Research Note

The Impact of Fiscal Policy on the Economy

John FitzGerald*

Introduction

Since 2008 there has been a series of very tough Budgets, which took a large amount of money out of the economy. While these measures were essential to restore order to the public finances, the contractionary impact of these measures on the wider economy was very severe. The impact on the economy of the fiscal policy measures taken over the period 2008 to 2012 has been analysed in Kearney (2012). The cumulative impact of recent budgets was also considered in FitzGerald and Kearney (2013). Here we apply the same methodology to estimate the likely impact of the 2013 and 2014 Budgets on the economy.

Measuring the actual impact of individual Budgets on the economy is not straightforward.

First, a model of the economy is needed to undertake this task. Here we use the *HERMES* model of the economy (Bergin *et al.*, 2013) which was specifically designed, inter alia, to analyse the effects of fiscal policy.

Second, a frequent misconception is that the existence of a budgetary deficit is, in itself, stimulatory and that a surplus is contractionary. However, when confronted with recent experience the absurdity of this approach, from an economic point of view, is clear. Ireland still has a large Budget deficit in spite of five years of contractionary Budgets. Nobody could suggest that the current expected deficit for 2013 means that Budgetary policy is stimulatory. It is not even the change in the Budget deficit itself that reflects whether a Budget is serving to expand or contract demand, because the change in the deficit is significantly affected by the economic cycle. Thus an increase in the deficit may occur because of a fall in underlying economic activity rather than because the government has decided to increase expenditure or to cut revenue. To determine the actual fiscal stance a model of the economy is needed to disentangle discretionary changes in government borrowing from changes due to cyclical factors.[1]

[1] The discretionary change in fiscal policy, as defined here, is similar to the change in the structural budget balance.

Third, the way Budgets are defined is not always very meaningful from an economic point of view. The definition of discretionary budgetary changes that is normally used in the Budget documents is based on whether or not a change in the law actually takes place.[2] For example, in the case of income tax the standard approach in the Budget is to define "no change" as a situation whereby tax rates and allowances are left at their previous year's level. With inflation and a progressive tax system such an approach would see the average rate of income tax rise with inflation in incomes. Instead, the approach normally taken by economists is to treat "no change" as meaning that the average rate of income tax remains unchanged at the previous year's level. In undertaking an economic assessment of the impact of Budgets a similar approach is applied to other areas of taxation and revenue, including an assumption that social welfare payments are indexed – held unchanged in real terms.[3]

Methodology

Here we apply the methodology set out in Kearney (2012), to analyse the impact of the 2013 Budget on the economy in 2013 and of the 2014 Budget on the economy in 2014. The multi-year impact of individual budgets was considered in FitzGerald and Kearney, 2013.

The approach we use is to first run the *HERMES* macro-economic model of the Irish economy with the actual budgetary measures implemented for the year being considered. This model run produces estimates for the key economic aggregates, such as GNP, GDP, employment and also for the key fiscal aggregates. This initial forecast is also dependent on the key exogenous assumptions (e.g., about world growth). Thus, for 2014, our initial model-based forecast incorporates the effects of the October Budget for the year, i.e., a planned *ex ante* adjustment of €2.6 billion.

We then do a second run of the model where, instead of the budgetary changes, we assume certain indexation rules, which incorporate our definition of a "neutral" Budget, where the government is neither deflating or inflating the economy. This indexed budget is intended to simulate a "what if there were no policy changes" scenario relative to the previous year. We then compare this "indexed" outcome for the budget with the actual outturn in each year. The difference between the indexed and actual outcome provides an estimate of the fiscal stance.

2 This approach is used in many other jurisdictions.

3 A similar approach is used in Callan *et al.*, 2013.

The full indexed budget is computed assuming no change in average tax and expenditure rates (e.g. for social welfare payments) from the previous year. These rates are applied to the relevant revenue and expenditure bases to arrive at estimates of tax revenue and expenditure. The use of average tax and expenditure rates ensures full indexation of the tax and welfare system. There is one exception to these indexation rules. For non-cyclical expenditure items (e.g., government current expenditure on goods and services and government investment), we assume no volume growth. Values of public investment, public employment and public consumption were computed on this basis. In normal times such an indexation rule would be deflationary. However, given the collapse in the economy, this "no real growth" rule could, in itself, be regarded as having an expansionary bias in the years 2009-13. To the extent that this is the case, our estimate of the fiscal stance in those years will overstate the contractionary effect of fiscal policy. On balance we considered that a long-run no-growth indexation rule was the best approximation to a realistic "no policy change" stance over the period in question.

