

Quarterly Economic Commentary

Joseph Durkan
David Duffy
Cormac O'Sullivan

Summer 2011



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Quarterly Economic Commentary

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Research Bulletin

11/2

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Authors

Joseph Durkan is an Associate Research Professor and Editor of the *Commentary*, David Duffy is a Research Officer and Cormac O'Sullivan is a Research Assistant at the Economic and Social Research Institute (ESRI).

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Summary Table

	2009	2010	2011(f)	2012(f)
OUTPUT				
(Real Annual Growth %)				
Private Consumer Expenditure	-6.9	-0.8	-1.3	0.0
Public Net Current Expenditure	-4.5	-3.8	-3.3	-4.0
Investment	-28.7	-24.9	-6.7	-2.8
Exports	-4.2	6.3	7.0	7.4
Imports	-9.3	2.7	4.9	5.8
Gross Domestic Product (GDP)	-7.0	-0.4	1.8	2.3
Gross National Product (GNP)	-9.8	0.3	0.2	0.7
PRICES				
(Annual Growth %)				
Harmonised Index of Consumer Prices (HICP)	-1.7	-1.6	1.3	1.0
Consumer Price Index (CPI)	-4.5	-1.0	3.0	1.0
Wage Growth	-0.8	-2.9	0.0	1.0
LABOUR MARKET				
Employment Levels (ILO basis (000s))	1,929	1,848	1,803	1,815
Unemployment Levels (ILO basis (000s))	259	292	300	310
Unemployment Rate (as % of Labour Force)	11.8	13.6	14.3	14.5
PUBLIC FINANCE				
Exchequer Balance (€m)	-24.6	-18.7	-17.3	-14.5
General Government Balance (€m)	-23.0	-49.9	-22.4	-11.4
General Government Balance (% of GDP)	-14.3	-32.0	-14.2	-7.1
Excluding once off bank bailout monies	-11.8	-11.5	-9.3	-7.1
General Government Debt (% of GDP)	65.2	94.9	104	109

Summary

The international economy is in a period of great uncertainty. On both sides of the Atlantic, governments are faced with difficult choices regarding levels of debt. In the United States, this has led to the first ever downgrading of sovereign debt by a major ratings agency. In Europe, governments have agreed major changes to the mechanism for bailing out troubled eurozone countries, although financial markets are not convinced that this is enough. While this agreement has brought about improved terms for Ireland's bailout, and thus made the road to fiscal sustainability easier, the issue of burden sharing remains to be addressed. At present the cost of the restructuring of the covered banking system has primarily been borne by Ireland, even though the benefits of this restructuring are shared throughout the eurozone.

Activity in the domestic economy is expected to remain depressed this year, with GNP growing by 0.2 per cent and GDP growing by 1.8 per cent. Growth may pick up in 2012, with GNP growing by 0.7 per cent and GDP by 2.3 per cent. The stimulus for growth is coming from the export sector as domestic producers seek to replace lost domestic demand with new business from abroad, while the multinational sector continues to perform well on global markets. Despite the difficulties being faced in the international economy, we predict that exports from indigenous firms will increase 7.5 per cent in volume terms, both this year and next. There is also an expansion of capacity underway in both the multinational manufacturing and services exports sectors. Overall, we expect the volume of exports of goods and services to increase by 7.0 per cent in 2011 and 7.4 per cent in 2012.

Forecasts of domestic demand have been scaled back in this *Commentary* as a result of a deterioration in the factors determining household consumption. The household savings rate remains elevated in the face of great uncertainty – uncertainty about the future global and domestic economic climate and about the impact of future domestic budgets. Our forecast inflation rate is now 1.3 per cent and consequently, we expect consumption to fall by 1.3 per cent this year, but may remain constant in 2012.

There remains an overhang of excess housing, office space and commercial space that is expected to depress investment over the coming years. The completion of the road-building programme will also act as a drag on building and construction

investment, which is unlikely to be replaced by any big-ticket infrastructure projects in the near future. In contrast, investment in manufacturing and agriculture is expected to expand this year following several years of decline. Overall, investment is expected to fall by 6.7 per cent this year, and 2.8 per cent in 2012.

Unemployment is expected to remain high. The collapse in output in the construction sector has created a major structural unemployment problem. The full scale of this problem is difficult to gauge as a significant number of workers in this sector were from overseas, and the extent to which these migrants have since left the country. Current trends in employment and unemployment are not encouraging. We expect unemployment will average 14.3 per cent this year, and could be even higher next year unless there is significant outward migration.

In addition to the cost of restructuring the banking system, the public finances have suffered due to the deterioration of taxation revenue following the collapse of the bubble. Expenditure has yet to reduce to match this new reality. Reducing the consequent large deficit has proven difficult, and has necessitated spending cuts, increased service charges, public sector pay cuts, and tax increases. The danger is that some good programmes will be cut because this is less challenging than cutting others that yield less benefit.

In the *General Assessment*, we consider four interconnected imbalances that are currently acting to depress the economy: the restructuring of the banking system, the fiscal deficit, private sector deleveraging, and structural unemployment. These problems could be alleviated by a resumption of economic growth, which can only be achieved by greater competitiveness and growing domestic confidence. Recent indications that government is planning to make explicit the changes in taxation and expenditure that are required to effect the fiscal consolidation over the next few years are very welcome.

NATIONAL ACCOUNTS 2010 (Estimate)

A: Expenditure on Gross National Product

	2009 Estimate €bn	2010 Estimate €bn	Change in 2010		
			Value	% Price	Volume
Private Consumer Expenditure	85.2	82.6	-3.1	-2.3	-0.8
Public Net Current Expenditure	28.5	26.2	-8.0	-4.3	-3.8
Gross Fixed Capital Formation	25.3	18.1	-28.5	-4.8	-24.9
Exports of Goods and Services (X)	145.9	157.7	8.1	1.7	6.3
Physical Changes in Stocks	-2.3	-0.9	-	-	-
Final Demand	282.6	283.7	0.4	-0.5	0.9
less:					
Imports of Goods and Services (M)	121.0	127.9	5.7	2.9	2.7
Statistical Discrepancy	1.0	-0.2	-	-	-
GDP at Market Prices	160.6	156.0	-2.9	-2.4	-0.4
less:					
Net Factor Payments (F)	28.4	27.8	-	-	-
GNP at Market Prices	132.2	128.2	-3.0	-3.3	0.3

B: Gross National Product by Origin

	2009 Estimate €bn	2010 Estimate €bn	Change in 2010	
			€bn	%
Agriculture, Forestry, Fishing	2.2	2.7	0.5	24.9
Non-Agricultural: Wages, etc.	73.6	68.8	-4.9	-6.6
Other:	49.5	53.2	3.7	7.5
Adjustments: Stock Appreciation	1.0	-0.3	-	-
Statistical Discrepancy	1.0	-0.2	-	-
Net Domestic Product	127.3	124.2	-3.2	-2.5
less:				
Net Factor Payments	28.4	27.8	0.6	-
National Income	99.0	96.4	-2.6	-2.6
Depreciation	17.3	16.1	-1.2	-
GNP at Factor Cost	116.2	112.4	-3.8	-3.3
Taxes less Subsidies	16.0	15.8	-0.2	-
GNP at Market Prices	132.2	128.2	-4.0	-3.0

C: Balance of Payments on Current Account

	2009 Estimate €bn	2010 Estimate €bn	Change in 2010
			€bn
Exports (X) less Imports (M)	24.9	29.8	+4.9
Net Factor Payments (F)	-28.4	-27.8	-0.6
Net Transfers	-1.2	-1.2	0.0
Balance on Current Account	-4.7	0.8	+5.5
as % of GNP	-3.6	0.6	+4.2

FORECAST NATIONAL ACCOUNTS 2011

A: Expenditure on Gross National Product

	2010 Estimate €bn	2011 Estimate €bn	Change in 2011		
			Value	% Price	Volume
Private Consumer Expenditure	82.6	82.5	-0.1	1.3	-1.3
Public Net Current Expenditure	26.2	25.4	-3.0	0.3	-3.3
Gross Fixed Capital Formation	18.1	16.7	-7.8	-1.1	-6.7
Exports of Goods and Services (X)	157.7	168.8	7.0	0.0	7.0
Physical Changes in Stocks	-0.9	-0.5	-	-	-
Final Demand	283.7	292.9	3.2	0.4	2.8
less:					
Imports of Goods and Services (M)	127.9	135.9	6.2	1.3	4.9
Statistical Discrepancy	-0.2	-0.1	-	-	-
GDP at Market Prices	156.0	157.2	0.7	-1.1	1.8
less:					
Net Factor Payments (F)	27.8	30.4	-	-	-
GNP at Market Prices	128.2	126.7	-1.1	-1.3	0.2

B: Gross National Product by Origin

	2010 Estimate €bn	2011 Forecast €bn	Change in 2011	
			€bn	%
Agriculture, Forestry, Fishing	2.7	3.0	0.3	9.8
Non-Agricultural: Wages, etc.	68.8	67.4	-1.4	-2.0
Other:	53.2	55.8	2.6	4.9
Adjustments: Stock Appreciation	-0.3	-0.3	-	-
Statistical Discrepancy	-0.2	-0.1	-	-
Net Domestic Product	124.2	125.8	1.6	1.3
less:				
Net Factor Payments	27.8	30.4	2.6	-
National Income	96.4	95.4	-1.0	-1.0
Depreciation	16.1	15.0	-1.0	-
GNP at Factor Cost	112.4	110.4	-2.1	-1.8
Taxes less Subsidies	15.8	16.4	0.6	-
GNP at Market Prices	128.2	126.7	-1.5	-1.1

C: Balance of Payments on Current Account

	2010 Estimate €bn	2011 Forecast €bn	Change in 2011
			€bn
Exports (X) less Imports (M)	29.8	32.9	3.1
Net Factor Payments (F)	-27.8	-30.4	-2.6
Net Transfers	-1.2	-1.0	0.2
Balance on Current Account	0.8	1.5	0.7
as % of GNP	0.6	1.2	0.6

FORECAST NATIONAL ACCOUNTS 2012

A: Expenditure on Gross National Product

	2011	2012	Change in 2012		
	Estimate €bn	Estimate €bn	Value	% Price	Volume
Private Consumer Expenditure	82.5	83.4	1.0	1.0	0.0
Public Net Current Expenditure	25.4	24.4	-4.0	0.0	-4.0
Gross Fixed Capital Formation	16.7	16.2	-2.6	0.2	-2.8
Exports of Goods and Services (X)	168.8	182.4	8.1	0.6	7.4
Physical Changes in Stocks	-0.5	0.0	-	-	-
Final Demand	292.9	306.5	4.6	0.7	3.9
less:					
Imports of Goods and Services (M)	135.9	145.5	7.1	1.2	5.8
Statistical Discrepancy	-0.1	-0.1	-	-	-
GDP at Market Prices	157.2	161.1	2.5	0.2	2.3
less:					
Net Factor Payments (F)	30.4	33.4	-	-	-
GNP at Market Prices	126.7	127.6	0.7	0.0	0.7

B: Gross National Product by Origin

	2011	2012	Change in 2012	
	Estimate €bn	Forecast €bn	€bn	%
Agriculture, Forestry, Fishing	3.0	3.3	0.3	10
Non-Agricultural: Wages, etc.	67.4	68.5	1.1	1.6
Other:	55.8	58.2	2.4	4.3
Adjustments: Stock Appreciation	-0.3	-0.3	-	-
Statistical Discrepancy	-0.1	-0.1	-	-
Net Domestic Product	125.8	129.5	3.8	3.0
less:				
Net Factor Payments	30.4	33.4	-3.0	-
National Income	95.4	96.1	0.7	0.8
Depreciation	15.0	14.1	-1.0	-
GNP at Factor Cost	110.4	110.2	-0.2	-0.2
Taxes less Subsidies	16.4	17.5	1.1	-
GNP at Market Prices	126.7	127.6	0.9	0.7

C: Balance of Payments on Current Account

	2011	2012	Change in 2012
	Estimate €bn	Forecast €bn	€bn
Exports (X) less Imports (M)	32.9	36.9	4.0
Net Factor Payments (F)	-30.4	-33.4	-3.0
Net Transfers	-1.0	-1.0	0.0
Balance on Current Account	1.5	2.5	1.0
as % of GNP	1.2	2.0	0.8

1. Introduction

DOMESTIC IMBALANCES

In the Spring *Quarterly Economic Commentary*, we described an economy in transition from one that was over-reliant on the domestic construction industry, to an economy that is orientated towards export demand. This transition is still underway, but a return to growth led by external demand is being frustrated by a global slowdown and several domestic imbalances; the structural unemployment problem created by the collapse of the construction industry, mounting public debt created by bubble-era expenditure and recession-era tax revenue, the ongoing restructuring of the troubled banking system, and the deleveraging of private sector debt. Taken together these factors will keep economic growth well below potential over the forecast horizon.

