

## TRANSPARENT FRAMEWORKS, FISCAL RULES AND POLICY-MAKING UNDER UNCERTAINTY

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### 1. Introduction

1. Over the past 30 years increasingly rapid flows of information have radically altered the power and role of the state. The ability of governments to influence their economies directly has gradually diminished. Electorates have become more sophisticated and better informed; labour markets have become more atomised; financial markets are more open and integrated and exert increasing power across national boundaries; and ever closer relationships between European States and among the G7 countries, for example, have strengthened fiscal surveillance and peer pressure. All these factors have contrived to limit the scope and impact of national fiscal policies.

2. Furthermore, fiscal policy itself failed more often than not to deliver stability. This undermined belief in the power of the authorities to deliver desirable macro outcomes. It is true that the task of fiscal policy was complicated by exogenous shocks, such as the oil crises in the 1970s, and persistent trends like the increase in social security spending through the 1980s. And monetary policy has been at least as much to blame. Nonetheless there have been clear episodes – at least in the UK – when the operation of fiscal policy has been a destabilising rather than stabilising force.

3. During this period developments in economic thinking also contributed to a gradual change of approach – shifting away from activist or interventionist fiscal policies at the macro level. In the macroeconomic context, academic attention has for the most part focused on monetary policy. This has been associated with many worthwhile policy changes, most notably the focus on credibility and the move towards independent central banks and greater transparency. There are parallel gains to be made to fiscal policy, although to date the academic community has paid relatively little attention to this.

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\* HM Treasury – United Kingdom. The views expressed in this paper are those of the author and do not necessarily represent those of HM Treasury.

4. In a dynamic and information hungry society transparency can promote a better understanding of policy and greater fiscal discipline, particularly when combined with well-defined fiscal rules and mature and respected institutions. This paper explores how a more transparent macroeconomic framework in the UK has helped put policy on a sounder footing. In a wider context, the recent IMF Code for Fiscal Transparency should similarly help improve the conduct of policy in other countries.

5. Although transparency appears to be a necessary condition for a successful fiscal policy it is unlikely to be sufficient, at least in the first instance. In particular, fiscal rules can play an important additional role. The paper describes the way in which fiscal rules have operated within a transparent framework in the UK since 1997 to produce better outcomes than experienced in previous decades.

6. Fiscal policy – perhaps in contrast to monetary policy – is a complex and multi-faceted business. The practical realities of fiscal policy-making are much more complicated than is typically portrayed in macro textbooks. All fiscal policy-makers face a number of potentially conflicting pressures beyond the decision to set the balance between spending and receipts or the short-term fiscal stance. For example, there will be a need to ensure that:

- public spending plans and the services they deliver meet the needs and expectations of the electorate;
- the tax burden remains low and the right incentives are in place to encourage work, enterprise and savings;
- ambitions for redistribution are met; and that
- policy is sustainable over the longer term and that the Government remains solvent.

7. In the UK the control of fiscal policy (including tax and spending policy) rests largely in the hands of the Chancellor and the Treasury. The *ex ante* decision in setting the balance between spending and taxation is thus relatively unencumbered by the need to take account of balances between regions or departments. The legal and parliamentary processes are also relatively straightforward and well understood. In this respect the institutional framework is sound and supports the policy-making process.

8. General uncertainty about the state and direction of the economy is an important influence on the way in which decisions are made. Even where a high degree of control is exerted from the centre, there remains a measure of manoeuvre in practice. Data and other lags from administrative,

implementation, legal or other factors often mean that little is known about the consequences of policy actions until some time after the event. Forecasting errors can be large but are not often analysed. The paper looks at the issue of uncertainty in the context of policy-making where the objectives of fiscal policy are clear and explores the trade-offs that must be made when making fiscal decisions.

9. In the light of these circumstances it is perhaps not surprising that many Governments have failed to manage fiscal policy well. The paper argues for there is a need for a cautious approach to policy-making and that a transparent macroeconomic framework underpinned by clear fiscal rules can play an important role in clarifying the purpose and conduct of fiscal policy and in producing more successful outcomes than in the past.

## **2. Lessons of the past**

### *Macroeconomic instability*

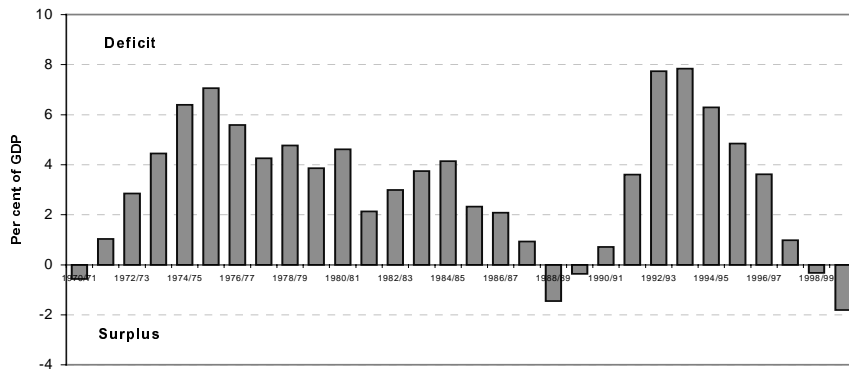
10. The primary objective of macroeconomic policy, and thus fiscal policy, should always be economic stability. Economic stability provides suitable conditions for the achievement of the high levels of growth and employment that governments and electorates desire. For this reason the new macroeconomic framework that has been put in place in the UK since 1997 has been geared towards delivering economic stability.

11. Until recently, however, the UK's macroeconomic experience was one of instability. Charts 1 and 2 show the volatile paths for the overall fiscal deficit, public debt and net worth that the UK experienced from the 1970s on. There were periods of substantial deficit, rapid build-up of debt and decline in net worth. Similar volatile patterns can be found for growth and inflation. This instability frequently translated into the uncomfortable policy choices.

12. Between 1979 and 1996 the overall deficit averaged 3 per cent of GDP. Moreover, as Chart 3 shows, there was a substantial decline in public sector net investment, from around 6 per cent of GDP to less than 1 per cent. Part of this change reflects the impact of privatisation but the general picture holds if adjustment is made for this factor. Compared with other G7 countries over this period the UK had a more volatile economy, invested less and grew more slowly (and had higher inflation).

**Chart 1**

**Public sector net borrowing, 1970-1999**  
*(per cent of GDP)<sup>1</sup>*



<sup>1</sup>Excluding windfall tax and associated spending.

**Chart 2**

**Public sector net debt and net worth**  
*(per cent of GDP)*

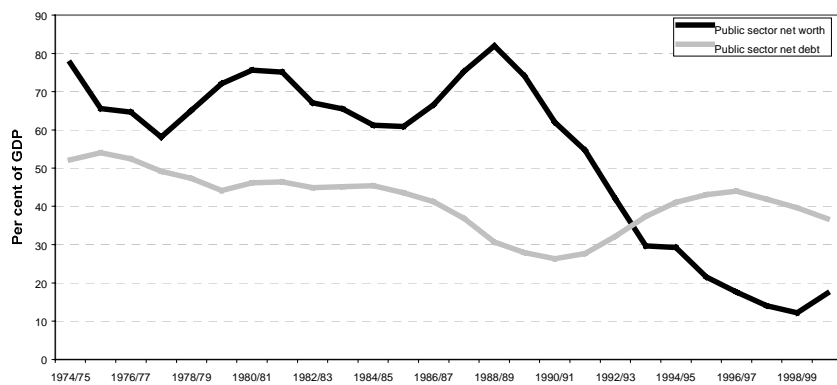
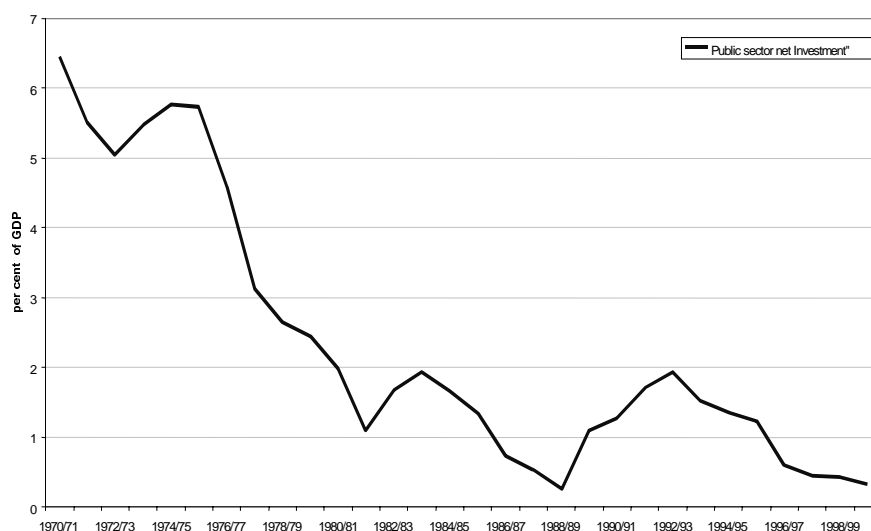


Chart 3

## Public sector net Investment

*Imprecise objectives*

13. Looking back, one of the lessons of this period has been the need to identify – and stick to – clear objectives. Too often in the past the purpose and precise objectives of fiscal policy were left unspecified or vague, allowing policy-makers an inappropriate degree of discretion. Policy could thus be changed in the light of circumstances, both economic and political, but without great risk of being called to account, at least in the short-term.

