

McCarthy, Colm

**Working Paper**

## Fiscal adjustment and macroeconomic re-balancing in Ireland

UCD Centre for Economic Research Working Paper Series, No. WP09/28

**Provided in Cooperation with:**

UCD School of Economics, University College Dublin (UCD)

*Suggested Citation:* McCarthy, Colm (2009) : Fiscal adjustment and macroeconomic re-balancing in Ireland, UCD Centre for Economic Research Working Paper Series, No. WP09/28, University College Dublin, UCD School of Economics, Dublin, <https://hdl.handle.net/10197/2626>

This Version is available at:

<https://hdl.handle.net/10419/71357>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

*UCD CENTRE FOR ECONOMIC RESEARCH*

*WORKING PAPER SERIES*

*2009*

**Fiscal Adjustment and  
Macroeconomic Re-balancing in Ireland**

Colm McCarthy, University College Dublin

WP09/28

December 2009

**UCD SCHOOL OF ECONOMICS  
UNIVERSITY COLLEGE DUBLIN  
BELFIELD DUBLIN 4**

## **Fiscal Adjustment and Macroeconomic Re-balancing in Ireland**

To appear *Journal of the Statistical and Social Inquiry Society of Ireland*

Colm McCarthy,  
School of Economics,  
University College Dublin.

## 1. A Macroeconomic and Banking Collapse

In the five quarters from 2008 Q1 to 2009 Q2, Ireland's real GNP, seasonally adjusted, has fallen by 13.5%. The unemployment rate has risen by eight points, labour force participation has fallen and emigration has resumed. The economic decline in Ireland exceeds by a large margin those being experienced by most other European countries, and constitutes the worst recession in Ireland since the early years of the Second World War. The policy challenge involves much more than fiscal consolidation, or recovery from a routine cyclical downturn. In an address to the recent ESRI/Foundation for Fiscal Studies conference, the Central Bank governor argued that Irish macro policy needs to focus, not just on the correction of the fiscal deficit, but on a broader re-balancing of the macro economy, acknowledging the nature and extent of the economic downturn from which recovery must somehow be managed (Honohan (2009b)).

Ireland has had two bubbles, not just one. There has been both a credit-fuelled property bubble and an associated bubble in public expenditure, resulting in an unprecedented macroeconomic contraction and the rapid collapse into severe fiscal deficit. Both bubbles attracted criticism along the way. The risk of a bubble in housing was widely discussed from 2000 onwards. On the spending boom, see Lawlor and McCarthy (2003). The GGB deficit has worsened from approximate balance to the unsustainable level of 12% of GDP in just two years. It will stay at this level in 2010 even if the Government succeeds in its intended adjustment of €4 billion in the December budget. Most of the deficit appears to be structural, and will not diminish automatically with macroeconomic recovery. Hence permanent measures need to be implemented to address the structural problem.

The extent of the banking collapse has yet to be fully acknowledged in much public discussion. Bank of Ireland at the end of November 2009 had a market capitalisation of about €1.5 billion, comparable to a medium-sized industrial company. The capitalisation of Allied Irish Bank has recently been below the market value of its shareholdings in listed overseas associates in the USA and Poland, implying that the market places zero value on its Irish operations. The markets have placed no faith in the book value of bank capital for almost two years now, despite repeated reassurances from bankers, regulators and government consultants, and the markets have been proved right every time. The Irish banking system enjoys roughly €100 billion in emergency liquidity support from the European Central Bank, equating to about 75% of national income. In relative terms, Ireland has had the largest banking collapse of any Eurozone member, and any pretence that the problem is merely one of liquidity, as distinct from solvency, has long since been abandoned by all independent observers.

In the real economy, job losses in sectors other than government, health and education had reached 216,000 by Q2 2009 compared to the peak in Q1 2008, that is to say in just five quarters, with the trend still strongly downwards. With no possibility to devalue, the restoration of competitiveness requires a continuing reduction in prices and costs in Ireland relative to other Eurozone countries, the more so given Ireland's exceptional exposure to the appreciating exchange rate. Since 1999, the harmonised

competitiveness index has worsened, on a producer price basis, by 16%, with the adverse effects concentrated on sectors exposed to sterling and the dollar, including many of the more labour-intensive trading businesses.

