

The Scope for Fiscal Policy: A Case Study of Thailand

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This article is concerned with the application of fiscal policy instruments in stabilisation policy. Theoretical and practical considerations suggest that the scope for fiscal policy may be limited, but analysis of the actual performance of Thailand shows that an active use has been made of it. Compared with advanced economies, the role of automatic stabilisers is relatively small; discretionary fiscal policy interventions have been more important. Particularly in the years after the Asian financial crisis fiscal policy has been actively used, first, under IMF programmes, to reduce aggregate demand, and later to stimulate the economy. The article focuses on the application of fiscal policy instruments, not on the impact of fiscal policy interventions on the real economy.

1 Introduction

This article focuses on the role of fiscal policy in stabilisation policies in middle-income developing countries. The aim of stabilisation policy is to keep the level of output close to its potential, while inflation and the current account deficit are kept at acceptable levels. The main instruments of stabilisation policy are fiscal and monetary policies, which should be co-ordinated to achieve the stability objectives. But each has its own focus, instruments and procedures. In recent years, monetary policy has been increasingly focused on controlling inflation, most explicitly in countries that have adopted inflation targeting. It is therefore less concerned with keeping the output gap stable and small. It could thus be argued that, under these conditions, the management of the output gap, and of the current account, becomes the task of fiscal policy (Budnevich, 2002).

However, assigning to fiscal policy the task of stabilising output fluctuations runs into theoretical and practical problems. Theoretical analyses argue that, for a variety of reasons, fiscal policy is quite ineffective in stabilising output. Practical problems relate to the fact that fiscal policy instruments (the various tax rates and expenditure activities) are somewhat inflexible in the short run and cannot therefore respond quickly enough to output fluctuations. As a result of these problems, the literature has in recent years focused more on the medium- and long-term issues in fiscal policy, such as the sustainability of the fiscal deficit or of the government debt. Some writers have proposed stable policy rules for fiscal policy to avoid the uncertainty that will arise from tinkering with the fiscal variables in the short run (see, for example, Heller, 1997; Kopits and Symansky, 1998).

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Despite these theoretical and practical considerations, fiscal policy does play a role in stabilisation policy in developing countries. In the first place, because of the impact of automatic stabilisers, the fiscal balance tends to show an anti-cyclical pattern. This pattern arises simply because, during a recession, tax revenue tends to fall with the decline in output (and increase during a boom), without any change in tax rates. But countries also undertake discretionary fiscal policy to keep the economy close to its potential output level. This is clearly the case today with the South-East Asian economies, where the recession that followed the Asian financial crisis is attacked with expansionary fiscal policies.

The next section of this article will review the theoretical and practical aspects of short-run fiscal policy in developing countries, followed by a section which will use the ideas developed to analyse the fiscal policy of Thailand. The focus is on the use of fiscal policy instruments, not on their impact on economic activity.

2 Fiscal policy in developing countries

2.1 *Fiscal policy in theory*

The standard model for the analysis of stabilisation policy in an open economy is the Mundell-Flemming model. According to this model, with a fully flexible exchange rate and perfect capital mobility, fiscal policy cannot affect real output. Fiscal expansion, with the money supply fixed, will push up interest rates. The resulting capital inflow will result in an appreciation of the exchange rate, which leads to a reduced demand for domestically produced goods, which, in turn, will offset the fiscal expansion (see, for example, Argy, 1994: Chap. 6).

In fact, this extreme situation is unlikely, certainly in developing countries. Capital mobility, even after financial liberalisation, is not perfect. Remaining regulations, transaction costs, incomplete information and limited possibilities for covering the exchange-rate risk make domestic and foreign financial assets imperfect substitutes. Moreover, the move to a more flexible exchange-rate regime that has taken place in many countries does not mean that the exchange rate is now freely floating. The monetary authorities continue to have objectives with respect to the level and stability of the exchange rate and may intervene to mitigate the fluctuations in it. Under such conditions of less than perfect capital mobility and a managed float, fiscal policy can retain some effectiveness.

The basic Mundell-Flemming model is a simple model: prices are assumed to be fixed, there is no role for a wealth effect or for expectations, and no attention is given to the dynamics of adjustment and the longer-term sustainability of the outcomes of the model. Some argue that these assumptions are acceptable if one is only interested in short-run adjustments to fiscal policy interventions; others see them as shortcomings that make the model less useful. The model has been extended to deal with the impact of price and wage flexibility, of the wealth effect, of incentive effects, and of expectations on the adjustment process.¹ The conclusion of these theoretical extensions

1. Argy (1994) presents a systematic treatment of the basic model and of its extensions. Barro (1997) presents a fundamentally different approach to macroeconomic analysis, based on households that maximise utility in the face of a budget constraint over several periods. These households operate on

can be summarised as follows: so long as capital mobility is not perfect, the exchange rate is not fully freely floating, and you do not start from already very high levels of fiscal deficit or government debt, fiscal policy can be effective in stabilising real output. Fiscal expansion may lead to an increase in the interest rate and an appreciation of the exchange rate, which would have negative effects on investment and exports and, through these, on prospects for long-term growth. However, when such a fiscal expansion is undertaken in a recession when output is below its potential level, such crowding-out effects are less likely and crowding-in of private investment is even possible. Hemming et al. (2002) review empirical studies on fiscal policy and conclude that these suggest that fiscal policy is possible and effective.²

The theoretical models generally assume that fiscal policy is responding to demand shocks. In developing countries fluctuations in economic activity are often due to supply shocks, such as exogenous shocks due to weather (floods, droughts) or shocks in international commodity prices. Can fiscal policy help in the face of such shocks? If the supply shock is expected to be only temporary, fiscal policy intervention is justified and will stabilise the fluctuations in output and the exchange rate over time. Also, in this case, fiscal policy is likely to be more effective than monetary policy (Bird, 1998). But if the supply shock is expected to be permanent, fiscal policy intervention is undesirable as it would hinder the adjustment to the new situation.

Another source of external shocks is the international financial market. Sudden changes in capital flows, in global interest rates or in the alignment of major currencies can lead to substantial fluctuations in economic activity in developing countries. The capital account liberalisation that took place in many countries during the 1980s and 1990s has further increased the vulnerability to this type of shock. During the second half of the 1980s and the early 1990s developing countries, particularly in South-East Asia, experienced very large inflows of foreign capital; after the start of the Asian crisis in 1997, these flows were drastically reversed. Macroeconomic management in the face of such large capital flows has become a major concern (see, for example, IMF, 1992; Corbo and Hernandez, 1994; Ffrench-Davis and Griffith-Jones, 1995; Kahler, 1998; Kwan et al., 1998; Lopez-Mejia, 1999).

