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# Ireland's Second Fiscal Consolidation – Lessons from the Last Time

Colm McCarthy, University College Dublin WP09/17

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<b>Ireland's Second Fiscal Consolidation – Lessons from the Last</b> Time <sup>1</sup>
Colm McCarthy, School of Economics,
University College Dublin.
colm.mccarthy@ucd.ie
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#### 1. Back to the Future.....

For the second time in a generation, Ireland is in a deep fiscal crisis, with double-digit borrowing, escalating debt and concerns about the country's solvency in international debt markets, reflected in the largest adverse bond spreads of any Eurozone member. What's different this time is that the fiscal system's second crisis since the foundation of the state has coincided with the banking system's first. The banks have lost a large portion (on worst estimates, all) of their capital and survive on liquidity furnished, on a prodigious scale, by the European Central Bank.

Parallels with the first Irish fiscal crisis in the 1980s are of limited value given the quite different circumstances. The next section argues that fiscal consolidation post-1987 was less daunting than is likely to be the case over the next few years, and that the role of expenditure cuts under the first Bord Snip has been exaggerated in journalistic renderings of the history of the period.

The deterioration in the public finances has been extraordinarily rapid – even with substantial tax rate increases, revenue has fallen far more rapidly than the tax base, while spending has continued to advance, despite the widespread perception of cutbacks. The conduct of fiscal policy since 2000 is reviewed in section three, and the prospects for a medium-term fiscal consolidation in section four. The paper concludes with some lessons from Irish experience for politicians - and for economists.

# 2. The 1980s Fiscal Correction and An Cead Bord Snip<sup>2</sup>

The current fiscal crisis is Ireland's second, and it is understandable that commentators should seek parallels with the first. By 1978, the debt ratio (Exchequer debt to GNP) had reached about 65%<sup>3</sup> and economists had begun warning about sustainability. In January 1980, Taoiseach Charles Haughey made a famous TV broadcast in which he opined that '...we are living beyond our means'. The subsequent development of Exchequer borrowing is shown in the chart.

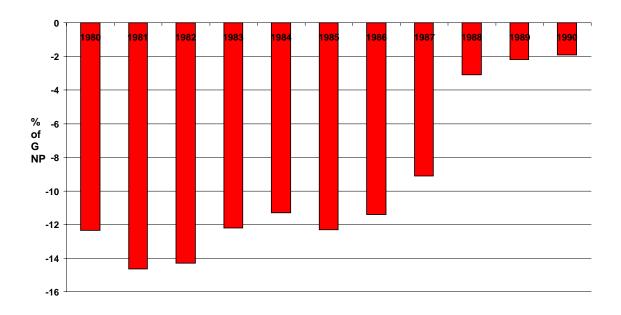


Chart 1: Exchequer Borrowing as a % of GNP in the 1980s.

Borrowing ran at double-digit rates for over a decade from the mid seventies, and by 1988, when sustainability was re-attained, the debt/GNP ratio had reached 117%. It is worth remembering that various fiscal programmes were prepared in the early 1980s which envisaged better macro performance than actually occurred and a more rapid return to fiscal balance. What happened in 1988 was planned to happen by 1983 or 1984.

The large deficits from 1980 onwards arose principally from a combination of revenue weakness (despite sharp increases in tax rates), expenditure growth in the early years and the build-up of debt-service costs. There were three general elections in the 1981-82 period, and it is interesting to focus on the position in 1987 compared to 1982 under the main expenditure and revenue headings. This spans the period in office of the only long-lived government (the Fine Gael-Labour coalition took office in December 1982) during the fiscal crisis after the penny dropped, so to speak. The figures are:

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<sup>&</sup>lt;sup>2</sup> If officials give committees titles like the Special Group on Public Service Numbers and Expenditure Programmes, the media can be excused when they dream up snappier alternatives.

<sup>&</sup>lt;sup>3</sup> This is a backward extrapolation on the revised basis adopted from 1982 onwards.

