

# NERI Research inBrief

May 2013

## Impact on the Government Deficit of a Reduction in the Public Sector Pay Bill

Tom Healy and Rory O'Farrell

ISSN 2009-5848

### SUMMARY

A further cut in the public sector paybill in addition to what was already planned and implemented under the Public Service Agreement 2010-2014 ('Croke Park 1') is likely to have a negative impact on domestic economic activity – other things constant. While difficult to model all of the impacts of the proposed adjustment it is likely to reduce the General Government Balance in a full year in the long-run by no more than one quarter (or €250 million) of the total amount (€1 billion).

### KEY POINTS

- Savings to the Government of a €1bn cut in payroll is likely to be approximately €250 million.
- A €1bn public sector payroll deduction is likely to cost 5,000-10,000 jobs, about half of which is in the private sector.

#### Nevin Economic Research Institute (NERI)

31/32 Parnell Square  
Dublin 1  
+ 353 (1) 8897722

e-mail: [info@NERInstitute.net](mailto:info@NERInstitute.net)  
Web: [www.NERInstitute.net](http://www.NERInstitute.net)

Carlin House  
4-6 Donegall Street Place  
Belfast  
BT1 2FN  
Northern Ireland  
+ 44 28 90247940



*Research for new economic policies*

### Context

The Draft Public Sector Agreement 2013-2016 ('Croke Park 2') proposal envisaged a reduction of €1,000 million in the total public sector pay bill. The stated aim of the draft Agreement was to: 'to effect savings in the Public Service Pay and Pensions Bill of €1 billion by 2015'. The draft Agreement is proposed to apply for 'a period of 3 years from 1st July 2013.'

The General Government Balance is estimated to be €12,461 million in 2012 (CSO, 2013). This is the equivalent of 7.6% of total estimated Gross Domestic Product in 2012.

The total estimated 'Compensation of Employees' (E.S.A.95 code D1) in 2012 was €18,784 million (Department of Finance, 2013). The total paybill (measured here as 'compensation of employees' in accordance with Eurostat guidelines) is determined by the total number of persons employed in the public sector ('General Government' sector) and levels of remuneration of persons in the sector. An estimate is made by the Central Statistics Office for the actuarial value of public sector pensions and included in the overall figure and is reported as part of total General Government expenditure for the purposes of measuring Ireland's compliance with General Government deficit and debt targets. The total amount of the paybill will change over time due to three factors:

- i. semi-automatic changes in numbers employed due to demographically-driven staff numbers (an example of which is a rising number of school-going children for a given pupil-teacher ratio);
- ii. existing or new discretionary measures to control the numbers in public sector employment (through for example the non-replacement of persons retiring or leaving the service); and
- iii. changes to pay by adjustments to hourly or annual pay rates, payment of various allowances and payment of increments.

Any particular measure to reduce total public sector pay under ii or iii, above, may be partly offset by changes resulting from i. Measures to reduce public sector pay bill impacts on public finance through a number of channels:

- a) Directly through reductions in 'compensation of employees' lowering total spending - other things equal;
- b) Directly through reductions in revenue (e.g. income tax, USC, PRSI, Public Sector Pension Deduction levy);
- c) Indirectly through reductions in consumption taxation (e.g. VAT and excise duties) and other receipts as a result of lower disposable income more generally;
- d) Indirectly through additional public spending to the extent that a given policy measure has a significant contractionary impact on the economy and is likely to generate some additional social expenditure through higher social transfers (e.g. unemployment benefits) and expenditures on health and education associated with lower household income or higher unemployment.

### Direct revenue impacts

In the case of public sector paybill reductions the direct loss in revenue is easier to estimate than indirect effects. The precise distribution of total gross earnings and various components such as allowances and premia included in the proposed Agreement in the public sector is not known. However, it is likely that the measures impacted disproportionately on those paying the higher rate of income tax of 41%. The following schedule provides a breakdown of direct revenue losses arising from any reduction in gross pay at the margin. The following example indicates that, at the margin, the total of state deductions from most public sector workers is likely to be somewhere between 47.5 and 68.5% of gross income. The actual figure is likely to be closer to 60% than 50% given the structure of pay adjustments envisaged under the proposed Agreement.

**Table 1: Forgone revenues at the margin (for each €100 reduction in pay) based on post-1995 entrants to the public service**

	Top Rate of Income Tax	Standard Rate of Income Tax
Gross Income (example)	100	100
Income tax forgone by Government	41	20
Universal Social Charge	7	7
Pay Related Social Insurance (typical for post-1995 entrants)	4	4
Pension Related Deduction (at the margin)	10	10
Superannuation (typical for most)	5	5
Spouses and children (if applicable)	1.5	1.5
	<b>68.5</b>	<b>47.5</b>

**Indirect revenue and spending impacts**

It is difficult to estimate the likely impact of a given adjustment in public sector pay on economic activity and, thus, receipts of Government from taxes on consumption as well as other receipts. The Economic and Social Research Institute released a working paper by Bergin et al. (2010) in which estimates were provided for the impact of (i) a cut of €1 billion in pay rates and (ii) a cut of €1 billion through a reduction in staff numbers employed in the sector. The impact is modelled by the ESRI through the HERMES macro-economic model and projects changes in the deficit (GGB) as well as GDP over a 7 year period from the time of a policy shock.