## **2. Fiscal Consolidation – Enhancing Government Revenue**

The budget due on December 9<sup>th</sup> will contain the fifth set of budgetary actions since July 2008, and it is salutary to note that the combined effect of these actions will have achieved no more than a containment of the GGB deficit to 12% of GDP next year. Tax revenue will reach about €32 billion this year, roughly 24% of GNP, according to the Pre-Budget Outlook (Department of Finance (2009b)).<sup>1</sup> Gross current revenue (including payroll taxes and some other items) will be about 30% of GNP, down from a peak of 40% in 1988 and 35% in 2006 and 2007. Revenue from stamp duties, capital gains taxes and corporation tax will likely be weak for several years to come – most financial companies, including IFSC companies, will have carry-forward tax losses for the foreseeable future, there will likely be modest realised capital gains, and some companies may be able to reclaim tax already paid. On the other hand there should be recovery in some tax heads in due course as private sector balance sheets are re-built, purchase taxes on cars being an example.

The balance between tax increases and expenditure reductions, as well as their composition and the desirable time-scale for fiscal consolidation, have dominated discussions of budgetary policy options. On time-scale, there is no evidence internationally nor from Ireland's experience in the 1980s which points to a drawn-out adjustment (Lane (2009)). If a deficit of 12% of GDP, and prospectively of 14 to 15% of GNP, is to be closed, it should be clear that the likely solution is a reduction in the public spending share of GNP and an increase in the government revenue share. Note that permanent tax and spending actions are required to address a structural deficit.

Increasing government revenue relative to GNP can be achieved in a variety of ways, and not just by increasing rates of tax. There are in any event severe constraints on the freedom of manoeuvre of government in tax policy, defined by the tax policies of neighbouring, and even of more distant, jurisdictions. Most indirect taxes do not display sizeable 'headroom' against the UK rates, and direct taxes on earned income have already been increased significantly. There are two discretionary actions which might be considered in order to enhance the revenue share, without further increases in rates of tax.

### **Tax Credits and Allowances.**

The current Irish tax code keeps substantial numbers of lower-income workers out of liability for income tax. Some view this as a problem, although it can just as readily be seen as an achievement. The price level, as measured by the CPI, has fallen 6.6% since the budget of October 2008, and the HICP, which I prefer, by just under 3%. These decreases have been cited by the recent spending review (Department of Finance (2009a)), and by the Minister for Finance, as justification for reductions in pay and in various categories of public spending. But on the tax side, they constitute a

---

<sup>1</sup> I prefer GNP to GDP as a denominator for fiscal ratios, see appendix.

compelling case for a reduction in tax credits and allowances. The Exchequer is now suffering from negative fiscal drag, and those below the income tax threshold in late 2009 include people whose real income has risen over the past year. The rising price level was regularly invoked over the last decade as support for increases in tax credits and allowances, and there is no logical case for ignoring the fall in prices as it affects real tax burdens when it is relied upon to support expenditure reductions.

### **Disposing of Intangible State Assets**

The State from time to time disposes of intangible State assets, such as

- (i) rights to the radio-magnetic spectrum, used by mobile phone companies, radio stations, TV stations, commercial and State organizations with wireless communications systems;
- (ii) permits to emit carbon dioxide, used by large industrial companies and electric power generators;
- (iii) mineral and hydrocarbon exploration licenses;
- (iv) fishing quotas and some extra-EU import quotas

It has been the practice in Ireland to allocate these scarce commercial assets for a fixed time-period after which a new allocation is made. They are distributed either for free, or at a nominal or low price unrelated to their commercial value. Allocation is by administrative procedure, usually a formal beauty contest. These beauty contests are fiercely contested, since the assets are being offered below market value.

There has been controversy about these allocations, including allegations of corruption. The alternative is to allocate by auction, where the highest bidder wins. This has three advantages. The State maximizes its revenue. The highest bidder wins, meaning that economic efficiency is enhanced – the asset ends up in its highest-value use. Finally the process is transparent, and scope for corruption, or for allegations of corruption, eliminated. Allegations of corruption are more likely from disappointed beauty contestants than from under-bidders, McCarthy (2003).