	Cumulative % Change	Average Annual
Current Services	40.6	7.1
Central Fund	71.6	11.4
Cotal Current	47.3	8.1
Exchequer Capital	-17.9	-3.9
Total Govt Spending	36.5	6.4
Total Revenue	48.7	8.3
Nominal GNP	46.3	7.9
CPI	35.4	6.3

Current non-interest spending rose only a little in real terms, but Central Fund (mainly debt service) rose dramatically. Exchequer capital spending actually fell, so total government spending barely exceeded CPI inflation. The lesson is that, if the tax base is growing only very slowly, as evidenced by sluggish nominal GNP<sup>4</sup>, the build-up of debt service means you have to cut spending – it is not enough to just hold the line. The primary surplus never rose fast enough. The consequence was a fiscal crisis that lasted eight years from Mr. Haughey's dramatic TV broadcast, and a decade from the realization, at least in the economics profession, that this was indeed a fiscal crisis. Debt service absorbed about 30% of tax revenue for ten straight years, total employment in 1991 had barely regained the level of a decade earlier and there was net outward migration in each year bar one from 1980 to 1991. In total, 221,000 emigrated over this period, out of a population averaging about 3.5 million versus 4.5 million at April 2009. All of this was accompanied by external imbalance and successive devaluations within the European pegged exchange rate system of the time. Honohan and Walsh (2002) provide an extended discussion of the attempts to restore fiscal balance during these years.

<sup>4</sup> I prefer GNP to GDP for fiscal ratios – see appendix.

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A minority Fianna Fail government, with Messrs. Haughey and McSharry at the helm, took over in March 1987, and proceeded to establish the first Bord Snip, called the Expenditure Review Group, in May 1987. It was led by the secretary of the Department of Finance, Sean Cromien, who has recently penned a fascinating account of the episode as viewed from Merrion St., (Cromien (2009)). A surprising number of myths, none of them the handiwork of the participants, has grown up about the activities and impact of this body, of which the author was a member.

Briefly, there was no significant reduction in the real volume of current spending as a result of Bord Snip I. There *was* a further squeeze on capital spending, a mistake in retrospect, but most of the adjustment came on the revenue side. The 'slash and burn' stories about 1987, Mac the Knife, decimation of public services and so forth are just journalistic invention. It never happened and the hard numbers are in the next table.

Table 2: The Irish Fisca	al Correct	ion 1987 to	1990.	
	1987	1988	1989	1990
Gross Current Expenditure	4.3	1.0	0.8	8.5
Exchequer Capital	-9.2	-23.7	-3.0	13.1
Total Government Expenditure	2.7	-1.3	0.5	7.0
CPI	3.1	2.1	4.1	3.3
Gross Exchequer Current Revenue	8.2	7.6	1.0	8.9
Exchequer Deficit % GNP	-9.1	-3.1	-2.2	-1.9

Debt service costs changed little over these years (interest rates had fallen, offsetting the rising debt volume), so the figures for total current spending and for non-interest spending (not shown) are similar. Current spending in real terms rose in 1987, fell a little in 1988, fell a little faster in 1989, but rose quite rapidly in 1990. By 1990, the real volume of current spending, however measured, was comfortably above the 1987 level. The big contributors to the adjustment were the severe cuts in capital spending and the sharp improvement in revenue.

Real GNP through the 1980s developed as follows.

		Ta	<b>ible 3:</b> ]	Real GI	NP Gro	wth in	the 198	0s		
1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
2.6	1.8	-1.3	-1.9	1.1	0.2	0.1	3.7	1.7	4.7	6.5

In 1986, the volume of GNP was about the same as it had been in 1980. It then grew 17.6% to 1990, an annual average real growth rate of 4.1%. A contributory factor was a well-executed devaluation in August 1986. The tax amnesty introduced in the January 1988 budget also contributed, yielding at least 2% of GNP more than expected. It was one of the most successful tax amnesties anywhere at the time, and attracted attention from policymakers internationally (Uchitelle (1989)).

