

Appendix A: Forecasting public finances

Rowena Crawford, Carl Emmerson and Gemma Tetlow (IFS)

This appendix looks at the techniques used for the Green Budget public finance forecasts. It starts by comparing the forecasts made for borrowing in 2008–09 in last year’s Green Budget and in the November 2008 Pre-Budget Report (PBR) with the eventual out-turn. It then goes on to provide more background information to the short-term and medium-term public finance forecasts that are set out in Chapter 6.

A.1 The accuracy of our previous forecasts

The January 2009 Green Budget forecast was for a lower level of current receipts and the same level of current spending as those published by the Treasury in the November 2008 PBR. The out-turn for the public finances in 2008–09 was actually even weaker than either the 2008 PBR or the 2009 IFS Green Budget forecast. Though spending ended up being slightly lower than PBR 2008 had forecast, current receipts were much weaker.

The November 2008 PBR forecast that the current budget deficit in 2008–09 would be £41.2 billion, while the 2009 IFS Green Budget forecast that it would be £47.8 billion. The actual estimated out-turn from the 2009 PBR was a deficit of £50.1 billion, as shown in Table A.1. Slightly lower-than-forecast investment spending meant that the out-turn for net borrowing diverged slightly less from the earlier forecasts, with net borrowing in 2008–09 estimated in the December 2009 PBR to have been £85.5 billion, compared with the November 2008 PBR forecast of £77.6 billion and the January 2009 Green Budget forecast of £84.3 billion.

Table A.1. Comparison of forecasts for fiscal aggregates, 2008–09

<i>£ billion</i>	HM Treasury PBR forecast, November 2008	IFS Green Budget forecast, January 2009	Estimate, PBR, December 2009
Current receipts	545.5	538.9	532.4
Current expenditure ^a	586.7	586.7	582.5
Net investment	36.5	36.5	35.4
Total managed expenditure	623.2	623.2	617.9
Public sector net borrowing	77.6	84.3	85.5
Surplus on current budget	–41.2	–47.8	–50.1

a. Includes depreciation.

Notes: Figures for net investment and net borrowing in 2008–09 from PBR 2009 are shown net of the impact of various capital transactions between the nationalised banks and other parts of the public sector (which amounted to £9.9 billion in 2008–09). Furthermore, the figure for net borrowing excludes the income received by the public sector from private sector banks as a result of public sector interventions in the financial sector (amounting to £0.8 billion in 2008–09) – see table B18 of PBR 2009.

Sources: Out-turn figures for 2008–09 from HM Treasury, *Pre-Budget Report 2009*, December 2009, http://www.hm-treasury.gov.uk/prebud_pbr09_index.htm. Forecasts from HM Treasury, *Pre-Budget Report 2008*, November 2008, http://www.hm-treasury.gov.uk/prebud_pbr08_index.htm, and table 6.2 of R. Chote, C. Emmerson, D. Miles and J. Shaw (eds), *The IFS Green Budget: January 2009*, IFS Commentary 107, <http://www.ifs.org.uk/publications/4417>.

Current receipts came in £13.1 billion weaker than forecast in the November 2008 PBR and £6.5 billion weaker than forecast in the January 2009 IFS Green Budget. Current spending (including depreciation) came in £4.2 billion lower than forecast by both the November 2008 PBR and the January 2009 IFS Green Budget. Public sector net investment was £1.1 billion lower than either of the previous forecasts suggested.

Table A.2 shows the breakdown of the errors in the forecasts for tax receipts contained in the November 2008 PBR and the January 2009 IFS Green Budget. Net taxes and National Insurance contributions were overestimated by the Treasury and, to a lesser extent, the Green Budget. The largest error, common to both forecasts for revenues, was in value added tax (VAT): the PBR 2008 forecast overestimated VAT revenues by £4.2 billion, while the January 2009 Green Budget forecast was £3.1 billion too high. Both forecasts also contained relatively small overestimates of corporation tax revenues and fuel duties.

Outside of net taxes and social security contributions, there was also an apparently large absolute error in both forecasts for non-tax receipts: the November 2008 PBR and the January 2009 Green Budget overestimated non-tax receipts by £4.2 billion and £4.1 billion, respectively.

