# THE DISTRIBUTIVE IMPACT OF BUDGETARY POLICY: A MEDIUM-TERM VIEW

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## 3.1 Introduction

After several years of exceptionally fast growth, the slowdown in the world and Irish economies has again put pressure on the public finances. One result is that the tax and welfare package in Budget 2003 will be on a much smaller scale than had become usual in recent years. But what of the "shape" of the package, in terms of its impact across different income groups? At one level, this might be regarded as a purely political choice, depending on the government of the day. At another level, these decisions could be seen as shaped, to a greater or lesser degree, by broader social forces. In particular, it has been argued that the series of partnership agreements has had a very substantial influence over tax and welfare policy. Broader macroeconomic forces also help to set the context for budgetary policy, and could also influence choices regarding the distributive impact of tax and welfare policy. Protection of those on the lowest incomes may be accorded particular priority during a downturn, so that their incomes rise more rapidly than the average (or fall less rapidly) when growth is low (or negative).

In this paper we explore how the distributive impact of budgetary tax and welfare policy has varied across sub-periods chosen to correspond to each of the key variables. We examine distributive impacts across successive governments, successive partnership agreements, and periods of high and low growth. Section 3.2 sets out the framework of the analysis, while the main findings are set out in Section 3.3. Section 3.4 draws together the main conclusions.

3.2 Background and Approach Our approach examines the distributive impact of fiscal policy on an unchanged population. Labour supply responses to tax and welfare changes are not taken into account, nor are changes in employment or unemployment. Thus, automatic fiscal responses, such as a rise in unemployment compensation when unemployment rises, are not included and the focus instead is on discretionary policy changes. Thus, automatic fiscal responses, such as a rise in unemployment compensation when unemployment rises, are not included. The focus instead is on how a given set of individuals and families fare from budgetary policy changes – which could include changes in means tests as well as changes in welfare payment rates and tax rates, bands and allowances or credits.

The benchmark against which the impact of policy is measured is a tax and welfare policy which is indexed in line with wage growth. Such a policy would see all incomes (welfare recipients, low waged and high waged) grow in line with the increase in gross wages. Thus, it would be distributionally neutral, unlike a measure of impact based on the convention of an unchanged tax and welfare policy in nominal terms. The details of this approach have been set out in a number of *Budget Perspectives* papers (Callan *et al.*, 1999, 2001) and are not repeated here.

The population analysed here is fixed in size and structure at its 1994 level – close to the midpoint of the period covered. In many other applications these data have been reweighted to represent the current situation e.g., in terms of levels of employment, unemployment, the size and age structure of the population and the size distribution of taxable income (see Callan *et al.*, 2001 for more details). But for present purposes we wish to examine the impact of budgetary policy changes on a *fixed* population. While other choices are possible, there is none which is clearly superior in this context to the use of the 1994 population.<sup>1</sup>

Table 3.1 shows GNP growth year by year over the past twenty years. Average growth over the full period was  $4\frac{1}{2}$  per cent. In more recent years, growth averaged close to  $8\frac{1}{2}$  per cent from the mid-1990s, and growth is now expected to average about 5 per cent over the medium term. (See Duffy *et al.*, 2001).

Growth in 2002 will influence the public finance outcomes and thereby form part of the backdrop for framing Budget 2003. But growth prospects for the coming year are also influential. In principle, one might wish to take this into account by associating each budget with growth in each of the two years, or some weighted average. In this exploratory analysis we simply associate each budget with the average of growth in the two years.

Looking at this two year moving average series, the decade of the 1980s is one in which growth was low throughout. Growth was particularly low in the early part of the 1980s, represented here by the 1982 to 1986 period when growth averaged 0.2 per cent per annum. For the 1987 to 1989 period, growth averaged 2.4 per cent. During the 1990s there was a shorter period of low growth, averaging 2.6 per cent, in 1992 and 1993. Only one multi-year period of above average growth stands out – the years from 1995 to 2001, when growth averaged 8.2 per cent. In Section 3.3 below, the distributive impacts of budgetary policy for these contrasting sub-periods are examined.

<sup>&</sup>lt;sup>1</sup> An analysis of the sensitivity of findings to the choice of "base year" would be of interest. For example, during certain periods with a high unemployment rate, unemployed persons may account for a high proportion of the bottom quintile of net income; while if unemployment is low, the composition of the bottom quintile may be rather different. The impact of budgetary policy on the bottom quintile may, therefore, depend on the composition of that quintile.