Most European countries, and the USA, allocate by auction. The most significant items include emission permits, where Ireland has allocated for free but the UK has announced that the next allocation will include an auction component and the Irish government should follow suit at the earliest feasible date. Ireland disposed of mobile phone licenses at well below value, and virtually all were subsequently re-sold at higher prices. Radio licenses have also been re-sold at substantial profit in some cases. The Department of Finance should prepare a policy paper on the issue, which should list all of the intangible asset disposals which arise, discuss the methods currently used, and consider the auction alternative. Note that the resultant revenues would be recurring and not once-off. Finally, should the auction route be chosen in order to maximize revenue, care needs to be taken in auction design: there is now extensive international experience with auctions, and some designs work better than others.

### **3. Fiscal consolidation – Reducing Government Spending**

In addition to the measures contained in the report of An Bord Snip, government is considering two expenditure policy matters which were outside its remit. The first concerns rates of pay in the public service and the second the capital spending programme.

#### **Public Service Pensions and the NPRF**

The pay bill includes pensions, and there is a substantial medium-term problem highlighted in the recent report of the Comptroller and Auditor-General (2009). Unfunded accrued liabilities stood at €108 billion at end 2008, and the annual cash cost is expected to approximately quadruple as a % of GNP over the next fifty years. Most Irish public service pensions are final salary, unfunded pay-as-you-go schemes. It is time to consider whether the State should now close its final salary pension schemes and move to a defined-contribution, pre-funded, model, as is happening throughout the private sector. As well as helping to regularise the public finances, this move would improve mobility between the public and private sectors and re-integrate the national labour market. It would also prevent the emergence of a two-tier system of retirement income provision, to go with our two-tier health service.

The C and AG's report mentions assets in the National Pension Reserve Fund as a kind of offset to the pension liabilities. The NPRF is a long-short hedge fund, short bonds and long equities, and not a sovereign wealth fund comparable to those operated by Norway and several oil-rich states in the Arabian Gulf. Every €1 in the Fund has a counterpart in the Exchequer debt. The government does not plan to borrow any further money to invest in equities, and the Fund should now be wound down: the carrying cost of the Fund has risen substantially in the last two years in line with the premium on Irish government debt, and to persist with it adds gratuitously to the volatility of the government's net financial position.

#### **The Capital Programme**

Some projects in the National Development Plan are backlog-elimination, some are capacity-enhancing, while some are Bubble left-overs which lacked any compelling economic justification, even when Exchequer resources appeared to be unconstrained. The backlog-elimination projects should be left in place if they can be financed. The capacity enhancing projects should be deferred, given the extent of the collapse in economic activity. The Bubble left-overs should never have been there in the first place, and the crisis presents the opportunity to delete them from the programme.

It is instructive to put some numbers on the economic slowdown and its implications for capacity-enhancing projects. Given the severity and likely duration of the downturn, it is critical to allow for a major *phase shift* in the path of real GDP, and hence in the path of capacity requirements. At the time the NDP was prepared, longer-term forecasts were for GDP to grow 4 to 4.5%. Assume it was 4.25%. In

2008, real GDP fell 3% and a further fall of 7% appears likely for 2009. Recent forecasts suggest a path along these lines: 2010, -1%, 2011, + 3%, with +4% in both 2012 and 2013.

In the table below, the NDP assumption is compared with what now seems likely.

	Assumed NDP		Actual/Current Forecast	
	Volume	% Chg	Volume	% Chg
2007	100.00	...	100.00	...
2008	104.25	4.25	97.00	-3.00
2009	108.68	4.25	90.21	-7.00
2010	113.30	4.25	89.31	-1.00
2011	118.11	4.25	91.99	+3.00
2012	123.13	4.25	95.67	+4.00
2013	128.36	4.25	99.49	+4.00

The loss in output equals a phase-shift of about seven years. *Real GDP in 2013 will be only about 78% of the 'NDP' value*, and there will have been zero growth from 2007. Had the NDP planners known this, the NDP would have deferred the capacity-enhancing projects at least to 2011 or 2012. There would hardly be any expenditure on them at the moment. I suspect this prospective *phase shift* is bigger than people have allowed for, as the recent controversy over paying for the new terminal at Dublin Airport has illustrated. The reduction in tender prices, up to 30% on some reports, reinforces the point. Of course, some capacity requirements relate to metrics other than GDP, such as population in certain age groups. Population may already be falling (emigration seems to be running at an annual rate of 30,000 or so in recent quarters, and could even be offsetting the natural increase). Projections need to be re-worked in these areas also.