*Poor coordination of policy*

14. A notably serious failing during this time was improper coordination of fiscal and monetary policy. This seems paradoxical, given that the decision to set both the fiscal stance and the interest rate rested in the hands of one person, the Chancellor of the Exchequer. But as Table 1 shows, more often than not short-term interest rates were cut within a few days of the announced Budget package. Between 1979 and 1996, interest rates were cut on 14 such occasions, and raised in only 2.

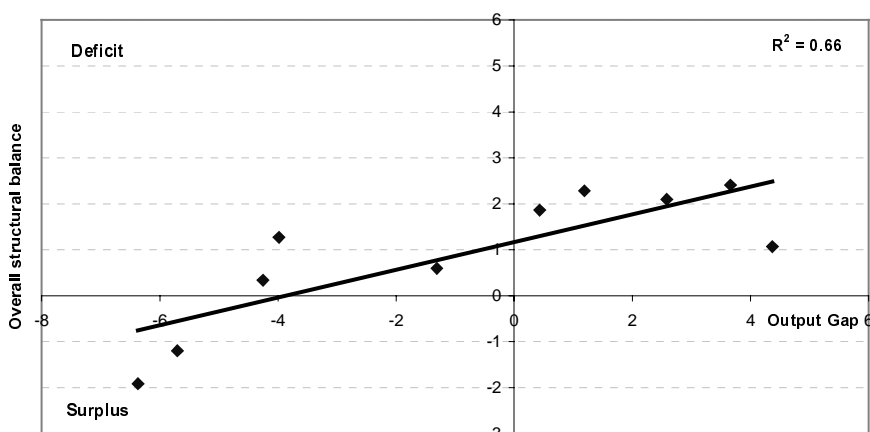
Table 1

## Post Budget Interest rate changes

Budget date	Interest rate movements	
	Rate change	Decision
12 June 1979	15 June	up 2 pps
26 March 1980		
10 March 1981	11 March	Down 2 pps
9 March 1982	12 March	Down ½ pp
15 March 1983	15 March	Down ½ pp
13 March 1984	7 March	Down ¼ pp
	15 March	Down ¼ pp
19 March 1985	20 March	Down ½ pp
	29 March	Down ½ pp
18 March 1986	19 March	Down 1 pp
17 March 1987	10 March	Down ½ pp
	19 March	Down ½ pp
15 March 1988	17 March	Down ½ pp
14 March 1989		
20 March 1990		
19 March 1991	22 March	Down ½ pp
10 March 1992		
16 March 1993		
30 November 1993	23 November	Down ½ pp
29 November 1994	7 December	up ½ pp
28 November 1995	13 December	Down ¼ pp
26 November 1996		

15. It also appears that the stance of fiscal policy did not work fully in the interests of stability. For example, during the 1980s and early 1990s the underlying stance of policy seems to have been relatively tight when the economy was weak and loose when the economy was overheating, as Chart 4 indicates.

**Chart 4**  
**Overall Structural Balance and the Cycle, 1981-82 to 1990-91**



#### *Cyclical effects*

16. Care was also needed in taking account of the effects of the economic cycle on the public finances. A particularly instructive episode occurred between 1986 and 1996. During this economic cycle output is estimated to have ranged from some 4 per cent above trend in the late 1980s to a similar amount below trend in the recession of the early 1990s. The overall fiscal balance also fluctuated significantly, from a surplus of just over 1 per cent at the peak in 1988 to a deficit approaching 8 per cent of GDP by 1993.

17. When the fiscal position moved into surplus (1988-89) after a long period in deficit there was a belief that the economy's potential had increased - there were few visible signs of inflation for example - and that the economy would remain strong and the surplus would last. Commentators and politicians began to talk of 'supply-side' miracles and even in terms of 'repaying the national debt', and policy was loosened.

18. The underlying position was not so rosy however. Potential output had not risen as far as people thought. And when it became clear output was well above potential it was too late: inflation accelerated, policy was tightened and the economy went into reverse.

19. One lesson to be drawn from this episode is the importance of trying to take the impact of the economic cycle on the public finances into account. Such estimates are necessarily imprecise but it is far better to make some attempt to adjust for the cycle than none at all.

20. Had such an attempt been made an unwarranted loosening of fiscal policy at the top of the cycle might not have occurred. In retrospect, the output gap was strongly positive by the late 1980s and implied a large component of the fiscal surplus was due to cyclical, and thus temporary, rather than structural factors. Estimates now show that rather than being in surplus the underlying fiscal position was one of deficit of the order of 1 per cent of GDP. The loosening of policy merely acted to compound the difficulties of an overheating economy and forced a greater retrenchment subsequently than otherwise necessary.

#### *Trend growth*

21. A further dimension to this experience concerned the assessment of trend growth, rather than the position of the economy in relation to trend. Trend growth was thought to have increased substantially. In fact, throughout the 1980s the economy had confounded the critics and recovered strongly with little evidence of inflation.

22. Published estimates of the medium-term growth path set out in successive Budget reports were thus moved up from an average of 2¼ per cent annual growth (over 4-5 years ahead) in the early part of the period to 3 per cent by 1989. Based on an assumption of a medium-term growth path of 3 per cent the fiscal projections were duly flattered, making tax cuts seemingly viable and consistent with a stable fiscal and debt position. It was not long however before it became clear trend growth had been significantly overestimated and had to be revised down.

#### *Consequences for public spending*

23. By creating uncertainty, mistakes over medium term assumptions also carried important consequences for public spending settings. In parallel with the often short-term and expedient approach to fiscal policy a ritual of bid, counterbid, escalation and deadlock characterised much of spending policy during this time. Annual jousting between spending departments and the Treasury would typically continue until time ran out



and a special council of Ministers (eg Star Chamber) or even the Prime Minister was required to declare in favour of Department X or Y.

24. In effect the planning horizon was a year ahead. This led to inefficiencies of various kinds; including, for example, poor value for money spending at year-end under a ‘use it or lose it’ mentality. While indicative plans were set for years 2 and 3, little attention was paid to them, not least because the economic and fiscal projections on which they were based constantly changed. Institutional short-termism prevailed and investment in particular suffered as a result.

#### *Some conclusions*

25. Some broad conclusions and lessons may be drawn from the experiences of this period. In particular, fiscal policy should benefit from:

- clear principles and targets;
- transparency and accountability;
- well-defined roles and responsibilities among the key actors;
- adequate mutual support between fiscal and monetary policy in promoting stability;
- caution against over-optimistic and insufficiently forward-looking assessments;
- taking account of the effects of the cycle on the public finances;
- a more stable and long-term framework for public spending decisions; and
- fiscal (and monetary) decisions should always be made in the best interests of the economy.

### **3. Reforms to the framework**

#### *Learning the lessons of the past*

26. The design of the UK’s new macroeconomic framework has taken account of the lessons of the past. In addition, policy since 1997 has been set to restore the health of the public finances. The Government’s reforms have been based on sound principles and are supported by clear objectives and firm rules. By aiming to create a climate of low inflation and strong public finances not only is the basis for economic growth enhanced but it is

possible to take a much longer term view in plotting a course for public spending and, in particular, to create a firmer path for public investment.

27. Rather than leaving too much scope for policy to be decided on the basis of expediency, fiscal policy now operates under three significant types of constraint:

- first, there is greater **transparency and accountability**;
- second, **independent and transparent monetary policy**;
- third, there are firm **fiscal rules**.

28. In all this the need to restore and subsequently maintain the credibility of policy has been regarded as of paramount importance.

#### *Transparency and accountability*

29. Given the history of UK fiscal policy, and the fact that the public sector deficit was over 4 per cent of GDP in 1997, it was clear when the new Government entered office that considerable changes were necessary to achieve a greater degree of credibility in policy making.

30. The need for transparency and the advantages of policy credibility are well documented for monetary policy. Credibility and transparency are, however, just as important when it comes to setting fiscal policy. For this reason, a similar philosophy to that adopted for monetary policy was pursued in the case of fiscal policy.

#### *Legislative framework*

31. The Code for Fiscal Stability (HM Treasury (1998f)) was thus created to provide a basic structure for the framework and was given statutory backing in the Finance Act 1998. The Code strengthened the openness, transparency and accountability of fiscal policy, features that also characterised the framework for monetary policy following the introduction of the 1998 Bank of England Act. It also improved the quality of information given to the public, the lack of which in the past was an important factor behind policy mistakes.