INTERNATIONAL CONTEXT

As well as the very difficult domestic situation, the international situation we now find ourselves in is increasingly challenging. The recent downgrading of US debt, the concerns about Italy's and Spain's level of debt, and the lack of clarity about the details of the revised terms of the bailout agreement covering Greece, Ireland and Portugal, have caused major turmoil in financial markets and increased the uncertainty that faces consumers, producers and governments. The financial turmoil requires a speedy and coherent solution, not just determined by governments but informed by market participants. If this does not happen, the uncertainty could easily spill over into corporate and household decision making – already in a fragile state – and cause developed economies to tip back into negative growth.

Against the background of global uncertainty, there have been other developments since the Spring *Quarterly Economic Commentary* that have been positive for Ireland. The most important of these developments has been the recent modification of the European Financial Stability Fund (EFSF) bailout mechanism as it applies to all programme countries, including Ireland, in response to the continuing crisis in Greece and worries about the financial health of Italy and Spain. The changes are very favourable to Ireland and ease the burden and timing of the required fiscal adjustment as well as significantly reducing the uncertainty in relation to a return to financial markets by the State.

The change in the conditions facing Ireland arising from the 21st July Statement by the Heads of State/Government in the eurozone on interest rates and lengthening the maturity of the bailout loans is a step in the right direction. The effect of the reduction in interest rates is to save approximately €1 billion per year when the loans are fully taken up, though somewhat less initially. This eases the adjustment of the public finances and should permit a return to a balanced budget earlier than might otherwise have occurred. The lengthening of the maturity increases the flexibility of government when facing the rollover of debt. If government is in a position to return to financial markets at more favourable rates then the bailout loans can be repaid earlier. There remain important elements of the new agreement that are yet to be finalised, but the general shape is clear.

The revised agreement allows for the possibility of debt buy-backs by the EFSF and the European Stability Mechanism (ESM) in secondary markets, depending on economic circumstances. This creates the possibility of debt reduction but the very existence of this facility, which effectively improves the liquidity of government debt, may limit the extent of buy-backs and bring market rates closer to bailout rates. This facility is likely to be important in circumstances where a renewal of uncertainty in financial markets leads to yields on government paper rising again to the very high levels reached from early July to the time of the new agreement.

The final element in the revised agreement that is of benefit to Ireland derives from the statement that “We are determined to continue to provide support to countries under programmes until they have regained market access, provided they successfully implement these programmes”. The significance of this is that the debt rollover of €12 billion due in early 2014 can be successfully financed, either by market access or by funding through the EFSF/ESM. In the *Spring Quarterly Economic Commentary* we expressed concern about the scale of the rollover while the country was still running a very large budget deficit and while there was some doubt about private sector debt reductions whether voluntary or not. These two factors suggested that a return to financial markets to finance the deficit and rollover was unlikely. Hence, at that time, we were in favour of a reduced timetable for deficit reduction. This new agreement has fundamentally changed our view about the necessary speed of adjustment. The lower interest rates allow a smaller budget deficit than the target 3 per cent by 2015. It has been argued¹ that Ireland should move more rapidly on fiscal adjustment in order

¹ Philip Lane “Swift fiscal adjustment could hasten recovery” *Irish Times*, July 29 2011.

to establish in the minds of market participants that the debt is sustainable and that consequently there will be no burden sharing with private holders of sovereign debt. It is hoped that this will allow earlier access to financial markets. This argument has much to recommend it and we believe that the deficit target could be reduced to 1.5 per cent by 2015. If, by 2015, regaining market access is difficult for whatever reason, then going above and beyond the bailout terms strengthens the case for support as quoted above.

While the agreement was much more favourable than many had expected, there are still unresolved issues in relation to burden sharing, the overall level of indebtedness of member countries in the eurozone, and the evolution of the European Central Bank (ECB) into a more classic central bank, albeit without a central government backstop. Taking the first of these issues, there are very significant differences between the causes of the financial crisis in different countries. In the case of Ireland a significant element of the level of debt and the amount borrowed year-by-year is a direct consequence of the banking collapse and inappropriate fiscal policy during the boom when policy should have been contractionary, whereas for other indebted nations it is primarily a reflection of fiscal mismanagement, with the emergence of permanent deficits. There are potential spillover effects to other countries in the monetary union of the financial crisis in Ireland and these argue for an approach that recognises this. At present the cost of the restructuring of the banking system has been reflected in increased indebtedness by the State, even as the benefits of this restructuring are more widely shared throughout the eurozone. In a monetary union with the necessary fiscal authorities, burden sharing would be the norm, recognising the interdependence between the different elements of the monetary union. The eurozone lacks this central fiscal authority so that the efforts to resolve this unprecedented crisis are fragmented. Over time we may move to an approach that involves burden sharing at the eurozone level and this would ease the burden on Ireland.

A more intractable problem remains the level of indebtedness of some members of the eurozone. The recent uncertainty in financial markets in relation to Spain and Italy highlights the need for greater urgency in reducing their debt/GDP ratios. As recent experience shows, debt/GDP ratios rise very quickly when output in an economy falls below potential. When economies are performing well, it is not enough to merely stabilise the debt/GDP ratio, as, if the debt/GDP ratio remains high, governments will have very little flexibility in the face of a downturn. The experience of recent years with Greece, Ireland, Portugal, Spain and now Italy argues for new rules of governance within the eurozone, both at the centre and between the centre and individual governments.

Finally, and this is a point we noted in the Spring *Quarterly Economic Commentary*, the ECB needs to be much more active in primary and secondary markets for government debt. Some initial steps have been taken in this direction, but the policy shift needs a strategic underpinning, rather than a grudging acceptance of an unwanted role. Otherwise the financial instability in the eurozone will continue. This is a major and unprecedented crisis that requires radical thinking to find a solution. A set of piecemeal actions that seem to maintain the status quo is not a sustainable option.

The forecasts in this *Commentary* are framed in the light of the current uncertainty. The risks are all on the downside. The openness of the economy is a strength in an upturn, but a weakness in a contracting world economy.

2. Exports of Goods and Services

EXPORTS OF GOODS AND SERVICES IN 2011 AND 2012

Merchandise exports increased by 6 per cent in value in 2010. The value of exports from the modern sector increased by 4 per cent, while the value of exports from the traditional sector rose by 12.5 per cent. Data for the first 6 months of 2011 indicate that merchandise exports have continued to grow rapidly, and are 8.5 per cent higher than in the same period in 2010. However, a direct comparison between 2010 and 2011 at a detailed level is complicated by a change in the treatment of exports from Shannon Free Zone. Prior to this year such exports were included in SITC 9 “Commodities and transactions not classified elsewhere”, but they have now been redistributed into the relevant SITC division. As a consequence, a direct comparison between 2010 and 2011 at a disaggregated level is no longer possible. Hence, we are not in a position illustrate the distinction between multinational and indigenous exports in the current year, though that distinction is important. In the Spring *Commentary* the growth in exports from indigenous companies replacing lost domestic demand by exporting was identified as an important source of growth, helping to replace some of the lost domestic demand resulting from the fiscal contraction and the increase in the personal savings rate. This is still important but we must rely on other sources of data to capture what is happening. Production data show that in the first half of 2011 the volume of output from the modern sector increased by about 1.3 per cent while output from the traditional sector rose by almost 2.4 and somewhat more if construction related manufacturing is excluded. Given that it is unlikely that domestic demand has expanded, this suggests that exports from the traditional sector have continued to grow, with the possible exception of the drinks subsector where output and exports have been relatively unchanged. The Irish Exporters Association expects an increase in food and drink exports of about 8 per cent this year and the Enterprise Ireland *Survey of Companies* puts this at above 10 per cent. However, exports from the indigenous sector are more likely to be affected by changes in world income and trade and these appear to have weakened in the first half of the year, with the recovery in the US stalling amid continuing uncertainty about the budget deficit and the permitted level of overall debt, and slower growth than anticipated in the UK as the budget measures there take effect. Uncertainty about the performance of both these economies could damage general sentiment in the world economy and return the developed

economies back into recession. This suggests a degree of caution in forecasting exports by traditional firms, but a volume increase of 7.5 per cent this year and next still looks realistic.

The composition of modern sector exports, with the heavy emphasis on chemicals and pharmaceuticals, suggests that supply capacity is critical in determining exports from the modern sector. The additions to capacity over the past years are expected to lead to further increases in output and sales this year and next. There is a very high degree of concentration in this sector, with one firm alone accounting for one-tenth of total merchandise exports. The critical issues are the extent to which investment continues and firms adapt to products going out of patent and the scale of mergers and acquisitions currently underway. Given that the sector in Ireland is still primarily production rather than research based and much of the economies sought from mergers and acquisitions to date have been driven by a desire to reduce research costs, as well as overheads and to improve research outcomes, the production side located in Ireland has mostly not been negatively impacted. The effect of the expiry of patents is more difficult to foresee. There will certainly be reductions in the value of output and perhaps in the level of output, but firms with products coming out of patent have adopted strategies that compete at all levels of the generic market to ensure that there is not a complete loss of markets. They have also continued to develop new products, and this has resulted in increased investment in the sector in Ireland. The greatest threat to pharmaceutical exports is likely to come from changes to reimbursement methods for healthcare expenditure in some countries struggling with fiscal deficits. On balance we think modern sector exports will continue to grow this year.

Overall merchandise exports could grow in value terms by 6 per cent.

Exports of services are now of equal importance to the export sector as merchandise exports. There is a much higher degree of concentration in this sector than in merchandise exports, with the top 10 companies accounting for just under 50 per cent of exports of services (excluding tourism). During 2011 there have been announcements of additions to existing firms and some new firms have established here. We expect continued growth in output from this sector of about 8 per cent this year and slightly less in 2012.

The number of tourists coming to Ireland peaked in 2007 and then declined for three years, with the 2010 level 25 per cent below that in 2007. In the fourth quarter of 2010 the numbers, seasonally corrected, rose, though they were still

over 2 per cent below the level of the same quarter of 2010. In the first half of this year the numbers increased again and were 12.7 per cent above the corresponding half of 2010. In the second quarter the growth was particularly strong, but the 2010 numbers were adversely affected by the ash cloud which reduced air travel. The UK market remains problematic and the increase in numbers from the UK is low relative to the increase from other markets. At this stage the number of overseas tourists visiting Ireland could rise in excess of 10 per cent. Taken together these numbers suggest that exports of goods and services could increase in volume terms by 7 per cent this year and by 7.4 per cent in 2012.

Table 1 : Exports of Goods and Services

	2009	% Change in 2010		2010	% Change in 2011		2011	% Change in 2012		2012
	€bn	Volume	Value	€bn	Volume	Value	€bn	Volume	Value	€bn
Merchandise	78	5.6	6.8	83	6.0	6.0	87.9	6.9	8.0	95.0
Tourism	4	-10.2	-12.3	3	11.4	12.5	3.5	11.4	12.5	3.9
Other Services	64	8.1	11.2	71	7.9	8.0	76.4	7.8	8.0	82.5
Exports of Goods and Services	145	6.3	8.3	157	7.0	7.0	167.8	7.4	8.1	181.4
FISIM Adjustment	1			1			1.0			1.0
Adjusted Exports	146	6.3	8.1	158	7.0	7.0	168.8	7.4	8.1	182.4

3. Investment

Total Investment fell by 24.9 per cent in volume terms in 2010.² Building and construction declined by over 30 per cent while machinery and equipment and other elements of investment fell by 14.5 per cent. Within the building and construction sector, housing fell by 35.4 per cent in volume terms, civil engineering works (roads) by 27.1 per cent and the remainder by 25.7 per cent. Expenditure on transport equipment fell by 15.4 per cent, while expenditure on other machinery and equipment fell by 19.6 per cent. Overall, investment in 2010 was 52 per cent below its peak level in 2007, and is now back at pre-1997 levels.

The fundamental factors behind the decline in investment in recent years are still in place. Following the exuberance of the bubble era, there remains an excess supply of housing, office space and commercial space. The major road-building programme of the last decade is more or less complete, though there remain some serious bottlenecks that could usefully be cleared. First quarter figures show a further decline into 2011 in all the main categories of building and construction on a quarter to quarter and annual basis. Production in the civil engineering sector fell by 31.5 per cent in the first quarter and in the absence of new starts is likely to experience a 35-40 per cent fall this year, and by about 20 per cent in 2012. Housing output fell again in the first quarter of the year and was running at just under 10 per cent of the peak level reached in 2006. There may be some slight recovery during the year as National Asset Management Agency (NAMA) is providing funds for the completion of some estates. NAMA has also attempted to kick-start the housing market by providing a floor on potential negative equity for purchasers of property it holds. This latter will reduce some element of the uncertainty that potential purchasers now face, but there are other considerable sources of uncertainty facing purchasers and society in general. There are also very many unsold second-hand houses, so that it is not certain that the NAMA approach will ease the market. There will continue to be some production of one-off housing and housing in some parts of the major cities, though prices will be considerably reduced. We expect a 18 per cent decline this year in the volume of housing output and a further 8 per cent decline in 2012.

