A Illustrative Long-Term Fiscal Projections

The Government's budgetary decisions need to be consistent with sustainable public finances over the long term to ensure that they promote long-term economic growth and intergenerational equity. The illustrative long-term fiscal projections presented in this annex allow the Government to assess the sustainability of its fiscal policies, consistent with the requirements of the *Code for Fiscal Stability*. Based on particularly cautious assumptions, the projections show that:

- **given the projected profile for tax revenue and transfers, current public consumption can grow slightly faster than GDP growth in the long run while meeting the Government's golden rule;**
- **public sector net investment can grow close to the economy's growth rate over the projection period without jeopardising the sustainable investment rule. The net debt to GDP ratio is projected to remain below 40 per cent in the long run; and**
- **the Government is well placed to deal with potential future spending needs, for example due to the health needs of an ageing population.**

INTRODUCTION

A1 A key objective of the Government's fiscal policy framework is to secure sound public finances over the short and medium term. However, the Government must also ensure that its fiscal policy decisions are consistent with a sustainable long-term framework. Failure to do so would see financial burdens being shifted to future generations, with detrimental effects on long-term economic growth. It would also be inconsistent with the principles of fiscal management set out in the *Code for Fiscal Stability.*

Illustrative long-term projections

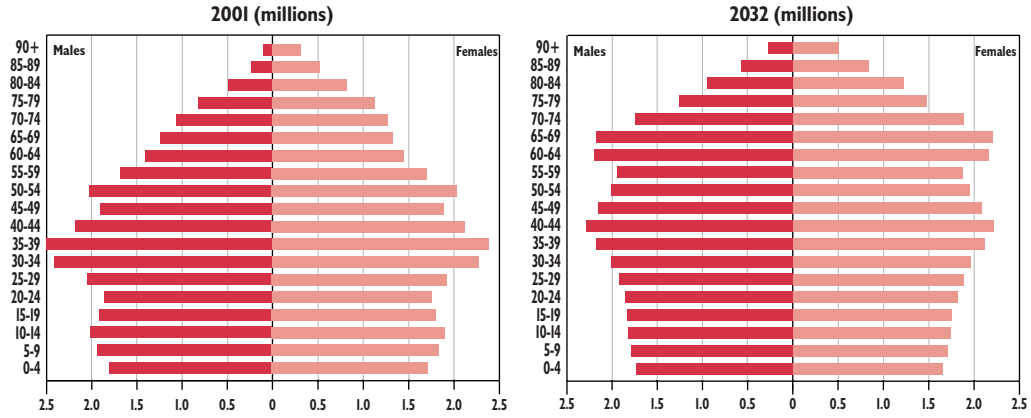
A2 The *Code* requires the Government to publish illustrative long-term projections covering a period of at least 10 years; in practice, a 30-year horizon has been adopted. The projections published in Budget 1999, 2000 and 2001 showed that the UK's long-term fiscal position was relatively favourable and that, as a result, current public consumption could grow at a faster rate than economic growth without jeopardising the Government's fiscal rules.

A3 The projections in this annex incorporate revised spending and revenue projections and provide an up-to-date assessment of the sustainability of UK fiscal policy. The underlying assumptions and the methodology used remain broadly unchanged from previous years.

DEMOGRAPHIC TRENDS

A4 As in most other European Union (EU) and Organisation for Economic Cooperation and Development (OECD) countries, an ageing population represents a challenge to the UK in the decades ahead. In March 2002, the Government Actuary's Department (GAD) published its latest set of population projections for the UK. The principal projections (first published in November 2001) show that, whereas only one in seven people in the UK were aged 65 or over in 1980, that share had risen to nearly one in six in 2001 and is predicted to rise to nearly one in five by 2020. Life expectancy at birth is expected to rise from 75.6 years in 2001 to 79.5 years in 2032 for males, and from 80.2 years to 83.7 years for females. The median age is projected to be nearly 44 years in 2032 – around six years higher than in 2001. Chart A1 shows the UK's age pyramid in 2001 and in 2032.

Chart A1: UK population by age and sex



Source: Government Actuary's Department, 2000-based principal population projections.