32. Legislating to make the Code a formal requirement of this Government's fiscal policy and those of future governments was an important step forward. For good reason a number of details were left

outside the statute book. But what the legislation did do for the first time was formally require any government to:

- specify its principles of fiscal management and state the objectives of fiscal policy;
- set out key annual reporting requirements, in particular a consultative Pre-Budget Report, an Economic and Fiscal Strategy Report as well as the traditional Financial Statement and Budget Report, and a Debt Management Report (see box 1); and
- adopt best practice accounting standards.

33. The Code draws together and makes clear the framework within which fiscal policy must operate. It demonstrates the Government's commitment to well-based policy, helping to improve the time consistency of fiscal policy. In other words, it supports the idea that the optimal policy for the Government remains the same over time, helping to ensure that short-term expediency does not take precedence over long-term planning.

#### *Principles of fiscal management*

34. Five principles of fiscal management are at the heart of the framework:

- *transparency* in the setting of fiscal policy objectives, the implementation of fiscal policy and in the publication of the public accounts;
- *stability* in the fiscal policy making process and in the way fiscal policy impacts on the economy;
- *responsibility* in the management of public finances;
- *fairness*, including between generations; and
- *efficiency* in the design and implementation of fiscal policy and in managing both sides of the public sector balance sheet.

35. These principles help to make clear what policy-makers should have uppermost in their minds when setting policy.

#### *Roles and responsibilities*

36. An integral part of any successful management framework is a

**Box 1****KEY PROVISIONS OF THE CODE FOR FISCAL STABILITY**

*Under the Code, the Government undertakes a number of commitments. It must:*

- *conduct fiscal and debt management policy in accordance with a set of specific principles;*
- *state explicitly its fiscal policy objectives and operating rules, and justify any changes to them;*
- *operate debt management policy to achieve a specific primary objective;*
- *disclose, and quantify where possible, all decisions and circumstances which may have a material impact on the economic and fiscal outlook;*
- *ensure that best practice accounting methods are used to construct public accounts;*
- *publish a pre-Budget report to encourage debate on the proposals under consideration for the Budget;*
- *publish a Financial Statement and Budget Report to disclose the key Budget decisions and the short-term economic and fiscal outlook;*
- *publish an Economic and Fiscal Strategy Report outlining the Government's long-term goals, strategy for the future and how it is progressing in meeting its fiscal policy objectives;*
- *publish a specific range of information in its economic and fiscal projections, including estimates of the cyclically-adjusted fiscal position and long-term projections to assess the sustainability of policy;*
- *invite the National Audit Office to audit changes in the key assumptions and conventions underpinning the fiscal projections;*
- *produce a Debt Management Report outlining the Government's debt management plans;*
- *refer all reports issued under the Code to the House of Commons Treasury Select Committee;*
- *ensure that the public has full access to the reports issued under the Code.*

proper assignment of roles and responsibilities among the main actors. In the case of the Monetary Policy Committee (MPC), established in 1997, its job is to set interest rates to achieve the Government's inflation target. They are thus held to account for their performance in achieving low inflation.

37. Responsibility and accountability for fiscal policy is equally clear. The Chancellor has set clear targets against which commentators, the public and Parliament alike can assess performance. Furthermore, under the new public spending regime departments and their Ministers have been allocated funds over three years in return for agreed pledges to achieve a range of specific results (known as Public Service Agreements), all of which are published and subject to regular appraisal.

#### *Consensus*

38. Compared with the past there is a reasonable consensus over the broad parameters of what constitutes sensible fiscal policy, and perhaps even more agreement over what represents bad policy. Transparency helps to build up the constituency for stability-oriented policies and encourages people and businesses to plan for the long term, rather than basing decisions only on what makes sense in the short term. In this way it helps to allocate both public and private resources efficiently.

#### *Cyclical adjustment*

39. One aspect of the fiscal framework that builds on past experience is the view that prominence should be given to the underlying fiscal position through the use of cyclically-adjusted indicators. Estimates of structural fiscal balances were thus published for the first time by a UK Government in 1997.

40. There are uncertainties and differences of view over methodologies used for calculations of structural balances so it follows that a high degree of transparency is appropriate here too. The UK published a paper (HM Treasury (1999b)) explaining how the cyclically-adjusted estimates presented in Budget reports are constructed. It is thereby open to others to make their own calculations for the purposes of assessing the Government's plans and comparing them against the Government's view;

and for example major international organisations such as the IMF, OECD and European Commission do this.

#### *Automatic stabilisers*

41. Focusing on the cyclically-adjusted position also gives appropriate prominence to the automatic stabilisers and the role they play in smoothing the path of output by boosting aggregate demand when the economy is below trend and curbing demand when the economy is above trend. The strength of the automatic stabilisers will depend on particular characteristics of the taxation and spending regimes, for example the progressivity of taxes. But when considering the extent to which the fiscal policy framework is supporting monetary policy, the strength of the automatic stabilisers should be taken into account.

#### *Key assumptions*

42. Transparency over the key assumptions which form the basis of the fiscal projections is important. It allows commentators and others scope to assess the realism of the projections on which policy is based, and to explore variants. In the UK these assumptions are independently audited by the National Audit Office (NAO) who consider whether they are realistic and cautious. Their reports are presented to Parliament and form part of the Budget documentation (see, for example, NAO (2001)).

43. The Government also sets store in focusing on the longer term and avoiding the risk of short-term reversals in policy. Thus policy is assessed annually against longer-term developments, such as the consequences of the ageing of the population.

#### *Scrutiny and accountability*

44. The ability to conduct high quality scrutiny also depends on transparency in a different direction; namely on timely, accurate and relevant statistics and high quality accounting standards. The UK's track record on statistics is good and has been enhanced in a number of ways to allow a better assessment of the fiscal aggregates. Moreover, all relevant figures are presented in line with internationally accepted statistical definitions.

45. Accounting standards in the public sector are undergoing a process of change as the UK moves onto a resource and budgeting basis, as has occurred in New Zealand and Australia for example (HM Treasury (1999c)). They are thus becoming increasingly in line with best practice in the private sector.

46. Although it is still a little way off, developments are well under way to produce a set of Whole of Government Accounts by 2005-06. This will be the first time a full consolidated set of accounts for the government sector will be available in the UK. Consolidated accounts for central government are likely to be available in 2003-04 and will help improve the quality of public spending decisions in forthcoming Spending Reviews.

47. Published Budget and other reports such as the UK Convergence Programme (HM Treasury (2000d)) contain a considerable amount of information on the progress of and outlook for fiscal policy. The ability and willingness to assess performance in a transparent way – for example by including details of fiscal aggregates on a cyclically-adjusted basis and by providing long-term fiscal projections - is an important feature of sound policy. So too is a strong commitment to long-term goals and a willingness to make policy-adjustments (in either direction) so that policy remains on track.

### *Objectives*

48. Above all, there must be transparency over the objectives of policy. As set out in *Analysing UK Fiscal Policy* (HM Treasury (1999f)) the key objectives of the Government's fiscal policy are:

- over the *medium term*, to ensure sound public finances and that spending and taxation impact fairly both within and across generations. In practice, this requires that:
  - the Government meets its key taxation and spending priorities while avoiding an unsustainable and damaging rise in the burden of debt; and
  - those generations who benefit from public spending also meet, as far as possible, the costs of the services they consume;
- over the *short term*, to support monetary policy, by:
  - allowing the automatic stabilisers to play their role in smoothing the path of the economy in the face of variations in demand; and

- to provide further support to monetary policy through changes in the fiscal stance, where prudent and sensible.

49. The Government's specific fiscal rules provide the operational basis for achieving the medium term goals while the independent central bank conditions the scope of fiscal policy over the shorter term. We turn to these issues.

*Independent and transparent monetary policy*

50. Proper coordination of fiscal and monetary policy is an important feature of the new macroeconomic framework. A high degree of transparency, as well as clear roles and responsibilities for all parties, ensures that the monetary policy authority is aware of fiscal policy objectives and performance, including performance against those objectives.

51. Monetary policy and fiscal policy each have the same aim of underpinning long-term growth through economic stability so it is appropriate for policy to be properly coordinated. Clearly defined objectives and transparent procedures enhance this. The MPC and the Government are each aware of what the other is trying to achieve. The arrangements allow the Treasury (non-voting) representative to participate fully in MPC deliberations, for example helping to provide MPC members with a good understanding of tax and spending developments during the year. In this way the main players are able to become aware of the likely reaction to each other's policy decisions.

52. Awareness of the policy reaction function by key players is one aspect of the system. However, the transparency and independence of the monetary policy framework imposes a particularly important discipline on fiscal policy. Its real impact in this context comes through the risk that interest rates are raised in reaction to fiscal policy, and through comments on the policy setting in the published minutes of the MPC meetings and the Inflation Report. In effect, these provide a high profile judgement on the Budget and other aspects of fiscal policy, which need to be taken into account by the fiscal policy-maker if credibility is to be maintained.

53. There can be no clearer contrast with the past. The present arrangements provide a credible threat of an interest rate rise in the event of inappropriate fiscal policy. This constrains budgetary policy in a more



time consistent way than previously where a Chancellor remained free to choose the option of declaring his economic policy, and the Budget in particular, a success and worthy of an interest rate cut.