² CSO, *National Income and Expenditure 2010*.

Other building output fell again in the first quarter of 2011, by 7.2 per cent compared with the final quarter of 2010. There still remains a surplus of office and commercial property, with many buildings empty. Existing shopping centres have empty units, as firms have closed since the onset of the downturn and retail sales in value and volume terms are 20-25 per cent below the previous peak. In this environment, significant investment is unlikely to be needed for some years. There may be some increased activity in small-scale projects, such as minor works in older schools to accommodate increased pupil numbers and some energy-saving expenditure by households.

Imports of producer capital goods rose by 22.2 per cent in the first four months compared with 2010. Registrations of new goods vehicles increased by 3 per cent in the first half of the year, though registrations of second-hand goods vehicles fell. The increase in imports of capital goods, along with the increase investment in machinery and equipment as seen in the latest QNA, are evidence of what we had expected: in manufacturing, expansion of existing facilities was underway, process development was continuing and new firms were beginning to invest. Announcements of planned investment by multinationals to date by the IDA indicate that there will be continued strong investment by overseas firms. Consequently, we expect machinery and equipment imports to rise again in 2012.

We also expect investment in agriculture to strengthen this year and to increase more rapidly in 2012. Registrations of tractors, both new and second-hand, rose by 27.5 per cent and 17 per cent in the first half of the year. Farmers' incomes fell by 40 per cent between 2007 and 2009 and this was followed by investment falling dramatically in 2009 and 2010. The recovery in incomes in 2010 and the continuation of this into this year and next, together with an expected increase in milk output due to improvements in competitiveness in the Irish dairy sector, when milk quotas are abolished in 2015, suggest that agricultural investment will recover.³ The precise CAP arrangements that will emerge in the future are still unclear but it is difficult to see why the natural advantage enjoyed in Ireland from grass-based production should be restricted, as it was when the quota system was introduced.

Overall, investment is expected to fall by 6.7 per cent this year, and 2.8 per cent in 2012.

³ *Study of the International Competitiveness of the Irish Dairy Sector*, Teagasc, June 2011.

Table 2 : Gross Fixed Capital Formation

	2009	% Change in 2010		2010	% Change in 2011		2011	% Change in 2012		2012
	€bn	Volume	Value	€bn	Volume	Value	€bn	Volume	Value	€bn
Housing	7.5	-35.6	-40.8	4.4	-18.4	-23.8	3.4	-8.1	-13.2	2.9
Other Building	8.6	-26.5	-32.4	5.8	-16.0	-18.5	4.7	-10.0	-10.0	4.2
Transfer Costs	0.6	-19.3	-31.5	0.4	-8.0	-4.5	0.4	-10.0	-2.0	0.4
Building and Construction	16.7	-30.3	-36.1	10.7	-16.6	-20.1	8.5	-9.2	-10.9	7.6
Machinery and Equipment	8.6	-14.5	-13.8	7.4	9.0	10.1	8.1	5.0	6.1	8.6
Total	25.3	-24.9	-28.5	18.1	-6.7	-7.8	16.7	-2.8	-2.6	16.2

4. Household Consumption

There have been some revisions to the National Accounts for earlier years and these revisions have changed our view about the extent to which the fall in domestic demand was exacerbated by a rise in the personal savings rate. The estimated savings rate for 2008 and 2009 are now 6.9 per cent and 10.5 per cent of disposable income, compared with previous Central Statistics Office (CSO) estimates of 5.2 per cent and 12.3 per cent.⁴ There was an increase in the savings rate in 2009 but this increase was significantly less than we had thought. There is no figure estimated on a comparable basis for 2010 though using data from Institutional Sector accounts which estimates the savings rate at 12.2 per cent it is possible to estimate the level of household savings at almost €11.5 billion in 2010. Accumulated savings over the period 2006-2010 are now estimated at €31.5 billion compared with an earlier estimate of €37.8 billion. The build up of assets by the household sector was thus somewhat less than we had expected.

A new quarterly series of Institutional Sector Accounts indicates that the savings rate in the first quarter of this year has increased again by as much as 1.6 percentage points, though these data are provisional. First quarter National Accounts data indicate that household expenditure fell again, declining by the largest amount experienced for two years, with the savings rate, again measured by the Institutional Sector Accounts, increasing to 12.9 per cent of disposable income. We had expected that the personal savings rate would fall this year and that this would maintain household spending at the level reached in 2010, though the time path was expected to be uneven. Household spending in 2010 remained relatively constant throughout the year, at €21,183 million, €21,182 million, €21,188 million and €21,000 million for the four quarters, with the final quarter consumption adversely affected by the weather conditions at the time. We had expected some pick-up from those somewhat depressed levels in the first quarter of 2011 but this did not happen. The further decline in the first quarter put consumption 2.1 per cent below the level of the first quarter of 2010. This was especially disappointing given the extreme weather conditions experienced in the first part of 2010. The retail sales index, the main indicator of consumption, fell by 2 per cent quarter-on-quarter in the first quarter and while in the second quarter the retail sales index rose by 1.8 per cent it is difficult to see, even if retail sales continue to grow under the impact of increased tourist numbers – both people coming from abroad and an increasing number of Irish people holidaying

⁴ Though this latter figure was estimated from institutional sector accounts rather than from the National Accounts.

at home – how household spending can remain relatively constant as we had previously forecast.

As indicated above it now seems that the savings rate has remained high as households continue to build up savings levels. It remains the case that if household savings continue to increase it will be very difficult for domestic demand to increase as personal disposable income looks set to fall by 1.3 per cent this year, and unemployment and emigration are expected to continue.

The first half of the year was characterised by a very high degree of uncertainty in relation to the public finances, and while the bailout and government's liquid assets guaranteed funding for government to end-2013, there were fears expressed about the possibility of default. While the end-July agreement has eased these fears the uncertainty led to significant outflows from the banking system. Furthermore, the situation has not been helped by the added uncertainty in relation to the tax increases and expenditure reductions due in the next budget. Since the downturn, households have faced a very high degree of uncertainty in relation to employment, income, wealth and taxation. Protecting themselves against adverse outcomes is a significant motivator of household behaviour.

In this environment the best that might be expected is that nominal expenditure by households would remain unchanged. The implicit consumption deflator may increase by about 1 per cent this year and by about the same in 2012. The fuel price increases, which earlier seemed temporary, have not been reversed and energy price increases for gas and electricity will push the deflator up this year, though these prices could easily fall back somewhat next year. Accordingly, we expect household consumption to fall by 1.3 per cent in volume terms this year and to remain relatively constant in 2012. The increase in prices is primarily due to the increase in energy prices and since this cannot be compensated for has resulted in a real loss to the economy, reflected in a fall in consumption. The Consumer Price Index is likely to increase by about 3 per cent this year, reflecting the same factors as well as the effect of mortgage interest rises. The energy prices may decrease in 2012, leading CPI inflation to slow to 1 per cent.

Table 3 : Personal Disposable Income

	2009	% Change in 2010		2010	% Change in 2011		2011	% Change in 2012		2012
	€bn	%	€bn	€bn	%	€bn	€bn	%	€bn	€bn
Agriculture, etc.	2.2	24.9	0.5	2.7	9.8	0.3	3.0	10.0	0.3	3.3
Non-Agricultural Wages	73.6	-6.6	-4.9	68.8	-2.0	-1.4	67.4	1.6	1.1	68.5
Other Non-Agricultural Income	14.4	13.9	2.0	16.5	4.7	0.8	17.2	4.0	0.7	17.9
Total Income Received	90.3	-2.5	-2.3	88.0	-0.4	-0.3	87.6	2.3	2.1	89.7
Current Transfers	26.5	-0.4	-0.1	26.4	-1.9	-0.5	25.9	0.7	0.2	26.1
Gross Personal Income	116.8	-2.1	-2.4	114.4	-0.7	-0.8	113.6	2.0	2.2	115.8
Direct Personal Taxes	21.6	-3.4	-0.7	20.8	2.0	0.4	21.2	9.8	2.1	23.3
Personal Disposable Income	95.2	-1.7	-1.7	93.6	-1.3	-1.2	92.3	0.2	0.1	92.5
Consumption	85.2	-3.1	-2.6	82.6	-0.1	-0.1	82.5	1.0	0.8	83.4
Personal Savings	10.0			11.0			9.8			9.1
Savings Ratio	10.5			11.7			10.6			9.8
Average Personal Tax Rate	18.5			18.2			18.7			20.1

5. Public Finances

Table 4(a) and 4(b) set out the budget figures for 2011, amended slightly by later figures with the end year returns, the figures taken from the *Revised Estimates of Public Expenditure and Ireland – Stability Programme Update*, April 2011 (Department of Finance), our forecast of the likely outturn for the year are based on trends during the year to date, and our forecast for 2012.

Table 4(a): Exchequer Finances € billion

	2010 Outcome	2011 Budget (Amended)	2011 Forecast	2012 Forecast
Net current expenditure	47.0	48.5	48.4	47.7
<i>Net voted expenditure</i>	40.5	41.8	41.3	39.6
<i>Non-voted expenditure</i>	6.5	6.7	7.1	8.1
Current revenue	34.4	36.9	37.2	39.0
<i>Tax revenue</i>	31.8	34.9	35.0	37.8
<i>Non-tax revenue</i>	2.7	2.0	2.2	1.2
Current budget deficit (1)	12.6	11.5	11.2	8.7
Capital expenditure	8.0	8.2	8.1	7.4
<i>Net voted expenditure</i>	5.9	4.3	4.2	3.5
<i>Non-voted*</i>	2.1	4.0	3.9	3.9
Capital receipts	1.8	2.1	2.0	1.6
Capital deficit (2)	6.2	6.1	6.1	5.8
Exchequer deficit (1+2)	18.7	17.7	17.3	14.5
General Government Balance (deficit)	49.9	15.2	22.4	11.4

Source: *Budget 2011, Ireland – Stability Programme Update*, April 2011 (Department of Finance), *July Exchequer Returns*. Rounding may affect figures. * Excludes recapitalisation figures which are included in the General Government Balance, but includes promissory notes.

Table 4(b): Exchequer Finances National Accounts Classification € billion

	2010	2011	2012
RECEIPTS	€bn	€bn	€bn
Current receipts:			
<i>Taxes on income and wealth (including social insurance contributions)</i>	25	26	28
<i>Taxes on expenditure (including rates)</i>	18	18	19
Other receipts	4	6	6
Total	47	50	54
EXPENDITURE			
Net current expenditure on goods and services	26	25	24
Current transfer payments	29	28	28
National debt interest payments	5	6	7
Gross fixed capital formation	6	6	4
Other expenditure	33	7	2
Total	99	72	64
GENERAL GOVERNMENT BALANCE	-52	-22	-11

The presentation of the accounts is not ideal because of the treatment of the recapitalisation of the banks and the treatment of the promissory notes to Anglo-Irish Bank. The exchequer deficit forecast figure excludes the recent recapitalisation of AIB, Bank of Ireland and Irish Life and Permanent, the exchequer contribution to this at end-July is €7.6 billion and that of the National Pension Reserve Fund (NPRF) is €10 billion, though this is not included in the exchequer returns. Ideally, we require consolidated accounts at least when such large transactions are taking place) but includes the promissory notes payment to Anglo-Irish Bank, Irish Nationwide Building Society and the Educational Building Society, while the General Government Balance (GGB) includes the former and excludes the latter, as the full cost of this was included in the GGB in 2010, and is included in measures of National Debt at end-2010. The trend in the underlying budget position is probably best captured by the current budget deficit, as the capital budget is so distorted by accounting conventions.

The exchequer returns for the first seven months provide a reasonable indication of how the budgetary situation is developing. Voted current expenditure is running 1.4 per cent below the expected total for the period and 3.5 per cent above the level of the first seven months of 2010. This overstates the true picture

as the health levy was previously subtracted from Health expenditure. Now it is not, but is treated as a revenue item, included in the Universal Social Charge (USC) which in turn is included in Income Tax receipts. In the first seven months of the year this is estimated to have raised €1.1-1.2 billion in revenue. When allowance is made for this, then, on a comparable basis, current expenditure is down about 1.5 per cent. We expect that this trend will continue and current expenditure will come in below budget.