Table A.2. IFS Green Budget and Treasury errors in forecasting tax receipts, 2008–09

<i>£ billion</i>	Pre-Budget Report, November 2008	IFS Green Budget, January 2009
Income tax (net of tax credits)	3.3	-0.8
National Insurance contributions	0.8	0.8
Value added tax	4.2	3.1
Corporation tax (net of tax credits)	1.8	1.9
Fuel duties	0.5	0.5
Stamp duties	0.3	-0.4
Other taxes	-2.0	-2.7
Net taxes & National Insurance contributions	8.9	2.4
Non-tax receipts ^a	4.2	4.1
Total current receipts	13.1	6.5

^a Includes accruals adjustments on taxes, the tax credits adjustments, interest and dividends, gross operating surplus and rent; net of oil royalties and business rate payments by local authorities, the own resources contribution to the EU budget and public corporations' corporation tax payments.

Sources: As for Table A.1.

A.2 Techniques used in our forecasts

For the current financial year, three different sources of information are examined before coming to a judgement for each element of government revenue. In addition to the latest Treasury forecast from the December 2009 PBR, we use information from the revenues implied by a current receipts method, and the IFS modelled approach.¹

¹ For a more detailed explanation of both these techniques, see C. Giles and J. Hall, 'Forecasting the PSBR outside government: the IFS perspective', *Fiscal Studies*, 1998, 19, 83–100.

Information from current receipts

The current receipts method uses the information on receipts received in the current financial year compared with those received up to the same point in the previous financial year. An estimate for the whole of the current year's receipts is then calculated using the following formula:

$$2009-10 \text{ forecast} = \frac{\text{Receipts received so far this year}}{\text{Receipts received to the same point last year}} \times 2008-09 \text{ receipts}$$

While this is useful when forecasting revenues in the current financial year, it cannot provide projections for borrowing in future years. Also, particular caution must be used when revenues are cyclical or changes have been made that may affect the timing of payments. Both of these factors are likely to have significantly affected the timing of some tax payments in 2008–09 and 2009–10.

The IFS modelled receipts approach

This estimates growth in each of the taxes using forecasts for the growth in the tax base relevant to each tax, combined with an estimate of the elasticity of revenue with respect to the growth in the tax base. Information on the revenue effects of pre-announced tax changes from previous Budgets is then added in order to reach a forecast. Hence, modelled receipts can be summarised by the following formula:

$$2009-10 \text{ forecast} = (2008-09 \text{ receipts} \times \text{Tax-base change} \times \text{Elasticity}) + \text{Tax changes}$$

This technique enables forecasts to be made for future years, given the expected structure of the tax system. It should be noted that these forecasts become considerably less accurate for later years, since forecasts for changes in tax bases, estimates of elasticities and the impact of tax changes all become less accurate.

The elasticities are largely estimated from TAXBEN, the IFS tax and benefit model. For fuel, an elasticity calculated from previous IFS research is used.² Elasticities for beer, spirits, wine and tobacco duties are taken from the median elasticity found in a range of UK studies.³

A.3 Forecasts for 2009–10

The Green Budget forecast is a judgement based on the Treasury's latest forecast contained in the December 2009 PBR, the current receipts method and the IFS modelled approach. Each of these is presented in Table A.3. For some taxes, we know there are significant changes in policy being brought in part-way through the year (such as the temporary cut in the main rate of VAT from 17½% to 15% that ran from 1 December 2008 to 31 December 2009, and the new bank payroll tax set to operate from 9 December 2009 to 5 April 2010). In these cases, we have also incorporated an estimate of the impact of these measures on the timing of receipts when coming to our judgement – this is discussed in more detail below.

² L. Blow and I. Crawford, *The Distributional Effects of Taxes on Private Motoring*, IFS Commentary 65, 1997, <http://www.ifs.org.uk/publications/1887>.

³ M. Chambers, 'Consumers' demand and excise duty receipts equations for alcohol, tobacco, petrol and DERV', Government Economic Service, Working Paper 138, August 1999.