There has been a tendency to over-protect the capital programme in recent public discussion, in a context where it is clear that project appraisal had become politicised. If project appraisal has been a failure there is no point to an intensification of whatever procedures have failed. The practice of entrusting project appraisals to consultants selected, and paid for, by the project champions (government departments, state agencies, quangoes, even lobby groups with access to Exchequer subvention) has hopefully been discredited, along with the potentially useful technique of cost-benefit analysis. Cost benefit in Ireland appears at times to have



become a branch of the public relations industry. It is time to set up a unit in the Department of Finance to undertake, either directly or through consultants chosen by Finance, appraisals of all projects over a specified value. Projects need champions, but they should be entitled only to make submissions to the evaluation process. Appraisals would be public documents, and should be laid before the Dail.

#### 4. Re-Balancing the Macro-Economy

If we assume that real GDP will have re-attained the 2007 level by 2013, and that the fiscal deficit will be back under control, it does not follow that the rest of the economy will look at all like it did in the final Bubble year. Indeed it cannot, unless someone can be found to finance another Bubble. In 2007, the Irish economy had a construction sector which had become far too large, a bursting credit bubble, serious competitiveness problems and an emerging fiscal crisis. This was not a good place to be, and there should be no nostalgia for 2007. Fiscal ratios with the revenue/GNP figure higher, and the ratio of non-interest spending to GNP substantially lower, are both likely and desirable, but the rest of the economy needs to be re-engineered.

**Table 2: Sectoral Employment Trends (seasonally adjusted).**

	Tot Emp	Construction	'Public' Emp	'Private' Emp	Public as % Private
Q1 04	1838.3	190.2	380.3	1458.0	26.1
Q1 05	1927.8	225.1	399.6	1528.2	26.1
Q1 06	2021.2	247.1	430.8	1590.4	27.1
Q1 07	2102.0	269.2	452.6	1649.4	27.4
Q2 07	2119.6	<b>272.8</b>	452.7	1666.9	27.2
Q3 07	2131.3	265.4	462.3	1669.0	27.7
Q4 07	2136.4	261.2	461.4	1675.0	27.5
Q1 08	<b>2139.5</b>	254.1	462.9	<b>1676.6</b>	27.6
Q2 08	2119.1	244.7	468.7	1650.4	28.4
Q3 08	2088.8	230.0	471.1	1617.7	29.1
Q4 08	2050.4	213.4	484.2	1566.2	30.9
Q1 09	1981.2	181.5	479.7	1501.5	31.9
Q2 09	1944.9	158.0	<b>484.8</b>	1460.1	<b>33.2</b>
Chg % v					
<b>Peak</b>	-9.1	-42.1	0.0	-12.9	0.0

Source: Table 3, QNHS for Q2 2009, [www.cso.ie](http://www.cso.ie).

Public: NACE O (Public Administration and Defence, Compulsory Social Security), P (Education), and Q (Human Health and Social Work). Private: Total - OPQ.

Recent developments in sectoral employment totals are instructive in this regard. The three sectors Public Administration, Education and Health exceed in aggregate the known totals for public employment, but contain most of it, plus some people nominally in the private sector but employed with the aid of public financial support. All three sectors produce largely non-tradable services. Employment in these sectors was still rising to Q2 2009, and had reached one-third of employment in the private economy, versus a little over one-quarter a few years back. Since macroeconomic adjustment requires an improvement in the external position, through an internal devaluation, this must result in a shift of resources into tradable sectors, including labour resources. In practise this means a shift into private sectors other than construction, where it is likely that employment will continue to fall for some time. Pay reductions in these three sectors should be seen as part of the adjustment process. A successful internal devaluation needs to extend beyond pay reductions, to include utility charges, local authority charges and professional fees. Property costs need to adjust downwards too, reflecting the enormous excess supply of residential and commercial property.

In this connection, it is wrong to argue that the public service pension levy was identical to a pay cut in macroeconomic terms. It feels that way of course for those on the receiving end, but, unlike a pay cut, it did not extend to those already retired, and there is less likelihood of a demonstration effect into private sector pay determination.