Tax revenue in the first seven months of the year was 8.6 per cent higher than a year earlier, and 1.4 per cent above the estimated profile for the period. However, when allowance is made for the USC, the situation is less favourable, with overall tax revenue increasing by about 3 per cent. Nevertheless, the year totals look achievable. Thus, we expect the current budget deficit at year end to be slightly lower than budgeted. On the capital side there may be some further savings, but it is difficult to forecast what these might be at this stage.

Turning to 2012, the broad fiscal framework is laid out in the report on the *EU/IMF Programme of Support for Ireland* issued by the Department of Finance (28 July, 2011). This set down explicit guidelines in relation to revenue and expenditure for Budget 2012. In practice, government has more leeway in relation to changes in taxation and expenditure than implied by this as if the required deficit reduction can be met in other ways this will satisfy the conditions of the loans. Nevertheless, the agreement sets out a profile of how of how these savings can be achieved.

Revenue Measures to yield €1,500 million in a full year, but including: a lowering of income tax bands and credits; a reduction in private pension tax reliefs; a reduction in general tax expenditures; a property tax; a reform of capital gains tax and acquisitions tax; and, an increase in the carbon tax.

Expenditure reductions of €2,100 million including: social expenditure reductions; reductions in public service numbers and public service pension adjustments; (reductions in) other programme expenditure; and, reductions in capital expenditure.

While the broad amounts are explicit, no detail has yet been provided. It is the detail that determines the reaction of the private sector to the changes and it is this reaction that will influence the extent to which there are negative or positive effects on the economy, quite independently of the obvious macro effects of

reducing demand in the economy by these amounts. There are also explicit big-picture numbers proposed for 2013, with revenue measures yielding €1.1 billion, and expenditure reductions of €2 billion. Government has indicated that it will go beyond these broad numbers and state exactly what the tax changes and expenditure reductions will be and this is welcome as the private sector than then plan accordingly. In framing the medium term fiscal details government should aim to surpass the targets set down in the *Programme of Support* for the reasons stated previously. In addition, there may be other adverse conditions not yet anticipated and there may be a need for some flexibility – a flexibility that would not be there if the budget targets are too tight. The 2012 figures could also be affected by timing conditions in relation to interest payments on EU/IMF and other loans. Nevertheless, the proposed cuts in expenditure and tax increases should proceed as planned and any savings on interest used to reduce the deficit faster.

In framing the budgets it is as well to recognise that output is significantly less than at the peak of the bubble, so that the infrastructural requirements are less than envisaged some years ago. Hence, proposed capital expenditure should reflect this, as well as the shortage for funds.

BOX 1: INFRASTRUCTURE BY EDGAR MORGENROTH

Public capital investment tends to be the first casualty when governments embark on deficit reduction, and it often impacts negatively on the growth potential of the economy. However, given the specific set of circumstances in Ireland today, reduced infrastructure investment over the next few years need not have this negative effect and can help to achieve a more sustainable budgetary position.

An extensive literature has shown that infrastructure yields a high long-run macroeconomic return. The return on such investment depends on the size and quality of the existing infrastructure stock and the level of demand for it. Thus, if the current infrastructure stock is adequate and no constraints exist then the likely return on further investment at this point is low or even negative.

While there are some additional short-run benefits to infrastructure investment via the stimulus associated with the construction phase, the long-run impacts tend to be a multiple of the short-run impact. Consequently, infrastructure investment should be undertaken primarily with the long-run impact in mind. The actual short-run impact depends on the type of project and the import content.

Specifically large scale projects involving the construction of new infrastructure have a smaller jobs impact per Euro spent than smaller scale projects and in particular refurbishment and maintenance projects.⁵

Capital expenditure over the period 2000 to 2009 reveals that investment in infrastructure amounted to almost €55 billion in 2009 prices. Despite this significant level of investment some competitiveness reports rank Ireland poorly in terms of overall infrastructure. However, once objective measures are used in a comparison and relevant factors are taken into account the relative position of Ireland with regard to many infrastructures is considerably better than suggested by the subjective competitiveness rankings.

While infrastructure was increasingly under severe pressure up to 2007, the economic downturn (reflected in the significant decline in GNP) has significantly reduced the pressure on infrastructure. In relation to transport, for example, passenger journeys on CIE services are down by 18 per cent compared to the peak in 2007. Passenger numbers at Dublin airport declined by 21 per cent between 2008 and 2010, while at the same time capacity for some 15 million passengers has been added through the completion of Terminal 2.

The process of drawing up of a National Development Plan (NDP) that can account for the complementarities between investments and ensure consistency with the national objectives is the first-best approach to capital investment programming. However, this approach requires some certainty on capital budgets over a multi-annual period. Capital budgets have been cut successively and now amount to just 50 per cent of what had been planned in 2007 even if one takes into account that tender prices have fallen by about 25 per cent. At this point there is no certainty that further cuts might not have to be implemented. Furthermore, the results of Census 2011 should be taken into account in determining the scale, nature and location of investment. To date only the preliminary results of the CSO Census 2011 have been published, which showed a surprisingly higher population than had previously been estimated. Thus, the detailed plans that would make up a new NDP could be subject to change, or if the capital budget were to be cut further result in postponements of projects, which would undermine confidence in the NDP process. In addition to the uncertainty about the funding envelope and the demographics there is also considerable uncertainty about the right projects to pursue. The proper transparent evaluation and analysis has in many cases not been carried out or,

⁵ However, it has been shown that the cost per job created (maintained) through publicly funded construction projects is high when compared to other public job creation subsidies like IDA grants. See Morgenroth, E. (2009). "Irish Public Capital Spending in a Recession", ESRI Working Paper No. 298.

where such analysis was done, this did not reflect the changed environment. Therefore it would seem imprudent to embark on a full scale National Development Plan for a five to seven year period and instead a more modest interim public capital plan should be drawn up.

In the context of the significant expansion of the infrastructure stock and the reduced demand in the short term the current focus of capital spending should be on maintaining the existing infrastructure. The only exception should be for infrastructure in very specific locations where constraints can be demonstrated. Where any substantial investment is being considered it should be supported by a comprehensive evaluation, including a proper cost-benefit analysis. For example, before water meters are rolled out, a cost-benefit analysis should be undertaken to estimate whether the net benefit of water meters justifies their roll out for the whole country or whether they are justified in some areas only because of installation and monitoring costs. Measures that improve the efficient use of existing infrastructure should also be prioritised as these will reduce the need for further capacity expansion at a reasonable cost. For example, the reduction of water leakage from the mains combined with other demand management measures in Dublin can potentially defer or even eliminate the need to make to build the required infrastructure to supply Dublin with water from the Shannon.`

To improve the quality of decision making on major infrastructure projects/programmes, the evaluation of projects should be based on independent analysis outside of the promoting agency and these evaluations should be published in order to allow public scrutiny.

The revised *Estimates for Public Services* for 2011 indicate a reduction of 1.1 per cent in whole-time equivalent numbers employed. When taken in conjunction with reductions in other expenditure, this suggests a 3.3 per cent decline in net government expenditure on goods and services in volume terms. We expect the decline to be greater in 2012, as the full-year effects of the Croke Park Agreement are felt along with the additional expenditure cuts outlined above.

6. Population, Employment, Unemployment and Earnings

The preliminary results of the *Census of Population 2011* were somewhat surprising in that they revealed a population significantly greater than the population and migration estimates available since the *2006 Census* would have indicated.

The 2011 population is approximately 100,000 more than expected on the basis of official CSO estimates. The greater part of this difference is likely to be in the 15-64 age group, of whom over 60,000 could be in the labour force, accounting for 3 per cent of the total. Unfortunately, since we have no way of determining the age distribution of this group until early 2012, we cannot be certain of the totals of those in work or unemployed, though the data for rates of, for instance unemployment by age group, or participation by age group, are probably correct. Often reweighting makes little difference to grossed up numbers, but it would be unwise to assume that the additional population is evenly distributed by age group. There may also be gender issues as the annual net migration estimates for 2006-2010 indicate net migration of 51.7 thousand males and 53.3 thousand females, while the preliminary 2011 Census estimates these for the whole period at 33.6 thousand and 88.1 thousand, respectively. These data may also have implications for grossing up income estimates and hence estimates of GNP and GDP and also growth rates. Unfortunately, as things now stand, we must wait until next year before the Census results are available so that the QNHS results can be re-weighted.

BOX 2: CENSUS 2011 AND MIGRATION ESTIMATES

The preliminary estimate of the 2011 population is 4,581,269 compared with a figure of 4,239,848 from the 2006 Census, and the net migration (inflow) figure for the period 2006-2011 was 118,650. The intercensal net migration figure is estimated as a residual. The 2006 population is known from the 2006 Census, and the 2011 population is known from the 2011 Census. The population changes as a result of births and deaths, both of which are known from mandatory registration and migration, which is unknown, but derived from the others. Simply put:

Population 2011 = Population 2006 + (Births-Death) + Net Migration

or Net Migration = Population 2011 - Population 2006 – (Births - Deaths)

In making annual intercensal estimates of population, as for 2009 for instance, it is necessary to make an estimate of net migration in that year – this is no longer derived from known population numbers. This migration estimate is then added to an estimate of the population based on projecting forward the existing 2008 population by ageing the numbers by one year, adding the number of births and subtracting the number of deaths. The annual migration flows are estimated from the Quarterly National Household Survey (QNHS), supplemented by data such as the number of Personal Public Service numbers issued to non-Irish nationals, the number of work permits issued or renewed and the number of asylum applications. This allows an estimate of emigration and immigration and the QNHS detail makes it feasible to distinguish gender, age, region, etc.

The methodology is basically sound and is preferable to the previous reliance on net passenger movements by sea and air, which historically formed the backbone of annual estimates of migration. If the estimated net migration figure for the period April 2006 to April 2010 of 63,000 was correct, the census results would imply that there was a net inflow of over 55,000 people in the year to April 2011. This number seems highly implausible when the general expectation was that there had been a net outflow in that year. The CSO has suggested that inward migration was stronger in the early part of the intercensal period and that this was followed by a switch to net outward migration towards the end of the period. This suggests that the annual population and migration estimates need to be revised back to 2006.

In general, Census results are taken as absolutes, but there may be some benefit in revisiting the 2006 Census results with the additional information available from the 2011 Census and other administrative data, and examining the emigration estimates that are derived from the QNHS. It is important to have reasonably accurate population data as the QNHS itself is weighted to reflect population estimates by age, sex, and region. Furthermore the initial selection of households for the QNHS is based on population density. These revisions are potentially very important to estimates of the labour force, employment and unemployment as well as many of the characteristics of the labour force.

In spite of these caveats in relation to the QNHS there is still a big picture that emerges from the data. First, there has been a catastrophic fall in the numbers employed in construction. Employment in the sector peaked in the second quarter of 2007 at 271,600 and has fallen continuously since then reaching 108,100 in the first quarter of this year. The collapse in construction output has created a structural unemployment problem. The full scale of this is difficult to gauge as a significant number of workers in this sector were from overseas, and a certain number of these will have returned home (the number being somewhat uncertain, as discussed above). In addition, some of those previously employed in the sector will have obtained work in other sectors, including agriculture. The following table attempts to capture the scale of the problem.

Table 5: Employment and Unemployment 000s Irish and Non-Irish

	Quarter	Irish	Non-Irish	Total
Total Population >14	Q II 2007	3,027.5	435.0	3,462.5
	Q I 2011	3,150.3	357.3	3,507.6
Labour Force	Q II 2007	1,882.0	335.0	
	Q I 2011	1,852.2	247.7	
Total Employment	Q II 2007	1,798.4	315.5	2,113.9
	Q I 2011	1,601.4	202.9	1,804.3
Employment in Construction	Q II 2007	224.7	45.2	269.9
	Q I 2011	98.5	8.9	107.4
Unemployment	Q II 2007	83.6	19.5	103.1
	Q I 2011	250.8	44.8	295.6
Total Numbers (Irish and Non-Irish) unemployed who previously worked in construction	Q I 2007			16.7
	Q I 2011			79.5

Source. QNHS Various issues.

The total numbers still unemployed out of the construction sector was 79,500 in the first quarter of this year, though total employment in the sector had fallen by 162,500 from the peak level of employment in the first quarter of 2007. Some of those who lost their jobs may have retired, may have gone to other employment and many others may have migrated. The non-Irish population aged over 14 fell by 77,700, with the non-Irish labour force declining by 87,300 and a very small change in the numbers of non-Irish not economically active over the same period. This suggests that a significant number of those who lost their jobs emigrated. We cannot be certain, but a reasonable inference is that many of those who emigrated must also have been in the construction sector. This still leaves a very

large number of people who were previously in the construction sector being currently unemployed. This is the basis for believing that there is a major structural unemployment problem. Had all construction workers obtained employment, even with the same high level of unemployment, then the problem would not be structural. There is still high unemployment among construction workers. Meanwhile, there are reports of skill shortages in some sectors, but the numbers are relatively small.