Table A.3. Forecasts for government borrowing in 2009–10

<i>£ billion</i>	PBR Dec. 2009	Current receipts method	IFS forecasting model	IFS forecast judgement
<i>HM Revenue and Customs</i>				
Income tax (net of tax credits)	134.2	141.5 ^f	144.8	137.5
National Insurance contributions ^a	94.8	94.9	99.5	95.9
Value added tax (VAT)	67.2	65.8	67.8	70.0
Corporation tax (net of tax credits)	33.4	33.1	40.1	33.1
Petroleum revenue tax	1.2	0.7	2.6	1.2
Fuel duties	26.4	26.2	26.3	26.4
Capital gains tax	2.5	n/a ^f	7.6	2.5
Inheritance tax	2.2	2.1	2.5	2.2
Stamp duties	7.4	6.5	7.4	7.4
Tobacco duties	8.8	8.9	8.3	8.8
Spirits duties	2.6	2.6	2.3	2.6
Wine duties	2.9	3.0	2.6	2.9
Beer and cider duties	3.5	3.6	3.9	3.5
Betting and gaming duties	1.4	1.4	1.5	1.4
Air passenger duty	1.9	1.7	2.1	1.9
Insurance premium tax	2.3	2.2	2.2	2.3
Landfill tax	0.9	0.8	1.2	0.9
Climate change levy	0.7	0.7	0.7	0.7
Aggregates levy	0.3	0.3	0.3	0.3
Customs duties and levies	2.6	2.7	2.8	2.6
Total HMRC	397.0	398.9	426.4	404.1
Vehicle excise duties	5.7	5.6	5.5	5.7
Business rates	23.7	23.7	21.6	23.7
Council tax ^b	24.8	24.8	24.8	24.8
Other taxes and royalties ^c	16.4	16.4	15.4	16.4
Net taxes and NI contributions^d	467.6	469.4	493.8	474.7
Other adjustments ^e	30.6	30.6	30.6	30.6
Current receipts	498.1	500.0	524.4	505.2
Current spending	626.2	617.5	623.0	623.0
Current balance	-128.1	-117.5	-98.6	-117.7
Net investment	49.5	49.5	49.5	49.5
Public sector net borrowing	177.6	167.0	148.1	167.2

a. 2009–10 includes revenues from the bank payroll tax.

b. PBR figures are based on stylised assumptions rather than government forecasts.

c. Includes VAT refunds and money paid into the National Lottery Distribution Fund.

d. Includes VAT and the traditional 'own resources' contributions to the EU budget.

e. This line is a sum of accruals adjustments on taxes, tax credit adjustment, interest and dividends, and other receipts, less own resources contribution to EU budget and public corporations' corporation tax payments.

f. Current receipts estimate of income tax revenues includes capital gains tax.

Sources: PBR forecasts from HM Treasury, *Pre-Budget Report 2009*, December 2009, http://www.hm-treasury.gov.uk/prebud_pbr09_index.htm; this table is similar to table B10 on page 181. Authors' calculations.

Our forecast for total receipts in 2009–10 is £7.1 billion higher than that which the Treasury made in PBR 2009, as a result of more optimistic forecasts of revenues from income tax, National Insurance contributions and VAT, slightly offset by a less optimistic forecast for corporation tax revenues. We also forecast that spending will be £3.2 billion lower than forecast in PBR 2009, as a result of a small current underspend.

HM Revenue and Customs receipts

For **income tax** (net of tax credits), we forecast £137.5 billion. This is £3.3 billion above the Treasury forecast. This judgement is based principally on the growth in income tax receipts seen over the year to date, adjusted downwards for an estimate of the impact that the bank payroll tax will have on reducing the amount of income tax that will be paid. (The Treasury has chosen to score the revenue raised from the bank payroll tax as National Insurance contributions.) In making the adjustment for the bank payroll tax, we assume that the Treasury's PBR 2009 estimate of the net revenues gained (of £550 million) is correct and then calculate from this the implied reduction in income tax. This results in a £0.5 billion estimated reduction in income tax receipts.

Considerable uncertainties regarding income tax receipts this year remain, much of which should be resolved when receipts in January are known. This is because January is the month in which PAYE income tax on financial sector bonuses is typically paid and also because the deadline for self-assessment income tax payments for 2008–09 was Sunday 31 January. The former is likely to boost receipts relative to January 2009 (notwithstanding the impact of the bank payroll tax mentioned above), as many financial sector firms have been more profitable in 2009 than they were in 2008 when the financial crisis struck. However, self-assessment income tax payments are likely to depress receipts due to the impact of the recession in 2008–09 compared with 2007–08. (Details of receipts in January are scheduled to be published by the ONS on 18 February 2010.)

Our forecast for **National Insurance contributions**, of £95.9 billion, is £1.1 billion higher than the Treasury's estimate. Our forecast is based on the current receipts method (which suggests that NI receipts for the year as a whole will be £94.9 billion), adjusted upwards to account for the net positive impact (amounting to about £1.0 billion) of the bank payroll tax on NI receipts this year.

We forecast **VAT** receipts of £70.0 billion, which is £2.8 billion higher than the Treasury's forecast. This is based on the current receipts forecast, which suggests VAT revenues of £65.8 billion for the whole year. We have then adjusted this forecast upwards to account for the fact that the main rate of VAT will be higher over the remaining months of 2009–10 than it was earlier this financial year and at the end of 2008–09. The Treasury estimated in Budget 2009 that the temporary reduction in the main rate of VAT had a direct exchequer cost of £7.8 billion in 2009–10, which is a little under £0.9 billion for each of the nine months that it applied.