## **5. Re-Building the Banking System**

The Irish banks got into trouble for three reasons. Balance sheet expansion was too rapid, and financed to an excessive degree by inter-bank and other foreign borrowing; the loan portfolio became concentrated into the property and construction sectors, and into residential mortgages; and the lending went bad, exposing rapidly the weakness in capital structure and liability management (Honohan (2009a)). For example, the net foreign liability of the Irish banks grew from 10% of GDP in 2003 to 60% in 2008 as they continued to lend into what had been repeatedly identified by independent commentators as a speculative property bubble. The subsequent collapse was precipitated by the failure of US bank Lehman Brothers, which some in the Irish banking industry continue to perceive as a causative factor. The Irish banks were so over-lent into the bubble that their net worth was likely to evaporate as soon as the bubble burst, as it was always bound to do. The failure of the regulatory and supervisory authorities in Ireland to see what was coming, and the failure of bank boards and management to exercise greater prudence, have yet to be subjected to public investigation.

The Government chose, in September 2008, to guarantee bank deposits, senior debt and even some categories of explicitly subordinated debt, a guarantee which runs out in September 2010. The legislation establishing an asset management agency, NAMA, is now on the statute book, and will see the liquidity problems of the banks ameliorated through the purchase by the state of impaired loan assets. Liquidity problems could however persist post-NAMA, particularly if the wind-down of liquidity provision by the European Central Bank proceeds quickly. But most industry observers believe that solvency issues remain, acute in some cases, and that the Irish banks need to be re-capitalised to substantial degree.

Of the two most seriously damaged banks, Irish Nationwide (remarkably, a building society with only a small portion of residential mortgages in its portfolio) and Anglo Irish, acquired systemic importance only through expansion to a scale which threatened the system as a whole and both could be wound down. The rest, including Bank of Ireland and Allied Irish, will end up with much smaller balance sheets and new shareholders.

Either of these large banks could end up too big to save, from the standpoint of an over-extended Irish Exchequer, should they get into further trouble in future years, and there is an urgent requirement for a Bank Resolution Act to deal with future problems in the sector. Such an Act, had it been available, would have helped to minimise taxpayer exposure to the costs of the bank rescue in September 2008, although it is fair to acknowledge that Ireland was not alone in lacking suitable statutory powers to seize and re-structure failing banks. The UK legislation passed earlier this year could serve as a model (Brierley (2009)).

Starting from here, we need to address deficiencies in bank capital quickly, re-visit the position of bond-holders in the Irish banks when the guarantee comes to be renewed, as realistically it must; and enact a bank resolution regime. Public acceptance of the need for austerity would benefit from a comprehensive public inquiry, perhaps through the Joint Oireachtas Committee on Finance or the Public Accounts Committee, into the collapse of the Irish banking industry.

### **Appendix: Choice of Denominator for Fiscal Ratios**

It is conventional internationally to express fiscal ratios (tax or total government revenue, current or total expenditure, various debt and deficit measures) as a percentage of GDP, a geographical output concept. GDP answers the question ‘how much output is produced annually in China’? The EU’s Stability and Growth Pact explicitly employs GDP as the denominator for debt and deficit ratios, and organisations such as the IMF and OECD routinely make international comparisons, and do fiscal policy analysis, with GDP as the denominator.

The alternatives are GNP, GNI (gross national income), or GNDI (gross national disposable income). They are related as follows:

GDP plus/minus factor payments abroad = GNP

GNP plus/minus other current payments abroad (eg EU taxes/subsidies) = GNI;

GNI plus/minus other international transfers (foreign aid, emigrants’ remittances, net EU transfers) = GNDI.

There are many countries where the differences between these aggregates are minor. A country with a small net creditor/debtor position, small foreign sector, will have GDP roughly = GNP roughly = GNI, and if it is not a big aid giver or receiver, and has small migrants’ remittances, GNDI will be similar too.

Ireland is not such a country. Factor payments abroad are substantial and both emigrants’ remittances and outward aid flows have been rising recently. So income is less than output and the choice of denominator matters.

Some figures for the ratio of GNI to GDP for European countries are shown in the table. The Euro-area average is 99.3%. Most countries are in a range of a few points either side of 100, with just four out of twenty below 96. Just two, Luxembourg and Ireland, are below 90. In both cases, there are substantial annual net outflows in the form of factor payments, mainly returns on foreign capital. At least for comparative purposes across European countries, it matters which denominator is chosen in Ireland.