### *Fiscal rules*

54. A transparent macroeconomic framework along these lines goes a long way in holding policy to a more reasonable set of outcomes. Nonetheless, in the context of a new framework, which takes time to be fully understood, a simple guide to the operation of policy is also necessary. Hence the need for fiscal rules.

55. Ideally, such rules should be realistic and relevant, capable of being understood by all, as well as being measurable and achievable. They should also be applied consistently. Different rules might share these characteristics but it is unlikely that universal rules exist. For this reason it was decided not to incorporate the specific fiscal rules within the UK legislation.

56. Different rules should reflect, for example, the different circumstances countries face at any particular time. Nonetheless, for a group of countries such as those in the European Union a common set of fiscal rules may be appropriate provided the diversity of Member States' circumstances can be taken into account in the application of those rules.

57. A fiscal rule, or set of rules, is necessarily somewhat arbitrary. However, rules can serve as a guide to better behaviour and for this reason alone it is likely to make sense to introduce some rules. Once this has been done it is important for the credibility of policy to stick with them.

58. Two fiscal rules apply in the UK:

- *UK fiscal rules the golden rule*: over the economic cycle, the Government will borrow only to invest and not fund current spending; and
- *the sustainable investment rule*: public sector net debt as a proportion of GDP will be held over the economic cycle at a stable and prudent level.

59. The fiscal rules provide benchmarks against which the performance of fiscal policy can be judged. The Government will meet the golden rule if, on average over a complete economic cycle, the current budget is in

balance or surplus. The Government has also stated that, other things being equal, a modest reduction in public sector net debt to below 40 per cent of GDP over the economic cycle is desirable.

### *Rationale*

60. Economic theory sheds light on the UK's past experience and strengthens the rationale for stating explicit fiscal rules. The benefits of establishing a sound and stable fiscal framework will be maximised if the framework is credible - that is, if households and firms believe firmly that the Government will deliver its commitments.

61. If the policy framework lacks credibility, households and firms will continue to base their decisions on previous experience. Savings and investment decisions would continue to anticipate poor fiscal management and a return to volatile output, high inflation and low growth. The benefits of a new framework would thereby be delayed until the Government was able to establish a convincing track record of favourable policy outcomes.

62. Firm fiscal rules also modify the tendency for fiscal policy to deviate from sound economic principles to provide short-term gains to certain interest groups. Such tendencies often occur, not surprisingly, close to elections. Indeed, as Keech (1985) suggests, even if a fiscal rule is not optimal in a perfect world, it may well be the best economic response in a situation where the unconstrained political process produces outcomes that are even less desirable.

### *Flexibility: cycles and other shocks*

63. Rules, by their very nature, are intended to impose restrictions on behaviour. Fiscal rules can ensure that the public finances are managed prudently and are maintained within sensible boundaries so that Governments meet their spending commitments without jeopardising economic stability or running up an unfair bill for future generations.

64. It is important, however, that the chosen rules allow sufficient flexibility to react sensibly to economic developments. The right balance needs to be struck between a rigid mechanical approach and one based on unfettered discretion. In particular, there must be scope to accommodate

the impact of the economic cycle and room to act in the event of exceptional economic shocks.

65. Fiscal policy can help to stabilise the economy through the operation of the automatic stabilisers. These movements support monetary policy by dampening economic cycles without putting at risk the long-term sustainability of fiscal policy. It is essential that the chosen rules do not override this inbuilt capacity to respond to changing economic circumstances.

66. The chosen fiscal rules should also make room for sensible discretionary adjustments to fiscal policy. For example, in the first years of this Government's term of office fiscal policy was additionally tightened to support monetary policy and to restore the structural integrity of the public finances as quickly as possible.

67. Fiscal rules should similarly incorporate a measure of flexibility to accommodate exceptional shocks, not associated with the usual economic cycle. The Code for Fiscal Stability thus permits a Government to deviate from its fiscal rules in exceptional circumstances, such as wars or natural disasters for example. The Code requires the reason for any such change to be explained in public, with guidance on how policy will operate in the meantime and for how long (if known).

#### *Scope*

68. A further consideration is the ambit of the rules. Ideally, they should relate to the whole public sector, ie general, central and local government and public corporations. The liabilities of public corporations could fall ultimately on the taxpayer so it is appropriate that the fiscal rules extend beyond the general government sector. Moreover, if the rules were applied to these activities alone it could lead to perverse incentives to reclassify spending in an attempt to get around the fiscal rules.

#### *Golden rule*

69. The previous fiscal policy regime made no formal distinction between current and capital spending and concentrated on a cash aggregate, the public sector net cash requirement. A significant shortcoming of this approach was that it created a bias against capital

spending. It also gave misleading signals when public assets were sold off. Current and capital spending could be offset against each other, making capital projects - where returns appear only in the future - an easy target when it became necessary to tighten the overall fiscal policy stance. The bias against capital contributed to a considerable under-investment in public assets (HM Treasury (1998c)).

70. The golden rule draws a distinction between current and capital spending and is designed to remove the bias against capital spending. The rule also gives consideration to fairness, and in particular, fairness between generations. Government decisions on spending and revenue may have important implications across generations. For example, large-scale investments, such as roads, produce benefits not just at the beginning but over the whole of the investment's effective life, which may be in excess of 40 years. It is fair that those generations who benefit from this spending also meet some of the costs.

71. It is not practical, of course, to match the timing of the streams of costs and benefits for each and every spending proposal. But, in aggregate, the Government takes the view that current spending, which mainly provides benefits to existing taxpayers, should be paid for by the current generation of taxpayers. Similarly, because capital spending produces a stream of services over time, it is appropriate that this form of spending is financed initially through borrowing. As far as possible each generation should pay for the benefits of the public services that it consumes.

72. It follows naturally that the definitions of current and capital spending are important to the application of the rule. For the purpose of the fiscal rules, the Government considers the best measure of capital currently available is that used in the national accounts (Office of National Statistics (1998)).

73. Another key feature of the golden rule, as the Government has adopted it, is that it is defined over the economic cycle. As mentioned earlier this allows room for the automatic stabilisers to operate freely. This characteristic is shared with the sustainable investment rule.

#### *Sustainable investment rule*

74. The Government's motive for borrowing reflects considerations related to fairness between generations and factors related to the economic

cycle. Borrowing allows the government to spread the upfront costs associated with capital projects across generations, so that the costs and benefits are matched more evenly. Even in the absence of major catastrophes such as war, most countries have positive levels of public net debt. However, in many cases this is symptomatic of poor control of public spending rather than high investment.

75. As noted above, the golden rule allows governments to borrow for the purposes of investment. If left unconstrained, however, it is conceivable that borrowing could reach levels that are too high, notwithstanding the specific merits of the underlying investment. This possibility motivates the Government's sustainable investment rule, that net debt should be held at a stable and prudent level.

#### *Limits to public sector debt*

76. The concept of sustainability involves analysing the conditions required to stabilise public debt at a given proportion of GDP. On this basis, a fiscal policy is usually defined as sustainable if, given reasonable assumptions, the government can maintain its current policies indefinitely while continuing to meet its debt obligations.

77. If the real interest rate exceeds the real growth rate - as has been the case for most of the last two decades - a primary surplus is generally required to prevent the debt ratio from rising. The extent of this surplus depends on the size of the interest rate-growth gap and the target public debt to GDP ratio.

78. The risks that are faced by a country with high levels of public debt are well known and readily apparent from calculations of primary balances required to stabilise debt under different conditions. A seemingly sustainable fiscal policy can quickly become unsustainable when real interest rates outstrip growth. And the costs of fiscal policy becoming unsustainable are likely to be high. Indeed, the corrective action needed to avert a fiscal crisis or the debt servicing obligations created by rising debt can threaten economic and political stability. Therefore, a disciplined and prudent approach to fiscal policy is sensible.

79. A prudent fiscal policy can be defined as one that is likely to be sustainable even in the event of adverse shocks. Thus, a prudent fiscal policy is likely to lead governments to select a lower level of public debt.

80. It is important to avoid high levels of debt as well as unsustainable levels. Although there is no clear consensus on the optimal level of public debt, it is clear that high levels of public debt can limit the effectiveness of policy. For example, high levels of public debt can:

- *make the public finances more vulnerable to increases in interest rates and economic shocks*: at high levels of public debt a sustainable fiscal policy can quickly become unsustainable through adverse movements in interest rates and/or growth rates;
- erode the ability of fiscal policy to buffer the economy against major shocks: if debt is not maintained at low levels during favourable economic times, there will be reduced scope for supporting monetary policy and cushioning the economy when faced with unfavourable shocks;
- *lead to a higher risk premium in interest rates*: high public debt levels increase default risk which leads to greater risk premia, higher interest rates and potentially 'crowding out' effects;
- *lead to a low level of Government services per unit of tax collected, lower levels of economic welfare and higher levels of structural unemployment*: high debt levels imply high levels of debt servicing - resources that would otherwise be available for spending programmes or to be distributed as tax cuts.
- *threaten intergenerational fairness* : high initial levels of debt can put such intergenerational equity at risk, especially where pensions systems are unfunded.