Our forecast for **corporation tax** (net of tax credits) is £33.1 billion. This is slightly (£0.3 billion) below the Treasury's forecast of £33.4 billion. This is based on the current receipts method. Until we have data on receipts in January 2010 (again due to be published on 18 February), when typically a large slice of corporation tax receipts is received each year, the outlook for these receipts is particularly uncertain.

Our forecast for receipts from **stamp duties** of £7.4 billion is the same as the Treasury's forecast. Though this is higher than the current receipts method suggests, stamp duty revenues are strongly affected not only by changes in asset prices but also by changes in

the volume of transactions. As the volume of housing transactions has been rising since the beginning of 2009–10, it seems not unreasonable to expect that stamp duty revenues will come in higher than suggested by the current receipts method. We therefore assume that the Treasury's PBR 2009 forecast is correct.

For **capital gains tax**, we simply take the Treasury's forecast. The IFS model is likely to be particularly inaccurate in this instance, as it does not properly account for the fact that reductions in the capital gains made may be substantially larger than average changes in asset prices. Monthly out-turns for receipts of capital gains tax are not available separately from income tax receipts. We do not, therefore, have a forecast for CGT revenues using the current receipts method.

We forecast that **fuel duties** will yield £26.4 billion, which is the same as the Treasury's projection and very similar to both the current receipts (£26.2 billion) and the IFS forecasting model (£26.3 billion).

Other government receipts

For all other receipts, we take the Treasury's forecasts for 2009–10.

Government expenditure

We forecast that **current spending** in 2009–10 will be £623.0 billion, which is £3.2 billion lower than the Treasury's forecast. So far this year, central government current spending has been growing less quickly than the PBR 2009 forecasts suggest for the year as a whole. If this trend continues, central government current spending would come in £8.7 billion below the PBR 2009 forecast.

We assume that the Treasury's forecast for £49.5 billion of **public sector net investment** in 2009–10 is accurate.⁴

Government borrowing

As a result of forecasting higher current receipts and lower current spending, we forecast a **deficit on the current budget** of £117.7 billion for 2009–10. This is £10.4 billion more optimistic than the £128.1 billion deficit forecast by the Treasury.

Since we forecast the same level of net investment in 2009–10 as the Treasury does, our forecast for **public sector net borrowing** (£167.2 billion) is also £10.4 billion lower than the Treasury forecast of £177.6 billion.

A.4 Medium-term forecasts

Any assessment of the fiscal stance should take into account the performance of the economy. Table A.4 presents the macroeconomic forecasts underlying the Green Budget forecasts for the public finances in each of the four economic scenarios used.

For the Green Budget baseline forecast, the Treasury's macroeconomic forecasts are used. These assume that national income will shrink by 3½% in 2009–10. After that, they project growth of 2% in 2010–11 and 3¼% a year thereafter. This path leads to the estimated output gap not being closed until well after the end of the forecast horizon in 2014–15.

⁴ This figure includes as public sector net investment approximately £1.8 billion of net capital transfers to the nationalised banks from other parts of the public sector.

Table A.4. Alternative macroeconomic assumptions underlying medium-term public finances forecasts

<i>Annual % change unless otherwise stated</i>	2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15
Green Budget baseline (PBR assumptions)						
Gross domestic product (GDP)	-3½	2	3¼	3¼	3¼	3¼
Real consumers' expenditure	-2.3	0.7	2.8	2.8	3.3	3.3
Employment	-1.4	0.0	0.0	0.0	0.1	0.3
Real wages	3.5	-0.9	0.9	2.1	2.5	2.4
GDP deflator	2	2¼	1½	2½	2¾	2¾
Output gap (% of potential GDP)	-6.4	-5.3	-4.3	-3.4	-2.5	-1.6
Alternative Green Budget scenario I (Barclays 'central' case)						
Gross domestic product (GDP)	-3¼	2¼	2¼	1¼	1½	1¾
Real consumers' expenditure	-2.5	1.6	2.0	1.2	2.0	1.6
Employment	-1.4	-0.1	-0.2	-0.2	-0.1	0.2
Real wages	1.8	-0.1	1.2	2.3	2.3	1.7
GDP deflator	2	2½	2½	2¼	2¼	2½
Output gap (% of potential GDP)	-3.1	-1.0	0.2	0.0	0.0	0.0
Alternative Green Budget scenario II (Barclays 'optimistic' case)						
Gross domestic product (GDP)	-3¼	2¾	2¾	2¼	2¼	2¼
Real consumers' expenditure	-2.4	2.9	3.4	3.2	3.2	2.8
Employment	-1.4	0.0	0.0	0.0	0.1	0.3
Real wages	1.9	0.2	1.7	2.9	3.0	2.4
GDP deflator	2	2¼	2	1¾	2¼	2½
Output gap (% of potential GDP)	-3.4	-1.5	-0.2	0.0	0.1	0.1
Alternative Green Budget scenario III (Barclays 'pessimistic' case)						
Gross domestic product (GDP)	-3¼	1½	1½	1	1½	1¾
Real consumers' expenditure	-2.6	0.2	0.5	0.7	1.5	1.9
Employment	-1.4	-0.2	-0.4	-0.4	-0.2	0.2
Real wages	1.8	-0.4	0.7	1.7	1.7	1.3
GDP deflator	2¼	2¾	2¾	2¼	2¼	2
Output gap (% of potential GDP)	-2.8	-0.7	0.1	0.0	-0.1	0.0

