	0.3	0.2	0.3
Non-payment	0.5	0.5	0.4	0.7	0.6
<b>Net total tax gap</b>					
Point estimate	1.0	1.1	0.7	0.9	0.8
Lower estimate	0.9	1.0	0.6	0.8	0.7
Upper estimate	1.1	1.3	0.7	0.9	0.8
Total tax liabilities	82.4	91.0	86.9	81.3	84.9
<b>Proportion of liabilities</b>	<b>1.3%</b>	<b>1.4%</b>	<b>0.8%</b>	<b>1.1%</b>	<b>1.0%</b>

1 Figures rounded to the nearest £0.1 billion. As a result components may not appear to sum.

2 By period of settlement of enquiry.

6.18 Table 6.8 shows the estimated proportion of employers failing to meet their obligations in respect of operating a PAYE scheme for the tax years 2005-06 to 2009-10.

6.19 The proportion of employers where the annualised under-declared liability was more than £0 but less than £1,000 fell from 24 per cent to 14 per cent over the period; the proportion where annualised under-declared liabilities exceeded £1,000 fell from 16 per cent to 12 per cent.

**Table 6.8: Small and medium-sized employers: Employers found to be failing to meet PAYE scheme obligations (per cent)<sup>1</sup>**

	2005-06	2006-07	2007-08	2008-09	2009-10
Proportion	41%	40%	39%	34%	26%
of which, under-declared liability per annum					
£1 to £1,000	24%	23%	23%	18%	14%
over £1,000	16%	18%	17%	16%	12%

1 Figures rounded to the nearest 1 per cent. As a result components may not appear to sum.

## Results and tables for large employers

6.20 Larger employers are not covered by the random enquiry programme, and therefore an illustrative tax gap is produced by assuming the tax at risk will represent a similar proportion of liabilities to

all other EC taxpayers, as shown by the results of the random programme.

6.21 Table 6.9 shows estimated tax gaps for large employers has gradually increased in line with total liabilities between the tax years 2006-07 to 2010-11.

**Table 6.9: Estimated tax gap for large employers (£ billion)<sup>1</sup>**

	2006-07	2007-08	2008-09	2009-10	2010-11
<b>Under-declared liabilities due to incorrect returns</b>					
Point estimate	1.9	1.8	1.8	1.7	1.9
Lower estimate	1.3	1.1	1.2	1.0	1.2
Upper estimate	2.6	2.5	2.5	2.4	2.6
Compliance yield <sup>2</sup>	0.1	0.1	0.1	0.2	0.3
Non-payment	0.1	0.3	0.3	0.5	0.5
<b>Net total tax gap</b>					
Point estimate	1.9	2.0	2.0	2.0	2.1
Lower estimate	1.3	1.4	1.4	1.4	1.4
Upper estimate	2.6	2.7	2.7	2.7	2.8
Total tax liabilities	133.0	137.5	136.8	138.0	144.4
<b>Proportion of liabilities</b>	<b>1.5%</b>	<b>1.5%</b>	<b>1.5%</b>	<b>1.5%</b>	<b>1.5%</b>

1 Figures rounded to the nearest £0.1 billion. As a result components may not appear to sum.

2 By period of settlement of enquiry.

## Non-declaration of income and capital gains by individuals not in Self Assessment

6.22 Table 6.10 shows the sources of income and gains contributing to the estimated tax gap relating to income and capital gains of individuals taxed through PAYE but who do not receive SA returns.

6.23 Around 60 per cent of the estimated tax gap in 2009-10 resulted from undeclared lettings income.

**Table 6.10: Estimated tax gap for employees and pensioners taxed through PAYE but outside Self Assessment, by income source, 2009-10 (£ million)**

Source of income	Estimated tax gap
Lettings	550
Interest	190
Capital gains	130
Irregular ISAs <sup>1</sup>	50
Chargeable events <sup>2</sup>	10
<b>Total<sup>3</sup></b>	<b>940</b>

1 Irregular ISAs: individuals are allowed to open or subscribe to just one ISA of any particular type within a given tax year. If another ISA of the same type is opened or subscribed to, then it is not entitled to tax-free status.

2 Chargeable events: Chargeable events are most commonly payment of money from a life insurance policy, though other types of event such as the sale of an investment bond can also give rise to chargeable event gain that should then be treated as income for Income Tax purposes.

3 Figures rounded to the nearest £10 million. As a result components may not appear to sum.

## Methodology and data issues

### Overview

6.24 These components of the tax gap are estimated using departmental sources, such as surveys, administrative and operational data. Estimation methods are based on compliance activity which can, in some cases, take years to complete. Therefore the resulting tax gap estimates typically apply to periods before 2010-11. This has two consequences:

- In order to produce a tax gap for years which have not yet been estimated, the latest available estimate is projected forward. The projections are made using the change in the tax liabilities for the relevant tax. This has been improved since last year which used Gross Domestic Product (GDP) estimates. Using tax liabilities ensures that our projections reflect changes to tax rates and taxable income, and projects a stable level of underlying compliance. GDP estimates continue to be used rather than receipts or liabilities for projecting some components of the hidden economy as there is no directly relevant data series to base predictions on.

- Estimates for earlier years have been revised since previously published as a result of the inclusion of additional data from compliance checks that have since been completed.

6.25 Methods used differ between taxes, according to the type of non-compliance and the type of taxpayer involved. The main methods used to estimate tax gaps for direct taxes are random enquiries, data matching and risk registers. In addition, where robust methodologies have not yet been developed, an illustrative estimate of the tax gap is given based on expert opinion or derived by selecting the nearest equivalent measured gap.