A5 The UK's population is, however, ageing less rapidly than the populations of most other EU Member States. According to the European Commission, for example, the UK's old-age dependency rate (the number of people aged 65 and over as a percentage of those aged 15 to 64) is set to rise from 24 per cent in 2000 to 37 per cent in 2030, compared with a projected rise from 24 per cent to 41 per cent over the same period in the EU as a whole[1].

A6 Nonetheless, while the UK faces a less severe demographic challenge than many other European countries, and the impact of an ageing population on the public finances is expected to be manageable, there is no room for complacency. Demographic developments will continue to have implications for government spending and revenue (for example, in the form of greater demand for health care and other services for the elderly), emphasising the importance of a sound long-term strategy for the public finances.

[1] *Budgetary challenges posed by ageing populations: the impact on public spending on pensions, health and long-term care for the elderly and possible indicators of the long-term sustainability of public finances*, EPC, 2001.

METHODOLOGY AND ASSUMPTIONS

A7 The Treasury's methodology for producing long-term fiscal projections examines the sustainability of the public finances by determining the rate at which current public consumption (current spending on items such as health and education) can grow while ensuring that the Government meets its fiscal rules. This is achieved by projecting the evolution of taxation and transfer payments (such as pensions) and capital consumption (depreciation) in the coming decades on the basis of prudent and cautious assumptions. Subtracting transfers and capital consumption from tax revenues indicates the financial resources available for current public consumption. This methodology is unchanged since Budget 1999 and was described in detail in Budget 2000[2].

A8 The taxation, transfers and capital consumption projections are based on existing policies and, unless explicitly stated otherwise, assume that the Government will leave these policies unchanged in the future. This does not imply that policy will in practice remain unchanged, but ensures that the projections give an indication of how the public finances are likely to develop on current policy settings.

Economic assumptions

A9 Table A1 sets out the key economic assumptions underlying the projections[3]. Given that the projections cover a period of 30 years, a range of assumptions could be considered plausible. The long-term economic assumptions remain unchanged from those underpinning previous long-term fiscal projections. The greater degree of uncertainty involved in projecting long-term trends is one reason for adopting particularly cautious assumptions for this exercise. As such it is assumed that annual real growth will average 2¼ per cent between 2007-08 and 2011-12 and 1¾ per cent between 2012-13 and 2031-32.

Table A1: Long-term economic assumptions for baseline projections

	Average annual real growth, per cent	
	2007–08 to 2011–12	2012–13 to 2031–32
Productivity	2	1¾
Employment	¼	0
GDP	2¼	1¾
Inflation	2½	2½

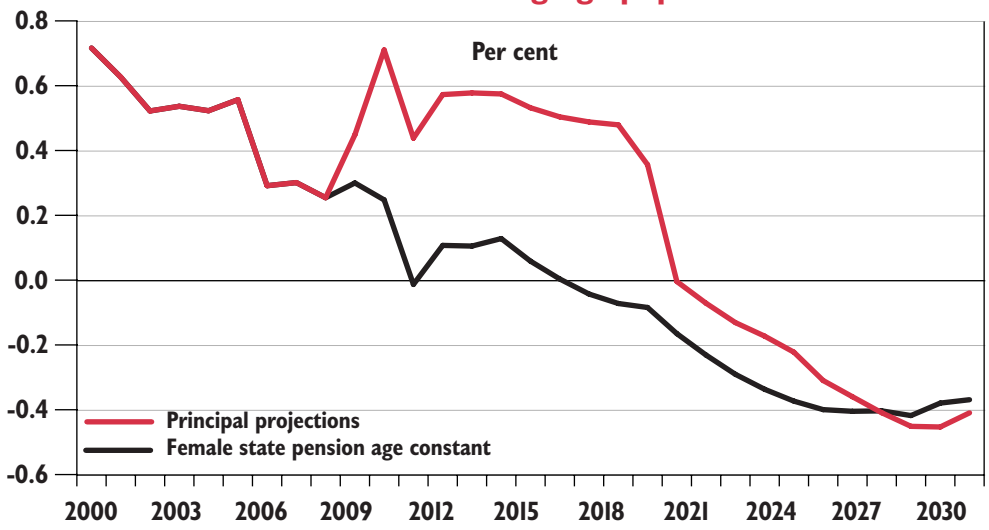
A10 While there is no indication that productivity growth will slow in the long run, and the Government is pursuing policies to improve the UK's productivity performance, the assumption of 1¾ per cent productivity growth a year from 2012-13 is motivated by the Government's prudent and cautious approach. Regarding population growth, the illustrative fiscal projections are based on GAD's principal projections for the population of working age. This is somewhat more cautious than the assumption used for the period 2002 to 2006, which is based on the mid-point of GAD's principal and high net migration projections.