**Table 3: Ratios of Gross National Income to Gross Domestic Product, 2008.**

Austria	98.4	Hungary	93.3	Slovenia	97.7
Belgium	100.4	<b>Ireland</b>	<b>85.8</b>	Spain	97.3
Czech Rep	92.5	Italy	98.5	Sweden	102.2
Denmark	101.8	Luxembourg	75.5	United Kingdom	102.1
Finland	99.8	Netherlands	97.4		
France	100.7	Poland (2007)	96.4	Euro Area	99.3
Germany	101.7	Portugal	96.0		
Greece	96.7	Slovakia	97.5	Source: OECD.	

It also matters when looking at long time-series, since the relationship between the competing denominators has been shifting. Up to the mid-1970s, GNP and GDP were roughly equal, for example, and GNP was about 90% of GDP through the late 1980s and up to the mid-1990s. It has recently fluctuated about 85%. Recent trends in the income measures, as a % of GDP, are shown in the next table.

**Table 4: Alternative Income Measures as % of GDP, Ireland.**

	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008
GNP	88.4	85.2	83.8	81.8	84.5	84.7	84.6	86.3	85.0	85.0
GNI	90.2	86.2	84.5	83.0	85.5	85.6	85.8	87.0	85.6	85.8
GNDI	91.1	86.1	83.9	82.4	84.8	84.9	84.8	86.0	84.5	84.4

All three ratios fell sharply from 1995 to 2000, oscillated to 2006 and have slipped again in the last couple of years.

In the context of assessing fiscal policy, and in particular of the credibility of fiscal consolidation programmes, the critical issue is taxable capacity. The best denominator for fiscal ratios, in this view, is the one closest to the tax base. Interestingly, member states pay contributions to the EU budget based on GNI, although the EU uses the output measure GDP for fiscal ratios under the Stability and Growth Pact. This when it comes to levying the Eu's 'tax' on members, GDP is abandoned. In supporting a contention that Irish public spending has been low compared to European averages, Karl Whelan (2009) favours GDP as the fiscal denominator. Noting that not everyone agrees, he states (in footnote 8):

*'Another argument is that GNP rather than GDP should be used for such comparisons. I disagree with these arguments because all income produced in Ireland is eligible for taxation by the Irish government.'*

Output produced in Ireland does not translate into income available to Irish taxable entities though. A portion of GDP (corporate profits much of which are ultimately expatriated) are nominally subject to tax at 12.5% (it is not clear that all are actually taxed at this rate), but most tax revenue comes from income, payroll and expenditure taxes. These are probably best proxied by GNDI. If a choice has to be made between GNP and GDP, GNP is far closer to GNDI. Whelan's point that '...all income produced in Ireland is eligible for taxation by the Irish government' is true but not operationally significant: the excess of GDP over GNP is taxed only a little, and it is not clear that an increase in the rate of tax (on currently expatriated corporate profits) would yield extra revenue. Of course, the best way to do taxable-capacity analysis is through a fully articulated model of tax revenues, and the ESRI model embeds a detailed revenue specification. Fiscal ratios are shorthand at best.

## References:

- Brierley, Peter (2009): The UK Special Resolution Regime for failing banks in an international context, Bank of England, July.
- Comptroller and Auditor General (2009): Public Service Pensions, Special Report No. 68, August.
- Department of Finance (2009a): Report of the Special Group on Public Service Numbers and Expenditure Programmes, Volumes I and II, July.
- Department of Finance (2009b): Pre-Budget Outlook, November, at [www.finance.gov.ie](http://www.finance.gov.ie).
- Honohan, Patrick (2009a): Resolving Ireland's Banking Crisis, *Economic and Social Review* Vol 40 No. 2, Summer 2009.
- Honohan, Patrick (2009b): Address to ESRI/Foundation for Fiscal Studies Conference, Dublin, 13<sup>th</sup>. October 2009, on [www.centralbank.ie](http://www.centralbank.ie).
- Lane, Philip (2009): "[Macroeconomic Adjustment and Fiscal Policy in Ireland](#)," Irish Economy Note No. 9, November 2009.
- Lawlor, John and Colm McCarthy (2003): Browsing Onwards: Irish Public Spending in Perspective, *Irish Banking Review*, Autumn 2003, pgs 2-17.
- McCarthy, Colm: (2003): Political Corruption in Ireland: Policy Design as a Counter-Measure, *Economic and Social Research Institute Quarterly Economic Commentary*, Autumn.
- Whelan, Karl (2009): Policy Lessons from Ireland's Latest Depression, in Mulholland J. and F. Bradley (eds) *Ireland's Economic Crisis – Time to Act*, Dublin, Carysfort Press