Sources: Authors' calculations; Barclays; PBR assumptions from HM Treasury, *Pre-Budget Report 2009*, December 2009, http://www.hm-treasury.gov.uk/prebud_pbr09_index.htm.

Under the first alternative Green Budget scenario (the Barclays 'central' case), growth in national income is very slightly stronger in 2009–10 and slightly stronger again in 2010–11 (2¼%). From 2011–12 onwards, the economy is forecast then to grow less strongly, as it is estimated that it will have already returned to trend activity (and in fact would move slightly above trend in 2011–12).

The second alternative Green Budget scenario (the Barclays 'optimistic' case) assumes that the economy shrinks by 3¼% in 2009–10 and then is able to grow by 2¾% in 2010–

11 and 2011–12, falling to 2¼% from 2012–13 onwards, once the economy is judged to have returned to trend activity.

The final alternative Green Budget scenario (the Barclays ‘pessimistic’ case) also assumes that the economy shrinks by 3¼% in 2009–10 but then by between 1% and 1¾% thereafter as the economy is judged to be operating at its trend level.

The outlook for the composition, level and growth of trend economic activity underlying the three Barclays scenarios is discussed in more detail in Chapter 4.

The Green Budget baseline scenario predominantly uses published Treasury forecasts for all macroeconomic assumptions, where these are available. The exceptions to this are that, as discussed in more detail in Chapter 6, we assume that corporation tax receipts over the near term are weaker than the Treasury has forecast.

Appendix B: Headline tax and benefit rates and thresholds

	2009–10 level	2010–11 level ^a
Income tax		
Personal allowance: under age 65	£6,475 p.a.	£6,475 p.a.
aged 65–74	£9,490 p.a.	£9,490 p.a.
aged 75 and over	£9,640 p.a.	£9,640 p.a.
Married couple's allowance, restricted to 10%: aged 75 or over	£6,965 p.a.	£6,965 p.a.
Basic rate	20%	20%
Higher rate	40%	40%
Additional rate	Not applicable	50%
Tax rates on interest income	10%, 20%, 40%	10%, 20%, 40%, 50%
Tax rates on dividend income	10%, ^b 32.5% ^b	10%, ^b 32.5%, ^b 42.5% ^b
Starting-rate limit	£2,440 p.a.	£2,440 p.a.
Basic-rate limit	£37,400 p.a.	£37,400 p.a.
Higher-rate limit	Not applicable	£150,000 p.a.
Income limit for personal allowance	Not applicable	£100,000 p.a.
National Insurance		
Lower earnings limit (LEL)	£95 p.w.	£97 p.w.
Upper earnings limit (UEL)	£844 p.w.	£844 p.w.
Earnings threshold (employee and employer)	£110 p.w.	£110 p.w.
Class 1 contracted-in rate: employee – below UEL	11%	11%
– above UEL	1%	1%
employer – below UEL	12.8%	12.8%
– above UEL	12.8%	12.8%
Class 1 contracted-out rate: employee – below UEL (salary-related schemes)	9.4%	9.4%
– above UEL	1%	1%
employer – below UEL	9.1%	9.1%
– above UEL	12.8%	12.8%
Corporation tax		
Rates: small companies' rate	21%	21%
standard rate	28%	28%
Capital gains tax		
Annual exemption limit: individuals	£10,100 p.a.	£10,100 p.a.
trusts	£5,050 p.a.	£5,050 p.a.
Rate	18%	18%
Inheritance tax		
Threshold	£325,000	£325,000
Rate for transfer at or near death	40%	40%
Value added tax		
Registration threshold	£68,000 p.a.	£70,000 p.a.
Standard rate	17.5% ^c	17.5%
Reduced rate	5%	5%
Excise duties		
Beer (pint at 3.9% abv)	36p ^d	38p ^d
Wine (75cl bottle at 12% abv)	161p ^d	169p ^d
Spirits (70cl bottle at 40% abv)	633p ^d	666p ^d
20 cigarettes: specific duty	229p ^d	235p ^d
<i>ad valorem</i> (24% of retail price)	131p ^d	135p ^d
Ultra-low-sulphur petrol (litre)	56p ^e	59p
Ultra-low-sulphur diesel (litre)	56p ^e	59p
	<i>Continues</i>	<i>Continues</i>