[2] See Box A1 of Budget 2000 (page 129).

[3] For the period up to and including 2007-08, the projections and assumptions presented in Chapter C of the FSBR are used.

AII GAD's principal projections show the working-age population growing at an average annual rate of 0.34 per cent between 2007-08 and 2011-12 before stabilising at around 0.5 per cent up to 2020-21. Between 2021-22 and 2031-32 annual average growth is projected to be negative. As shown in Chart A2, the increase in the working-age population depends on the gradual rise in the state pension age for females from 60 years in 2010 to 65 years by 2020. The long-term fiscal projections assume zero employment growth after 2011-12. This is an approximation to this demographic profile assuming the employment rate is constant.

Chart A2: Growth in the working-age population



Source: Government Actuary's Department, 2000-based principal population projections.

Taxation and spending assumptions

AI2 For the period up to and including 2007–08, covering the five year plans for health announced in this Budget, the illustrative long-term fiscal projections are based on the forecasts and assumptions presented in Chapter C of the Financial statement and Budget Report (FSBR). Tax revenues are assumed to be equal to total current spending from 2007–08 onwards. This implies that the current budget is projected to be in balance, meeting the golden rule. From 2008–09, total current spending and tax revenues are assumed to grow in line with GDP. This approach is equivalent to saying that the Government will continue to raise the same amount of revenue as a proportion of GDP as in 2007–08, offsetting possible changes in tax bases by changing policy in a revenue neutral way.

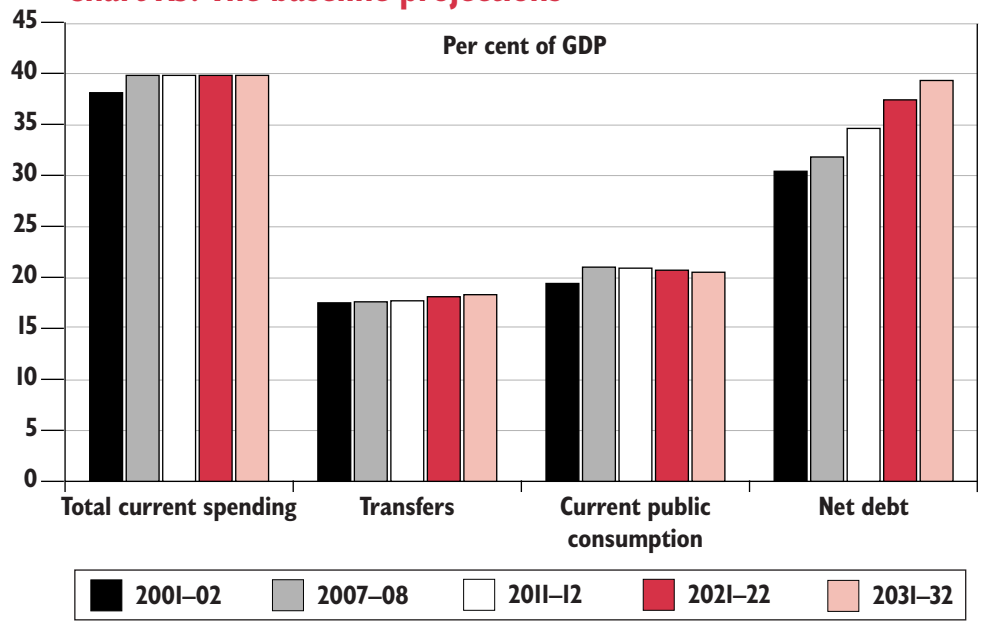
AI3 Current public consumption is calculated as the difference between receipts and other spending which comprises transfers and capital consumption. Transfers are made up of three separate components: social security transfers; interest payments; and other transfers. Social security transfers include state pensions and - for the first time - the long-term costs of the Pension Credit[4]. The calculation of interest payments requires assumptions about interest rates and the level of public sector debt. As in the medium-term forecasts, interest rates are based on market expectations and the existing spread of financial assets to which those rates apply. Under the assumption that the current budget is in balance, the growth of public sector debt simply reflects public sector net investment. The share of public sector net investment in GDP is assumed to be $2^{1}/_{4}$ per cent up to 2011-12 and then 1.8 per cent of GDP. This approach is consistent both with meeting the sustainable investment rule.