Unemployment has regional and gender aspects in addition to structural. Male participation rates have fallen from 73.9 per cent in early 2007 to 68.2 per cent in the first quarter of this year. The rate of male unemployment has increased from 4.7 per cent to 17.2 per cent over the same period. By contrast female participation fell from 54.7 per cent to 52.9 per cent, while female unemployment rose from 3.9 per cent to 10.4 per cent. There is, however, a much greater incidence of part-time working among women and this has increased slightly over the period. There is also a regional dimension to unemployment. In the first quarter the average unemployment rate was 14.1 per cent, but the Border, Dublin Mid-East and South-West experienced unemployment rates below that while the Midland, West, Mid-West and South-East were above it. Dublin had the lowest rate at 12.5 per cent whereas the South-East had the highest at 17.2 per cent. There has been a significant increase in participation rates in education among younger age groups, thus reducing their participation in the labour force.

Current trends in employment and unemployment so far this year are not encouraging. The first quarter employment and unemployment figures were, on the face of it, better, showing a reduction in the rate of decline in employment and a reduction in the rate of unemployment compared with the final quarter of 2010. However, the final quarter now looks like an outlier and perhaps there are changes in seasonal patterns that are not being picked up yet. The Standardised Unemployment rate estimated from the Live Register rose during the second quarter and into July. The average rate of unemployment in 2010, including the very high fourth quarter figure, was 13.6 per cent, and this year it may average 14.3. As things now stand, unemployment will rise again in 2012. The scale of this increase depends on the extent to which migration will reduce the numbers unemployed. The rise in unemployment, and the likelihood that it will persist, even though there are significant flows on to and off the Live Register, means that the number of long-term unemployed will increase. This highlights the need for policy directed to maintain the link that those unemployed have with the labour market (see Box 3 below).

The recent data in relation to migration over the period 2006-2011 show how hard it is to estimate, never mind forecast, migration. We understand the factors that affect the migration in the past, covering the 1950s the 1970s and the 1980s when much of the migration was between Ireland and the UK. However, we do not have sufficient data to explain migration between Ireland and the new accession states and the migration of people from those states when they emigrate from here.

In terms of other sectors, employment in agriculture could increase this year and next given the increases in agricultural output and incomes that seems likely, and the absence of alternatives. There could be some increase in employment in manufacturing in the second half of the year as a result of increases in exports, though these may be slight as domestic demand remains very weak. Construction output and employment will fall again this year and next. In the services sector public sector employment will fall. There has already been a reduction in numbers employed, as reported under the Croke Park Agreement, and the ban on recruitment is having an effect on numbers as people retire. The constraints on the budget in the health services and the necessity to cut back on recruitment even where posts were approved, suggest that employment will fall. There may be some shifting to private sector activity if the public health service constraint becomes more serious, though there have been declines in the total numbers covered by private health insurance. Nevertheless, there may be greater utilisation of private sector entitlements as public sector services are constrained. The one area where there could be increases in employment during the year is in the hospitality sector. The increase in the number of overseas visitors and in the number of Irish people opting to take domestic holidays have had some impact on the sector, but it remains depressed. In the first quarter of this year there was a 10 per cent fall in employment in the sector and even with a modest recovery during this year it is difficult to see the annual level rising. Next year could be better if the momentum gained this year can be maintained in the face of what is likely to be a very difficult international environment. The latest data show modest increases in employment in some professional and technical areas and while this is likely to be maintained the gains are unlikely to outweigh the losses elsewhere in 2011. Thus service sector employment is expected to fall this year but perhaps will rise slightly next year.

Table 6: Employment and Unemployment

	Annual Averages 000s			
	2009	2010	2011	2012
Agriculture	96	85	88	90
Industry	411	240	235	245
Construction		120	100	90
Services	1,422	1,403	1,380	1,390
Total at Work	1,929	1,848	1,803	1,815
Unemployed	259	292	300	310
Labour Force	2,187	2,140	2,103	2,125
Unemployment Rate %	11.8	13.6	14.3	14.5

BOX 3: ACTIVATION IN IRELAND: THE IMPACT OF THE NATIONAL EMPLOYMENT ACTION PLAN*S. McGuinness, P.J. O’Connell and E. Kelly*

Ireland’s unemployment rate currently stands at 14.3 per cent. Given the scale of the problems facing the country at present, the level of unemployment is likely to remain high over the medium term. In this context, it is particularly important to implement effective activation measures to assist and encourage jobseekers to remain active in the labour market and/or to increase their employability in order to avoid long-term unemployment.

In 2009, the Economic and Social Research Institute (ESRI) was commissioned by the Department of Social Protection (DSP) to conduct a systematic evaluation of activation measures that are implemented under the National Employment Action Plan (NEAP), which is Ireland’s activation strategy.⁶ Under the NEAP, unemployed individuals in receipt of Jobseeker’s Benefit (JB) or Jobseeker’s Allowance (JA) who reach three months on the Live Register are identified by the DSP and referred to FÁS for an activation interview. In this interview, the client’s needs are assessed and he/she is provided with job search assistance. Some individuals are also referred to employment or training opportunities. The ESRI study evaluated two key interventions implemented under the NEAP: i) referral by the DSP for an activation interview with FÁS and ii) participation in training programmes provided by FÁS following an activation interview. The analysis was based on a unique dataset that was constructed by combining three separate

⁶ See McGuinness, S., O’Connell, P.J., Kelly, E., and Walsh, J. (2011). *Activation in Ireland: An Evaluation of the National Employment Action Plan*. ESRI Research Series 20. Dublin: ESRI.

data sources: i) a specially designed questionnaire administered to all new claimants for JB or JA between September and December 2006; ii) weekly administrative data from the Live Register of unemployment, which contained information on all unemployment benefit recipients in Ireland, and on their movements on and off the Live Register; and iii) client event files collected by FÁS. Those jobseekers that registered a new unemployment benefit claim between September and December 2006 were subsequently tracked until July 2008, so the evaluation refers to the effects of the NEAP over that time period.

The research pointed to three main findings on the effectiveness of Ireland's activation strategy:

1. There were problems of access to programmes under the NEAP, so not all of those jobseekers who needed to participate in an activation measure did so. Approximately 25 per cent of jobseekers who were eligible for assistance under the NEAP were not in fact identified and referred. Another 25 per cent of jobseekers who had a previous spell of unemployment and received an intervention at that time were not eligible for NEAP assistance in their current spell.
2. Those individuals who were referred by the DSP to FÁS for an activation interview were less likely to become employed. When the authors compared the employment outcomes of those that were either referred for an interview with FÁS or had received both a referral and an activation interview with a group of similarly unemployed individuals that were not referred, it was found that this NEAP intervention had a negative impact, with the chances of entering employment being about 17 per cent lower for those who went through the referral and interview process.
3. FÁS training programmes increased participant's employment prospects. Compared with jobseekers that were either referred for an interview with FÁS or had received both a referral and an activation interview, FÁS training was found to increase an unemployed person's likelihood of exiting the Live Register by between 10 and 14 per cent. However, the combined effect of receiving both FÁS training and an activation interview was either zero, or at best, weakly positive, because of the negative impact of the FÁS referral and interview process.

The DSP is currently developing a new National Employment and Entitlements Service (NEES) which has the potential to deliver a number of important reforms:

1. The NEES is to take a greater role in providing activation services for the unemployed, as well as for the more traditional role in paying benefits performed heretofore by the DSP. This combination of income support and

activation policies is similar to the role adopted by social welfare authorities in other countries.

2. The DSP is introducing a profiling system for the unemployed, developed in collaboration between the Department and ESRI researchers. Profiling is a state-of-the-art statistically-based system for the early identification of those with a high probability of becoming long-term unemployed at the time they first become unemployed. This will facilitate the delivery of appropriate interventions with jobseekers according to their likelihood of becoming long-term unemployed, and provides the capacity to target resources on those who most need, and can benefit most from, activation measures.
3. The DSP is implementing a new case management system with a strong focus on activation, rather than just income support. A further innovation is the provision for sanctions to be applied to unemployed persons on the Live Register unreasonably refusing to participate in training, education and employment offered by the NEES.

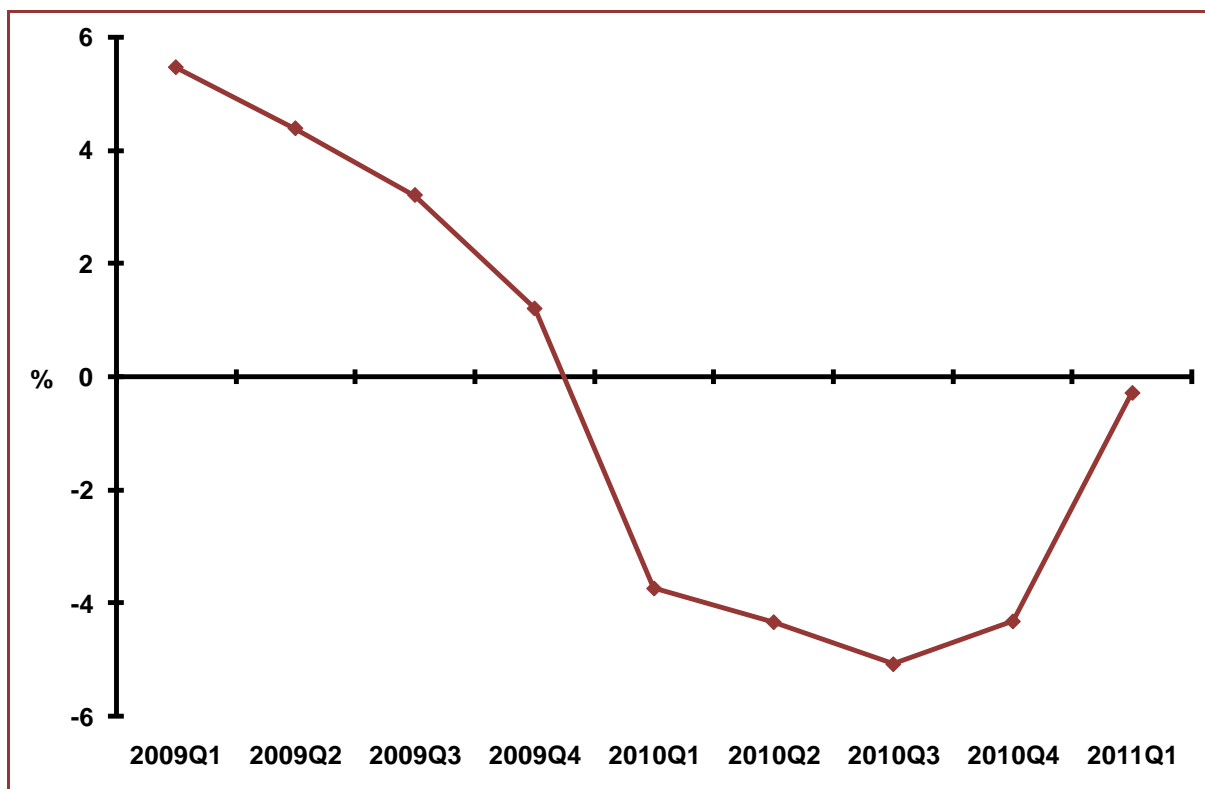
These developments are welcome. Underlying the reforms is a new commitment to a social contract based on mutual obligations: job seekers are expected to seek work and improve their employability and in return receive income support and high quality activation services from the community. To underpin that social contract, activation policy needs to have systematic monitoring of job search activity backed up by effective sanctions, while training policy needs to focus on programmes with a close connection to the labour market that enhance the employment prospects of their participants.

Average earnings in the economy at large remained relatively constant throughout 2010 following the declines of the previous year, though the wage bill was down 3.3 per cent. Recent years have been characterised by falling public and private sector wages. Public sector pay rates were reduced from January 2010, with pay cuts averaging 6.2 per cent, though with increments the actual cuts were less (Chart 1). The pension levy introduced for public servants, from the first half of 2009 represented an average deduction of approximately 7 per cent.⁷ Private sector earnings fell slightly earlier and the declines are less. However, private sector data are more difficult to interpret as there has been a much greater fall in private sector employment by sector and consequently some composition changes, where patterns of average earnings differ by sector. For instance, while average hourly earnings (excluding irregular earnings) fell by 0.2 per cent between the first quarters of 2010 and 2011 average hourly earnings in

⁷ The earnings data from the CSO do not allow for the pension levy, which is treated as a deduction, rather than a cut in income.