**Table 6.11 Summary of methods by tax gap estimate**

Tax gap	Population section	Methods used
EC (IT and NICs on employment income and tax on occupational pensions)	Employers with up to 250 employees (except where the employer is part of a complex group).	Random enquiries
	Employers that are dealt with by the Large Business Service or are within the Local Compliance Large and Complex population.	Illustrative estimate
SA (IT, NICs and CGT)	'Business taxpayers' consisting of self-employed taxpayers and partnerships with up to 4 partners who receive notices to file an SA return.	Random enquiries
	'Non-business taxpayers' consisting of individuals without business income and trusts who receive notices to file an SA return.	Random enquiries
	Partnerships with 5 or more partners who receive notices to file an SA return.	Illustrative estimate
Avoidance (IT, NICs and CGT)	Individuals, trusts, partnerships and employers.	Risk register
Hidden economy	Employees and pensioners who are taxed through PAYE but are outside SA.	Data matching
	Ghosts	Illustrative estimate
	Moonlighters	Illustrative estimate

## Random enquiries

- 6.26 Random enquiry programmes involve samples of taxpayers being selected at random and their returns being subjected to full enquiries by HMRC officers. The results of the random enquiry programmes show the proportion of taxpayers under-reporting their tax liabilities and the corresponding amount of additional tax due. These results can be used to produce an estimate for the amount of under-declared tax liability for the whole population because the enquiries are randomly selected and form a representative sample. A proportion of the under-declared liabilities will be recovered as a result of HMRC compliance activity. This is called compliance yield and is subtracted from the estimate of under-declared liabilities.
- 6.27 The random enquiry programmes will not identify all incorrect returns or the full scale of tax gaps, especially where independent information from third parties is not available to verify the data supplied by the taxpayer. This means that tax gap estimates produced through random enquiries will underestimate the full extent of the tax gap.
- 6.28 The Internal Revenue Service (IRS) in the United States (US) has tackled this problem by using a range of ‘multipliers’ to make adjustments for non detection<sup>4</sup>. These multipliers are generated through supplementary studies on particular tax return entries, together with econometric analysis of non-detection rates across IRS examiners.

## Non-payment

- 6.29 If appropriate the tax gap estimates include a measure of associated losses from non-payment of tax by the relevant type of taxpayer. The estimates of non-payment for direct taxes come from HMRC’s financial statements and represent amounts written off or remitted, i.e. debts that are not collectable. Direct tax debts that are later paid do not form part of the direct tax gap, although payment will be deferred. Due to timing effects the amounts written off during a tax year will not all relate to liabilities arising during that year.

## Large employers

- 6.30 Larger employers, those with 250 or more employees, including those dealt with by the Large Business Service and employers which are part of a complex group, are not covered by the EC random enquiry programme and therefore an alternative methodology is required to produce an indicator of the associated tax gap. An illustrative estimate can be produced by assuming that the tax at risk will represent a similar proportion of liabilities to all other EC taxpayers, as shown by the results of the random programme.

## Large partnerships

- 6.31 Partnerships with five or more partners are not covered by the SA random enquiry programme and therefore an alternative methodology is required to estimate the associated tax gap. An illustrative estimate can be produced by assuming that the tax at risk will represent a similar proportion of liabilities to all other SA taxpayers, as shown by the results of the random programme.

## Avoidance

- 6.32 The IT, NICs and CGT avoidance tax gap is estimated using HMRC’s register of information on identified avoidance schemes for individuals, trusts, partnerships and employers. This gives an estimate for the total amount of tax that is considered to be at risk whilst avoidance schemes are in operation. The estimates reflect the legal framework in place at the time and will not include any subsequent changes to the tax law to prevent further use of avoidance schemes.
- 6.33 Annual estimates are derived by dividing the total tax under consideration by the average number of years that schemes are assumed to operate.
- 6.34 The methodology has been reviewed this year and an improvement was made to estimate the impact of schemes which have not been declared to or identified by HMRC. An uplift has been applied to 2009-10 and 2010-11, based on management judgement. Figures have not been adjusted for previous years.

<sup>4</sup> James Andreoni, Brian Erard and Jonathan Feinstein (1998) ‘Tax Compliance’, *Journal of Economic Literature*, Vol. 36, No. 2. (Jun., 1998), pp. 818-860

## Hidden economy

- 6.35 The direct tax hidden economy estimate is composed of three elements:
- Non-declaration of income and capital gains by individuals not in Self Assessment
  - Ghosts
  - Moonlighters

## Non-declaration of income and capital gains by individuals not in Self Assessment

- 6.36 A tax gap estimate is produced for employees and pensioners taxed under PAYE who do not receive Self Assessment returns and have not returned details of additional taxable income.
- 6.37 By matching data supplied by third parties to a sample of HMRC PAYE records, it has been possible to produce an estimate of the tax gap relating to income and capital gains of individuals taxed through PAYE but who do not receive SA returns. Several sources of income were investigated, such as income from lettings, bank and building society interest and capital gains. Where a difference was found between income in the third party data and the tax records, the tax that should have been paid on this income, if any, was then calculated and identified as the tax gap. The results from the sample were then grossed to produce an estimate of the overall tax gap for all employees and pensioners taxed through PAYE who are outside SA.
- 6.38 The limitations associated with the results of this exercise relate to the coverage of the third party data used to establish evidence of additional undeclared income. Not all potential sources of income could be investigated due to availability of data and the investigation of some sources was limited by the completeness of the information. The resulting estimate should therefore be interpreted broadly as a lower limit for the true scale of the tax gap relating to this group of taxpayers.