AI4 To calculate capital consumption, the Treasury uses the forward profile for investment that provides information on additions to the capital stock. The consumption of both the existing stock of assets and these new additions is then calculated on the assumption that future public sector asset lives are broadly similar to those evident in the past.

THE BASELINE PROJECTIONS

AI5 Chart A3 shows the projected evolution of total current spending, transfers, current public consumption and net debt between 2001-02 and 2031-32, given the baseline assumptions. As a percentage of GDP, total current spending is projected to increase between 2001-02 and 2007-08. Transfers and net debt are predicted to rise gradually over the projection period, with net debt rising towards 40 per cent of GDP by 2031-32, consistent with the sustainable investment rule. Current public consumption is projected to rise from 19.4 per cent of GDP in 2001-02 to 21.0 per cent in 2007–08, to remain stable until 2015–16 and to fall slightly towards the end of the projection period. Despite this, current public consumption as a percentage of GDP in 2031-32 will be higher than in 2001-02. This relative expansion reflects the fact that current public consumption can grow at a slightly faster average annual rate than GDP while still meeting the fiscal rules.

Chart A3: The baseline projections



[4] Calculated in conjunction with the Department for Work and Pensions. The social security transfer projections are based on the latest demographic projections by GAD.

AI6 With total current spending (by assumption) remaining constant as a percentage of GDP from 2008-09 onwards, the gradual decrease in current public consumption as a share of GDP from 2016-17 onwards is entirely due to the increasing trend for transfers as a proportion of GDP. This largely reflects an increase in debt interest payments as a share of GDP - which is itself due to a higher share of net debt in GDP. Compared with the long-term fiscal projections in Budget 2001, social security spending as a share of GDP is also slightly higher, reflecting the inclusion of the Pension Credit. With the underlying assumptions remaining more or less unchanged, these illustrative projections produce a broadly similar picture to those presented in previous Budgets.

AI7 The projected changes in net debt mainly reflect the higher ratio of public investment to GDP up to 2011–12. This emphasises the importance of ensuring sound public finances in the short term to prepare for future developments. On current projections, net debt will rise gradually to reach 39.3 per cent of GDP in 2031-32 given the baseline growth and investment assumptions.

External studies

AI8 The general conclusion of the baseline projections has been supported by various external studies. Generational accounts provide one of the most sophisticated methods of analysing long-term fiscal sustainability. Following independent research, backed by the National Institute of Economic and Social Research (NIESR), the first set of generational accounts for the UK were published in 2000[5]. The results, based on policies in place or legislated for at the time of the study (1998), indicated that the UK faced only a modest generational imbalance and that the public finances were sustainable in the long run. This conclusion compared favourably with those reached for other countries, many of which were found to face marked imbalances[6].

AI9 The NIESR has updated the UK's generational accounts to include subsequent policy changes, such as the Pension Credit, and revised demographic assumptions. Taking into account all policy changes prior to Budget 2002, the updated accounts confirm the 1998 finding that the UK's public finances are broadly sustainable in the long term. The 2002 accounts also show that present policy is largely generationally neutral in the sense that current generations are not favoured over future generations in terms of net lifetime tax transfers with the Government.

ALTERNATIVE SCENARIO

A20 This section analyses the sensitivity of the projections to higher productivity growth[7]. All other assumptions are unchanged. As mentioned above, the productivity assumption in the baseline scenario is particularly cautious. Increasing the sustainable rate of UK productivity growth, and closing the productivity gap that exists between the UK and its main competitors, is central to the Government's economic strategy. Chapter 3 describes the measures the Government is introducing to support the drivers of productivity growth in the UK. The alternative scenario presented here assumes productivity growth of $2^{1}/_{4}$ per cent a year from 2007-08 onwards – a quarter of a percentage point higher than the baseline scenario between 2007-08 and 2011-12, and half a percentage point higher than the baseline scenario between 2012-13 and 2031-32.