81. Even if fiscal policy is sustainable, the public debt ratio may not be at an optimal level. Some level of public debt is clearly justified. However, as noted above, high levels of public debt make the economy vulnerable to the need for large adjustments in fiscal policy with negative consequences for long-term growth and employment. This suggests that there may be a middle ground: a level of debt that represents an optimal trade-off between the need to undertake public investment (and funding this in an equitable way) and the economic costs associated with higher levels of public debt.

82. A small number of academic studies have tried to identify the optimal public debt ratio using empirical means. Three approaches may be noted:

- inferring the optimal debt ratio by observing debt/equity ratios prevailing in the private sector. The assumption implicit in this approach is that whatever the optimal debt ratio may be, the private

sector has solved this to its own satisfaction. Thus given the Government's estimated assets, one could argue that the optimal debt ratio for the UK may lie somewhere in the range of 30-50 per cent of GDP (based on private sector gearing ratios). However, given the differing risk characteristics of activities in the public sector the use of private sector benchmarks is questionable, and even more so when applied at an aggregate level.

- *inferring the optimal debt ratio from tests of dynamic efficiency.* This approach stems from economic theory and involves analysing differentials between investment and profit levels or, alternatively, economic growth rates and interest rates. One US study by Zee (1988) suggested that the optimal public debt level is less than 20 per cent of GDP, although the results are conditional on the parameters and assumptions made in the model.
- *estimation of the optimal public debt ratio using statistical techniques.* One study by Smyth and Hsing (1995) using US data suggested that economic growth is maximised when public debt levels are around 50 per cent of GDP. Robson and Scarth (1997) argue for a target of 20 per cent of GDP in the Canadian context. By contrast, another US study by Asilis (1994) suggested that the costs of being away from the optimal level are quite small: public debt levels need to rise substantially before serious damage to the economy will occur. More generally, it is important to note that the public debt that maximises growth need not correspond to that which maximises welfare.

83. The methods and assumptions underpinning each of these approaches are open to criticism; and the range of results illustrates the difficulty encountered in arriving at a precise answer to the optimal debt ratio question.

84. While it may not be possible to make definitive statements about optimal ratios of debt to GDP, it is possible to say that lower debt ratios allow more room for manoeuvre to redress shortfalls in public investment or to undertake tax reforms that might enhance potential output and employment. Lower debt thus conveys some advantages and over time may provide room for more flexibility in the interpretation of shorter term rules, such as overall budgetary balance.

*Conclusion*

85. The golden rule is particularly appropriate in the UK context, given a history of public sector underinvestment and run down of net worth. The sustainable investment rule ensures borrowing to finance investment is not excessive and remains consistent with fiscal policy sustainability. By setting the rules over the economic cycle appropriate scope is given to the operation of the automatic stabilisers. The choice of holding public net debt below 40 per cent of GDP (roughly equivalent to less than 50 per cent on the Maastricht definition) is somewhat arbitrary, though not unreasonable. It means that the public debt ratio is amongst the lowest in the EU and G7 and provides room to cope with unforeseen shocks.

**4. Uncertainty and caution**

86. In considering the operation of fiscal policy, and Budget decisions in particular, it is important to recognise the high degree of uncertainty that surrounds any fiscal judgement. As noted earlier, the costs of making faulty judgements can be severe. It is thus important to make every effort to meet a set of fiscal rules so as to achieve credibility. The strength of this commitment will be tested by the process through which judgements are made in trying to meet the rules.

*Credibility and caution*

87. In order to have a good chance of meeting the fiscal rules there is a need to guard against future uncertainties. If the costs of policy reversals are high, and if a set of fiscal rules should be met to generate credibility, it becomes all the more important to take a cautious approach.

88. But it is also the case that there are dangers in excessive caution, since that might imply a sub-optimal tax or spending path, or intergenerational imbalance, with associated welfare costs. A suitable balance therefore needs to be struck between credibility and caution on the one hand and efficiency, growth and fairness on the other.

89. If the sole aim of policy was to meet a particular fiscal rule, there is no reason in theory why it should not be possible to achieve a very high probability of doing so if the fiscal policy-maker is prepared to build in a



sufficiently large margin for error and does not mind systematically overachieving the rule.

90. However, while there are potential benefits from budget surpluses, such as lower risk premia, lower debt service costs and reduced vulnerability to shocks, there are also potential costs, arising for example from the distortionary effects of taxation, political costs associated with ignoring calls for tax cuts/more spending<sup>1</sup> and costs associated with possible distortions to intergenerational fairness.

91. This is shown conceptually in Chart 5. The first line shows the expected costs associated with failing to meet the rule. These decrease as the certainty of meeting the rule rises. The second line illustrates the implicit expected costs of overachievement. As the probability of success moves towards certainty the margin required to raise that probability – and hence the distortionary taxes needed – rises at a disproportionate rate. The cost functions are assumed to be non-linear because the cost of missing the rule is likely to depend increasingly on the amount by which the rule is missed, in both directions. The chart illustrates an assumed asymmetry in that the costs of missing the rule on the downside (risking credibility) are greater than those associated with overachieving the objective. A total cost curve can be found by summing the two cost functions. Assuming the aim is to minimise the total expected costs, a margin sufficient to raise the probability of meeting the rule consistent with the lowest point of the total cost curve is required.

92. It is conceivable that such a trade-off may change over time. For example, the costs of missing the rule may diminish as a fiscal framework becomes more established, and its credibility grows.

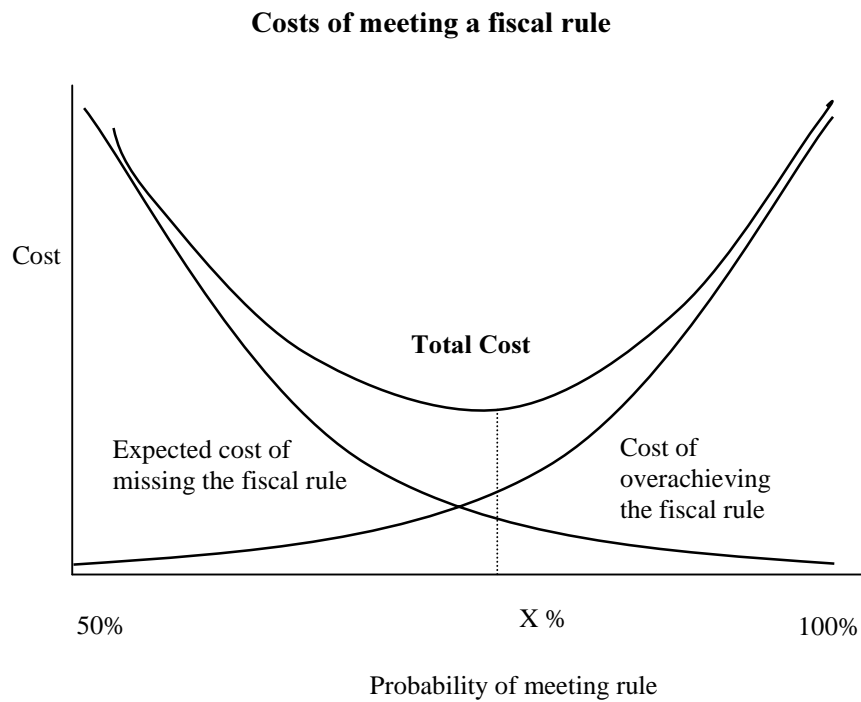
#### *Precautionary saving*

93. The problem facing a responsible government in trying to smooth taxes and/or spending in the face of future uncertainties is not dissimilar to that facing consumers who want to smooth the path of consumption/utility.

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<sup>1</sup> A recent study by the US General Accounting Office suggests that public support for fiscal discipline quickly dissipates when there is excess money at the end of the year, see “Budget Surpluses: Experiences of other nations and implications for the US” General Accounting Office (1999).

Chart 5



Being aware of the discomfort that unfavourable future shocks may bring consumers build up precautionary savings in an attempt to cover such risks. The greater the future uncertainties or the tighter the liquidity constraint faced by the consumer, the greater the degree of precautionary saving.

94. Governments in industrialised countries are unlikely to face problems of solvency; and they of course retain the power to tax. In this respect they face less severe constraints than many consumers. Nonetheless, the desire to be re-elected may operate in a similar way to a liquidity constraint. In particular, Governments in some instances may wish to insure themselves against the consequences of unexpected adverse shocks in the run-up to an election. Moreover, at the margin a less than cautious approach could force up risk premia on debt; while attempts to raise taxes may be counter-productive. A responsible approach to fiscal policy is thus likely to imply a certain degree of precautionary saving.

*Contrasts with monetary policy*

95. In the monetary policy context, outcomes above or below the inflation target are regarded as equally undesirable. The independent central bank is able to raise or lower interest rates, at frequent intervals if necessary, without fear of asymmetrical costs or penalties, provided inflation is already low. Policy can be conducted in a time consistent manner. In fiscal policy, however, the position is rather different.