## Ghosts and moonlighters

- 6.39 'Ghosts' are individuals who receive income from employment or self-employment but are not known to HMRC because they and/or their employers fail to declare their earnings. Ghosts are not accurately recorded by any government agency or survey and therefore any estimate as to their number or the consequential loss of duty is approximate.
- 6.40 'Moonlighters' are individuals who pay tax on their main job through PAYE but who fail to declare earnings from a second job or additional income from self-employment.
- 6.41 Using a series of assumptions, it has been possible to produce illustrative estimates of the tax gap from moonlighters and ghosts. Due to the extent of the assumptions used to produce this estimate and the inherent uncertainties in the methodologies, this estimate has a large margin of error and should be treated with due caution.

# 7. Estimating the direct tax gap for Corporation Tax

## Key findings for Corporation Tax

- The estimated total net tax gap for Corporation Tax was £4.1 billion in 2010-11 (£3.8 billion in 2009-10), equivalent to 13 per cent of the overall tax gap.
- The tax gap from Corporation Tax accounts for 8.8 per cent of the estimated Corporation Tax liabilities in 2010-11 (9.6 per cent in 2009-10).

## Key findings for large businesses

- The 2004-05 to 2007-08 estimates of the Corporation Tax gap for businesses managed by the Large Business Service (LBS) have been increased in the light of a methodological improvement enabled by better data from the LBS case management system. The adjustment adds between £0.2 billion and £0.4 billion to the tax gap estimate (see Paragraph 7.13).
- The projected tax gap is £1.1 billion in 2009-10 and £1.4 billion in 2010-11 (see Paragraph 7.3).
- Revisions to the LBS tax gap lead to estimates of £1.5 billion for 2008-09, broadly the same as the revised 2007-08 estimate (£1.4 billion), but an increase of £0.2 billion from the 2007-08 estimate published last year.
- The number of LBS Corporation Tax avoidance risks and technical risks subject to litigation has decreased by around 16 per cent between 2007-08 and 2008-09, from 342 to 288. The effect on the tax gap is offset by an increase in average tax under consideration (TuC) per risk from £8.2 million to £9.5 million.
- The illustrative tax gap estimate from business managed by Local Compliance Large and Complex has remained broadly stable between 2009-10 (£1.3 billion) and 2010-11 (£1.2 billion). The avoidance component has decreased from £0.3 billion to £0.2 billion.

## Key findings for small and medium-sized businesses

- The estimate for the Corporation Tax gap for SMEs is £1.4 billion in 2010-11, which is the same as the revised 2009-10 estimate (£1.4 billion). However, revisions mean that the estimate for 2009-10 is down by £1.2 billion from the estimate published last year.
- The estimate is generated from the latest results of HMRC's random enquiry programmes. All the direct tax random programmes (Self Assessment, Employer Compliance and Corporation Tax) have shown a decrease in the tax gap in the latest available year. It is likely that the recession was a factor for the reduction as profit levels and hence the amount of tax due decreased. Improved customer compliance may also contribute to the decrease.
- Estimates for the identified tax gap as a proportion of the total relevant (SME) Corporation Tax liabilities have declined from around 13 per cent in 2005-06 and 2006-07 to 8 per cent in 2009-10 and 2010-11.
- The proportion of small and medium-sized businesses submitting an incorrect return leading to a loss of tax declined from 41 per cent in both 2004 and 2005 to 30 per cent by 2009. This decline is almost completely due to a lower proportion of under-declared annualised additional liability in the range £1-£1,000.

7.1 The tax gap for Corporation Tax is estimated separately for small and medium-sized enterprises (SMEs) and large businesses. The large business estimates are sub divided into two categories; 'Large Business Service' (LBS) and 'Large and Complex'. These are the two divisions of HMRC that manage the relationship with these businesses. The LBS handles the largest businesses, approximately 800 groups, and Large and Complex oversees a much larger number of comparatively smaller businesses, approximately 9,000 groups.

## Results and tables for the Large Business Service

7.2 Table 7.1 shows estimates of the Corporation Tax gap for LBS groups for accounting periods ending in 2004-05 to 2008-09 and projections for 2009-10 and 2010-11 as at April 2012. The 2008-09 estimate of the tax gap is £1.5 billion, broadly the same as the previous year (£1.4 billion). This is lower than earlier years when the tax gap ranged between £2.2 billion and £2.4 billion. As a proportion of estimated Corporation Tax liabilities the tax gap declined from 9 per cent in 2004-05 to 5 per cent in 2007-08, before rising slightly to 6 per cent in 2008-09.

7.3 Projections are made using the change in the tax receipts of LBS groups (see note 6 in Table 7.1). This gives a more accurate projection than last year where the trend in GDP (gross operating surplus) was used. Using tax receipts ensures that projections reflect changes to corporate tax rates and taxable profits. This projects a stable level of underlying compliance. This is applied to the latest year's estimate to produce projections for 2009-10 of £1.1 billion and an increase to £1.4 billion in 2010-11.