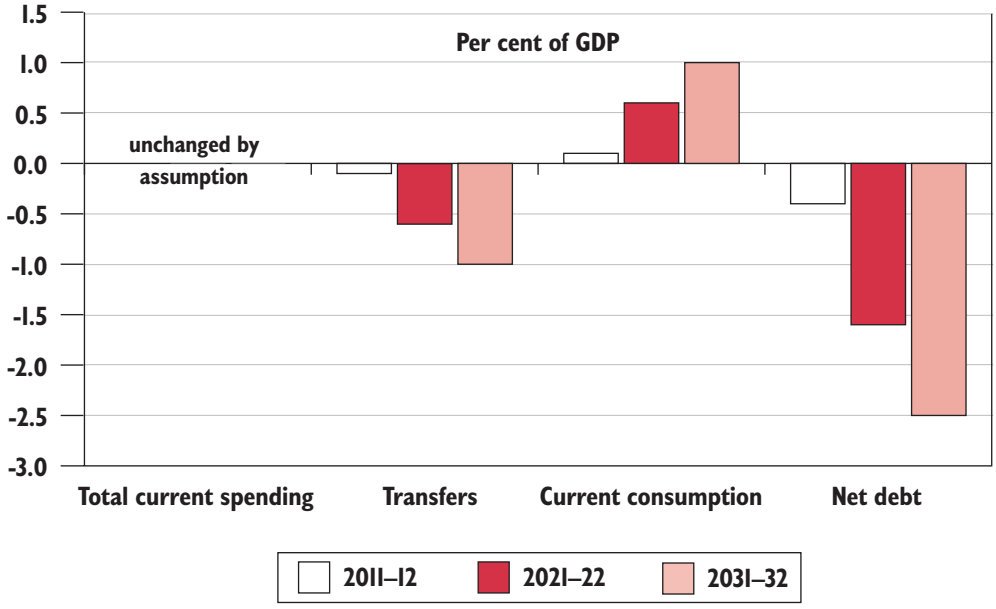
[5] *Generational Accounting in the UK*, by Roberto Cardarelli, James Sefton and Laurence J. Kotlikoff, The Economic Journal, 2000.

[6] *Generational Accounting Around the World*, edited by Alan Auerbach, Laurence Kotlikoff and Willi Leibfritz, 1999.

[7] Alternative scenarios presented in previous Budgets have studied the effects of assuming stronger economic growth and higher public investment, a higher labour market participation rate and lower social transfers.

A21 The alternative projections show, not surprisingly, that faster productivity growth would have significant beneficial consequences for the public finances. Instead of rising by 1.1 percentage points from 19.4 per cent in 2001-02 to 20.5 per cent in 2031–32, the share of current public consumption in GDP could rise by 2.1 percentage points to 21.5 per cent. This means that the average annual growth rate of current public consumption can be markedly higher than the underlying real GDP growth rate. This is mainly due to the fact that the share of social security transfers in GDP falls relative to the baseline projections, but also because the share of debt interest payments rises less rapidly. Chart A4 shows the differences between the baseline and alternative projections.

Chart A4: Differences between baseline and alternative projections



CONCLUSIONS

A22 The long-term fiscal projections presented in this annex show that the UK's public finances are broadly sustainable over the long term, confirming earlier findings. Consistent with meeting the golden rule, current public consumption can grow slightly faster than GDP in the baseline projections, providing the resources to meet potential future spending needs – for example, to meet the health care needs of an ageing population. The alternative projections show that stronger productivity growth would increase this margin further. Furthermore, public sector net investment can grow more or less in line with the economy without jeopardising the sustainable investment rule. Net debt is projected to remain below 40 per cent of GDP in the long run.

A23 Despite this relatively favourable position, there is no room for complacency. Notwithstanding the use of prudent and cautious assumptions, a wide range of unforeseen developments and spending pressures could arise over the projection period. The Government will therefore continue to publish and evaluate long-term fiscal projections to ensure that all fiscal policy decisions are set firmly within a sustainable long-term framework and take account of the latest demographic and economic projections.