There are some special measures that affect the Budget numbers that may not have a direct impact on the economy and we treat them separately. They are included in both the base run and the indexed run, thus excluding them from the category of "normal" discretionary fiscal policy. These items are the reduction in payments by the banks in respect of the bank guarantee and also the special once-off costs arising from the winding up of IBRC in 2013. These two measures have a large impact on the budgetary numbers for 2013 (and a smaller impact in 2014). Together they have added almost one percentage point of GDP to the deficit for 2013. (In spite of this, the deficit is forecast to fall significantly in the winter 2013 *Quarterly Economic Commentary*.) However, in both cases the additional expenditure (on winding up IBRC) or reduced revenue (from the banks) is unlikely to have any impact on domestic demand this year. In the case of the reduced payments for the bank guarantee it is most unlikely to have any impact on their lending behaviour in 2014 and, hence, on the wider economy. Thus this reduction in government revenue will not raise household incomes or result in significant new investment by the company sector, at least in 2013 or 2014.[4]

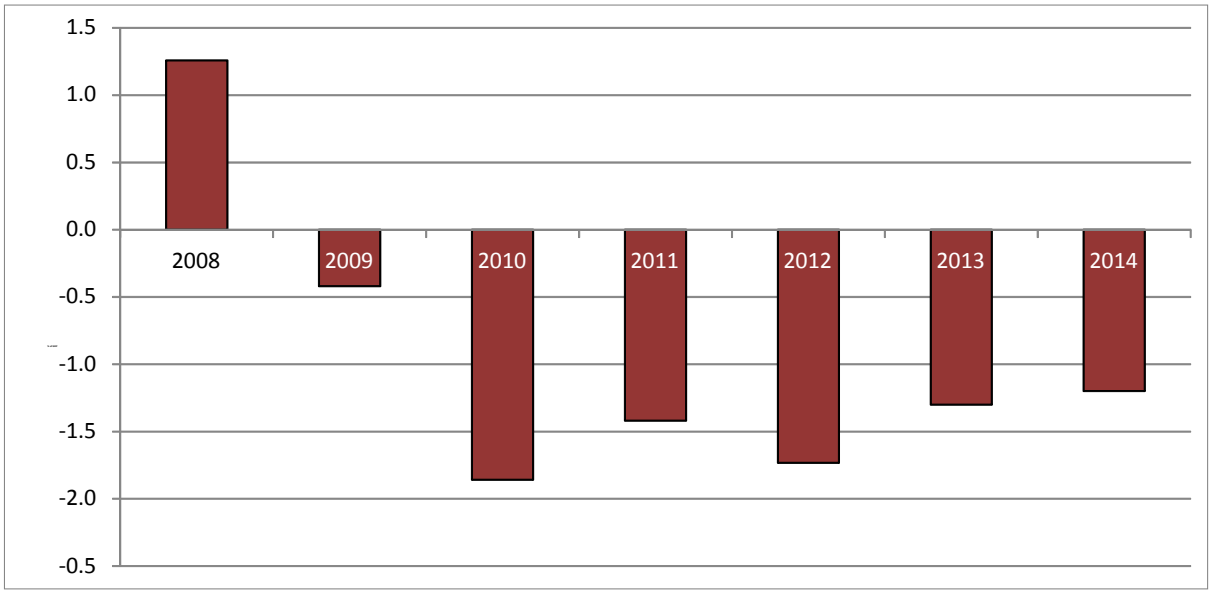
In the case of the IBRC related payments, this expenditure merely pays off existing liabilities of the banks (to depositors). These depositors knew their assets were guaranteed and the payment by the state will neither affect their expected income position nor their net wealth position. Thus there should be no change in household or company behaviour arising from this expenditure.

[4] In the long run returning the banks to profitability should have a positive impact on the economy.

Impact on the Economy

Figure 1 shows the *ex post* effects of discretionary budgetary policy since 2008 on government borrowing as a percentage of GDP.[5] The Budgets for 2010 to 2013 effected a reduction in government borrowing each year by around 1.5 percentage points of GDP. The reduction effected by the 2013 and 2014 Budgets will be around 1.2 percentage points of GDP. The cumulative effect of the Budgets between 2009 and 2014 has been a reduction in the government deficit by approximately eight percentage points of GDP. (A scenario considering what would have happened if there had been a failure to implement any fiscal adjustment from 2010 onwards was considered in Appendix 2 of FitzGerald and Kearney, 2013.)