Continued

	2009–10 level	2010–11 level ^a
Air passenger duty		
Band A (up to 2,000 miles):	economy club/first class	£11 ^f £11 ^g
Band B (2,001–4,000 miles):	economy club/first class	£22 ^f £22 ^g
Band C (4,001–6,000 miles):	economy club/first class	£45 ^f £45 ^g
Band D (6,001 or more miles):	economy club/first class	£90 ^f £90 ^g
		£50 ^f £50 ^g
		£100 ^f £100 ^g
		£55 ^f £55 ^g
		£110 ^f £110 ^g
Betting and gaming duty		
Gross profits tax		15–50%
Spread betting rate:	financial bets	3%
	other bets	10%
Insurance premium tax		
Standard rate		5%
Higher rate (for insurance sold accompanying certain goods and services)		17.5%
Stamp duty		
Land and buildings:		
residential threshold		£125,000 ^h
non-residential threshold		£125,000
rate: up to threshold		£150,000
threshold–£250,000		0%
£250,000–£500,000		0%
above £500,000		1%
		3%
		4%
Stocks and shares: rate		0.5%
		0.5%
Vehicle excise duty		
Graduated system (for new cars from 1 March 2001)	£0–£405 p.a. ⁱ	£0–£435 p.a. ⁱ
Graduated system (first-year rate from April 2010)	Not applicable	£0–£950 p.a. ^j
Standard rate (for cars registered before March 2001)	£190 p.a.	£205 p.a.
Small-car rate (engines up to 1,549cc)	£125 p.a.	£125 p.a.
Heavy goods vehicles (varies according to vehicle type and weight)	£165–£1,850 p.a.	£170–£1,910 p.a.
Landfill tax		
Standard rate	£40 per tonne	£48 per tonne
Lower rate (inactive waste only)	£2.50 per tonne	£2.50 per tonne
Climate change levy		
Electricity	0.470p/kWh	0.470p/kWh
Natural gas	0.164p/kWh	0.164p/kWh
Coal	1.281p/kg	1.281p/kg
Liquefied petroleum gas	1.050p/kg	1.050p/kg
Business rates		
Rate applicable for low-value properties ^k in:	England	48.1%
	Scotland	40.7% ^l
	Wales	48.1%
		40.7% ^l
		48.9%
		40.9% ^l
Council tax		
Average rate band D council tax in England and Wales	£1,394	Councils to set
Income support / income-based jobseeker's allowance		
Single (aged 25 or over)	£64.30 p.w.	£65.45 p.w.
Couple (both aged 18 or over)	£100.95 p.w.	£102.75 p.w.
Basic state pension		
Single	£95.25 p.w.	£97.65 p.w.
Couple	£152.30 p.w.	£156.15 p.w.
Winter fuel payment: for those aged 60–79	£250	£200
for those aged 80 or over	£400	£300