Heller (1997) argues that capital inflows should be accompanied by cautious fiscal policy. The inflows will stimulate economic activity, as a result tax collection will increase and the fiscal balance, with unchanged expenditure, will improve.³ Nevertheless, fiscal contraction beyond this automatic adjustment is desirable in order to limit the expansionary pressures in the economy, to reduce the liquidity in the financial market and to limit the exchange-rate appreciation that is caused by the capital inflows. Heller (1997) emphasises that also during periods of capital outflows a

markets for goods, labour and credit that all clear through flexible prices. See Blanchard and Fischer (1993) for a more advanced treatment.

2. Most of the studies reviewed in Hemming et al. (2002) are of advanced countries. The few studies dealing with developing countries suggest that the impact of fiscal policy depends on its financial consequences; if fiscal policy pushes up the interest rate negative effects can emerge.

3. The capital inflows may have further fiscal effects: liquidity in the domestic financial market will increase so that domestic interest rates will fall, which could affect domestic debt-servicing costs for the government. If the monetary authorities try to sterilise the liquidity effect of the capital inflows, domestic interest rates may increase. The capital inflows will also lead to an appreciation of the real exchange rate, thus reducing the domestic currency cost of servicing external public debt.

contractionary fiscal policy is required in order to reduce domestic absorption to create the current-account surplus that is necessary to finance the capital outflows, and to maintain the confidence of the international investors in order to limit the extent of the outflows.

The tight fiscal policy will be counter-cyclical during the period of inflow and boom but could easily become pro-cyclical during the outflow and recession period. The crucial point is how international investors are reacting. If the fiscal contraction persuades them to keep their money in the country, the recession will be mitigated, but the tight fiscal policy will lead to a fall in demand and this may induce investors to take their money and run. In this case fiscal policy can easily become pro-cyclical (see FitzGerald, 2001; Budnevich, 2002).

In order to contain these problems, Heller (1997) suggests that, under an open capital account, the appropriate level of the sustainable fiscal deficit and of sustainable government debt should be reduced significantly. A lower level of the long-run fiscal deficit and public debt will help to:

- avoid frequent and large fiscal adjustments as capital flows turn around;
- reduce the risk of capital outflows. A large fiscal deficit and a high level of government debt will make the country more vulnerable to shifts in market sentiment;
- reduce the risk premium that comes with high levels of debt;
- take care of contingent liabilities. Next to the explicit government debt, the government may carry hidden liabilities. This is most obviously so in the case of government-guaranteed borrowing by state-owned enterprises. Another important case relates to the domestic financial system (Kopits, 2000). Capital inflows are, to some extent, channelled through the financial system and they do increase the liquidity on financial markets. Capital inflows are therefore generally associated with sharp increases in domestic credit. Sudden outflows of funds can affect the health of the financial institutions and government support will be necessary, as was the case, for instance, during the Asian crisis.

2.2 *Fiscal policy in practice*

A counter-cyclical fiscal policy would reduce expenditure and/or increase taxes (i.e. reduce the fiscal deficit, or even run a surplus) when aggregate demand tends to push output beyond the potential, and would do the reverse when the economy hits a recession. In so doing, fiscal policy would help prevent unemployment, inflation and excessive current account deficits.

The fiscal policy stance can be read from the changes in the fiscal balance (or the fiscal balance as a percentage of GDP).⁴ But the changes in the fiscal balance are not fully due to fiscal policy interventions. Even without any explicit fiscal measure the

4. It should be recognised that the fiscal balance is an incomplete indicator. The impact of an increase in the fiscal deficit will be different depending on whether it is brought about by raising expenditure or lowering taxes. The impact may differ depending on which categories of spending are increased or which taxes are reduced. The impact of an increase in the deficit will depend on how the deficit is financed, by monetary expansion, domestic borrowing or external borrowing. The impact of domestic financing will depend on the state of development of financial markets.

fiscal balance will fluctuate over the economic cycle because of so-called *automatic stabilisers*. These are ‘those elements of fiscal policy that tend to mitigate output fluctuations without any explicit government action’ (Auerbach and Feenberg, 2000: 37). As the economy slides into a recession, incomes are falling and collected income taxes are falling, imports are falling and import duties revenue is falling, unemployment is rising and the payment of unemployment benefits is rising. As a result, a fiscal deficit is emerging or deepening. During a boom a reverse process takes place.

The changes in the observed fiscal balance are caused by (i) automatic stabilisers, (ii) discretionary fiscal policy measures, and (iii) structural changes in the economy. An example of the structural changes is the demographic transition that affects expenditure on social services and on pensions; these are typically long-term changes that do not need to concern us when discussing short-term stabilisation policy.

The sensitivity of the fiscal balance to the economic cycle depends on (see Auerbach and Feenberg, 2000; Van den Noord, 2000):

- the size of the government sector. The larger the revenue/GDP and the expenditure/GDP ratios, the more sensitive the fiscal balance will be to fluctuations in GDP;
- the progressivity of taxes and the generosity of unemployment benefits. The more progressive the rate structure of the tax, the more sensitive it will be to fluctuations in income;
- the tax structure. The larger the share of progressive or cycle-sensitive taxes in total revenue, the more sensitive total tax revenue will be.

The impact of the automatic stabilisers is to make disposable income fluctuate less than pre-tax income; therefore, the fluctuation in private spending (particularly consumption) is less than the fluctuation in income. This helps to stabilise the economy and, as automatic stabilisers can work fast, the impact can be important.

In advanced countries, the role of automatic stabilisers is very important. Taylor (2000) concludes that in the United States over the last four decades, automatic stabilisers have been far more important than discretionary fiscal policy. Van den Noord (2000: 8) estimates the cyclical component of the fiscal deficit of OECD countries at cyclical peaks and troughs at about 1% of GDP, equal to about 50% of the output gap.⁵ When the automatic stabilisers are effective, there will be less need for discretionary fiscal policy over the business cycle. This implies that tax rates and expenditure programmes are stable over time; this stability may reduce uncertainty and may have positive effects on long-term growth. Of course, the process should be symmetrical over the cycle; there may be the temptation to use the good revenues during the boom to finance new expenditure.

It is likely that automatic stabilisers are less important in developing countries:

- The revenue/GDP and expenditure/GDP ratios are far smaller than in advanced countries. In the 1980s the tax/GDP ratio was around 30% in OECD countries as against about 17% in non-OECD countries and only 15% in Asia (Zee, 1996).