**Table 7.1: Estimated Corporation Tax gap for LBS groups: accounting periods ending in 2004-05 to 2010-11 (£ billion)**

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10 <sup>6</sup>	2010-11 <sup>6</sup>
<b>Total number of risks<sup>1,2</sup></b>	<b>3,498</b>	<b>1,991</b>	<b>1,475</b>	<b>1,232</b>	<b>1,061</b>		
Number of technical risks not subject to litigation	2,839	1,441	1,043	890	773		
Number of avoidance risks and technical risks subject to litigation	659	550	432	342	288		
<b>Total Tax under Consideration (TuC)<sup>3</sup></b>	<b>9.1</b>	<b>7.1</b>	<b>7.7</b>	<b>7.1</b>	<b>6.5</b>	No data	No data
TuC from technical risks not subject to litigation	3.9	2.5	2.8	3.6	3.0		
TuC from avoidance risks and technical risks subject to litigation	5.2	4.5	4.8	3.4	3.5		
Compliance yield <sup>4</sup>	2.8	2.2	2.6	2.0	2.0		
Tax gap <sup>5</sup>	2.4	2.4	2.2	1.4	1.5	1.1	1.4
<b>Total liabilities</b>	<b>26.1</b>	<b>31.4</b>	<b>30.1</b>	<b>27.6</b>	<b>25.4</b>		
<b>Tax gap as a proportion of liabilities<sup>7</sup></b>	<b>9%</b>	<b>8%</b>	<b>7%</b>	<b>5%</b>	<b>6%</b>	No data	No data

1 Risks may span more than one accounting period.

2 Estimates will include both risks that are being worked (open) and risks that have been settled closed - see Table 7.4.

3 Tax under Consideration is defined in the glossary.

4 Compliance yield = the total yield from closed avoidance or litigated technical risks plus the estimated compliance yield from open avoidance risks and technical risks in litigation. Compliance yield in this table relates to a specific accounting period.

5 Tax gap = TuC on avoidance risks and technical risks subject to litigation minus compliance yield. This includes tax gap from risks identified or recorded in subsequent APs of £0.2 billion in 2004-05, £0.2 billion in 2005-06, £0.3 billion in 2006-07, £0.3 billion in 2007-08 and £0.4 billion in 2008-09.

6 Estimates for 2009-10 and 2010-11 are projected using factors of 0.76 and 0.96 respectively, based on the trend in Corporation Tax receipts for LBS groups.

7 Total liabilities = the estimated Corporation Tax liabilities from LBS groups plus the TuC on avoidance risks and technical risks subject to litigation.

- 7.4 The small increase in the tax gap between 2007-08 and 2008-09 can be explained by a number of factors.
- The overall number of avoidance risks and technical risks subject to litigation identified fell from 342 to 288 (16 per cent).
  - The average TuC (Tax under Consideration) for this type of risk increased from £8.2 million to £9.5 million (as shown in Table 7.2).
  - In addition, the proportion of the total TuC relating to avoidance risks and technical risks subject to litigation increased slightly from 49 per cent to 54 per cent.

In combination, these factors result in the small increase over the period.

- 7.5 The larger decrease in the tax gap from £2.2 billion in 2006-07 and £1.4 billion in 2007-08 resulted from a number of changes.

- The overall number of risks identified fell from 1,475 to 1,232 (16 per cent).
- The proportion of total TuC relating to avoidance risks and technical risks subject to litigation fell from 63 per cent to 49 per cent.
- In addition, the average TuC from avoidance risks and technical risks subject to litigation decreased from £9.6 million to £8.2 million from 2006-07 to 2007-08 (see Table 7.2).

These factors resulted in the TuC from avoidance risks and technical risks subject to litigation decreasing 29 per cent (from £4.8 billion in 2006-07 to £3.4 billion in 2007-08). Over the same period the compliance yield from these types of risks fell less sharply (from £2.6 billion to £2.0 billion or 24 per cent) i.e. the conversion ratio<sup>5</sup> increased. The combination of these factors led to a reduced tax gap.

**Table 7.2: Average value of Corporation Tax risks for LBS groups: accounting periods ending in 2004-05 to 2008-09 (£ million)<sup>1</sup>**

	2004-05	2005-06	2006-07	2007-08	2008-09
Average TuC from technical risks not subject to litigation	1.4	1.8	2.7	4.1	3.9
Average TuC from avoidance risks and technical risks subject to litigation	7.2	7.3	9.6	8.2	9.5
<b>Average TuC from all risks</b>	<b>2.5</b>	<b>3.3</b>	<b>4.7</b>	<b>5.2</b>	<b>5.4</b>

<sup>1</sup> The average value of each risk is calculated on the estimates before adjustments for risks recorded in future accounting periods because the adjustments only increase the TuC and do not produce estimates of the number of additional risks.

- 7.6 As shown in Table 7.3, the tax gap can be split according to the type of risk identified; into the gap due to avoidance risks and the gap due to technical risks subject to litigation.

**Table 7.3: Estimated Corporation Tax gap for LBS groups: by type of risk and accounting periods ending in 2004-05 to 2008-09 (£ billion)<sup>1</sup>**

	2004-05	2005-06	2006-07	2007-08	2008-09
Tax gap for avoidance risks	2.2	2.1	2.0	1.1	1.1
Tax gap for technical risks subject to litigation	0.2	0.2	0.2	0.3	0.4
<b>Total tax gap</b>	<b>2.4</b>	<b>2.4</b>	<b>2.2</b>	<b>1.4</b>	<b>1.5</b>

<sup>1</sup> Figures may not appear to sum due to rounding.

<sup>5</sup> The conversion ratio is calculated by dividing the compliance yield by the tax under consideration for avoidance risks and technical risks subject to litigation that are closed on the case management system.

7.7 Avoidance risks contribute around three quarters of the latest tax gap estimate (£1.1 billion), although this was higher in previous years where around 90 per cent of the tax gap was from avoidance. The tax gap due to technical risks subject to litigation as a proportion of the overall gap has increased over the period from around 10 per cent to nearly one quarter of the LBS Corporation Tax gap.