The first Bord Snip contributed no doubt, but more in the sense of the old football adage that '....you make your own luck', in other words, get yourself into a position to get lucky. The capital cuts, in retrospect, were overdone during the 1980s, tax rates were raised to self-defeating levels and the emerging fiscal crisis could, and should, have been addressed much earlier. In my view, if it had been acknowledged in say 1978 and dealt with decisively, it could have been over by about 1982 or 1983.

By the end of the 1980s, the public did not need persuading that there was indeed a fiscal crisis: the topic had dominated political debate for a decade. The current position is decidedly less favourable in that regard: the deterioration has been sudden, and has coincided both with a domestically-generated banking collapse and a deep international recession. Public acceptance of the need for severe spending adjustments has been weakened by the infantilisation of public debate through the bubble period by both government and opposition. A further difference from 1987 is the markedly less forgiving condition of the international sovereign debt markets, in which Ireland was one of the few heavy borrowers at times during the 1980s.

On the plus side, the extraordinary pace of spending increases in the last decade means that Bord Snip II has been operating in a target-rich environment, which was not the case in 1987.

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# 3. Fiscal Policy since 2000

From a position of fiscal balance and a declining debt ratio that had lasted over a decade, the public finance position has this year lurched into heavy deficit, and the debt ratio has begun to rise rapidly. On the GGB definition, gross debt will have more than doubled as % GDP in just two years by end 2009. The table shows developments in some public finance aggregates since the turn of the century.

Table 4	: Tren	ds in S	Spendii	ng, Def	icit an	d Debt	, 2000	to 200	9.	
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009f
Tot Spend % Chg*	10.4	16.1	11.0	7.7	6.2	11.1	10.6	11.5	9.8	7.1
Current - CF % Chg	11.4	19.7	14.8	9.2	7.7	10.3	10.6	12.1	9.9	6.0
CPI % Chg	5.6	4.9	4.6	3.5	2.2	2.5	4.0	4.9	4.1	-4.4
Total as % GNP	34.7	36.7	37.5	36.6	36.2	37.0	36.8	38.8	44.5	51.1
GGB Deficit**	4.7	0.9	-0.4	0.4	1.4	1.7	3.0	0.2	-7.3	-12.0
GGB Debt**	37.8	35.6	32.2	31.0	29.4	27.5	25.0	25.1	44.2	59.0
*Total = gross currer ** Both as % GDP	nt + Ex	cheque	r capita	al + Ce	ntral F	und (Cl	F).			

The recent sharp deterioration in both deficit and debt ratios is of course driven in part by the unprecedented decline in GDP. On any measure, spending grew rapidly from 2000 onwards, the more so when some of the measured output growth was borrowed from the future so to speak, through building for stock. Spend relative to GNP as measured was growing up to 2007, and even more so if the GNP growth rates and hence tax buoyancy from say 2002 onwards were in truth not as good as they looked. The dramatic increase in spending ratios in the last couple of years has a large cyclical component, but it is salutary to note that the real increase in current spending in 2009, excluding debt service, will likely be in double digits. This continuing expenditure growth has of course been accompanied by a collapse in tax revenue exceeding the decline in the tax base, reflecting the excessive reliance on taxing transactions in assets.

#### The Origins of the Irish Bubble – an Urtext

Since the Lansdowne Road stadium closed for reconstruction at the end of 2006, all rugby, soccer, Gaelic football and hurling games in Dublin have been played at Croke Park. This is what statisticians call a hypothesis test: is it possible to accommodate all major games in a single Dublin stadium? The answer apparently is yes. When Lansdowne Road re-opens next year, the two stadiums will share the available fixtures and both will be under-utilised QED.