5. Also Taylor (2000) estimates that automatic stabilisers account for about half the output gap in the US.

- Within that smaller tax base, the share of income-elastic taxes is smaller. Income taxes account for almost 40% of total revenue (or about 12% of GDP) in OECD countries but only for 32% in non-OECD and 33% in Asia (in both cases about 5% of GDP). Taxes on consumption and on international trade are the more important revenue sources in developing countries.
- On the expenditure side, there are few automatic stabilisers in developing countries. In the OECD countries, unemployment benefits are an important expenditure category that moves with the cycle. Few developing countries have significant social security spending.

As automatic stabilisers may be less powerful in developing countries, there would be a greater need for discretionary fiscal policy interventions. But there is a practical problem: government expenditure and revenue are not very flexible in the short run. The tax systems in developing countries are not very flexible. It may be easy to lower the tax burden but difficult to increase it. Part of that problem is political, but there are also other aspects. The total tax burden, as a percentage of GDP, stands at 17%. An increase in tax collection of 10%, which would be a considerable achievement, will increase the tax/GDP ratio by only a little more than one percentage point and would therefore have a limited effect on the state of the economy. Moreover, tax systems in developing countries tend to be diffuse, with many different types of taxes; to get an increase in tax revenue, many taxes will have to be adjusted. There is also widespread tax evasion, and that may increase when tax rates are raised.

Also government expenditures are rather inflexible, particularly in the short run. Most of government current spending is on salaries and they are difficult to cut. Inflation may be used to cut into nominal salaries, but continued inflation is likely to lead to demands for indexation. To increase expenditure is also not so easy, as, in general, it would imply taking up new or more activities and this may have a long preparation time. It is, of course, possible to increase civil servants' salaries at short notice. Toye (2000: 30) has a table that shows that most of the adjustment in government spending falls on government investment, where new projects can be postponed. However, such an investment cut may be undesirable for other reasons, mainly because it undermines the growth potential of the economy.

3 Fiscal policy in Thailand

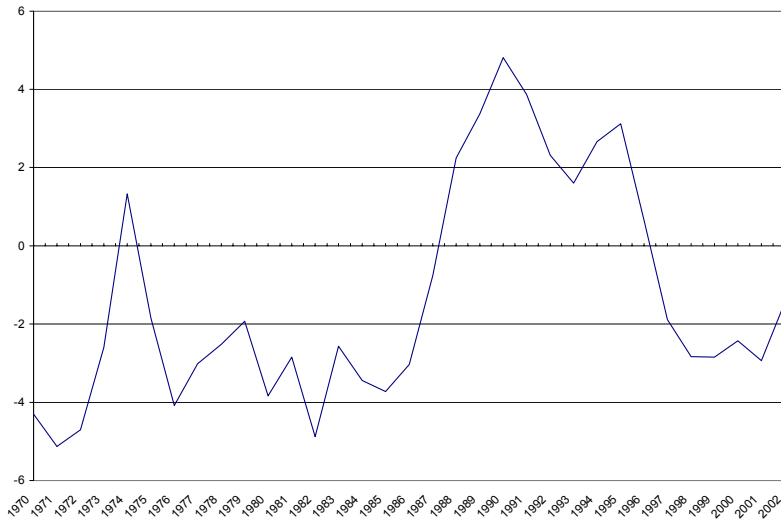
3.1 Measuring the fiscal policy stance

In discussing fiscal policy in Thailand, it should be noted that till 1997 Thailand had a *de facto* fixed exchange rate, while capital mobility was restricted until the capital account liberalisation of the early 1990s. One could thus distinguish two regimes: in the 1970s and 1980s a fixed exchange rate with limited capital mobility (i.e. a regime in which, according to the textbooks, fiscal policy can be effective) and, later in the 1990s, a regime with a flexible, but managed, exchange rate and enhanced capital mobility (where fiscal policy is only effective to the extent that the exchange rate is managed and the capital mobility less than perfect).

A first impression of fiscal policy can be obtained by looking at Figure 1, which shows the budget balance as a percentage of GDP. Looking at the longer-term trend,

there are clearly three periods. Between 1970 and 1986 there were significant fiscal deficits, on average at 3.2% of GDP. In the period 1987 to 1996 the underlying trend shifted towards surpluses, on average at 2.1% of GDP. And with the crisis of 1997 the deficits returned.

Figure 1: Thailand: fiscal balance as % of GDP, 1970-2002



In this article we are, however, more interested in the short-term pattern of the fiscal variables. Figure 1 shows that there have been significant short-term fluctuations around the longer-term trend values of the budget balance. These short-term fluctuations show the fiscal impulse in any year and its size can be considerable. For instance, in 1974 the fiscal balance improved by 3.9 percentage points (to fall back by 3.2 percentage points in 1975).

As argued above, these short-term fluctuations in the fiscal balance are due to (i) automatic stabilisers and (ii) discretionary fiscal policy. To assess the relative contribution of these two elements, we use the method developed at the OECD (see Heller et al., 1986; Chouraqi et al., 1990; Van den Noord, 2000). The approach is based on the assumption that, during the economic cycle, output fluctuates around its longer-term trend level (or around potential output). During a boom, output is above its trend level and revenue and expenditure will then also differ from their trend level, depending on the income elasticity of revenue and expenditure; during a recession, the reverse is the case. The actual fiscal balance is the sum of a cyclical component (caused by movements of the output gap) and the structural balance (due to discretionary fiscal policy). The method consists of (i) estimating trend output or potential output and calculating the output gap as the difference between potential output and actual output; (ii) estimating the income elasticities of revenue and expenditure and using these, together with the output gap, to calculate the cyclical component of the fiscal balance; (iii) calculating the structural balance as the difference between the actual balance and the cyclical component. The Appendix gives more detail about the method.

Figure 2 shows the decomposition of the fiscal balance into its cyclical and structural parts. The cyclical component of the fiscal balance is small: the average value of the cyclical balance is -0.06% of GDP, close to zero, as you would expect for a cyclical component. The average of the absolute value of the cyclical component is 0.37% of GDP; only in the years 1997 and 1998, when output fell precipitously, is it higher. The cyclical component is equivalent, on average, to between 5 and 10% of the output gap and, at peaks of the cycle, to about 20% of the output gap. These numbers are much smaller than the comparable numbers for OECD countries mentioned above, where automatic stabilisers often exceed 1% of GDP and account for about half of the output gap. The comparatively small role of automatic stabilisers can be explained by:

- the small share of government revenue and expenditure in GDP. Over the period 1970-2001 the average revenue/GDP ratio was 15.4% and the average government expenditure/GDP ratio 16.5%;
- the relatively low income elasticity of taxes;
- the small share of income-elastic taxes in total tax revenue. The share of the more elastic income tax (both personal and corporate) was, on average over the period, only 3.4% of GDP; by the end of the period, it had risen to between 4 and 5%;
- the absence of automatic stabilisers (such as unemployment benefits) on the expenditure side.