96. Once a set of fiscal rules is in place it will generally be better for credibility to meet the rules by a small margin rather than to miss by an equivalent amount, particularly when the rules are new. The Government in effect faces a reputational cost function which is asymmetric. Its form might be thought of as  $\Phi(D) = \max \{0, \phi D\}$  where  $D$  is the accumulated deficit since the Government entered office, or when the rule was set.

97. An example is shown in Cart 6. This illustrates a quadratic reputational loss function of the form  $\Phi(D) = \phi D + \frac{1}{2}\psi D^2$ . Here reputational losses increase with the size of the deficit; and there is an increasing marginal cost associated with a large accumulated deficit (or surplus). Once in deficit, the Government faces reputational losses and to stem the flow would require a surplus to meet the rule. If surpluses are excessive, the Government also suffers a reputational loss, on the basis the fiscal rule(s) is significantly overachieved and the electorate are unimpressed by the failure to hand back the excess in the form of tax cuts or better public services. The Government thus prefers to achieve a modest surplus, and aims to be in the region AB (at  $-\phi/\psi$ ).

The government's reputational loss is:

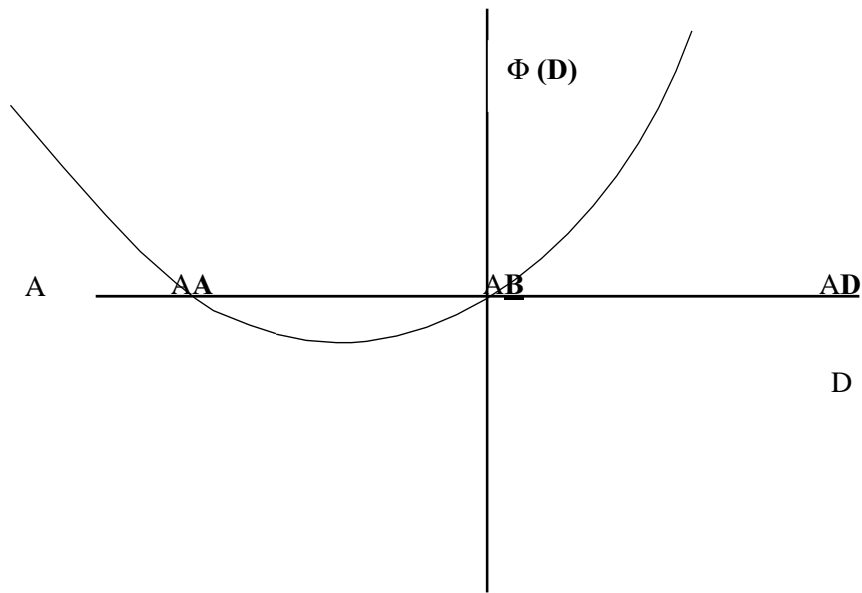
$$\Phi(D) = \phi D + \frac{1}{2} \psi D^2 \quad \text{where } \phi, \psi > 0$$

98. It is also generally much easier to reduce taxes than to raise them; and to increase spending rather than cut it. There are several reasons for this:

- political factors: governments face elections and the instruments of fiscal policy are powerful and tempting tools in the electoral armoury;
- administrative, legal, parliamentary and other lags make reversals of policy difficult to achieve;
- losers, ie current taxpayers or recipients of public spending, are likely to press for compensation whereas gainers (such as future taxpayers) will be less vociferous.

Chart 6

**The Government's reputational loss function**



99. Fiscal decisions in Budgets are normally conducted annually and this is a further reason why fiscal policy cannot operate like monetary policy. But it is also the case that the principle of tax (and spending) smoothing implies an asymmetric effect in the face of meeting a fiscal rule. The deadweight costs<sup>2</sup> of distortionary taxes are an increasing function of the tax rate so any requirement to raise taxes to meet a fiscal rule, eg at the end of a cycle or a Parliament, will be more costly than an equivalent reduction in taxes.

<sup>2</sup> A deadweight cost reflects the efficiency loss incurred when the imposition of non-lump sum taxes drives the economy away from its free market equilibrium.

100. For these reasons time inconsistency remains a problem in the fiscal policy context. The external constraints imposed by transparency and fiscal rules are an important and necessary counter-balancing force. But the principles of tax smoothing and gains from credibility can be enhanced by a cautious approach to policy.

#### *Time horizon*

101. The time horizon in the application of any fiscal rule is also relevant since it will determine the speed of adjustment to shocks. For example, if balance had to be achieved in each and every year, the Government would need to change its spending plans or tax rates on a frequent basis. The administrative costs of such a system - both to the Government and taxpayers - makes it highly impractical. More fundamentally, frequent tax rate changes could be destabilising, raise uncertainty and run counter to the principle of tax smoothing.

102. The UK approach moves in the direction of tax smoothing in a number of ways. First, allowance is made for transitory shocks related to the economic cycle. The time horizon is thus likely to be several years, though this is not precisely known. Second, capital and current budgets are treated separately. There is no strong reason why current taxpayers should finance capital investment in full so this potentially 'lumpy' constraint is effectively smoothed out, subject to a debt ratio criterion.

103. In principle, the time horizon might be stretched even more, leaving only a fiscal sustainability constraint in place (in addition to the constraint deriving from an independent monetary authority). However, it is not clear that fiscal discipline is sufficiently entrenched or credible to make this feasible.

#### *Forecast errors*

104. While a Budget is an annual event, and taxes and spending can in principle be adjusted each year, frequent and unpredictable adjustments to taxes and public expenditure are far from ideal. The effects of fiscal measures take time to work through, and are sometimes set to change only some years ahead. Moreover, it is often not clear what impact a Budget has had by the time of the subsequent Budget.

105. Fine tuning of fiscal policy is rarely feasible or sensible. It is therefore appropriate to try to plan as smooth a path for taxes and spending as possible. Given this aim – and consistent with the principle of stability – a medium-term approach is necessary.

106. The emphasis on the medium term puts a great deal of weight on forecasts. The fiscal projections are a crucial component in deciding which Budget options for tax or spending appear feasible. But forecasts are fallible, so care needs to be taken in assessing the risks involved.

107. These risks may be thought of as deriving from two sources: mis-specification of general economic conditions, notably GDP, and more specific fiscal risks, such as sudden shortfalls in taxes or overspends unrelated to cyclical factors. In the UK, fiscal projections have suffered from both sources of error. Charts 7 and 8 show successive projections of GDP and borrowing against outcomes illustrate some of the problems.

108. It is instructive to look back at the size and sources of forecast errors in the context of forecasts on the basis of which fiscal judgements were made. For this purpose, we have looked at the period from 1986 to 1996, which comprised a full economic cycle. It is difficult to make an assessment earlier than this; and we have only limited information on forecast errors since the new macroeconomic framework was put in place.

109. Table 2 sets out average one year ahead forecast errors for public sector net borrowing (PSNB) for the period 1986-87 to 1996-97. It distinguishes between actual errors and absolute errors, ie errors where the signs are ignored. The errors refer to outturn less forecast; and the one year ahead period relates to the immediate year, eg the one year ahead forecast error for the March 1986 Budget refers to the outturn and forecast for the fiscal year 1986-87. The table also shows the errors which occurred from factors other than from GDP forecast errors, for convenience described as ‘fiscal’ errors. An unexpected shortfall in underlying income tax receipts would be an example of such an error.

110. Over this period, the average error in forecasts of borrowing amounted to 0.1 per cent of GDP. One year ahead forecasts of borrowing were thus slightly optimistic on average. However, this hides considerable variation: the average absolute error was more than 1 per cent of GDP, a large error just one year ahead.