7.9 The LBS case management system allows the classification of risks into two broad categories; avoidance and technical risks. The avoidance category relates to the use of disclosed avoidance schemes or other suspected avoidance identified by HMRC tax specialists. Technical risks cover a wide range of risks; from cases where there is genuine uncertainty about the correct tax treatment, through mistakes to culpable errors in, or omissions from, the company tax return.

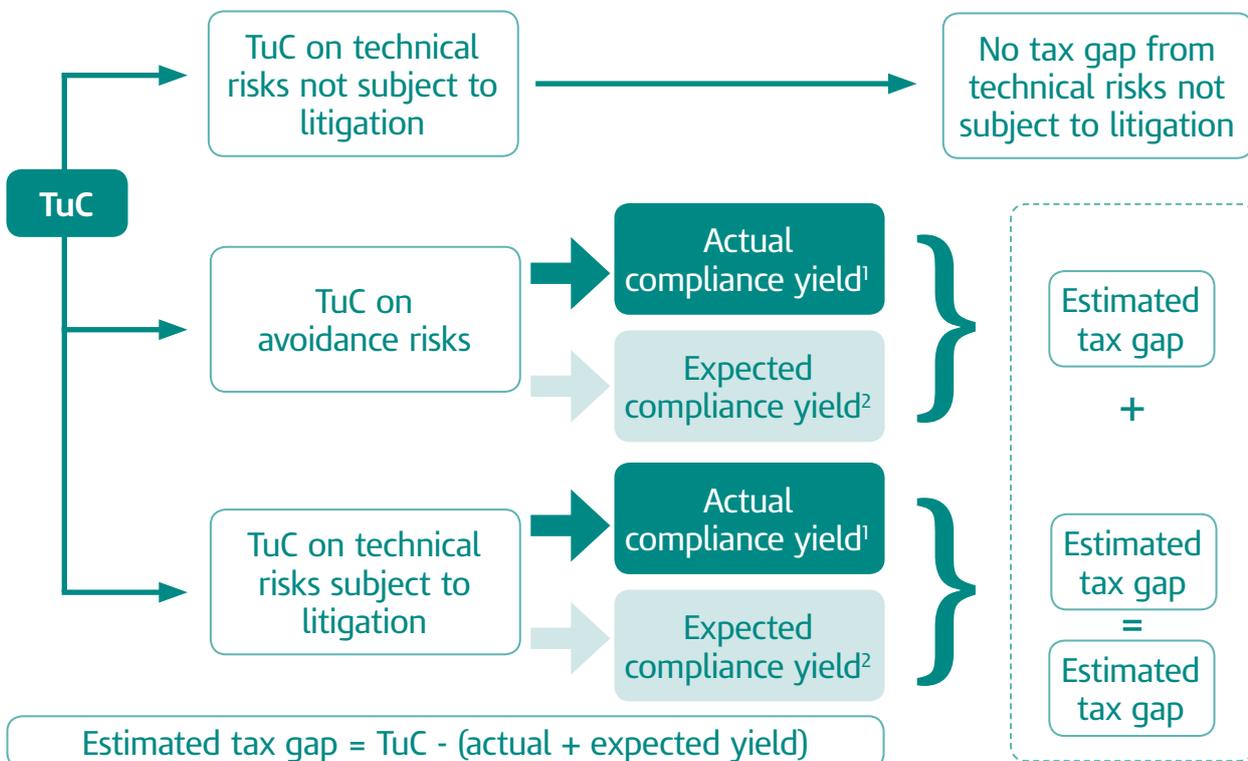
## Methodology and data issues for the Large Business Service

7.8 Estimates of the Corporation Tax gap for businesses managed by the LBS come from information captured on HMRC's LBS case management system. Where HMRC tax specialists identify risks for further consideration, the initial estimate of the tax associated with these risks is recorded on the system as the TuC. TuC is not tax owed or unpaid - it is a tool which helps LBS managers to better direct resources in order to produce the best results.

7.10 The risks will be worked until resolution in line with HMRC's Litigation and Settlement Strategy. Where the risk relates to avoidance or subject to litigation, tax gap may result. (Risks proceeding to litigation are identified on the case management system). There is assumed to be no net tax gap on technical risks settled by agreement. The flowchart at Figure 7.1 shows the process for arriving at the tax gap estimate.

- 7.11 The tax gap estimates are calculated:
- for avoidance risks, as the total TuC minus the total actual and expected compliance yield and,
  - for technical risks, where it has not been possible to reach agreement, as the total TuC minus the total actual and expected compliance yield.

Figure 7.1: The process for estimating the Corporation Tax gap for LBS groups by category



- Closed enquiries
- Open enquiries

1 Actual compliance yield refers to closed risks only.  
2 Expected compliance yield refers to forecast yield from open risks.

7.12 Identified risks can take a number of years to be resolved. Table 7.4 shows the proportion of risks that have closed from accounting periods ending in 2004-05 to 2008-09. While all these risks will be closed over time, in the interim it is necessary to estimate the yield that will result from open enquiries. Differences between the estimated yield

and the actual yield will lead to revisions to the tax gap estimates when calculated for subsequent publications. As the proportion of risks closed is lower for later years, and estimates of the yield for more risks is required, the tax gap estimates for these years are more likely to be subject to revision.

**Table 7.4: Proportion of Corporation Tax risks closed by the number and value of the risk and accounting periods ending in 2004-05 to 2008-09 (per cent)**

	2004-05	2005-06	2006-07	2007-08	2008-09
Percentage of risks closed	92	87	83	74	60
Percentage of Tax under Consideration closed	84	79	80	69	40

7.13 As more data has become available since the methodology was first devised, it has become apparent that new risks for the accounting periods presented here can be identified in subsequent accounting periods. This data has been used to estimate an appropriate increase to the TuC to reflect these additional risks that are expected to be identified at a later point. Additional TuC will result in additional tax gap. In general, larger adjustments to TuC are made to recent accounting periods than to older accounting periods; additional tax gap ranged from £0.2 billion in 2004-05 to £0.4 billion in 2008-09.