Figure 2: Decomposition of fiscal balance, 1970-2002



The total impact of short-term fiscal policy on aggregate demand, i.e. the fiscal impulse, can be measured by the change in the fiscal balance, obtained by adding the changes in the cyclical and the structural balances. A negative sign implies an increase in the fiscal deficit (or a decline in the surplus) and indicates an expansionary fiscal policy. Figure 3 presents the annual changes in the fiscal balance as a percentage of

GDP, thus calculated. The contribution of automatic stabilisers to the fiscal impulse is small. The changes in the cyclical balance are always far below 1% of GDP, only in the disaster years after 1997 do they reach 1%. The changes in the structural component, reflecting discretionary fiscal policy, are substantial.

Figure 3: Fiscal impulse and changes in instability indicator, 1970-2002

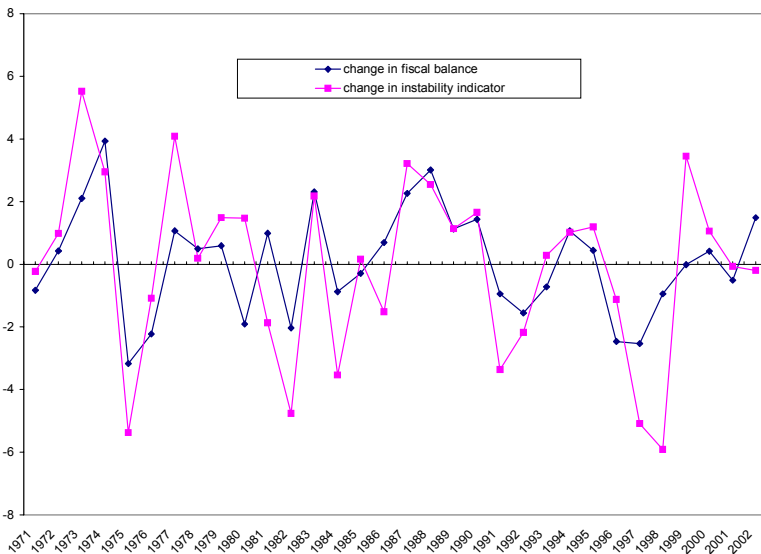


Figure 3 shows that there have been significant fiscal policy interventions over the years. The average (absolute) value of the fiscal impulse indicator over the period 1970-2002 is 1.4% of GDP, equivalent to about 40% of the output gap, but the peak years show much higher values (for instance, +3.9 in 1974, -3.2 in 1975, and +3.0 in 1988). The conclusion is therefore that fiscal policy plays a significant role. While in the OECD countries the automatic stabilisers take care of stabilisation, in Thailand it is the discretionary fiscal policy that does the job.⁶

Fiscal policy is clearly used for countercyclical purposes, as Table 1, giving the correlation coefficients between the fiscal impulse indicator, and its constituent cyclical and structural parts, and the output gap, inflation, the current account deficit and a broader instability indicator, shows.⁷

6. Figure 3 only looks at the central government budget balance. Local government is not very important in Thailand. It collects little revenue and its expenditure accounts for only about 10% of total government spending. State enterprises are more important. They are active in sectors like energy production and distribution and public transport, and decisions about their prices have effects on disposable private income and decisions about investment have a significant impact on aggregate demand. There is active government intervention in these decisions, and decisions about price changes and about the extent and timing of investment are influenced by fiscal policy considerations. To this extent, Figure 3 provides an underestimate of total fiscal policy.

7. The instability indicator brings together the elements that concern policy-makers: the output gap, inflation and the current account deficit. It is calculated as:

Table 1: Determinants of fiscal policy (correlation coefficients)

	Fiscal impulse	Δ cyclical	Δ structural
Δ output gap	0.46	0.96	0.33
Δ inflation	0.44	0.05	0.46
Δ current account def.	0.38	0.74	0.28
Δ instability indicator	0.72	0.69	0.65

The positive correlations suggest an active countercyclical fiscal policy that responds rather quickly to threats to the stability of the economy. It appears that changes in the fiscal policy stance are closely related to changes in the economic stability variables that the policy-makers are concerned about (see also Figure 3, which shows the close correlation between the fiscal impulse and the instability indicator). The signs of the correlations suggest that it is instability that leads to fiscal policy rather than fiscal policy leading to instability. Increases in inflation, the output gap and the current account deficit are positively correlated with the fiscal policy indicator; i.e. they are associated with a tightening fiscal policy. On the impact side, one would expect a tighter fiscal policy to have a negative correlation with inflation, the output gap and the current account deficit. Of course, by construction the cyclical component of the changes in the fiscal balance (the automatic stabilisers) are highly correlated with the output gap, but also the short-term changes in the structural balance (discretionary fiscal policy) follow the instability indicators.⁸

The fiscal policy variables appear to be more flexible than is sometimes assumed. The change in the fiscal policy variable (i.e. the change in the ratio of fiscal balance to GDP) is the sum of the change in the revenue/GDP and expenditure/GDP ratios. As noted above, the average absolute value of the fiscal policy indicator is 1.4 percentage points of GDP, and the average absolute changes in the revenue and expenditure ratio are 0.6 and 1.0 percentage points respectively. Within expenditure, both current and capital spending turn out to be relatively flexible in the short run. The changes in the revenue and expenditure ratios are also consistent: in most years they work to change the fiscal balance in the same direction.

3.2 Fiscal policy in action

The picture that emerges from the above analysis is one of a fairly active and consistent fiscal policy. Fiscal policy is not just concerned about the output gap; the correlations of

$$\text{instability indicator} = [\text{output gap (\%GDP)} + \text{inflation} + \text{current account deficit (\% GDP)}] / 3$$

The assumption is that policy-makers give equal importance to each of the three aspects of instability.

8. The three indicators of instability used here are of course correlated with each other. The correlation coefficient between the change in inflation and the change in the output gap is only 0.04 and between inflation and the change in the current account only 0.13, but the correlation between the change in the output gap and the change in the current account deficit is very high at 0.76. We also calculated the correlation coefficient between the fiscal policy indicators and the lagged instability indicators but these were all much smaller than the ones reported in the table; fiscal policy appears to react rather quickly.

Table 1 suggest that it is as concerned with inflation and the current account deficit. How was fiscal policy executed?