Year	Growth in GNP
1980	1.8
1981	1.9
1982	-2.0
1983	-0.9
1984	1.5
1985	1.3
1986	-0.2
1987	3.3
1988	1.5
1989	5.0
1990	6.9
1991	2.3
1992	2.3
1993	3.4
1994	6.3
1995	8.4
1996	7.4
1997	9.4
1998	7.9
1999	8.2
2000	10.4
2001	5.0
2002 Natur Caractherita fan 1	2.9 980 to 2000 from ESRI Databank: for 2001 from CSO <i>Quarterk</i>

Table 3.1: Growth in Real GNP, 1980-2002

Note:: Growth rates for 1980 to 2000 from ESRI Databank; for 2001 from CSO *Quarterly* National Accounts, 1st Quarter 2002. Forecast for 2002 from *Quarterly Economic* Commentary, Summer 2002.

At times of rapid growth, it is often observed that higher incomes increase more rapidly than average or low incomes; with the converse holding when incomes grow less rapidly or fall. To some extent this can reflect the fact that self-employed incomes and those of senior employees, have a rather different risk-reward profile over the business cycle than that of employees with low or average incomes. But here we are not directly concerned with how market incomes respond to the business cycle. Our focus is instead on how the distributive impact of budgetary policy varies over the cycle. Is there a tendency for budgetary policy changes to be more redistributive towards lower income groups during the downswing of a business cycle, and less redistributive when growth is more rapid?

Suppose that the economy is fluctuating about its long-run trend growth due to cyclical factors. Abstracting from the effect of automatic stabilisers, as our analysis does, what might government policy be expected to do? One view is discretionary policy might also "lean against the wind", with welfare recipients not sharing fully in income growth during boom times, but benefiting from protection against falls in income during bad times. In this way they could share fully in growth over the medium term, but with their incomes following a smoother path than might otherwise be possible. Against this, it could be argued that labour market incentives are under greater pressure in the downswing of the business cycle, and that a rise in the income of welfare recipients relative to those in work would lead to greater increases in replacement rates. Recent work (Layte and Callan, 2001) suggests that the duration of unemployment spells in Ireland has not been very responsive to changes in the replacement rate. Nevertheless, if budgetary policy aimed at reducing replacement rates in a downturn, this would require a distributive impact which favoured middle income groups over lower income groups.

Table 3.2 sets out the time periods covered by the 5 partnership agreements concluded since 1987. On several occasions, negotiations on a new partnership agreement reached a crucial stage just before the Budget. In these circumstances, it is may be that the negotiations had a significant influence on the current budget, perhaps even having a stronger effect than outstanding commitments on the last budget "covered" by an agreement. But it could also be argued that delivering on outstanding commitments represented a *sine qua non* of a new agreement and therefore had a stronger effect than current negotiations on the last budget "covered" by an agreement. We present results based on each of these alternatives.

Title	Acronym	Period Covered
Programme for National Recovery	PNR	1 Jan. 1987 to 31 Dec. 1990
Programme for Economic and Social Progress	PESP	1 Jan. 1991 to 31 Dec. 1993
Programme for Competitiveness and Work	PCW	1 Jan. 1994 to 31 Dec. 1996
Partnership 2000 for Inclusion, Employment and Competitiveness	P2K	1 Jan. 1997 to 31 Mar. 2000
Programme for Prosperity and Fairness	PPF	1 Apr. 2000 to 21 Dec. 2002

Table 3.2: Partnership Agreements, 1987 to 2002

The link between governments and the budgets they introduce is more direct, and is set out in Table 3.3. Three out of the six governments introduced three budgets and one delivered only two.

#### Table 3.3: Budgets Associated with Each Government, 1983 - 2002

Government	Budgets Introduced (Number of Budgets)				
Fine Gael, Labour	Budget 1983 – Budget 1986 (4)				
Fianna Fáil	Budget 1987 – Budget 1989 (3)				
Fianna Fáil, Progressive Democrats	Budget 1990 – Budget 1992 (3)				
Fianna Fáil, Labour	Budget 1993 – Budget 1994 (2)				
Fine Gael, Labour, Democratic Left	Budget 1995 – Budget 1997 (3)				
Fianna Fáil, Progressive Democrats	Budget 1998 – Budget 2002 (5)				

## 3.3 Distributive Impact of **Budgetary Policies**

Table 3.4 shows the distributive impact of budgetary policy during periods of high growth and low growth.

During the high growth period (1995 to 2001) budgetary policy led to gains of 12 per cent or more for the top 60 per cent of tax units, as against a loss of 2 per cent for the bottom 20 per cent of tax units and a small gain for the second quintile. These results are quite robust with respect to the timing of the influence of growth on budgetary policy. Thus, over the period of highest growth, budgetary policy boosted the incomes of the upper half of the income distribution, while the incomes of the poorest fifth of the population failed to keep pace with the growth in average income.