It is salutary to note that (i) both Croke Park and Lansdowne Road have received substantial Exchequer support, and (ii) at one stage, there were live plans to have four modern stadiums in Dublin. The third would have been Eircom Park, promoted by the Football Association of Ireland and promised public funds. It fell through. The most ambitious was the National Stadium at Abbotstown, promoted by the Department of the Taoiseach and better known as the Bertiebowl. When finally killed off by Progressive Democrat Ministers Mary Harney and Michael McDowell, the cost estimate had reached €l billion.

The National Stadium fiasco should stand as the definitive monument to the retreat from reality in Ireland during the early stages of the Bubble. While it appears ridiculous now, the project was taken seriously by the political class and the media for the best part of a decade. It is entirely fair to note that the project enjoyed the endorsement of an economic and technical evaluation from an impressive list of consultants (PriceWaterhouseCoopers, Indecon and numerous others (1999)). Their findings included

'Progressive countries and economies have certain landmark buildings such as sports stadia to accommodate and showcase what is best about that society. Investments in such flagship projects are made primarily on strategic grounds, and rarely on financial or economic grounds alone.

Ireland is entering the 21<sup>st</sup>. century as a confident, young and dynamic country, achieving international recognition for our achievements on many fronts – our economic recovery, our cultural and artistic renaissance, and not least our sporting achievements. The National Sports Stadium Complex would be an icon for Ireland and Irishness.'

The report is dated 22<sup>nd</sup>. October 1999, a decade ago almost to the day. This document deserves a place as an Urtext of the Irish Bubble.

The recent economic history of Ireland can be divided provisionally into the fiscal consolidation phase up to the currency crisis of late 1992 and early1993; the Celtic Tiger period which lasted until about 2001; followed by the Bubble, which began to burst in mid-2007. The Irish Bubble has been, in relative terms, one of the largest in a developed country and seems destined to spawn a cottage industry for economic analysts to rival that created by the Tiger. The main domestic components were failures in expenditure control and in the regulation and supervision of the banking system. Of course even if Irish policy had been flawless in both of these dimensions, the economy would now be experiencing a serious downturn, but it is a form of denial, and not conducive to the best policy response, to pretend that the current crisis was caused by an asteroid strike, or the unfortunate Brothers Lehman.

#### 4. Fiscal Consolidation over the Medium Term

The recent revised programme for government reiterates the commitment to the fiscal consolidation targets outlined at the time of the supplementary budget last April. These are

Table 5: Govern	ment's Fis	cal Conso	olidation I	Programn	ie	
	2009	2010	2011	2012	2013	
GGB Deficit % GDP	12.00	10.75	8.50	5.50	3.00	
GGB Debt % GDP	59	73	78	79	77	
Assumed GDP Growth	-7.7	-2.9	+2.7	+4.2	+4.0	

In April, the GGB deficit for this year was expected to be 10.75% of GDP. Due mainly to tax revenue weakness, this now looks unlikely, and 12% is more realistic. The GGB debt, shown at 59% in the April document, will presumably be a few points higher, as would the figures for subsequent years. The GDP decline shown for 2010 is pessimistic compared to more recent forecasts, but the numbers pencilled in for 2011, 2012 and 2013 are ones a lot of people would settle for. The adjustment, crucially, is expected to come substantially on the revenue side. Tax revenue is assumed to rise 27% from a 2009 base now unlikely to be reached. The figures also assume that spending grows very little, despite the inevitable build-up of debt service costs, implying significant real cuts in the non-interest component. These are forecasts, and debating their plausibility is pointless. What matters is the target deficit for 2013, at the SGP limit of 3%. The Stability and Growth Pact has been relaxed but not abandoned, and Eurozone members are still expected, when the dust settles, to (i) not breach the 3% limit, but also (ii) adhere to the 0% average over the cycle.

The revised government programme agreed between Fianna Fail and the Greens last weekend states, regarding the re-affirmation of the fiscal consolidation programme,

No doubt it has, but more importantly it has been *permitted* by the European Commission, and as a concession – no other member state, so far as I am aware, has been given until 2013 to get back to 3% borrowing. Thus those, such as the Irish Congress of Trade Unions, who argue for a much longer period of adjustment are in effect arguing that we should go back to the Commission and re-negotiate the terms of our adherence to Eurozone rules. There can be no presumption that such a re-negotiation would succeed.