Before the mid-1980s discretionary control was limited. Budgeted expenditures were based on estimated revenue, quite often rather optimistic estimates. There was only limited cash control and spending departments could carry over unspent funds at the end of the year. Fiscal policy in these years took the form of *ad hoc* packages whenever economic conditions required it. Figure 3 shows strong swings in the fiscal policy indicator around 1974/5. In this period Thailand suffered substantial external shocks. In 1973/4 the first oil price shock hit the world, increasing the cost of imports substantially. These shocks were so severe, not only because of their size, but also because they came after a period of strong expansion and relative stability of the world economy. The oil price increase had an immediate effect on domestic prices. The acceleration of inflation invited a strong policy reaction in the form of tight fiscal and monetary policy. Table 2 shows that there was a sharp contraction of government spending, particularly capital expenditure, and a sharp increase in revenue, leading to a budget surplus in 1974. The policy reaction to the external shocks of the early 1970s was very much a shock reaction to unexpected external shocks and, with the benefit of hindsight, it can be said to have been an over-reaction. The increase in import prices (particularly oil) had been accompanied by an increase in prices of Thai exports and the international recession that followed the first oil shock was mild and short-lived. Hence, the adverse impact of the external shocks on the Thai economy was probably less than the impact of the contractionary policies. The sharp upsurge of government spending and the relaxation of the tax effort in 1975 reflect the recognition of the authorities that they over-reacted.

A new series of external shocks occurred around 1979/80: again a sharp increase in oil prices and a rise in the international interest rate. The immediate impacts of these shocks on the Thai economy were the high rate of inflation and the growing current account deficit. Unlike the first oil crisis, when public expenditure had been sharply curtailed, this time public spending continued to grow. But it gradually became clear that the adjustment to the second oil shock, as it occurred, was leading to an unsustainable situation. The public sector imbalances were huge, the external debt was rising rapidly and the debt-service burden had increased with the hike in world interest rates, export earnings were not growing rapidly enough, and private investment was declining, leading to poor growth rates. The structural fiscal deficit was at too high a level.⁹

Pisit (1991) describes in detail how fiscal policy was attempting to deal with this situation. In each of the years 1981, 1982, 1983 and 1984, *ad hoc* fiscal measures were introduced to contain the deficit. These packages consisted of increasing tax rates (for example, of sin taxes), acceleration of tax payments, temporary surcharges on import duties and cuts in expenditures. However, the cuts in spending were not very effective in a system where underspending and carry-over of unspent funds to the next year were prevalent. Some of these measures were only temporary and, as can be seen in Figure 1, a decrease in the deficit in one year was often followed by a reversal in the next.

9. As is clear from Figure 1 the structural deficit was rather high in the 1970s and early 1980s and several observers expressed their concern about this situation. However, the changes brought about by the second oil crisis deepened these concerns.

**Table 2: Government expenditure and revenue
at constant 1988 prices, 1970-2002 (Baht bn)**

	Primary expenditure			Interest payments	Total expenditure	Total revenue
	Current excl. interest payment	Capital expenditure	Total primary			
1970	50.1	25.5	75.6	5.2	80.8	60.4
1971	54.7	27.2	81.9	6.4	88.3	62.8
1972	50.2	23.7	73.9	13.3	87.2	65.5
1973	56.0	20.0	76.0	7.8	83.8	69.0
1974	53.9	13.5	67.4	7.5	74.9	82.8
1975	62.9	20.8	83.7	9.0	92.7	81.2
1976	74.5	30.3	104.7	8.5	113.2	85.5
1977	81.9	31.5	113.4	9.1	122.5	100.0
1978	86.5	32.1	118.6	12.5	131.1	110.3
1979	100.9	30.0	131.0	8.3	139.2	122.5
1980	116.8	36.7	153.5	13.4	166.9	131.8
1981	116.7	35.9	152.5	17.3	169.8	142.3
1982	132.4	37.7	170.1	20.1	190.2	140.5
1983	135.6	34.8	170.4	24.9	195.3	167.6
1984	149.5	32.0	181.4	28.5	209.9	170.8
1985	153.6	37.3	190.9	34.6	225.5	181.1
1986	153.7	34.1	187.8	38.8	226.6	188.5
1987	152.5	33.0	185.4	39.1	224.5	214.0
1988	154.2	28.7	182.9	40.2	223.1	258.2
1989	171.6	35.5	207.0	41.6	248.6	308.3
1990	185.6	49.1	234.6	35.7	270.3	365.5
1991	208.2	65.8	274.0	29.6	303.6	387.7
1992	239.6	93.1	332.7	23.9	356.6	411.9
1993	264.4	122.8	387.2	19.4	406.6	448.7
1994	277.4	136.3	413.6	16.3	429.9	505.1
1995	296.3	146.0	442.2	9.4	451.7	546.2
1996	330.7	215.8	546.6	6.2	552.7	575.8
1997	322.3	271.9	594.2	10.1	604.3	549.8
1998	325.0	163.5	488.5	11.1	499.6	425.4
1999	344.9	140.9	485.8	30.2	516.1	441.7
2000	365.4	117.8	483.2	36.5	519.7	453.9
2001	389.0	113.8	502.8	38.5	541.3	462.2
2002	406.8	121.3	528.1	40.7	568.8	522.0

Around 1985/6 Thailand shifted to a more effective system of budget control. Before the start of the fiscal year, a strict expenditure ceiling was imposed, based on the economic conditions and expected revenue. And the carry-over of unspent funds was restricted. The measures aimed to redress the unsustainable structural deficit but they also significantly increased the short-term fiscal control. During the fiscal year, if necessary, tax rates could be changed, disbursements speeded up or down, and tax payments accelerated or postponed, to adjust the fiscal impulse to new developments. As Table 2 shows, the growth of current government spending in constant prices stagnated between 1985 and 1988. Real government investment had stagnated since 1980. As a result, the expenditure ratio fell sharply after 1985 and the revenue ratio increased after 1986, leading to a much smaller deficit in 1987 and surpluses in subsequent years.¹⁰

Fiscal policy in the 1990s was characterised, up to 1996, by relatively large budget surpluses. This was one of the ways in which Thailand tried to cope with the expansionary pressures arising from the large capital inflows. In 1996 the surplus came down sharply (Figure 1) and fiscal policy exerted a strong expansionary impulse (Figure 3). This could be justified by the fact that the economy started to slow down in 1996. But this slowdown was partly due to the stagnation of exports and was accompanied by an exceptionally large current account deficit (at 8% of GDP), which made the fiscal expansion less appropriate.