Chart 7

Successive illustrative projections of real GDP

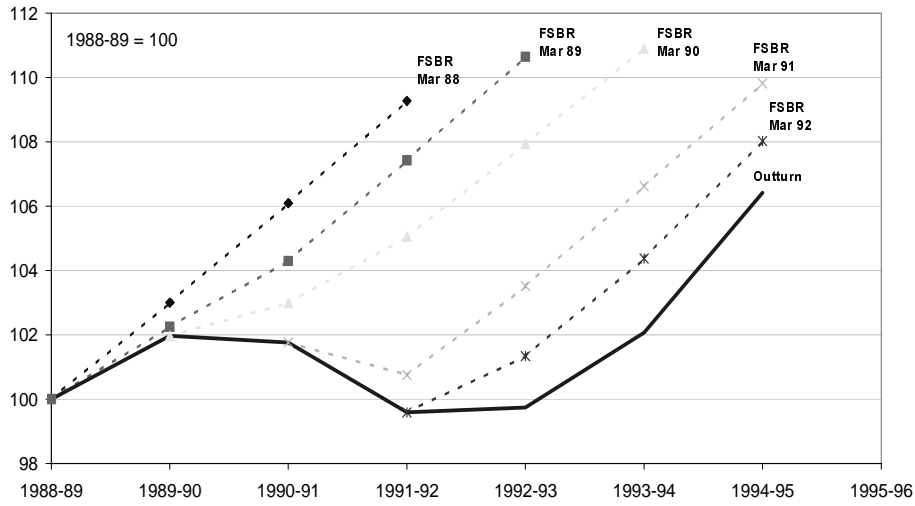
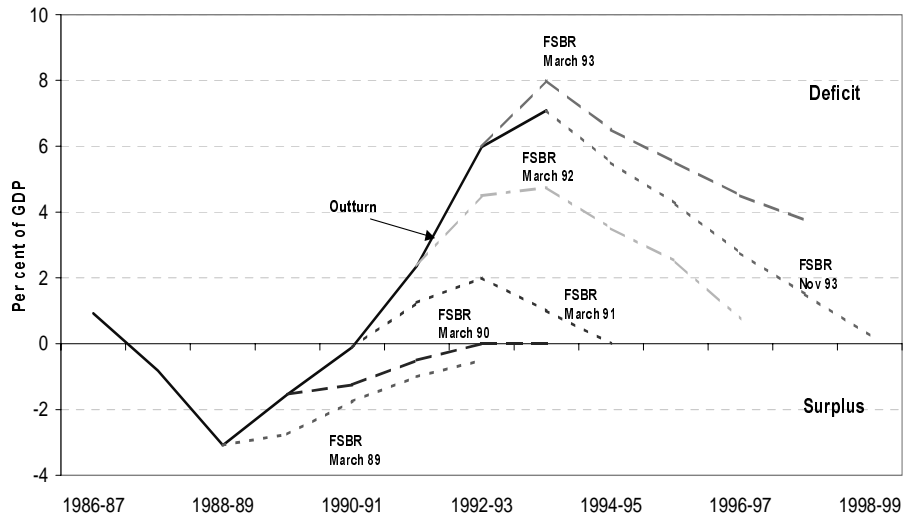


Chart 8

Borrowing (PSNB) - Medium term projections and outturns



**Table 2****Comparison of one-year ahead forecast errors - borrowing (PSNB)**

<b>1986-87 to 1996-97</b>	<b>Total error (% GDP)</b>	<b>'Fiscal' error (%GDP)</b>
Actual	0.1	0.7
Absolute	1.1	1.1

111. Within the total, errors in forecasting GDP were an important influence. But even if GDP had been forecast correctly, significant fiscal errors remained, also amounting to around 1 per cent of GDP in absolute terms. Although this is not shown in this table the errors grow significantly as the time period is extended to two-year, three-year ahead errors, etc. These errors are strongly influenced by a growing GDP error component. For example, the two-year ahead absolute error in PSNB forecasts is estimated to be 2 per cent of GDP, of which the fiscal error is 1.4 per cent of GDP; three-years ahead the absolute average error is 3 per cent of GDP, with the fiscal component some 2 per cent.

*Implications for the conduct of fiscal policy*

112. These results carry important implications for fiscal policy. First, they indicate that even if GDP is forecast correctly, or if the economy remains on trend, considerable errors can still arise from other sources. Second, the considerable uncertainties implicit in forecasting mean in practice that there is leeway for the policy-maker to fudge results if the process is not wholly transparent.

113. Above all, the scale of the errors emphasises the need for caution in policy-making. It is not unusual for a surge in spending, a large bonus or a sudden shortfall in receipts to appear "out of the blue", sometimes almost before the ink has dried on a Budget. Political and other pressures can dictate that a surplus or windfall should be given away or spent on priorities. (Consider for example recent the clamour to spend UTMS



licence windfall receipts.) Given the size, frequency and direction of the errors it is quite probable that a windfall, if fully spent for example, will have to be clawed back before long.

### *Building a margin*

114. Given the potentially large errors in any forecast of the public finances, aiming for exact balance, say, one year ahead would result in a significant chance that the target was not met and might require drastic or inappropriate remedial action to meet the objective. This could be costly in economic terms and might compromise the ability of fiscal policy to support monetary policy. For these reasons, it makes sense to build in a margin to achieve a good probability of meeting the fiscal rules.

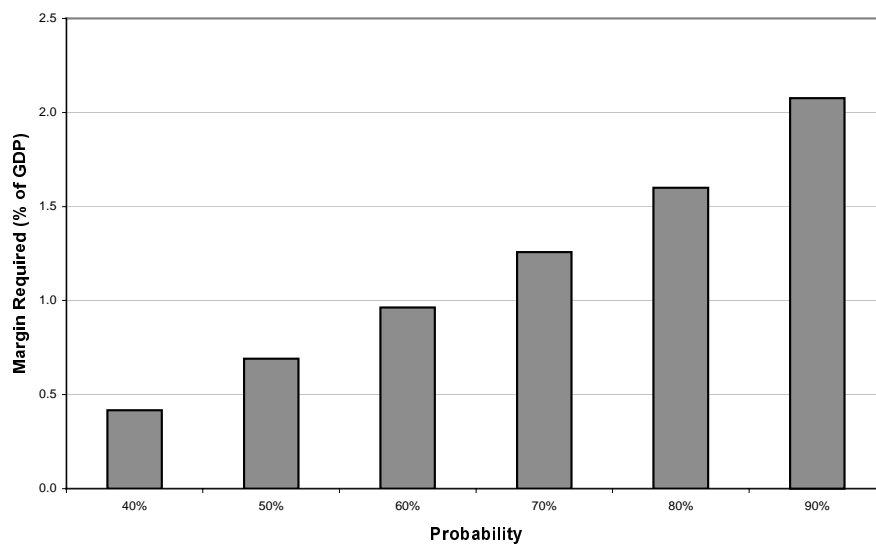
115. Suppose there is no uncertainty with respect to GDP on the basis that the monetary authority is presumed to be successful in keeping the economy on its trend path. Fiscal errors are likely to remain, however. Using the mean and the variance of the fiscal errors over the past, Chart 9 shows the margin that would be required to meet a cyclically-adjusted balance rule one year ahead. A surplus of 0.7 per cent of GDP is needed simply to offset the previous bias to have a 50 per cent chance of being on target. A surplus of well over 1 per cent of GDP would be required to improve the probability of meeting the objective to, say, 75 per cent. The chart illustrates the trade-off that exists between the need for certainty and the margin required, which rises at a disproportionate rate to the degree of certainty achieved.

### *Three sources of errors*

116. There are a number of uncertainties that can be identified as key sources error of error. We look at three here:

- where the economy is in relation to trend at the start of the forecast ('output gap' error);
- specific fiscal and economic assumptions, such as VAT ratios, unemployment, equity prices and turnover (which drive capital taxes), interest rates (which impact on debt interest projections), oil prices, and so on;
- how trend output is likely to evolve (trend growth assumption).

Chart 9

**Meeting the Rules: Additional Margin Required***'Output gap'*

117. One of the key uncertainties for the policy maker is knowing the position of the economy in the economic cycle at any given point in time. This might be called 'output gap' error, ie knowing how far the economy is above potential (or otherwise). Important information, such as GDP, is only available with a lag and can be subject to substantial revisions. What appears plausible at Budget time can often look different several months or years later. Nonetheless, a view must be taken in framing the Budget.

118. Taking account of the experience of the late 1980s, when assumptions about potential and the output gap proved to be seriously wrong, a more cautious approach has been followed since 1997. Because of the inherent uncertainties involved the projections are 'stress tested' by considering a more cautious case than the main projection. In this case, the question is posed whether the fiscal rules would still be met in the event that the level of trend output was 1 percentage point lower than assumed.

119. By way of illustrating the implications, consider the following example. Assume the economy starts on trend and in fiscal balance and the aim is to reach the next Budget a year later in the same state, ie again in structural balance. Policy is set accordingly. Suppose further that it is realised later in the year that the economy had in fact been running more strongly than earlier supposed, say at 1 per cent above potential. With the economy above trend the fiscal position would in fact be in structural deficit of around 0.7 per cent of GDP, based on ready reckoners. So the previous policy measures would have turned out to have been inappropriate and remedial action, with associated costs, would have to be taken to get back to the target.

120. In order to counter this risk and avoid potential disruptions to policy from this source of error, it makes sense to aim for a surplus of at least 0.7 per cent of GDP in this example.

#### *Fiscal error*

121. As noted earlier, optimism in the past allowed policy to be looser than warranted. Ex-ante projections turned out to be significantly worse ex-post. Identifying the exact causes of this bias is not easy. However, by adopting a cautious set of assumptions, ex-ante projections may turn out to be acceptable ex-post, as indeed seems to have been the case recently in the UK.

122. An example of adopting a more cautious approach can be seen from the behaviour of the underlying VAT ratio which was expected to rise in the early 1990s as the economy recovered from recession. However, this did not occur and in fact the ratio fell. Had a cautious assumption been adopted, as now with a gently falling ratio assumed, it is estimated that the average error would have been reduced by 0.3 per cent of GDP.