Construction declined by 8.1 per cent and earnings in the Information and Communication sector rose by 5.2 per cent. There may also be within-firm composition changes with employment losses among unskilled workers greater than among skilled workers and this can affect measured average earnings. The decline in hourly earnings in Construction is exactly what might be expected, given the decline in employment in the sector, but the increase in unemployment might have been expected to have a bigger impact on earnings than it has. This same characteristic was observed during the long-1980s recession, with insiders effectively protecting themselves, and was only broken in the early years of social consensus when pay increases were less than might have been expected.⁸ This was easier to achieve in the 1980's with inflation running at 4 per cent compared with the present situation where further real and nominal wage cuts will be required. This point is returned to in the *General Assessment*, but we do not see nominal average hourly earnings increasing, except in some isolated areas, such as International Services where shortages have emerged, and possibly in export-oriented indigenous firms.

Figure 1: Public Sector Hourly Earnings, Annual % Change



Source: Earnings and Labour Costs, CSO.

⁸ Durkan, J. and Harmon, C. (1996). "Social Consensus, Income Policies and Unemployment", UCD Centre for Economic Research WP 96/11, UCD.

Figure 2: Private Sector Hourly Earnings, Annual % Change



Source: Earnings and Labour Costs, CSO.

7. Imports and the Balance of Payments

The latest National Accounts⁹ revised very heavily the previous annual and quarterly estimates of imports of goods and services in both value and volume terms for 2010 and 2009, leading to significant adjustments in the percentage changes. For 2010 the figures are now 5.7 and 2.7 per cent respectively, compared with the previous estimates of 7.4 and 6.6 per cent.

In the first five months of the year imports were 11.4 per cent higher than a year earlier. This was partly driven by imports of machinery, referred to earlier and reflecting investment by firms, but there was also an increase in imports of goods for further production. Ideally, we would like to relate these imports directly to output, but the data are complicated in that the *Quarterly National Accounts* show a small decrease in stock levels in the first quarter while the stock figures for industry show an increase following a period of reduction. We suspect that stock levels in the export sector have increased, but with the contraction in construction work in progress has collapsed, and stocks at retail level are being run down, reflecting the relatively poor growth in the sector. Energy prices have risen during the year, so that the increase associated with the Libyan conflict has persisted – though there have been some decreases recently. The short-term outlook for energy prices is very uncertain. Demand in developing Asia continues to increase, while in developed economies the weakness in GDP growth has led to volume reductions. The effect of the price increases has led to increased expenditure as demand is still relatively price inelastic in the short run.

The increase in imports has been widespread across all SITC sections and divisions. In addition to increases in energy imports, and in cars, there were rises in chemical and pharmaceutical imports. Import prices have also risen, driven partly by oil and gas price rises. These are now feeding into the domestic price level with a lag and there will be a similar lag if the price reductions are sustained.

⁹ National Income and Expenditure 2010, CSO, August 2011.

Data for the earlier part of the year indicate that overseas tourism expenditure has fallen, and passenger movements suggest that this has continued into the third quarter. The indications are that such expenditure may decline by 10 per cent in volume terms this year and by the same amount again in 2012.

We expect the growth in imports of goods to slacken in the second half of the year. Nevertheless, imports will rise by about 5 per cent in volume terms this year, with import prices increasing by about 1.3 per cent. The rise in import prices is in contrast to the stagnant export prices. The resulting deterioration in the terms of trade is another adverse factor affecting the economy.

Imports in 2012 may grow slightly faster as stock levels are built up again in manufacturing, given the forecast increase in modern sector exports and the level of investment in machinery and equipment.

Table 7: Balance of Payments 2010-2012, € billion

	2010	2011	2012
Exports of goods and services	157.7	168.8	182.4
Imports of goods and services	127.9	135.9	145.5
Net Factor Payments	-27.8	-30.4	-33.4
Net Transfer	-1.2	-1.0	-1.0
Balance on current account	0.8	1.5	2.5

Table 8: Imports of Goods and Services

	2009	% Change in 2010		2010	% Change in 2011		2011	% Change in 2012		2012
	€bn	Volume	Value	€bn	Volume	Value	€bn	Volume	Value	€bn
Merchandise	45.2	-1.8	2.8	46.4	-0.9	5.1	48.8	5.4	6.5	52
Tourism	6.3	-6.9	-7.3	5.8	-10.0	-10.0	5.2	-10.0	-9.5	5
Other Services	68.9	6.5	9.0	75.1	9.5	8.2	81.3	7.0	8.5	88
Imports of Goods and Services	120.4	2.7	5.8	127.4	4.9	6.2	135.3	5.8	7.1	145
FISIM Adjustment	0.7			0.5			0.6			1
Adjusted Imports	121.0	2.7	5.7	127.9	4.9	6.2	135.9	5.8	7.1	145

8. Overall Output

Although there have been some changes in our perception of what is happening in the economy over the past few months, the overall picture still shows positive GNP and GDP growth for this year and next, with next year's growth gathering pace. We now expect household consumption to fall in volume terms this year because of the increase in prices now in the system and as a consequence, when consumption turns, to grow only very modestly during next year. Investment in machinery and equipment will grow faster this year than we had expected. Total domestic demand will fall by 1.8 per cent this year, but this will improve in 2012, but will still experience a decline of 0.5 per cent. GNP may grow by 0.2 per cent this year and 0.7 per cent in 2012. The corresponding figures for GDP are 1.8 and 2.3 per cent respectively.

In the recent past the economy has experienced a significant worsening in the terms of trade. Conventional measures of output, such as GDP and GNP make no allowance for this. A worsening of the terms of trade means that more output is required to maintain a given level of imports. When GNP is adjusted for the terms of trade then GNP fell in 2010 and is forecast to fall again this year, but more or less stabilising in 2012.

Table 9: Measures of Output, % Volume Change

	2010	2011	2012
GDP	-0.4	1.8	2.3
GNP	0.3	0.2	0.7
GNP adjusted for Terms of Trade	-1.1	-1.4	-0.1

9. Banking Crisis and the Real Economy

BANK FUNDING AND DOMESTIC CREDIT

The size of the domestic banking sector balance sheet has fallen by €200 billion, or nearly one-quarter, from its peak in mid-2009. Wholesale funding for domestic banks has diminished due to the perceived inadequacy of banks' capital reserves, declining credit ratings and greater uncertainty in the interbank lending market across the eurozone. The funding base has also been steadily eroded by the outflow of deposits, particularly those of non-residents. Non-resident deposits fell by over a half in the year to June. Indeed, the foreign liabilities of the domestic banking sector have decreased far faster than other liabilities, meaning that as a share of total liabilities they have fallen from a high of around 50 per cent in 2008, to around 20 per cent in 2011. This outflow is expected to persist due to downgrading of Ireland's sovereign debt to junk status by Moody's ratings agency.

Lost funding has been replaced to an extent by borrowing from the Eurosystem. This borrowing grew rapidly last year, and peaked at €97 billion in November. It has since fallen to €72 billion, but this is partially due to a temporary increase in government deposits of some €18 billion that is expected to be used to recapitalise the banking system. It is hoped that this recapitalisation will instil confidence in the ability of banks to withstand future expected losses. There is some evidence that this approach is paying off, mainly the recent investment of €1.7 billion of private funding in Bank of Ireland. However, this is dwarfed by the €65 billion contribution committed by the State since the onset of the banking crisis.

On the asset side of the balance sheet, the issuance of credit has significantly contracted due to both supply and demand forces. On the margin, the demand for credit increases during downturns, but this has been outweighed by the deleveraging being pursued on aggregate by both households and businesses. The supply of credit has also decreased, at least partially due to the need set out in the troika deal for the banks to 'rightsize'. This policy seeks to decrease the contingent liability the State assumed via the guarantee of covered institutions' liabilities, as well as the exposure of the Eurosystem.

There is also evidence of credit rationing by banks due to the increased likelihood of default and repayment difficulties by borrowers that generally accompany recessions. CSO data on firms' access to credit shows that the proportion of firms whose applications for loans were successful fell sharply from 93.6 per cent in 2007 to 68.1 per cent in 2010, though 2007 represented the peak of the boom and the banks' appetite for risk. This pattern was consistent even for high growth businesses and businesses in well-performing sectors such as information and communication technologies. For households, the interest rates being charged for personal loans by banks remain elevated, which reduces the availability of credit. Research on recoveries that occur without an expansion of the supply of credit suggest that this increased risk aversion on the part of banks will stunt economic growth in the future as businesses and households are denied credit they would otherwise be eligible for.¹⁰

While on aggregate, the contraction of the overall supply of credit via deleveraging is beneficial for the sustainability of economic growth, new credit is essential in order to finance investment and some elements of durable goods consumption. For government, the policy challenge is to ensure the mechanisms of financial intermediation remain active, while at the same time allowing the necessary process of deleveraging to continue. In this light, the announcement by the Minister for Finance that some €30 billion of credit would be available over the next 3 years is to be welcomed. This credit is essentially a rollover of part of €54 billion worth of expiring credit lines, but will be earmarked for domestic use rather than being used to reduce the exposure of the ECB and the Central Bank of Ireland.

BOX 4: HOUSEHOLDS AND THE SAVINGS RATE

The Irish savings rate has increased rapidly in recent years, rising from 1.5 per cent in 2007 to 11.7 per cent in 2010. The very low savings rate during the bubble years was indicative of the debt being accumulated by households, whereas the current elevated levels have depressed domestic demand.

The savings rate is a term used to describe that portion of income that is not consumed, which includes both income that is converted into savings and income that is used to pay down debt. Whether Irish households are increasing their savings or decreasing their debts is an important question for policy formulation. If households are holding on to income in the form of savings, then policies that

¹⁰ See Abiad, A. *et al.* (2011). "Creditless Recoveries" WP 11/58, IMF; Bijsterbosch, M. and Dahlhaus, T. (2011). "Determinants of Credit-less Recoveries" WP No. 1358, ECB; Coricelli, F. and Roland, I. (2011). "How do credit conditions shape economic recoveries?" Discussion Paper 8325, CEPR.

reduce uncertainty around future losses could help to stimulate consumption. However, if households are constrained by the need to pay down debt, they will be unable to respond to enticements to increase consumer expenditure. Consumption demand will only return when households have reduced debt to a level at which they feel comfortable to spend.

In previous *Commentaries* we have noted that households have begun to deleverage in order to reduce their exposure to debt, citing evidence on outstanding household credit from the Central Bank's Money and Banking statistics. Linking the contraction of the outstanding stock of credit with an increase in the savings rate is not straightforward. First, the two measures come from different data sources, so any relationship between them is purely illustrative. Second, changes in the monthly data for the outstanding stock of credit are comprised of transactions effects – which occur when credit is paid back or when new credit is availed of – and valuation effects – which include changes due to foreign exchange fluctuations, reclassifications and revaluation of the debt. Only changes due to transactions can provide evidence of deleveraging by the household sector. Table 10 gives the change in stock of credit outstanding in a particular year, as well as the change measured by cumulative monthly transactions in that year, and the valuations effects measured as the difference between the two.

Table 10: Changes in Outstanding Credit, € million

	2007	2008	2009	2010
Actual	15,748	-8,438	-4,491	-9,767
Transactions	22,458	12,344	-1,631	-7,570
Valuations	-6,710	-20,782	-2,860	-2,197

Source: Money and Banking Statistics, Central Bank of Ireland.

The data show that household deleveraging has only been part of the story, and that valuation effects have had a larger impact since the current crisis began in 2008 due to a large downward revaluation in that year. Data for 2010 as well as the first 6 months of 2011 indicate that deleveraging via transaction effects has since become the more dominant factor influencing the decline of the credit stock.

The negative transactions data alone appear to be insufficient for explaining the increase in the savings rate. Therefore, we must consider also data on saving. Taking data on household deposit transactions from the Central Bank's *Money and Banking Statistics*, it emerges that yearly growth in deposits held in domestic

institutions began to decline in 2007 and turned negative in 2010. However, this is not a surprising result given the waning confidence in the domestic banking system over this period. The household balance sheet from the Central Bank's *Quarterly Financial Account* shows that household financial assets declined during in 2007 and 2008, but have increased in 2009 and 2010. Of the €18.3 billion increase in financial assets, €8 billion was due to valuation effects, reflecting the recovery in global financial assets rather than the behaviour of households. Looking at the increased transactions, there was an increase of €6 billion in investment in insurance and pension assets, and €3.7 billion in investment in cash and deposits. The majority of this asset accumulation took place in 2009. Furthermore, there remains the possibility that financial assets of households have shifted abroad. There is indeed some evidence from the *Quarterly Financial Accounts* that the value Irish financial assets abroad increased during 2010, but it is unclear as to what extent this increase might accrue to households.