3.3 Financial crisis and the struggle with the IMF

In July 1997, the combination of the overvaluation of the exchange rate and stagnating exports, the large current account deficit and rapidly growing external debt, the weakness of the financial system and the volatility of international financial markets, led to the collapse of the currency and the ensuing crisis (see Jansen, 2001). Once the Baht was floated, the large outflow of capital led to a precipitous depreciation, with disastrous effects on externally indebted corporations and financial institutions. The result was a rapid decline in demand and output.

The IMF came to the rescue and in the first Letter of Intent (LoI) of August 1997 a very tight fiscal and monetary policy was imposed, aiming at a fiscal surplus of 1% of GDP through increased revenue (for example, the VAT rate went up from 7 to 10%) and restrained expenditure. The second LoI (November 1997) observed that economic conditions had turned more negative than expected. Aggregate demand was declining faster and the exchange rate was depreciating more than expected. Nevertheless, the fiscal surplus targeted at 1% of GDP was maintained and additional expenditure cuts and tax rises were introduced. This, it was said, was necessary to offset the cost of financial sector restructuring and to provide a clear signal to the market of the government's intention to implement the economic programme.

The fiscal surplus that was foreseen in the first two LoIs never materialised. Automatic stabilisers were at work. Figure 2 shows the effect of automatic stabilisers due to the output fall (with about 10% in 1998): the decline in demand and output alone led to a deterioration of the fiscal balance to the tune of 1.8% of GDP between 1996 and 1998. But in 1997/8 another stabiliser was also at work: the drastic depreciation of the

10. For more detail about policy-making in the 1970s and 1980s see Jansen (1997: Chap. 4).

exchange rate had an effect on the fiscal balance. It reduced the profits of externally indebted corporations (and thus revenue from corporate income tax), it increased the local currency cost of debt service on external government debt, and it affected the revenue from import duties (after the depreciation the volume of imports collapsed). The IMF estimated that the exchange-rate effect caused the fiscal deficit to deepen by 2% of GDP in fiscal year 1997/8 (Lane et al., 1999: 95). Our indicator of the cyclical fiscal balance does not include this effect and would thus underestimate the automatic stabilisers.¹¹ To turn around the fiscal balance in the face of these negative trends in the automatic stabilisers would have required an exceptional discretionary fiscal effort, in the order of 3-4% of GDP. Such a massive fiscal contraction would have sent the economy even deeper into problems.

The third LoI (February 1998) projected that, because of the weak economy and the sharp depreciation, the fiscal balance would turn out at a deficit of 2% of GDP rather than the target of a surplus of 1%. This time, the IMF accepted that the shortfall of the fiscal balance target did not need not to be fully offset, but it still insisted on measures that would contain the deficit at 1.5% rather than the projected 2% of GDP. Only the fourth LoI (May 1998) moved to a more expansionary fiscal policy. By that time a substantial current account surplus had emerged and this created the room for an adjustment of the fiscal target. In particular, expenditure on social safety nets increased.

Critics of the IMF, inside and outside of Thailand, have attacked the policies included in the LoIs (see, for example, Chalongphob, 1999; Pasuk and Baker, 2000). They pointed out that these policies further weakened an economy that was already in deep trouble. Economic growth had been decelerating in 1996 and turned negative in the first half of 1997. By the middle of 1997 foreign reserves were almost depleted, spent in the unsuccessful defence of the peg. The fiscal contraction only added to the recession. Under such conditions, it is likely that the fiscal contraction reduced rather than increased the confidence of international investors.

Also Stiglitz (2002) argued that a recession was on the way. Moreover, fiscal discipline had been excellent in the past and outstanding government debt small. There was thus a need and a possibility for fiscal expansion. These views contrast with those of Heller (1997) who argued for a contractionary fiscal policy in periods of capital outflow.

To some extent, these differences depend on views on what determines investors' confidence. Heller and the IMF argued that fiscal contraction gives international investors confidence in the management of the economy and in the economy's ability to repay debt. This confidence implies that they will not withdraw funds. Stiglitz argued that investors will lose confidence when they see that fiscal and monetary contraction leads the economy into a recession. It is possible, however, that both these views are beside the point: if international investors act on hunches, rumours, and contagion, they may take their money out no matter what the government does.

11. Note that the effect of the depreciation in 1997/8 is large because of the exceptionally large fall in the value of the Baht and the negative effects this had on the economy. Under normal circumstances, when the currency fluctuates around its equilibrium value, the effects of changes in the exchange rate on the fiscal balance are likely to be small. Also note that, under normal circumstances, a depreciation of the exchange rate may have an expansionary effect on the real economy as it increases demand for domestically produced goods.

The other argument was that fiscal contraction was necessary to generate the funds to pay for the restructuring of the financial sector. The cost of this turned out to be quite substantial.¹² However, Stiglitz' argument is that the contractionary fiscal and monetary policies made the financial distress much more severe than was necessary.

The initial policies of the IMF were based on rather optimistic projections of the main economic variables. For example, the first LoI assumed a 1998 growth rate of 3.5%. Actual developments, in terms of capital outflows, currency depreciation and output collapse, were much worse than foreseen. Private investment and consumption had fallen much more than private income and the private saving surplus was more than enough to finance the capital outflow. Hence there was no more need for fiscal contraction (Lane et al., 1999). The IMF admitted that it had been a bit slow in adjusting its position on fiscal policy and that, perhaps, it had been too optimistic about the ability of the programme to restore market confidence and contain capital outflows (Boorman et al., 2000). Critics have persisted in arguing that the IMF should have known better, as it did have the information about the real state of the foreign reserves (long before this became public knowledge), the extent of problems in the financial institutions and the slowdown in growth.¹³

A fiscal contraction, with its multiplier effects on the private sector, does help to generate the current account surplus necessary to finance external debt repayments. In this perspective, the choice of fiscal contraction or expansion reflects a priority for either debt repayment or the health of the domestic economy. The IMF was apparently more concerned with the repayment of the short-term external debt and the restructuring of the financial system than with the state of the real economy. Some accused the IMF (and the US Treasury behind it) of using the crisis to force a full opening of the Thai economy to foreign investors, a critique that was made credible by the insistence of the IMF on including rapid privatisation of state enterprises in the conditionality package.

Figure 3 shows that the fiscal policy stance was expansionary in 1997 and 1998. The negative value for the fiscal impulse indicator implies an expansionary fiscal policy, but the indicator may be an incomplete indicator under the extreme conditions of these years. Table 2 helps to explain: how much expansion can one expect from an increase in the fiscal deficit that is brought about by a decline in primary expenditure at constant prices of 18% and an even greater decline in real revenue (of 23%)?