Average Growth Rate*	Budgets Covered	Quintiles of Disposable Income Per Adult Equivalent (% Change Over Benchmark)					
		Bottom	2nd	3rd	4th	Тор	All
0.2%	Budget 1983-1986	-5.8	-8.5	-10.4	-7.2	-7.1	-7.7
2.4%	Budget 1987-1989	4.2	-2.5	-1.9	-0.2	1.0	0.1
2.6%	Budget 1993-1994	-2.1	-2.4	-1.0	0.6	2.0	0.5
8.2%	Budget 1995-2001	-1.9	3.1	11.8	13.7	12.5	10.5

### Table 3.4: Distributive Impact of Budgets from High Growth and Low Growth Periods

Note: \* For each Budget, growth rates for the calendar year mainly affected by the budget and the previous calendar year are averaged. The growth rate reported in the first column is the average of these calculated growth rates over the relevant number of budgets.

What of the low growth periods? Here the results are rather different for the 1980s - when growth was low for most of the decade - and for the 1992-1993 Budgets, when growth slipped back from average levels to below average. During the 1983 to 1986 period, actual budgetary policy led to income losses, relative to the neutral benchmark, for all income groups as efforts were made to reduce budget deficits. Losses were smallest for the lowest income quintile, but were still substantial. The percentage loss for the bottom quintile was 5.8 per cent, while that for the top quintile was not much greater at 7.1 per cent; the greatest percentage loss (10.4 per cent) was for those in the middle quintile. During the 1987 to 1989 period, the incomes of the poorest quintile were increased relative to average incomes, while the incomes of those in other low and middle income groups fell. The incomes of the top quintile were also increased relative to the benchmark policy.

During the 1992-1993 period, however, low growth was not associated with favourable treatment for low income quintiles. The incomes of the bottom half of the income distribution fell by about 2 per cent relative to the benchmark, while the incomes of the top quintile rose by a similar rate.

Table 3.5 sets out the distributive impact of budgetary policy for periods relating to the 5 different partnership agreements since 1987.

#### Table 3.5: Distributive Impact of Budgetary Policy, Classified by Partnership Agreements, 1987-2002

	Benchmark Policy	Bottom	2nd	3rd	4th	Тор	All
	Budgetary Policy Influenced by Published Agreement						
PNR	Budget 1988-1991	10.6	-0.3	0.1	2.6	4.3	3.2
PESP	Budget 1992-1994	1.2	0.5	0.4	0.8	1.7	1.1
PCW	Budget 1995-1997	-1.9	-1.0	2.0	3.0	1.9	1.6
P2K	Budget 1998-2000	-2.6	1.5	6.7	6.9	6.8	5.6
PPF	Budget 2001-2002*	6.0	5.1	5.4	4.0	3.8	4.2
	Budgetary Policy Influenced by Negotiations for Current Agreement						
PNR	Budget 1987-1990	8.3	-1.1	-1.1	0.8	2.6	1.6
PESP PCW	Budget 1991-1993 Budget 1994-1996	-1.9 1.2	-3.3 2.0	-1.5 2.3	0.5 1.5	1.7 0.3	0.2 1.0
P2K PPF	Budget 1997-1999	4.5	7.9	10.9	10.7	9.8	9.5
PPF	Budget 2000-2002*	3.3	3.9	6.9	6.5	7.0	6.2

Note:: \*Analysis of agreement to date: Budget 2003 is also covered by the PPF.

Under the Programme for National Recovery, budgetary packages boosted average income by about 2 to 3 per cent (depending on the timing of its influence). There were very substantial gains for the bottom quintile, as some of the key recommendations of the Commission on Social Welfare were implemented – notably increases focused on the lowest rates of social welfare payment. The middle-to-lower section of the distribution (quintiles 2 and 3) did not share in the gains, while the top quintile experienced gains above the average. This pattern relates to the fact that tax cuts were focused on reductions in tax rates – the top rate was cut from 58 to 53 per cent, while the standard rate was cut from 35 to 30 per cent.

The pattern of gains in Budgets influenced by the Programme for Economic and Social Progress depends in part on the timing of that influence. Overall, gains were modest (if budgets were influenced only by published agreements) or negligible (if influenced by the negotiation of an agreement). Gains were greatest for the top quintile. The middle three income quintiles saw either below average gains, or losses. The bottom quintile saw gains which were about average (if negotiations were not influential) or losses (if negotiations were more influential than outstanding commitments).