Continues

Continues

Continued

	2009–10 level	2010–11 level ^a
Pension credit		
Guarantee credit for those aged 60 or over: single	£130.00 p.w.	£132.60 p.w.
couple	£198.45 p.w.	£202.40 p.w.
Savings credit for those aged 65 or over:		
threshold – single	£96.00 p.w.	£98.40 p.w.
threshold – couple	£153.40 p.w.	£157.25 p.w.
maximum – single	£20.40 p.w.	£20.52 p.w.
maximum – couple	£27.03 p.w.	£27.09 p.w.
withdrawal rate	40%	40%
Child benefit		
First child	£20.00 p.w.	£20.30 p.w.
Other children	£13.20 p.w.	£13.40 p.w.
Child tax credit		
Family element (doubled for first year of a child's life)	£545 p.a.	£545 p.a.
Child element	£2,235 p.a.	£2,300 p.a.
Disabled child element	£2,670 p.a.	£2,715 p.a.
Working tax credit		
Basic element	£1,890 p.a.	£1,920 p.a.
Couples and lone-parent element	£1,860 p.a.	£1,890 p.a.
30-hour element	£775 p.a.	£790 p.a.
Disabled worker element	£2,530 p.a.	£2,570 p.a.
Childcare element:		
maximum eligible cost for one child	£175.00 p.w.	£175.00 p.w.
maximum eligible cost for two or more children	£300.00 p.w.	£300.00 p.w.
proportion of eligible costs covered	80%	80%
Features common to child and working tax credits		
First threshold	£6,420 p.a.	£6,420 p.a.
First threshold if entitled to child tax credit only	£16,040 p.a.	£16,190 p.a.
First withdrawal rate	39%	39%
Second threshold	£50,000 p.a.	£50,000 p.a.
Second withdrawal rate	1 in 15	1 in 15
Maternity benefits		
Sure Start maternity grant	£500	£500
Statutory maternity pay: weeks 1–6	90% earnings	90% earnings
weeks 7–33	£123.06 p.w., or 90% earnings if lower	£124.88 p.w., or 90% earnings if lower
Maternity allowance	£123.06 p.w.	£124.88 p.w.

a. 2010–11 figures take pre-announced values where available and estimated results of standard indexation otherwise.

b. Offsetting tax credit available, which reduces marginal effective tax rates to 0%, 25% and 36.11%.

c. Until 31 December 2009, the rate was 15%.

d. Assumes RPI inflation of 3% in September 2010 as per the 2009 Pre-Budget Report. Assumes pre-tax price of cigarettes rises by RPI.

e. Prior to September 2009, the rate was 54p per litre.

f. Prior to November 2009, there were two distance bands: EU and non-EU. For EU destinations, the duties were £10 and £20 (for economy and club/first, respectively); for non-EU destinations, they were £40 and £80.

g. From November 2010, the economy (reduced) rates will be increased to £12, £60, £75 and £85. The club/first class rates will be £24, £120, £150 and £170.

h. £150,000 in designated disadvantaged areas. A £175,000 threshold applied from 3 September 2008 to 31 December 2009.

i. Highest rate applies only to cars registered on or after 23 March 2006. For cars registered before this date, the highest rates are £215 and £245 for 2009–10 and 2010–11 respectively.

j. Higher first-year rates apply only for cars with emissions of 166g/km or greater (band H and above).

k. Applies where rateable values are less than £21,500 in Greater London, £15,000 in the rest of England, £29,000 in Scotland and £5,000 in Wales. In 2009–10, a supplement of 0.4% is payable on higher-value properties, increasing to 0.7% in 2010–11.

l. Non-domestic property has been revalued; in order to ensure business rates revenues increase in line with inflation, the poundage rates have been reduced.

Sources: Various HM Treasury and HM Revenue and Customs press releases, March 2008, November 2008, April 2009 and December 2009; HM Treasury, *Pre-Budget Report 2009*, December 2009, http://www.hm-treasury.gov.uk/prebud_pbr09_repindex.htm; HM Treasury, *Budget 2009*, April 2009, http://www.hm-treasury.gov.uk/bud_bud09_index.htm; <http://www.hmrc.gov.uk>; http://www.hm-treasury.gov.uk/prebud_pbr09_index.htm; <http://www.dft.gov.uk/dvla/~media/pdf/leaflets/v149.ashx>; http://www.hm-treasury.gov.uk/d/pbr08_chapter7_159.pdf; http://www.2010.voa.gov.uk/rli/static/HelpPages/English/help/help022-about_the_business_rate_multiplier.html; <http://www.scotland.gov.uk/Topics/Government/local-government/17999/11199>; <http://www.communities.gov.uk/publications/corporate/statistics/counciltax200910>; <http://wales.gov.uk/docs/statistics/2009/090325sdr412009en.pdf?lang=en>.

For descriptions of the tax and benefit systems, see S. Adam and J. Browne, *A Survey of the UK Tax System*, IFS Briefing Note 9, 2009, <http://www.ifs.org.uk/bns/bn09.pdf> and P. Levell, R. May, C. O'Dea and D. Phillips, *A Survey of the UK Benefit System*, IFS Briefing Note 13, 2009, <http://www.ifs.org.uk/bns/bn13.pdf> respectively.

For a summary of the main tax measures introduced in each Budget and Pre-Budget Report since 1979, see http://www.ifs.org.uk/ff/budget_measures.xls.