During late 1998 and 1999 there was a shift to a more deliberately expansionary fiscal policy but the effects were small (see Table 2). Primary expenditure at constant prices declined continuously between 1997 and 2000, owing to the collapse of government investment. Revenue at constant prices declined in 1997 and 1998 but started to rise again in 1999 when the economy recovered somewhat from the deep recession of 1998.

In early 1999 funds that became available from the Japanese Miyazawa Plan enabled further fiscal expansion. Thailand also reduced, temporarily, the VAT rate from 10% to 7%. Around that time, Thailand stopped drawing on the IMF facility (after about \$14 billion of the \$17 billion available had been used).

12. The current estimate is that interest payments on the bonds that were issued to finance the restructuring may cost between 3 and 4% of GDP in the coming years.

13. For instance, Chalongphob (1999: 4) observes that the IMF 'had a very wrong picture of the recovery process in Thailand from the beginning and this wrong scenario may have led to a combination of policies that led to more serious economic problems than necessary'.

The fiscal balance was in deficit in 1999, 2000 and 2001, but these years still do not show the expansionary impulse that would have been appropriate (see Figure 3). Factors that may have kept fiscal expansion below the desired level include the slow process of project preparation and the slow disbursement of foreign funds. Table 2 shows that real primary expenditure actually contracted in 1999 and 2000 as government investment was kept at very low levels. At the same time, concerns about the fiscal deficit emerged as the cost of financial restructuring became clearer (Nabi and Shivakumar, 2001).

3.4 Fiscal expansion under the Thaksin government

In 2002, the fiscal expansion was stronger and is credited with reviving the economy.¹⁴ The Thaksin government that came to power in 2001 adopted a different type of fiscal policy. First of all, it formulated a *dual-track* approach to macroeconomic management, under which fiscal stimulus is used when other elements of demand, such as exports or private investment, are weak, but when exports recover the fiscal stimulus should be held back. The government introduced an explicit *contingency fund* in the budget, to be spent when the economic conditions required (for example, to cope with the impact of the SARS crisis). Fiscal stimulus was provided through a number of grassroots programmes, including that whereby each of the 77,000 villages received Baht 1 million for village projects, a public works programme, subsidised health care, a moratorium of farmers' debt, etc.¹⁵ These initiatives aim to put money directly into the hands of the people rather than spending it through government agencies.

Some of the new initiatives of the Thaksin government are financed outside the budget. For instance, the directed lending programmes aimed at micro credit for the poor, at the housing sector or at SMEs are channelled through state-owned financial institutions, such as the Government Savings Bank, the Government Housing Bank and the Krung Thai Bank. The burden of the moratorium on farmers' debt is mainly carried by the Agricultural Bank (BAAC). Many are worried about the future impact of these off-budget items. For the analysis in this article it is relevant to note that, to the extent that the fiscal impulse is extended through off-budget channels, the fiscal policy indicators used in Figure 3 and in Table 2 become less informative. Nevertheless, Table 2 shows the rapid increase in real primary expenditure in 2001 and 2002. However, the recovery of the economy also led to an increase in government revenue and the fiscal deficit was falling in 2002.

The policy debate in 2002, however, concentrated on the question of whether this fiscal stimulus was sustainable in view of the rising government debt. Total public sector debt was only 35% of GDP in 1997, had peaked at over 57% in 2000 and 2001 and, by the end of 2002, stood at 54% of GDP. The increase in government debt was not so much due to the fiscal deficits; these were initially (in 1998 and 1999) financed mainly by running down Treasury cash balances that had accumulated during the years of surpluses. The debt is mainly due to the bonds issued to finance the restructuring of financial institutions.

14. See, for example, *Far Eastern Economic Review*, 11 July 2002.

15. In 2001 57 billion Baht was spent on the programmes (which would be equivalent to about 1% of GDP), and for 2002 an expenditure of 92 billion Baht was foreseen (*The Nation*, 3 July 2002).

The concern is that public debt may rise to 60% of GDP, a limit above which, according to many, it would be dangerous to go, and many studies have asked the question whether the current level of public sector debt is sustainable (see, for example, IMF, 2002; Sawitree et al., 2002; FPRI, 2003). In some contributions to this debate it seems as if the only role of fiscal policy is to bring the budget back into balance and to reduce the public debt. But that position is extreme and premature for at least three reasons.

First, to limit government debt at 60% of GDP is completely arbitrary; the figure may have been borrowed from the European Union which used it in the stability pact formulated around the introduction of the common currency, but even in Euroland there are countries with still larger ratios. Moreover, public debt in Thailand is defined very broadly. It includes debt of the government and of state enterprises and debt incurred to salvage financial institutions. However, the majority of state enterprise debt is issued by perfectly healthy enterprises, can be serviced from their cash flow and is backed by the assets of these enterprises (FPRI, 2003). The public debt problem is overstated by including this part of the debt. On the other hand, public debt may be understated, as there may be contingent liabilities that in the future could increase government debt. Such contingent liabilities may arise from further losses of the financial institutions for which the government may have to assume responsibility, and from the cost of some underfunded government programmes. Against these contingent liabilities there may also be contingent assets. Some of the losses of financial institutions, which have been booked already, may be recouped when bad loans turn good again with the recovery of the economy, or when the assets of closed financial institutions can be sold above the purchase price paid by the asset management companies. The public debt can also be reduced when state enterprise privatisation is undertaken once the market improves.

A second point to note is that the public debt is composed of domestic and foreign debt. Presumably, the external debt is more worrying as a too high level may reduce access to foreign funds or will increase the risk premium. About 70% of Thai public debt is domestic, only 30% is external debt. Total (public and private) external debt, by the end of 2002, was US\$59 billion or 46% of GDP, down from a peak of US\$109 billion in 1997. These numbers are relatively low, particularly when taking into account that the net foreign assets of the central bank were about US\$33 billion at that time. Moreover, almost all public debt is long-term; only 17% is short-term.

Thirdly, the domestic public debt will only constitute a problem if the conditions on financial markets are tight. This is not the case: private investment remains low and far below private savings. The financial institutions are thus awash with funds and there is a ready market for government bonds. Despite the high level of government debt, the yield on government bonds is very low. The liquidity in financial markets makes monetary policy rather ineffective: despite the low loan rate, the demand for credit is small. This leaves fiscal policy as the only instrument to stimulate the economy. There is the danger that, if the government were to move to a surplus on top of the private sector surplus, the current account surplus would become unnecessarily large. At this stage, Thailand no longer needs a large current account surplus, as the external debt has fallen considerably.¹⁶

16. IMF (2002), FPRI (2003) and Sawitree et al. (2002) present model simulations to project the paths of the fiscal deficit and public debt. Sawitree et al. and the IMF project that the public debt-to-GDP ratio will

Nevertheless, the concerns about the debt have reached the government; the 2003 budget proposed a considerable reduction in the fiscal stimulation. Planned expenditure for Fiscal Year 2003 showed a decline in expenditure compared with FY 2002. It was argued that this was appropriate as exports and private investment were recovering. Latest reports over the first seven months of FY2003 show that actual spending is lagging behind the plans and that revenues are better, thanks to the strong growth of the economy. The deficit over 2003 will therefore turn out much lower than was originally budgeted. As a result, the level of the public debt is stabilising and the public debt-to-GDP ratio continues to decline.