Evidence of both asset accumulation and household deleveraging indicate that both processes are combining to generate a high savings rate. The impact appears to be of the same order of magnitude over the period 2009-2010, although there are differences in the time profile. Asset accumulation was greater in 2009 than in 2010, while deleveraging has gained momentum over time.

10. General Assessment

In the Spring *Quarterly Economic Commentary* we described the economy as an economy in transition, with the focus shifting from domestic demand to export led demand, with indigenous firms playing an important role as they responded to the declines in domestic demand by seeking markets abroad. The data for 2010 indicated that this shift was underway and the forecasts contained in this *Commentary* see this shift continuing. The danger for Ireland is that the advanced economies will go back into recession as this would dampen this export growth. We have no policy instrument that can influence this. The policy issue, given this very uncertain international environment, and the continued need for fiscal consolidation, is the extent to which indigenous firms' competitiveness can be strengthened and the transition to an export led growth be speeded up. The transition process may be more difficult than previously anticipated, as there are four serious imbalances that must be addressed.

Over the period 1999-2008 the economy experienced a major structural imbalance, as building and construction expanded beyond a sustainable level, fuelled by excessive lending by banks and excessive borrowing by households and the corporate sector. The need to rebalance the economy was and is reflected in a range of interconnected challenges. Ireland now faces a major structural unemployment problem in addition to a cyclical unemployment problem, a banking system that required restructuring, a private sector requiring restructuring of household and corporate debt, and public sector imbalances that require restructuring of the tax system and the pattern of expenditure across all heads of expenditure.

Labour market restructuring: The level of unemployment is primarily structural, following the collapse of the Construction sector. In spite of the high level of unemployment there are shortages of some types of labour at present. These shortages are affecting international services and the technical side of some multinational manufacturing companies; however, the numbers are small relative to the level of unemployment. Typically structural unemployment requires shifting workers from contracting sectors to growth sectors, retraining of workers and invariably cuts in real wages, or slower real wage growth.

Bank restructuring: The collapse of the bubble exposed the poor financial state of the banking system's balance sheet. Banks had borrowed heavily in the eurozone

wholesale money markets, which left them with real liabilities, but the corresponding assets were and still are of doubtful value. One purpose of NAMA was to determine the losses of the banking system so that banks could be put on a cleaner footing. This has necessitated very significant funding by government and losses by junior bondholders. The alternative is losses by depositors or by senior bondholders. It is claimed that within the eurozone, losses incurred by senior bondholders would have significant knock-on effects on other eurozone financial institutions. The ECB and EU authorities were and remain unwilling to countenance such losses across the eurozone. This is the logic behind the attempt to isolate the problem within countries (though it is clear that the problems of Ireland, Greece and Portugal are very different), but it is also the reason why the attempts to contain the problem to the countries are misguided, as the very interdependence that is the characteristic of a monetary union argues for a eurozone solution.

Private Sector Restructuring: The third area of restructuring now underway is within the private sector. Some elements of the corporate sector got involved in property development using the existing business as collateral. Losses on such property transactions may result in the sale of businesses that are sound so that the main effect is a change of ownership. This process needs to be accelerated, so that viable business can continue unencumbered by property debt, and property loans repaid in full or in part. The main hindrance is the poor functioning of the banking system. For the necessary restructuring to go ahead a financial intermediary is necessary between those with funds and those capable of operating a business. This may emerge over time, but would be better if forced liquidations were not the mechanism. We may need to rethink the processes whereby the necessary transfer of ownership takes place, particularly as government now effectively owns the banking system. Within the corporate sector the property development sector has suffered catastrophic losses, partly reflected in banking losses, but the mechanisms are in place (NAMA) to deal with this. Within the private sector the household sector is now engaged in a major deleveraging activity, increasing saving, and reducing indebtedness, but there are also still potential losses arising from negative equity holdings. The current approach is to deal with distressed mortgages on a case by case basis and this seems better than a uniform approach in that judgements can be made for differing circumstances.

Public Finance Restructuring: In addition to this the collapse of the bubble has led to a very serious deterioration of the public finances quite independently of the bank restructuring costs. During the period of the bubble government revenue increased, leading to reductions in tax rates, removal of people from the tax net, new programmes of expenditure, increases in existing programmes and an

increase in wage rates throughout the public sector. The collapse in the bubble led immediately to a major deterioration in the public finances and government has been seeking to restore balance, both prior to and post the “troika” financing package. The public finance deterioration has led to further increase in net debt and this increase will continue for some years yet as the deficit is wound down. The reduction in the public finance deficit is proving difficult and has necessitated cuts in programmes and increased taxes and charges for services. It has also led to public sector pay cuts, the public sector pension levy (effectively a pay cut), lower rates of pay for new entrants, etc. As indicated earlier there are still more increases in taxes and charges for services as well as reduced expenditure as part of the fiscal consolidation process.

The economy thus faces a series of major restructuring problems. These problems would admit of easier solutions if there was a resumption of growth in the economy. But growth is not a policy option – it is the outcome of policy changes. Output in the economy now seems to have stabilised, after three years of decline, though the first half of the year has been relatively flat with the private sector very cautious because of fears of upcoming tax and interest rate changes and the uncertainty in financial markets. The main positive feature of the last 18 months has been the growth in exports and in particular the growth in exports from indigenous/traditional companies.

The policy issue is how to strengthen the shift to exports and improved competitiveness so that the economy can get on a faster growth path, with the external stimulus beginning to outweigh the demand deflationary budgetary measures. This is primarily a question of the cost base of firms, which is largely determined by the general price level as this impacts directly on wage and non-wage costs, as material costs will tend to be uniform across markets. General consumer prices impact on wage inflation and wages are an important element of total costs. Thus policy should be directed to eliminating price distortions in markets. This requires very detailed work at a sectoral level and benchmarking against prices elsewhere. A reduction in the general price level will improve competitiveness directly and then indirectly through its effect on wage inflation and the wage level, making it much easier to effect a wage reduction relative to competitor countries. This effect is quite independent of the impact of lower comparative price and wage inflation that has already improved competitiveness.

Finally, it is worth remembering that the personal savings rate has increased from very low levels of less than 1.5 per cent of disposable incomes during the boom to 11-12 per cent now. This has the same effect on domestic demand as a contractionary fiscal policy. Several reasons are given for this increase, but the modelling of these is poor at present so that we can only speculate. Some part

may be due to increased uncertainty in relation to future taxes. Government have indicated that they intend to set out, prior to the budget, the changes in taxation, charges for services and changes in expenditure over the next 2-3 years. This is to be welcomed as explicit numbers will enable the private sector to plan accordingly.

Clearly as mentioned earlier some part of increased saving is an attempt by households to reduce their net indebtedness, built up excessively during the bubble. At some time households will reach a position when they are generally satisfied with their net debt position, when their spending will resume. The uncertainty now arising from financial market instability and the fears of a return to recession in the US and the UK have also had an adverse impact on spending patterns. This can only be resolved by policy elsewhere. The moves within the eurozone to resolve the financial crisis are slow, but now at least moving in the right direction, while the developed economies may have to accept that the recovery from the financial crisis will be slower than from a traditional recession.

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The Macro-economic Impact of Changing the Rate of Corporation Tax

**Thomas Conefrey and ** John FitzGerald*

The size and importance of the market services sector within the Irish economy has increased dramatically since the mid 1990s and the sector now accounts for a significant share of overall exports. The rise in output and employment in market services coincided with the reduction in the corporation tax rate applicable to the sector from 40 per cent in 1994 to 12½ per cent in 2003. This low corporation tax regime was introduced for the manufacturing sector in the late 1950s. However, the exceptional growth in that sector peaked in the 1990s and thus the precise impact of the low tax rate for the manufacturing sector is not obvious. The extension of this low tax regime to the business and financial services sector after 1994 constitutes a natural experiment which allows us to consider the before and after periods and to derive an estimate of the macroeconomic impact of this tax change.

The analysis in our recent paper[†] indicates that the reduction in the rate of corporation tax in the 1990s stimulated exports of services and, even allowing for profit repatriations by foreign firms and replacement of lost tax revenue, it resulted in an increase in domestic output. The increase in the profit rate in the business and financial services sector suggests that some of the increased output involved relocation of profits to Ireland by multinational firms.

From 1989, the low manufacturing rate of corporation tax was extended to companies engaged in internationally traded financial services activities in the Irish Financial Services Sector (IFSC). In 1996, to comply with EU rules, the Irish government decided to move to apply a rate of 12½ per cent on corporate profits across all activities from 2003. This meant that the rate of corporation tax applicable to activity in the bulk of the business and financial services sector fell gradually from 40 per cent in 1994 to 32 per cent in 1998 and finally to 12½ per cent by 2003. This extended the attraction of Ireland for mobile firms in the business and financial services sector.

*thomas.conefrey@centralbank.ie; **john.fitzgerald@esri.ie

We developed a model of the business and financial services sector to derive an estimate of the final impact on output and tax revenue in Ireland of changes in the rate of corporation tax. In our new model of the business and financial services sector the output of the sector depends on overall world demand and on Ireland's competitiveness, broadly defined.

We analyse the impact of the tax change on the economy in a two-stage process. In the first stage, we consider the direct impact on the business and financial services sector. Our simulation results indicate that the reduction in the corporation tax rate from 40 per cent in 1993 to 12.5 per cent in 2003 had a significant long-run impact on the business and financial services sector. By 2005, exports, output, employment and tax revenue from the sector were significantly higher than they would have been without the tax change.

This simulation does not allow for government action to offset any net change in corporate tax revenue and it takes no account of the knock-on effects of changes in this sector on the wider economy, such as its effect on wage inflation. In order to capture the wider macro-economic effects, and to test the robustness of the results from the small business and financial services sector model, this model is embedded in the *HERMES* macroeconomic model of the Irish economy in the second stage.

The results from the modified *HERMES* model of the whole economy indicate that the substantial loss of tax revenue, consequent on the reduction in the corporation tax rate, required significantly higher taxes. In the paper it is assumed that any loss of revenue from a reduction in corporation tax rates is made good through higher taxes on labour, leaving government borrowing unchanged. This rise in labour taxes caused wage rates to increase, which in turn offset some of the positive effects of the reduction in corporation tax on Ireland's external competitiveness. Nonetheless the change in the corporate tax regime is estimated to have had a positive effect on overall output and employment in the economy. Our results also suggest that the reduction in the corporation tax rate gave rise to the relocation to Ireland of a substantial amount of profits through transfer pricing.

[†] Conefrey, T., FitzGerald, J. 2011. The Macro-economic Impact of Changing the Rate of Corporation Tax. *Economic Modelling*, Vol. 28, No. 3, pp. 991-999.

The Banking Sector and Recovery in the EU Economy[†]

Ray Barrell ^{}, Tatiana Fic, John FitzGerald ^{**}, Ali Orazgani and Rachel Whitworth*

The financial crisis of the last three years has seen a dramatic change in the EU financial sector. Since the early 1990s, with the completion of the internal market, there had been a growing trend towards an EU financial services market. Banks were becoming more international with greater regional coverage within the EU (and the world) resulting in a more efficient use of capital in the EU economy and enhanced competition. The benefit of this growth in “European” banks was expected to arise from both efficiency gains within the sector and also from a more efficient allocation of capital across wider European economy, all leading to higher growth. Experience has shown that the expected changes in the banking sector within the EU did, in fact, translate into welfare benefits for consumers in the period prior to the current crisis.

Since the 1980s similar changes were also taking place in the US. As a result of the savings and loan crisis of the 1980s there was a concern in the US that banks, which were confined to single states, were more at risk from idiosyncratic shocks affecting individual states. This prudential concern for geographical diversification seems to have been less of an issue within the EU in the move towards financial integration.

As a result of the completion of the EU internal market, banks within Europe have become larger and more international. However, the current financial crisis has seen the collapse of some banks within the EU and many more banks have been either partly or fully nationalised because of their inability to deal with their losses. Because of the national basis of banking regulation within the EU it has fallen to individual member governments to rescue “their own” banks rendering the EU banking system more “national”. This contrasts with the situation in the

^{*} r.barrell@niesr.ac.uk

^{**} john.fitzgerald@esri.ie

US where banking regulation was a Federal responsibility and where there has been no move to return to a system of smaller “State” banks. This paper shows that the result of the EU approach to dealing with the financial crisis has been a greater concentration of banks on their “home” markets and a decline in participation by domestic banks in foreign markets. This will reduce the average scale of banks in many economies, especially in the smaller economies.

We have used a micro data set to investigate the impact of size on banks’ net interest margin and have shown that larger banks have smaller spreads between borrowing and lending rates for firms and households, while smaller banks generally charge more for their loans. As we have competition between deposit takers this largely reflects the fact that larger banks charge their borrowers less. Lower borrowing costs for households results in higher incomes, consumption and investment in housing. Lower borrowing costs for firms results in higher investment and, hence, a higher capital stock. Taken together the result of lower borrowing costs is higher sustainable national output.