<sup>&#</sup>x27;This plan has been welcomed by the European Commission'.

Nor is it self-evidently in Ireland's interests to spin out the adjustment to 2017 or 2018, were it to be permitted by the Commission, and by the international sovereign lenders. The exit debt ratio could easily exceed 100% of GDP at the end of a decade-long adjustment.<sup>5</sup> An important difference between the current situation and the 1980s is that worldwide sovereign debt issuance is at unprecedented levels and the markets, though improving, remain stretched. As quantitative easing programmes are withdrawn, the bond issuance which they have been supporting will also have to be trimmed, so the European Central Bank's stance will affect Ireland's options. Finally Ireland's credit spread at ten years against the bund remains around 160 basis points, easily the largest adverse spread of any Eurozone member. Bluntly, this means that the markets are not convinced that Irish debt is free of risk, and countries with higher debt ratios than ours, and no greater liquidity, enjoy narrower spreads. Any move to delay the fiscal adjustment could see spreads widen further, adding quickly to debt-service costs and thus offsetting at least in part the intended relaxation of fiscal policy. Some of those advocating stimulus or a slower adjustment are assuming an elastic supply of sovereign credit at unchanged cost, as well as low fiscal leakages, neither of which is self-evidently realistic.

Fiscal consolidation must be seen in the broader policy context. In addition to fixing the budget, we need to fix the banking system, cut wage and non-wage costs to restore competitiveness and de-leverage the national balance sheet. In an address to the ESRI/Foundation for Fiscal Studies conference during the week, the Central Bank Governor suggested that a reasonable medium-term target would be to re-balance the economy with revenue and expenditure shares in GNP around the levels prevailing eight or ten years ago (Honohan (2009)). This would mean a sharp increase in the ratio of tax revenue to GNP from current very depressed levels. Rates of tax have already been increased and there may be further increases on the way, but the tax/GNP ratio should rise anyway without rate increases. People will have to replace cars eventually, for example, and the rise in the savings ratio cannot go on forever.

But the Governor's suggestion also implies that the recent sharp increase in the ratio of public spending to GNP should be reversed. Some of it is cyclical and will reverse anyway as the economy recovers, but it must be accepted that some of the increases during the Bubble were based on a misperception of the economy's long-run taxpaying capacity. What must be avoided is any nostalgia, in any area of policy, for the unbalanced economy which emerged in the final years of the Bubble. In 2007, we had full employment, easy credit and a balanced budget, but we also had iffy banks, excess leverage throughout the system, crowding-out of the traded sector and poor competitiveness. It felt fine, but it was not a good place to be.

A re-balanced economy will not look like 2007, unless we somehow manage to persuade foreigners to finance another Bubble. At its simplest, it will need to switch resources

<sup>&</sup>lt;sup>5</sup> The net debt has recently been about 20 GDP points below the gross figure it is true (the state has financial assets, mainly cash arising from pre-funding by the NTMA and the securities held by the National Pension Reserve Fund). But the gross debt figure contains no provision for any Exchequer costs which might emerge from the bank rescue, which works the other way.

from making buildings and other non-tradables to making exports. It is clear from the table that the shrinking of the construction sector continues apace, with employment