Taking the example of a wage cut in the public sector, first, the ESRI authors assume no 'demonstration' effect in the private sector arising from a wage cut in the public sector (equal to €1 billion). The results show a fall in the deficit (GGB) of €677 million in the first year with a fall of €577 million in the second year followed by smaller falls in later years (the lowest being €441 million in year 4).

The estimates of a cut in the numbers employed in the sector as approximated by a cut in health and education employment (equivalent to €1 billion) was €483 million in year one and somewhat smaller amounts in years 2,3 and 4 (but somewhat larger in years 5, 6 and 7).

A number of important caveats are in order concerning the use of HERMES in the 2010 ESRI paper:

- The model tends to reflect strong economic growth conditions and

likely lower 'multipliers' (the impact of a given policy on output and expenditure);

- The model was used in the above example to simulate an across-the-board cut in pay or staff numbers and on the basis of taxation and deduction rates prevailing before 2009 (hence no account is taken of the specific targeting of higher paid staff or the prevalence of a high marginal deduction rate of close to 60% in the case of most employees).

Hence, it is very likely that the ESRI estimates of the reduction in the deficit arising from a discretionary cut of €1 billion are over-estimated by some magnitude. Combining a pay cut and a fall in numbers (through additional non-replacement of retiring staff as a result of longer working hours by those remaining in the service) it is likely, on the basis of the ESRI 2010 working paper that the first-year fall in the deficit is somewhere in the region of €600 million and below €500 million in years 2 and later. Hence, at most, a reduction of €500 million in the deficit in 2014 might be expected as a result of the full implementation of a reduction of €1 billion before December 2014. However, given the high likelihood of revenue depletion not only due to the targeting of the proposed Agreement on higher-paid public servants but the dramatic increase in various deductions at the margin since 2009 for all public sector workers the estimated fall in the deficit is likely to be considerably less than that estimated by the ESRI in 2010. The combined marginal deduction rate of approximately 60% means that there is a likely upfront full-year direct revenue loss

of €600 million for a planned reduction of €1 billion. When indirect revenue losses are added to this the total loss in revenue may be higher than €800 million including loss in indirect tax receipts and multiplier effects as a result of job losses in both the public and private sectors. This would leave a net reduction of €200 million in the deficit for a planned reduction of €1 billion. Modelling by the NERI indicates a likely loss of somewhere in the region of 5,000-10,000 jobs – other things equal – of a paybill reduction of €1 billion.

When account is taken of the impacts of higher unemployment on social expenditure the reduction in the deficit may be even smaller still. A perverse result whereby a reduction of €1 billion might lead to no net effect in the deficit cannot be entirely excluded especially if the loss in employment were more than that estimated by the NERI implementation of the HERMIN model.

None of the above impacts takes account of a possible long-term rebound from greater capital market confidence, lower borrowing costs and investor confidence as a result of on-going fiscal austerity by the Irish government including adjustments to pay, conditions and numbers employed in the public sector. The likely impact of a ‘crowding-in’ of private sector investment and activity as well as reductions, over time, in borrowing costs is difficult to estimate. To date, there is very limited or no evidence that fiscal austerity in various European countries has proved successful in generating economic activity to compensate for the negative impacts of cuts in public spending or increases in government taxes.

### Conclusion

A further cut in the public sector paybill in addition to what was already planned and implemented under the Public Service Agreement 2010-2014 (‘Croke Park 1’) is likely to have a negative impact on domestic economic activity – other things constant. While difficult to model all of the impacts of the proposed adjustment it is likely to reduce the General Government Balance by

no more than one quarter (or €250 million) of the total amount (€1 billion).

### References

Bergin, A., Conefrey, T., FitzGerald, J., & Kearney, I. (2010) *The Behaviour of the Irish Economy: Insights from the HERMES Macro-Economic Model. ESRI Working Paper, No. 28*

CSO (2013) *Government Finance Statistics Annual Results 2009-2012*, Central Statistics Office, Ireland.

Department of Finance, (2012) *Budget 2013 - Economic and Fiscal Outlook*, Department of Finance.

Department of Finance (2013) *Irish Stability Programme. April 2013 Update.*

The views expressed in NERI *Research inBrief* documents are those of the author(s) and do not necessarily represent those of the NERI.

Previous editions of this series are available on the institute’s website [www.NERInstitute.net](http://www.NERInstitute.net)