- HMRC’s judgement on the TuC of a risk or its classification as avoidance or technical may change where better information has emerged.

### Limitations

- 7.16 The main source of error in these estimates is that HMRC may not identify all risks - which will lead to an underestimation of the tax gap. It is difficult to quantify the extent to which this source of error impacts upon the estimates.
- 7.17 Compliance yield will reflect the legal framework in place at the time of intervention and does not include changes to the tax law to address the issues.
- 7.18 As it can take many years to close every risk identified in a particular year, the yield expected from open cases must be forecast to be able to produce estimates of the overall tax gap. Differences between forecast yield and actual yield may lead to some degree of error, and as such, estimates are provisional until every risk is closed.

### Revisions

- 7.14 Tax gap estimates for accounting periods ending before 2008-09 have been revised since last year. This is primarily the result of efforts made by the LBS to record better estimates of TuC on the case management system. In addition, further quality assurance processes have been built into the methodology.
- 7.15 Other minor changes result because a more recent snapshot of the data was used. In last year’s publication, the data used was from April 2011 whereas the estimates are now based on data from April 2012. Where time has elapsed between data snapshots, differences between the initial and latest tax gap estimates are expected, for the following reasons.
- More risks may be found, leading to additional TuC in any category.
  - A larger proportion of the tax gap estimate will be based on actual yield numbers, replacing the values previously forecast.
  - The forecast values may change as the conversion ratio calculation is based on a larger sample of closed cases.

## Results and tables for Large and Complex businesses

- 7.19 Businesses dealt with by Large and Complex fall out of scope of the Corporation Tax Self Assessment (CTSA) random enquiry programme which is used to derive estimates of the tax gap for small and medium-sized businesses (see next section). They are also not covered by the case management system used by LBS (as detailed above). Hence neither methodology can be directly applied to produce an estimate of the tax gap for the Large and Complex businesses.

## Methodology and data issues for Large and Complex businesses

7.20 An illustrative estimate of the Corporation Tax gap for Large and Complex businesses can be produced by assuming that the tax at risk will represent a similar proportion of liabilities to businesses managed by the LBS. Applying this assumption to the latest data produces an estimate of the tax at risk for Large and Complex businesses for 2008-09. This estimate is projected to 2009-10 and 2010-11 using factors of 1.00 and 1.01, based on the trend in Large and Complex Corporation Tax liabilities. This produces illustrative estimates of under-declared liabilities for 2009-10 and 2010-11, respectively, from which yield from compliance checks is then subtracted and an estimate of losses from non-payment is added. This produces illustrative estimates of the tax gap for Large and Complex businesses of £1.3 billion for 2009-10 and £1.2 billion for 2010-11.

### Avoidance

7.21 Using information that HMRC holds on avoidance schemes, it is possible to estimate the Corporation Tax gap from avoidance by Large and Complex businesses. The same methodology used to produce an estimate of the IT, NICs and CGT tax gap due to avoidance (as outlined in Chapter 6) can be applied. Using this methodology it is estimated that within the overall Large and Complex tax gap of £1.2 billion for 2010-11, approximately £0.2 billion is due to avoidance of CT. This is an illustrative estimate only. The corresponding estimate of CT avoidance for 2009-10 is £0.3 billion (£0.2 billion in last year's publication).

## Results and tables for small and medium-sized businesses

7.22 Estimates of tax gaps from incorrect returns in this section come from the Corporation Tax Self Assessment (CTSA) random enquiry programme and data on compliance yield and non-payment. The programme covers small and medium-sized businesses, which in this context means those businesses not managed by the LBS or Large and Complex.

### Results

7.23 Table 7.5 shows estimated tax gaps for businesses with accounting periods ending in financial years 2004-05 to 2010-11. Calendar year data for 2007 and 2008 was not of a sufficient quality to be used for analysis and therefore estimates for the financial years 2007-08 and 2008-09 are not shown. The latest programme data available is for the 2009 calendar year, with subsequent years projected forward based on the year on year change in total SME tax liabilities.

7.24 The estimate for the identified tax gap as a proportion of total SME tax liabilities has declined from around 18 per cent in 2004-05 to around 8 per cent in both 2009-10 and 2010-11. Due to a substantial margin of sampling error in these figures it is not possible to determine with certainty whether or not this variation represents significant changes in the underlying level of under-declaration of liabilities. However, the trend in these figures does appear to show a decline over the period.

**Table 7.5: Estimated Corporation Tax gap for small and medium-sized businesses (£ billion)<sup>1</sup>**

	2004-05	2005-06	2006-07 <sup>2</sup>	2007-08	2008-09	2009-10 <sup>2</sup>	2010-11 <sup>2</sup>
<b>Under-declared liabilities due to incorrect returns<sup>3</sup></b>							
Point estimate	2.8	2.2	2.4	No data	No data	1.3	1.3
Lower estimate	1.1	0.9	1.0			0.7	0.7
Upper estimate	6.2	4.8	4.7			2.2	2.3
Compliance yield <sup>4</sup>	0.4	0.5	0.5			0.5	0.4
Non-payment <sup>5</sup>	0.2	0.2	0.2			0.6	0.5
<b>Net total tax gap<sup>6</sup></b>							
Point estimate	2.6	1.9	2.0	No data	No data	1.4	1.4
Lower estimate	0.9	0.6	0.6			0.8	0.8
Upper estimate	6.0	4.5	4.4			2.3	2.4
Total SME tax liabilities	13.9	14.3	15.7			17.0	17.1
<b>Proportion of liabilities</b>	<b>18%</b>	<b>13%</b>	<b>13%</b>			<b>8%</b>	<b>8%</b>

1 Figures rounded to the nearest £0.1 billion. As a result components may not appear to sum.

2 Multiplier applied to gross tax gap estimate for 2006 to produce a projected estimate for 2007 (on a calendar year basis). Multipliers applied to gross tax gap estimate for 2009 to produce projected estimates for 2010 and 2011 (on a calendar year basis). Projection factors based on trend in total SME tax liabilities. Estimates then converted to a financial year basis.