	Table 6: S	ectoral Emplo	oyment Trends	(seasonally ad	justed).
	Tot Emp	Construction	'Public' Emp	'Private' Emp	Public as % Private
Q1 04	1838.3	190.2	380.3	1458.0	26.1
Q2 04	1856.6	199.0	386.4	1470.2	26.3
Q3 04	1885.0	210.3	390.9	1494.1	26.2
Q4 04	1901.9	211.9	390.3	1511.6	25.8
Q1 05	1927.8	225.1	399.6	1528.2	26.1
Q2 05	1949.3	229.0	408.4	1540.9	26.5
Q3 05	1976.1	231.2	413.6	1562.5	26.5
Q4 05	1996.8	238.0	421.2	1575.6	26.7
Q1 06	2021.2	247.1	430.8	1590.4	27.1
Q2 06	2039.9	253.5	437.5	1602.4	27.3
Q3 06	2053.8	265.8	445.7	1608.1	28.3
Q4 06	2076.8	266.9	447.9	1628.9	27.5
Q1 07	2102.0	269.2	452.6	1649.4	27.4
Q2 07	2119.6	272.8	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	2139.5	254.1	462.9	1676.6	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	484.8	1460.1	33.2
Chg % v	-9.1	-42.1	0.0	-12.9	0.0

Source: Table 3, QNHS for Q2 2009, 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.

down 42% from peak. But the three sectors called O, P and Q (public administration, education and health) have yet to peak in employment terms, and these are hardly promising export sectors.

The three sectors OPQ exceed in aggregate by a fair margin the total number of public service employees, reflecting the presence of workers in health and education who are not public servants. Many of course are paid out of budgets which enjoy public subvention. Employment in the OPQ sector has yet to peak, and the % of total employment accounted for by these three employment categories has risen from around 26% a few years ago to 33% in mid-2009. We need to re-balance more than the public finances.

The 1987-90 fiscal consolidation finally took place in a more propitious environment than seems likely over the next four or five years: GNP growth rates will do well to average 4%, the sovereign debt markets are more crowded and less forgiving, and we cannot have another last-chance tax amnesty. The other important difference is that the years preceding the 1987 corrective action were ones in which current and capital spending had grown very little – this time, we are faced for the first time with a fiscal correction coming out of a bubble. There was a bubble in public spending as well as in credit provision, and the economy will not be re-balanced on a sustainable path unless this is acknowledged.

# 5. Lessons from the 1980s for Politicians (and Economists)

The principal lesson for policymakers is that little was achieved by delaying the fiscal adjustment. Had action been taken from as late as 1980, and it would have been justified even earlier, the economy could have skipped five miserable years. Four more specific lessons are

- (i) A medium-term consolidation is more likely to under-achieve, the rosier the macro projection on which it is based. Better be cautious, and be surprised on the upside!
- (ii) Even with rising tax rates, it is difficult to realise substantial increases in tax/GNP ratios in a downturn.
- (iii) With debt-service building up, and pressure on social transfers, actual cuts are needed for stabilisation it is not enough just to halt the rise in real non-interest spending.
- (iv) The better capital projects need to be identified and defended. It would help if project evaluation could be undertaken by someone other than consultants hired by the project promoters. I cannot recall a single project being dropped as a result of an evaluation conducted in this manner.

There are some lessons for economists too. While the full dimensions of the Irish implosion were foreseen by no-one, it is simply untrue that no warnings were issued about the emerging banking and fiscal crises: whether they were loud enough is another matter, although what is heard matters more than what is said. The IMF reports on Ireland from the early years of the current decade make interesting reading, especially on banking and credit developments. On the lack of discipline in expenditure control see Lawlor and McCarthy (2003). But it seems obvious that, after the abolition of the currency in 1999, many Irish economists began to focus more on micro-policy concerns, believing that the big macro issues including external financial balance and budgetary policy (given the Stability and Growth Pact rules) had been taken off the list of things likely to go wrong. This was a bad call!

The legendary hurler Christy Ring was noted for taking advantage of the inattention of Cork's opponents when the referee held the ball after stoppages in play. Christy was accused of gamesmanship, taking quick frees, even of swapping a soggy ball on a wet day for a crisp dry one secreted on his person. Asked about this after he retired, Ring remarked:

'Always keep your eye on the ball, especially when it's out of play'.

#### **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 7: R	atios of (	Gross National Inco	ne to G	Fross Domestic Product	t, 2008.
Austria	98.4	Hungary	93.3	Slovenia	97.7
Belgium	100.4	Ireland	85.8	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 8: 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.

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