123. There are other areas where a prudent approach has been adopted. For instance instead of scoring all expected returns from Spend to Save programmes (programmes designed to reduce fraud and raise tax) only direct effects are taken into account. Unemployment is no longer assumed to fall; and market interest rates - rather than internal, undisclosed assumptions - are used explicitly to drive the debt interest forecasts. Had these and other similarly cautious assumptions been used much of the previous optimism bias would have been removed.

124. Assumptions in these areas are now independently audited by the National Audit Office (NAO) to ensure that they remain both reasonable and cautious. The full set of assumptions audited is shown in the box 2.

#### *Trend growth assumptions*

125. A particularly important assumption concerns trend growth, which has a strong influence on the medium-term profile of taxes and, to a lesser extent, spending. Under the current forecasting arrangements trend growth for the public finance projections is taken to be 2¼ per cent a year in contrast to the ‘neutral’ view of 2½ per cent used in the economic forecast.

126. The effect of additional annual growth of a quarter percentage point on the public finances builds up over time. For example, after 3-4 years it improves the budget balance by an amount approaching half a per cent of GDP, equivalent to more than £4 billion extra spending a year.

127. It is also worth noting that a cautious trend growth assumption helps to constrain policy choices that extend into the medium term. This is especially important where a multi-year public spending regime is in place, as is now the case in the UK. It also applies to tax where announcements are often made in advance but may be implemented later and extend into the future. By constraining the fiscal aggregates to a more moderate path over the medium term, policy is less likely to be over-stretched. The short-term outcome for the fiscal balances, and for policy overall, may be better as a result.

#### *Improving the chances of meeting the rules*

128. The adoption of cautious assumptions raises the probability of meeting the fiscal rules. Using the assessment of errors presented earlier, it is possible to deduce the chances of meeting the rules under this approach. To simplify, we assume the Bank meets the inflation target and the economy remains close to trend. It is also assumed that there is no longer any optimistic bias in the fiscal component of the projections but that the absolute errors are similar to those previously. This appears broadly appropriate on the basis of the limited evidence since 1997. Again, for exposition we start from a position of balance, and the objective is to achieve structural balance in a year’s time.

**Box 2****Key assumptions audited by the NAO**

- Privatisation proceeds<sup>1,6</sup>  
Credit is taken only for proceeds from sales that have been announced.
- Trend GDP growth<sup>1,6</sup>  
2<sup>1</sup>/<sub>4</sub> per cent a year.
- UK claimant unemployment<sup>1,4,7, 8</sup>  
Rising slowly to 1.06 million.
- Interest rates<sup>1,6,7</sup>  
3 month market rates change in line with market expectations.
- Equity prices<sup>2,7</sup>  
FT-All share index rises in line with money GDP.
- VAT<sup>2,7</sup>  
Ratio of VAT to consumption falls by 0.05 percentage points a year.
- GDP deflator and RPI<sup>2,7</sup>  
Projections of price indices used to plan public expenditure are consistent with RPIX.
- Composition of GDP<sup>3</sup>  
Shares of labour income and profits in national income are broadly constant in the medium term.
- Funding<sup>3</sup>  
Funding assumptions used to project debt interest are consistent with the public finances forecast and with financing policy.
- Oil prices<sup>5, 8</sup>  
\$24.40 a barrel in 2001, the average of independent forecasts, and then constant in real terms.
- Anti-tobacco smuggling measures<sup>6</sup>  
Only direct effects, including deterrent effects of fiscal marks, are allowed for.

<sup>1</sup> NAO (1997a)<sup>2</sup> NAO (1997b)<sup>3</sup> NAO (1998a)<sup>4</sup> NAO (1999a)<sup>5</sup> NAO (1999b)<sup>6</sup> NAO (2000a)<sup>7</sup> NAO (2000b)<sup>8</sup> NAO (2001)

129. Policy is set to achieve this objective. The mean expectation for the fiscal position is balance, ie there is a 50 per cent chance of achieving this particular rule in one year ahead. This is unlikely to be sufficient to ensure policy credibility since, if the pattern of past errors were repeated, there is a good chance of a deficit of 1 per cent of GDP within one year.

130. In using the cautious case and cautious assumptions a structural surplus equivalent to around  $\frac{3}{4}$  per cent of GDP is being aimed for. This improves the chances of achieving balance or surplus from 50 per cent to over 70 per cent.

131. Over the medium term fiscal errors grow larger, reflecting greater uncertainty. However, a cautious trend growth assumption builds up a further margin over time. In principle, one might set the expected additional margin from lower than central trend growth to match the additional risk arising from future projections. On the other hand, since some policy adjustments can be made in future Budgets this may not be necessary.

## **5. Conclusions**

132. On the basis of UK evidence, it appears that the probability of meeting the golden rule (starting from a position of balance) over the medium term, other things equal, remains better than evens and is perhaps in the region of 70 per cent as a result of the adoption of cautious assumptions. Like all such figures, they are only illustrative and depend on several conditions that may not hold in practice. But they make the point that in trying to meet a set of fiscal rules, some assessment needs to be made of how likely it is they will be met and whether additional action is required to improve the chances of doing so.

133. Good rules should produce good outcomes. But rules should not be pursued for their own sake or simply because they are there. It is the spirit of the law that should count not the letter of the law. However, fiscal rules must deliver for most of the time and especially when first set.

134. Ideally a fiscal framework and associated rules should operate through constrained discretion. Constrained first by the transparency of the overall macroeconomic - monetary and fiscal - framework and second by the particular fiscal rules. The operating rules should provide room for some discretion:

- to allow scope for sensible adjustment to severe shocks;
- by leaving room for cyclical and other transitory shocks and by allowing full scope for the automatic stabilisers to exert their smoothing effect on the economy; and
- to ensure that sensible investments with appropriate rates of return are not unduly held back.

135. Two fundamental objectives for fiscal policy seem to hold. First, to ensure that policy remains sustainable over the longer term. Second, to support monetary policy in the short-term to achieve a sensible policy mix.

136. The specific fiscal rules set need to take account of circumstances. In the UK redressing the considerable underinvestment in public sector infrastructure, and improving generational balance, have motivated the focus on the golden rule. Setting the rules over the economic cycle has general applicability where it is desired that automatic stabilisers should have a free rein.

137. In practice, meeting a set of fiscal rules is important for credibility. Over time, once credibility of fiscal policy has been regained and has become entrenched it may be possible to relax fiscal rules further. In the monetary policy context, for example, the Bundesbank achieved sufficient credibility that whether or not its monetary targets were met was not of vital importance, since it was more or less universally believed that the central goal of low inflation would be achieved.

138. The path for fiscal policy is more difficult, not least because Governments will always face re-election. Transparent frameworks and a credible set of fiscal rules, however, currently offer the best route forward within a political democracy.

139. The credibility of the monetary authority depends on output gap smoothing and hitting an inflationary target. The credibility of the fiscal authority depends on achieving a sustainable fiscal path and meeting its fiscal rules. But it also depends critically on not disrupting the monetary authority's task, ie ensuring that there is good co-ordination of policy. The independence and transparency of the monetary authority serves to ensure a more disciplined and efficient fiscal policy.

140. Two trade-offs are of particular importance in calibrating a fiscal system. First, between transparency and the rigidity of fiscal rules: a greater degree of transparency may imply less need for rigid rules. Second,

between the rigidity of the fiscal rules and the extent of tax and/or spending smoothing. The more rigid the rules the less scope there will be for smoothing tax or spending in the face of shocks.

141. Uncertainty over the state of the economy and specific fiscal risks interfere with the conduct of policy in practice. In particular, they can reduce the transparency of policy and create risks over meeting fiscal rules. Uncertainty thus can undermine the credibility of policy. Moreover, since reversals of policy are costly – both in political terms and through economic inefficiency – governments should favour approaches that reduce these risks.

142. Countering uncertainty requires a fiscal margin, a form of precautionary saving. The larger the margin, the higher the probability of meeting the rules, thus strengthening the reputation of the fiscal policy-maker and fiscal credibility. But a larger margin also involves potential costs in terms of lost output (or reduced welfare) via higher taxes or lower spending paths than would otherwise be the case.

143. In the UK the Government has introduced a transparent macroeconomic framework, backed by legislation, and supported by a clear set of fiscal rules. It has supplemented this by a comprehensive outcome-based multi-year regime for public spending, which is now being run on resource accounting and budgeting lines and more in keeping with best-practice in the private sector.

144. Because of risks and future uncertainties the fiscal projections are based on a cautious approach, with key assumptions audited by an independent authority (the NAO), and are ‘stress tested’ to try to avoid repetition of past mistakes. The effect is to improve the chances of meeting the fiscal rules and thereby provide a smoother path for taxes and spending. This has helped to improve policy credibility, for instance (along with monetary policy) helping to reduce the risk premium on debt and has strengthened efficiency in spending on public services.

145. Through a combination of a transparent framework, sensible fiscal rules, cautious assumptions and a well-informed and equally transparent independent monetary authority it is possible to arrive at desirable outcomes for macroeconomic policy: economic stability based on low inflation, sound public finances and an appropriate policy mix.



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