3 Ranges for under-declared liabilities are 95 per cent confidence intervals.

4 By period of settlement of enquiry.

5 Estimates of write-offs of tax for 2004-05 are converted to financial year figures from a year approximately ending in October each year. From 2005-06, estimates for write-offs of tax are available on a financial year basis.

6 Includes avoidance for 2009-10 and 2010-11.

7.25 Table 7.6 shows that between the years 2004 to 2009, the proportion of small and medium-sized businesses submitting an incorrect CTSA return leading to a loss of tax declined from 41 per cent to 30 per cent by 2009.

7.26 The proportion of annualised additional liability over £1,000 has consistently remained at around 20 per cent across the period, whilst the proportion of annualised additional liability under £1,000 has been found to have decreased from 20 per cent in 2004 to 10 per cent in 2009.

7.27 Data for 2007 and 2008 was not of a sufficient quality to be used for analysis and therefore estimates for these calendar years are not shown.

**Table 7.6: Small and medium-sized businesses: Incorrect CTSA returns where additional liability established (per cent)**

	2004	2005	2006	2007	2008	2009
Proportion	41%	41%	37%	No data	No data	30%
of which, under-declared liability per annum						
£1 to £1,000	20%	21%	17%	No data	No data	10%
over £1,000	21%	20%	20%	No data	No data	20%

## Avoidance

- 7.28 The tax gap arising from the avoidance of Corporation Tax by SMEs can be estimated by applying the same methodology used to estimate the IT, NICs and CGT tax gap due to avoidance (Chapter 6). The illustrative estimate is £0.1 billion for 2010-11.

## Methodology and data issues for small and medium-sized businesses

- 7.29 The CTSA random enquiry programme allows HMRC to estimate the extent of under-declaration of liabilities arising from the submission of incorrect returns. The random sample used for the programme is selected from small and medium-sized businesses issued with a notice to file a CTSA return.
- 7.30 Enquiries are taken up into the sampled returns. The results of the enquiries are then extrapolated to the population to produce estimates of the compliance of small and medium-sized businesses.
- 7.31 As enquiries can take a number of years to settle, it is necessary to make assumptions about any enquiries that are still open at the time of analysis. Therefore figures are subject to revision until all enquiries are settled.
- 7.32 Estimates have been revised since the previous publication to include information on the outcomes of enquiries which have since settled.
- 7.33 Based on US research a multiplier of 1.4 is applied to account for non-detected non-compliance.
- 7.34 Projection factors based on the trend in total SME Corporation Tax liabilities are then applied to the latest available estimate (2009 calendar year), to produce illustrative estimates of under-declared liabilities for 2009-10 and 2010-11.
- 7.35 Compliance yield is then subtracted and losses from non-payment added. This results in estimates of the tax gap for small and medium-sized businesses of £1.4 billion for both 2009-10 and 2010-11, as shown in Table 1.1 and Table 7.5.

# 8. Other indirect and direct taxes

## Key findings

- The illustrative estimated tax gap for the other indirect taxes is £1 billion.
- The illustrative tax gap estimate for Inheritance tax is £0.2 billion.
- The estimate of the Stamp Duty Land Tax lower estimate tax gap is £0.3 billion.
- The illustrative estimate of Shares Stamp Duty is £0.3 billion.

**Table 8.1: Other direct and indirect taxes (£ billion)**

	2006-07	2007-08	2008-09	2009-10	2010-11
<b>Revenue losses</b>					
Other indirect taxes <sup>1</sup>	1.1	1.1	1.0	1.0	1.0
Inheritance Tax <sup>1</sup>				0.2	0.2
Stamp Duty Land Tax	No data	No data	No data	0.2	0.3
Shares Stamp Duty <sup>1</sup>				0.3	0.3

<sup>1</sup> Illustrative estimates

## Methodology and data issues for other indirect taxes

8.1 HMRC currently has no established methodologies for producing estimates of the tax gap for the following indirect taxes:

- cider and perry duties
- betting and gaming duties
- customs duties and levies
- air passenger duty
- insurance premium tax
- landfill tax
- climate change levy
- aggregates levy
- spirits-based ready-to-drink (RTD's)
- biofuels.

8.2 A proxy indicator for the scale of revenue losses across these taxes has been produced based on the estimated percentage tax gaps for GB oils, spirits duty, beer duty and cigarettes duty. Hand rolling tobacco and the Northern Ireland oils gaps have not been used to produce the proxy indicator. This is because:

- Northern Ireland estimates include losses from legitimate cross border shopping and therefore overestimate the true tax gaps
- it is clear from operational evidence that none of the unmeasured indirect taxes are subject to the high levels of fraud found in hand rolling tobacco.

8.3 For alcohol duties, the average percentage loss from the measured alcohol tax gaps has been applied to the receipts of the unmeasured alcohol tax gaps. For other indirect taxes the indicator has been calculated by treating the unknown tax gaps as if they had the same simple average percentage loss as the selected measured excise gaps. By calculating the alcohol component separately, using known alcohol tax gaps, the calculation should be more representative.