For estimates of the effects of various illustrative tax changes on government revenues, see HM Treasury and HM Revenue & Customs, *Tax Ready Reckoner and Tax Reliefs*, December 2009, http://www.hm-treasury.gov.uk/d/pbr09_taxreadyreckoner.pdf.

Appendix C: Abbreviations

AA	attendance allowance
AEI	average earnings index
AME	annually managed expenditure
APD	air passenger duty
AWE	average weekly earnings
BBC	British Broadcasting Corporation
BSP	basic state pension
BT	British Telecom
CA	Carer's allowance
CB	child benefit
CBI	Confederation of British Industry
CCL	climate change levy
CES	constant elasticity of substitution
CGT	capital gains tax
CO ₂	carbon dioxide
CPI	consumer price inflation
CSR	Comprehensive Spending Review
CTB	council tax benefit
CTC	child tax credit
CTF	Child Trust Fund
DB	defined benefit
DC	defined contribution / District of Columbia
DCSF	Department for Children, Schools and Families
DECC	Department of Energy and Climate Change
DEFRA	Department for Environment, Food and Rural Affairs
DEL	departmental expenditure limit
DfT	Department for Transport
DLA	disability living allowance
DMO	Debt Management Office
DWP	Department for Work and Pensions
ECB	European Central Bank
EIS	elasticity of intertemporal substitution
EMA	education maintenance allowance
EPO	European Patent Office
ERM	exchange rate mechanism
ESA	employment and support allowance
ESRI	Economic and Social Research Institute
ETS	Emissions Trading Scheme
EU	European Union
FCP	Fiscal Consolidation Plan
FRS	Family Resources Survey
FSA	Financial Services Authority
GB	Green Budget
GDP	gross domestic product

GHG	greenhouse gas
GNI	gross national income
HB	housing benefit
HMRC	Her Majesty's Revenue and Customs
HMT	Her Majesty's Treasury
HP filter	Hodrick–Prescott filter
HRT	higher-rate threshold
IB	incapacity benefit
IFS	Institute for Fiscal Studies
IHT	inheritance tax
IMF	International Monetary Fund
IP	intellectual property
IPPR	Institute for Public Policy Research
IS	income support
ISA	Individual Savings Account
JPO	Japan Patent Office
JSA	Jobseeker's allowance
LEL	lower earnings limit
LFS	Labour Force Survey
LGV	light goods vehicle
LIBOR	London Interbank Offered Rate
MA	Massachusetts
METR	marginal effective tax rate
MIRAS	mortgage interest relief at source
MORI	Market and Opinion Research International
MOT	Ministry of Transport
MP	Member of Parliament
MPC	Monetary Policy Committee
MTIC	missing trader intra-community
NAO	National Audit Office
NAWRU	non-accelerating wage rate of unemployment
NBER	National Bureau of Economic Research
NHS	National Health Service
NI	National Insurance
NICs	National Insurance contributions
NIESR	National Institute of Economic and Social Research
NJ	New Jersey
NTS	National Travel Survey
OBR	Office for Budget Responsibility
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
OG	output gap
OLS	ordinary least squares
ONS	Office for National Statistics
PA	personal allowance
PAYE	Pay-As-You-Earn
PBR	Pre-Budget Report
PC	pension credit / public corporation
PEP	Personal Equity Plan

PESA	Public Expenditure Statistical Analyses
PFI	Private Finance Initiative
PLC	public limited company
PQ	Parliamentary Question
PSBR	public sector borrowing requirement
PSNB	public sector net borrowing
PSNI	public sector net investment
QE	quantitative easing
RAC	Royal Automobile Club
ROSSI	retail price index excluding rent, mortgage interest, council tax and housing depreciation
RPI	retail price index
S2P	state second pension
SERPS	State Earnings-Related Pension Scheme
SMEs	small and medium-sized enterprises
SMMT	Society of Motor Manufacturers and Traders
SOC	Standard Occupational Classification
SPA	state pension age
SPI	Survey of Personal Incomes
STRB	School Teachers' Review Body
TAXBEN	IFS tax and benefits model
TC	tax credit
TESSA	Tax-Exempt Special Savings Account
TFP	total factor productivity
TME	total managed expenditure
UEL	upper earnings limit
UK	United Kingdom
UKIPO	United Kingdom Intellectual Property Office
UN	United Nations
US	United States
USPTO	US Patent and Trademark Office
VAT	value added tax
VED	vehicle excise duty
WFP	winter fuel payment