4 Conclusion

This article has analysed the scope for fiscal policy in developing countries in general and in Thailand in particular. Theories assert that, while the authorities may manipulate fiscal variables, this will have no effect on real variables. These assertions are based on assumed flexible prices, rational expectations, perfect information, perfect capital mobility and perfect financial markets. Practical problems, such as long implementation lags and the inflexibility of fiscal variables, tend to make it impossible to implement an active fiscal policy successfully. Another practical problem may arise when the government debt is already high and when further fiscal expansion would push it over the limits that are considered sustainable. As fiscal variables cannot be manipulated in good time and, even if they could, would have no effect on the real economy, there is no scope for an active fiscal policy. The best the country can do is to reduce uncertainty for the private sector by sticking to stable fiscal policy rules that will keep the fiscal deficit at sustainable levels.

In fact, however, there are information and market imperfections and price rigidities, expectations are not fully rational and exchange rates are managed. Also the practical problems are exaggerated. Clearly, automatic stabilisers work quickly and some fiscal variables are open to quick discretionary intervention. This implies that fiscal policy is practically possible and can be effective in influencing the real economy. There is thus a rationale for fiscal policy.

The analysis of fiscal policy in Thailand shows that the authorities do make active use of fiscal policy and that the relative size of the variations in fiscal variables is significant. As the role of automatic stabilisers is quite limited for structural reasons, there is a great need for discretionary policy, and it appears that such discretionary policy measures are undertaken in good time and decisively with the purpose of keeping the economy on a stable growth path.

The intervention of the IMF after the Asian crisis of 1997 seemed initially to be forcing Thailand into a pro-cyclical fiscal policy but, after some struggle, this was turned around and by 2001/2 the economy started to benefit from the fiscal expansion. Current concerns about the level of government debt threatened to put a premature end

peak in 2005 and then decline and that the fiscal balance will be restored around 2007-9. FPRI is more optimistic and sees the debt ratio declining after 2002. But all agree that the public debt is sustainable, i.e. that under reasonable assumptions with respect to growth, exports and interest rates, the public debt ratio will start declining soon. It appears that current actual trends present an even better picture: since its peak in 2001 the debt ratio has been steadily declining.

to this fiscal stimulus but, fortunately, the strong recovery of the economy in 2002 also reduced the need for fiscal stimulation.

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Appendix: Automatic stabilisers and discretionary fiscal policy

In calculating the impact of the automatic stabilisers and the size of the structural fiscal balance we follow the OECD methodology (see Heller et al., 1986; Chouraqui et al., 1990; Van den Noord, 2000).

The actual budget balance is made up of an underlying structural balance plus a cyclical component. The structural balance is the balance that would occur if the economy were producing at its potential capacity level, and the size of this balance is determined by the revenue structure and the longer-term expenditure pattern. Over the

economic cycle, actual output will divert from its potential or trend level and this output gap will induce effects on revenue and expenditure.

The approach consists of three steps:

- (i) estimate potential output or trend output and calculate the output gap;
- (ii) estimate the income elasticities of the various elements of revenue and expenditure;
- (iii) use the output gap and the elasticities to calculate the cyclical component of the actual fiscal balance; the difference between the actual balance and the cyclical component is the structural (or cyclically-adjusted) fiscal balance.

Estimating the trend in potential output is complicated as long-term growth is determined by many factors, including growth of the labour force, saving and investment patterns, and productivity growth.

This study has used two methods to estimate potential output. The first was the production function approach: we fitted a production function, focusing particularly on the level of investment. The second approach was to determine the level of trend output through a statistical method by applying a Hodrick-Prescott filter to time series data of actual output. The output gap is calculated as the difference between the actual and the potential or trend level of output.

Time series data were used to calculate the income elasticity of the various types of taxes and government expenditure. The following results were obtained:

Personal income tax	1.48	Current expenditure	1.00
Corporate income tax	1.52	Capital expenditure	1.00
Indirect taxes	1.18		
Trade taxes	0.95		
Other revenue	1.10		

These elasticity estimates are similar to those obtained in other studies (see Warr and Nidhiprabha, 1996: 156, where they summarise elasticity estimates from a number of studies).

In calculating the cyclical component of the budget balance we followed the model of Van den Noord (2000), which may be summarised as follows. The actual fiscal balance (FB), as a percentage of GDP, is made up of a cyclical and a structural component.

$$FB_{\text{actual}} = FB_{\text{structural}} + FB_{\text{cyclical}} \quad (1)$$

The structural component is related to the trend level of output

$$FB_{\text{structural}} = \frac{\Sigma T_i^* - G^*}{Y^*} \quad (2)$$

where G^* and T^* are the structural components of expenditure and the various types of taxes and Y^* the level of potential output.

Actual revenue and expenditure may differ from the structural level because of differences between actual and potential output (the output gap).

$$\frac{T_i^*}{T_i} = \left(\frac{Y^*}{Y} \right)^{\varepsilon_i} ; \quad \frac{G^*}{G} = \left(\frac{Y^*}{Y} \right)^{\gamma} \quad (3)$$

where ε_i and γ are the income elasticities of taxes and expenditure. From these relationships, the cyclical component of the fiscal balance can be derived:

$$FB_{cyclical} = \Sigma \frac{T_i}{Y} \left[1 - \left(\frac{Y^*}{Y} \right)^{\varepsilon_i - 1} \right] - \frac{G}{Y} \left[1 - \left(\frac{Y^*}{Y} \right)^{\gamma - 1} \right] \quad (4)$$

Once the cyclical component has been calculated in this way, the cyclically adjusted or structural fiscal balance can be obtained by deducting the cyclical component from the actual fiscal balance.

As already mentioned, two alternative estimates of Y^* were made, one using a production function and the other using the Hodrick-Prescott filter. This gave two alternative estimates of the cyclical component. However, the differences were not large. In both cases the size of the cyclical component was small and, on the whole, the pattern over time similar, although there were small differences in timing and extent of fluctuations. The analysis in the article used the potential output as derived from the production function.