- 8.4 The average percentage revenue losses should not be considered estimates of the true percentage loss across the taxes listed in Paragraph 8.1 as this is unknown. Many of the indirect taxes listed are very different from one another in their nature, each being subject to different rules. The true percentage tax gaps are therefore likely to vary widely across the various taxes listed.

## Methodology and data issues for stamp taxes

- 8.5 SDLT tax gap is estimated using a bottom-up methodology. The estimate covers two years only as there is insufficient historical information to estimate the figures for previous years. It covers both commercial and residential transactions and is a lower bound estimate.
- 8.6 An illustrative estimate of the tax gap for Shares Stamp Duty has been produced using the same approach as was used in the previous publication for estimating the overall Stamp Duties tax gap. The assumption is made that the tax at risk is approximately 10 per cent of receipts, from which compliance yield is subtracted and losses from non-payment of stamp duties are added. This results in an estimate of the tax gap for Shares Stamp Duty of £0.3 billion for 2010-11. Varying the tax at risk assumption between five per cent and 20 per cent produces a range for the tax gap of £0.1 billion to £0.6 billion. These estimates are based purely on judgement and should be treated with due caution.

## Methodology and data issues for Inheritance Tax

- 8.7 The assumption underlying the methodology for estimating the size of the inheritance tax gap has been improved following consultation with operational experts. The estimate is now calculated on the assumption that the tax at risk is 17.5 per cent of receipts for 2009-10 and 2010-11, rather than the previous assumption of 10 per cent. Compliance yield is subtracted and losses from non-payment of inheritance tax are added to produce an illustrative tax gap of £0.2 billion for 2010-11.
- 8.8 Work is ongoing investigating whether further improvements can be made to the estimate.

# Glossary

Accounting period	The period for which a business prepares its accounts and in respect of which a Corporation Tax assessment is raised. It cannot be more than 12 months in length, although it can be shorter.
Central Estimate	The most likely estimate of the true value.
Compliance	State of being in accordance with established legislation.
Compliance activity	An intervention by HMRC, such as a direct tax enquiry, Employer compliance review or VAT assurance visit, design to ensure that the correct amount of tax is being accounted for and paid.
Compliance yield	Additional tax charged, resulting from compliance activity.
Confidence interval	A range of values that has a specified probability of containing the true value of interest.
Cross-border shopping	Legal importation of goods for personal use.
Estimates	Approximate results calculated from approximate or incomplete data.
Evasion	The deliberate omission, concealment or misrepresentation of information, or the false or deceptive presentation of circumstances, to fraudulently obtain a fiscal advantage, whether temporarily or permanently.
Fraud	Deliberate, dishonest evasion of tax.
Gross Domestic Product (GDP)	GDP is the market value of all final goods and services made within a country in a year.
Illicit market	The part of the market on which due taxes and duties have not been paid.
Legitimate consumption	Consumption of goods for which the correct duty has been paid.
Litigation	A lawsuit seeking a legal remedy to a question or dispute.
Lower estimate	The value below which the true value will not lie.
Mid-point	Average of the upper and lower estimates.
Non-payment	Tax debts that are identified but never paid off. Eventually this debt will be written off by HMRC as uncollectable.
Non-UK Duty paid	Any product that has not had UK duty paid on it.
Official Statistics	All statistics produced by the Office for National Statistics, government departments, the devolved Administrations and other Crown bodies, are automatically deemed to be Official Statistics.
PAYE scheme	Each employer operating PAYE registers a PAYE scheme with HMRC, which allows for the issue and monitoring of returns.
Risk Register	A list of identified tax risks, together with information such as estimated value, nature and status. Registers are used to track and monitor the risks they cover.
Self Assessment (SA)	A system for reporting income and capital gains to, and claiming tax allowances from, HMRC.
Settlement	Closure of a direct tax enquiry, resulting in the agreement of any additional tax liability.
Small and medium-sized enterprises (SME)/business	Any employer / business that does not fall within the EU Large definition.
Smuggling	In this document this covers all activity that results in goods entering the UK market without the correct duty being paid.
Tax under Consideration (TuC)	The value of an issue is the amount of TuC. The TuC in an enquiry is an estimate initially made before any consideration of the specific facts has taken place and before any reliefs or allowances are applied. It does not represent the tax owed or unpaid. The TuC for a given risk is updated when the Department's view on the possible outcome of the enquiry changes, for example, because new facts are established or legal advice is obtained.
Upper estimate	The value above which the true value will not lie.
Write-offs:	Debts that are considered to be irrecoverable.

# Abbreviations

CGT	Capital Gains Tax
CT	Corporation Tax
CTSA	Corporation Tax Self Assessment
EU	European Union
GB	Great Britain
GDP	Gross Domestic Product
GLF	General Lifestyle Survey
HMRC	Her Majesty's Revenue & Customs
HRT	Hand Rolling Tobacco
IRS	Internal Revenue Service (United States)
IT	Income Tax
LBS	Large Business Service
LCF	Living Cost and Food Survey
MTIC	Missing Trader Intra-Community fraud
NI	Northern Ireland
NICs	National Insurance Contributions
ONS	Office for National Statistics
PAYE	Pay As You Earn
PRT	Petroleum Revenue Tax
SA	Self Assessment
SDLT	Stamp Duty Land Tax
SME	Small or medium-sized enterprise/business
UK	United Kingdom
VAT	Value Added Tax
VTTL	VAT Theoretical Tax Liability