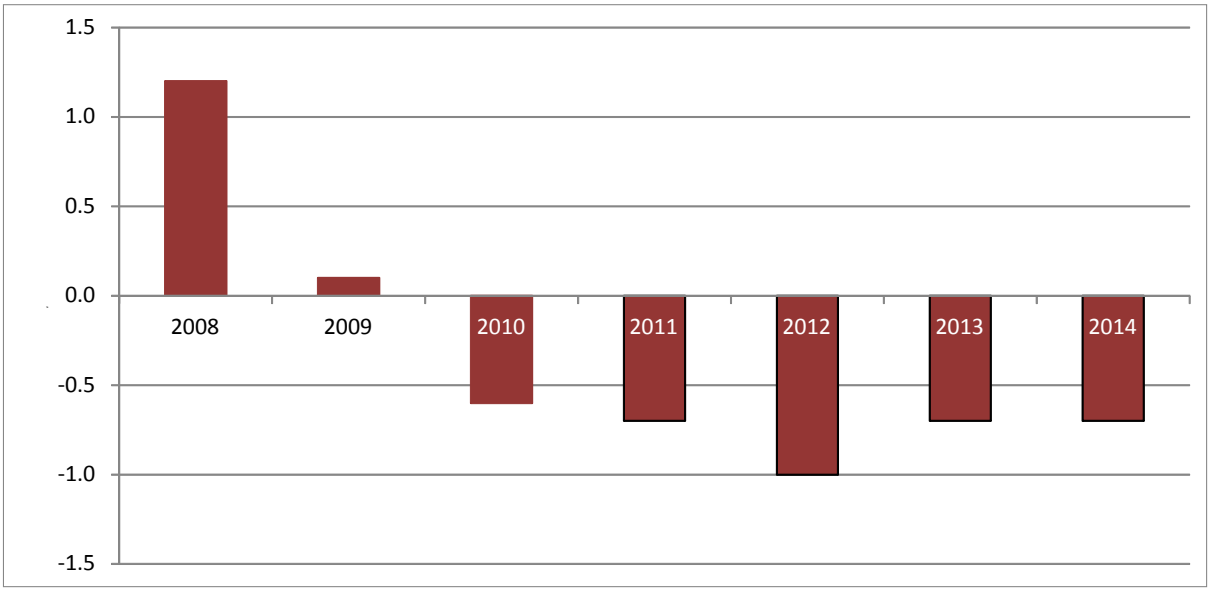
FIGURE 1 Change in General Government Deficit as a % of GDP



This reduction in the deficit through discretionary fiscal policy has come at a significant price in terms of reducing GDP (Figure 2). Fiscal policy, in deflating the economy, reduced the rate of growth of GDP by around 0.7 percentage points in both 2013 and 2014. Over the period 2009 to 2014 the cumulative effect of the discretionary changes in a series of six tough budgets will have been to reduce the level of GDP in 2014 by a cumulative 3.6 per cent of GDP.

[5] As discussed above, for the 2013 Budget we have excluded certain measures (payments in respect of IBRC and reduced charges to banks for guarantee). That would have served to offset the reduction in the borrowing by approximately one percentage point of GDP.

FIGURE 2 Effect of Discretionary Fiscal Policy on GDP, %



Conclusions

The series of tough Budgets between 2009 and 2014 have served to reduce the level of the General Government Deficit by around 8 percentage points of GDP. We forecast that there will still be a deficit of 4.4 per cent of GDP in 2014. The effect of the 2014 Budget will be to reduce the rate of growth of GDP in 2014 by around 0.7 percentage points. The effect on GNP will be slightly higher at around 0.9 percentage points. Thus, in 2014 the underlying growth rate of GNP would be around 3.6 per cent in the absence of any Budgetary cutbacks.

Bergin, A., T. Conefrey, L. FitzGerald and I. Kearney, 2013, "The HERMES-13 macroeconomic model of the Irish economy", ESRI Working Paper No. 460.

Callan, T., C., Keane, M. Savage, and J. Walsh, "Distributional Impact of Tax, Welfare and Public Service Pay Policies: Budget 2014 and Budgets 2009-2014", special Article in *Quarterly Economic Commentary*, Winter 2013.

FitzGerald, J. and I. Kearney, 2013, *Medium-Term Review: 2013-2020*, Dublin: The Economic and Social Research Institute.

Kearney, I., 2013, "Measuring Fiscal Stance", special article in *Quarterly Economic Commentary*, Autumn 2012, p.67-88