Differences arising from the timing of impact are sharpest in the case of the Programme for Competitiveness and Work. Overall gains from Budgets 1994 to 1996 were about 1 per cent, as against 1<sup>1</sup>/<sub>2</sub> per cent for Budgets 1995 to 1997. The 1994 to 1996 period saw gains for the bottom two quintiles somewhat above the average, whereas they experienced losses relative to the benchmark policy for Budgets 1995 to 1997. Since Budgets 1995 and 1996 are included under either approach, the contrast which emerges is essentially one between Budget 1994 and Budget 1997. For Programme 2000 the bottom quintile experienced either losses or below average gains relative to the benchmark policy. The top three quintiles, on the other hand, saw gains at or above the average rate.

Finally, for the current agreement, analysed in terms of its impact to date, the picture depends on the timing of its influence. If budgetary policy is influenced by the published final agreement, then only Budgets 2001 and 2002 are included in the analysis. In this case, gains are greatest for the bottom quintile (at about 6 per cent), declining to just under 4 per cent for the top quintile. If, on the other hand, the negotiation of an agreement is expected to influence a budget (negotiations were begun in November 1999 and concluded after the Budget) then Budget 2000 is also included. In this case the shape of the impact is almost reversed: gains of 3 per cent for the bottom quintile rising to gains of 7 per cent for the top quintile.

		Bottom	2 <sup>nd</sup>	3 <sup>rd</sup>	4th	Тор	All
Budget 83-Budget 86	(FG, Lab)	-5.8	-8.5	-10.4	-7.2	-7.1	-7.7
Budget 87-Budget 89	(FF)	4.2	-2.5	-1.9	-0.2	1.0	0.1
Budget 90-Budget 92	(FF, PD)	3.7	0.0	0.3	1.9	3.7	2.5
Budget 93-Budget 94	(FF, Lab)	1.3	1.1	0.4	-0.4	-0.7	-0.1
Budget 95-Budget 97	(FG, Lab, DL)	-1.9	-1.0	2.0	3.0	1.9	1.6
Budget 98-Budget 02	(FF, PD)	2.3	6.4	11.5	10.9	10.6	9.7

Table 3.6: Distributive Impact of Budgetary Policy Across Periods of Government

Now we turn to a similar analysis based on the budgets for which different governments were responsible. The first period of government (Budget 1983 to Budget 1986) coincides with the period of low growth analysed earlier. There are substantial losses across all groups, with below average losses in the bottom quintile, above average for the lower-tomiddle income groups (quintiles 2 and 3) and about average losses for those higher up the income distribution. The 1987 to 1989 government's<sup>2</sup> policies were broadly neutral overall, but benefited the bottom and top quintiles, while the lower-to-middle income groups (quintiles 2 and 3) experienced losses relative to the benchmark policy. The 1990 to 1992 government's policies had a similar U-shaped distributive impact, favourable to those at the bottom and the top of the income distribution, but unfavourable to the lower-to-middle income groups. The budgetary policy of the 1993 to 1994 government was broadly neutral overall, but involved small gains for those towards the bottom of the distribution and small losses for those towards the top.

The 1995 to 1997 government's policies involved losses relative to a neutral benchmark for those in the bottom 40 per cent of the income distribution, and gains for those in higher income groups. The gains were concentrated on the upper middle income group (quintile 4). Finally, the policies of the 1998 to 2002 government involved substantial gains for the top 60 per cent of the income distribution and much more modest gains for the bottom income quintile. This does not include the impact of the SSIA scheme; it seems likely that this will have sharpened the contrast

<sup>2</sup> For simplicity, we refer to the Budgets for which each government was responsible.

between the small gains (relative to a neutral policy) for those on low incomes, and much greater gains for those with higher incomes.

## 3.4 Conclusion

We have examined the impact of budgetary policy over the last twenty years. Our method of analysis aims to identify the first-round impact of budgetary policy choices across the income distribution. We abstract from cyclical influences on market income (e.g., increased earnings inequality during upswings, or increased unemployment during downswings) by focusing on the impact of policy changes on a fixed population. Policy impacts are measured relative to a distributionally neutral benchmark, namely indexation of tax and benefit parameters in line with wage growth.

It is clear that the distributive "shape" of budgetary policy varies considerably not just from year to year, but across three to five year periods covered by partnership agreements, governments, or spells of high and low growth. During Ireland's recent growth spurt budgetary policy acted to reinforce income gains for the higher income groups, while involving losses (relative to the distributionally neutral scenario) for those in lower income groups. Results for low growth periods were more mixed, with a favourable treatment of low income groups in the 1980s contrasting with an unfavourable treatment in 1992-1993.

The overall impact of budgetary policy on the income distribution depends on the balance between relative gains and losses over these subperiods. There are no automatic mechanisms guiding this process. In their absence, continued monitoring of the effects of policy and of distributional outcomes is essential.

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