Having established the inverse relationship between bank size and the net interest margin we then consider the implications of the changes in the EU banking system for growth in the EU economy. Three factors affect the long-run impact of this change in the structure of the banking system on output. First, countries with a higher capital-output ratio are more affected: Germany, which has a more capital intensive economy than France is, as a result, likely to be more affected than France. Second, countries with a greater dependence on the banking sector than on equity to fund business investment are also more likely to be affected. Third, the effects are likely to be largest in small countries because of their dependence on bank funding and because the shock to their banking systems is larger.

Given these estimates of the size of the likely change in the bank margin and, therefore, in borrowing costs, we then look at the possible impact of the reduction in bank size on sustainable output in the Euro Area countries. We do this using the NIESR global macro-economic model, NiGEM. We first investigate the impact on output in large and small countries showing that the effects are generally larger in small countries, and also larger in economies that are more dependent on bank finance for their business investment decisions. If the recent increase in sovereign spreads propagates into the banking system of peripheral economies this will result in significantly lower growth than would otherwise be the case in Greece, Portugal, Ireland, Spain and Italy. However, in the case of Ireland a substantial share of domestic output is accounted for by multinational

companies, both foreign and national. These firms are not dependent on the Irish capital markets (including banks) to fund their activities and, hence, should be less affected by a higher cost of domestic funding. However, smaller domestically owned firms in Ireland will suffer the full adverse effects of the increase in margins.

Generally, the model results suggest that an illustrative one percentage point increase in borrowing costs would cut Euro area output by $\frac{1}{2}$ per cent within four years and by $\frac{3}{4}$ of a per cent in the long run. If the growth over the last three years in government borrowing costs compared to Germany persists, and if these increased spreads propagate themselves into the largely nationalised banking system of high debtor countries, this will cause a sharp slowdown in activity. The impact will be particularly felt in Greece, and to a lesser extent in Spain, Portugal, Ireland and Italy. While Euro area growth would be 0.1 or 0.2 lower for a couple of years with an illustrative one percentage point increase in borrowing, under these circumstances output growth in Greece might be $1\frac{1}{2}$ percent lower than it would have been for three years.

A more “national” and fragmented banking system within the EU will have broader implications for the financing of economic activity in Europe. Larger firms, especially multinational firms would be favoured over smaller firms because of their ability to access capital markets directly (through corporate bonds) and also because they have access to the banking sectors in the different jurisdictions in which they operate. Small and medium sized enterprises, and especially households, which are more dependent on the domestic banking system will be most affected. The different approaches to dealing with the financial crisis in the EU and the US will also probably favour growth in the US economy in the medium term.

[†] Ray Barrell, Tatiana Fic, John FitzGerald, Ali Orazgani and Rachel Whitworth, 2011, “[The Banking Sector and Recovery in the EU economy](#)”, *National Institute Economic Review*, No. 216, April 2011, pp. R41-R52.

Should We Be Worried About Income Inequality in Ireland?

**Richard Layte*

Despite the recession Ireland remains a country with relatively high income inequality. Ireland sits just behind the UK near the top of the inequality rankings in Europe behind the Baltic and Southern European states. Is this a problem? Should we be concerned about levels of income inequality in Irish society? Debates about this issue often centre on the moral acceptability of income inequality with protagonists adopting well worn ideological positions but is there actually any *evidence* that higher levels of income inequality are a problem? Some may have moral misgivings about excessively high incomes at the top and those at the bottom being left behind as middle incomes increase, but does inequality in itself, as opposed to being poor, actually have any consequences? Recent ESRI research suggests that the answer is yes.

First, it should be made clear that having less income is bad for your health. There is ample evidence for Ireland that those with less income, education or from a lower social class have a lower life expectancy and poorer health while alive. This 'health gradient' is not just between those at the bottom and everyone else. Those in the top income or class grouping have better health and a higher life expectancy than those just below them and the pattern is repeated all the way to the bottom. But social scientists have also found that high income inequality at the country level also lowers life expectancy, health and well-being. Even the wealthy appear to die younger in more unequal societies. For many years it was argued by some that the association was just a statistical artefact but in the last decade a growing literature using increasingly sophisticated data and methodology has shown that income inequality has a detrimental effect not only on health and life expectancy but a range of other troubling social issues including low educational performance in schools, rates of teenage pregnancy, levels of obesity, even the 'agreeableness' of the population. What unites these phenomena and why does inequality have these effects?

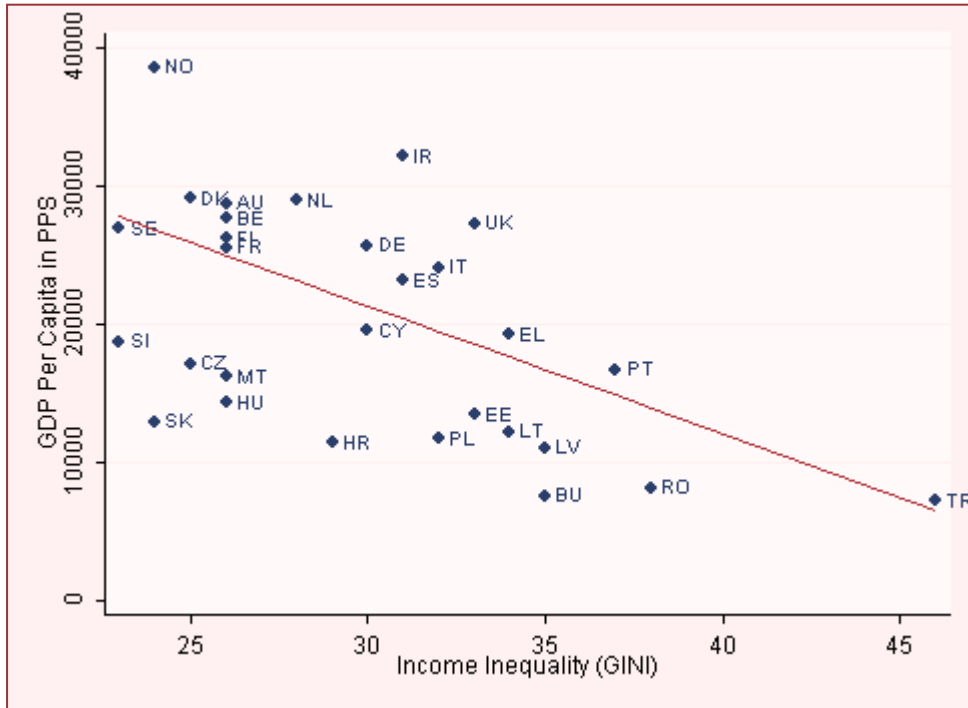
* richard.layte@esri.ie

One part of the answer was provided in a recent paper by Richard Layte[†] which used data on 35,000 people from 30 countries in Europe to examine the association between income inequality and mental well-being. As with physical health and life expectancy, high income inequality is associated with less mental health and well-being and the research set out to test different theories about what explained the association. Past research has suggested that higher inequality is damaging because it precipitates feelings of inferiority and shame that are damaging to health and poisonous to social relationships. People who feel inferior or disrespected are more hostile and less trusting of others intentions. This makes them less likely to help others and so less likely to work together and cooperate within a community. Feelings of shame and hostility have an individual cost in terms of mental and physical health but they are also highly toxic to social cohesion in a society because collective action and social efficacy require trust between individuals.

This research by Richard Layte shows that more unequal societies do indeed appear to precipitate more feelings of social inferiority. In more unequal societies people, even those at the top of the income pile, are more likely to feel that others look down on them. This same relationship holds for individual measures of social trust. More affluent people trust more but even affluent people are less likely to trust in more unequal societies and these relationships hold even if we control for a number of individual characteristics. Does this perceived inferiority and distrust matter? The research paper summarised here suggests it does, presenting evidence that these factors explain the lower levels of mental well-being in more unequal countries which contribute to higher levels of mental illness.

Debate about the rights and wrongs of Ireland's high level of inequality have been ongoing for a long time but perhaps it is time to move the debate forward and discuss the evidence about the effect of inequality on individuals, families and the society at large. It is often argued that inequality is necessary to provide the economic incentives for the hard work which creates economic growth and higher incomes for all. The fact that in Europe, the more equal countries are actually richer on average (see Figure 1) suggests not. Moreover, research has consistently shown that the disadvantage of poor children relative to their affluent peers in terms of mobility up the income distribution is stronger in the highly unequal US than in more equal European societies. Inequality it seems stacks the odds against poorer children succeeding. Debate on income inequality in Ireland needs to be informed by such evidence.

Country GDP per Capita in PPS by Income Inequality (GINI)



† Layte, R. (2011). The Association Between Income Inequality and Mental Health: Testing Status Anxiety, Social Capital, and Neo-Materialist Explanations, *European Sociological Review* (<http://esr.oxfordjournals.org/content/early/2011/03/08/esr.jcr012.abstract>)

Investing in Child Health and Development: The Impact of Breastfeeding on Children's School Performance

**Cathal McCrory and Richard Layte*

There is now strong evidence that breastfed babies are less prone to stomach upsets, ear infections and the coughs and colds of early childhood than their bottle fed peers. There is also a growing body of evidence that breastfeeding may confer more long term benefits for child development. For example, studies have consistently shown that breastfed children score more highly on cognitive and academic performance tests in later life compared with those who were bottle-fed. At first glance the explanation seems simple: breast milk contains nutrients that improve brain development during infancy leading to longer-term gains in cognitive performance. The story may not be so simple however. Research shows that children who are breastfed are more likely to come from more advantaged households, that is, those with higher levels of education, higher income and social class. This means that these children enjoy other economic and environmental advantages and it may well be that it is these factors, not the breast milk itself, that explains the higher ability scores among the breastfed.

Recent research carried out by the ESRI (McCrory & Layte 2011)[†] has sought to shed some light on this issue using data from the Child Cohort of the Growing Up in Ireland project, a study of 8,568 nine-year-old children whose development is being followed over time. The children's parents were asked whether their child was ever breastfed as an infant and the duration of this breastfeeding in weeks. The children also completed the Drumcondra reading and maths tests. More importantly, the Growing Up in Ireland study also collects a large number of other measures of the families' social and economic situation providing the information necessary to identify the specific effect of being breastfed.

The study found that children who were breastfed scored almost 9 points higher on the reading and 7 points higher on the maths tests compared to those who were bottle-fed. More persuasively, the study also found that test scores improved with the amount of breastfeeding which the child had experienced

*cathal.mccrory@esri.ie; richard.layte@esri.ie

although the benefits peak after around 6 months of breastfeeding. However, it also showed that there was a strong association between breastfeeding and the socio-economic characteristics of the household such as the mother's level of education, household social class, household income, and the number of children's books in the home. For instance, about three quarters of those who were university educated breastfed compared with a quarter of those who had a lower secondary education or less.

The question is: does the effect of breastfeeding remain once we remove the effect of the child's family background? The research showed that it does. Although the gain from breastfeeding dropped to 3.2 percentage points on reading and 2.2 percentage points on mathematics, these differences are statistically significant. Breastfeeding for a longer time did not have a statistically identifiable advantage.

The results quantify the benefits which being breastfed in early life has for child educational development but could this effect vary across children? Those coming from more affluent homes have a number of advantages that contribute to educational development aside from breastfeeding so we may see less of an effect for these children. On the other hand, the effect may be largest for the most disadvantaged children. This is precisely what the study found. The test score advantage of breastfeeding was largest among the most socially disadvantaged where it averaged 7 percentage points on reading and 4 percentage points on maths. Among the most advantaged breastfeeding improved scores by around 1 percentage point on both the reading and maths test.

The advantages of breastfeeding for health in childhood are already well established but this study shows that breast feeding is also very important for the child's long term development. This result underlines the importance of encouraging and facilitating mothers to breastfeed where at all possible for the first six months of the child's life, particularly among women with less education or in lower income groups whose children have the most to gain. This task is all the more important as Ireland has the lowest breastfeeding rate in Europe. Around half of women giving birth in Irish hospitals are breastfeeding their child 48 hours after birth. This is true of between 75 and 95% of women in most other European countries (<http://www.europeristat.com/bm.doc/european-perinatal-health-report.pdf>, p82).

Not all women will be able to breastfeed their child. Demonising mothers who cannot or choose not to would be counterproductive but identifying and sharing evidence as to the advantages of breastfeeding can play a positive role in

persuading women of the benefits. Non-Irish women giving birth in Irish hospitals are twice as likely to breastfeed as Irish women and this suggests that attitudes toward breastfeeding are important in shaping behaviour. But, it is also important to provide an environment which is supportive of women who want to if we are serious about increasing breastfeeding levels in Ireland.

†McCorry, C. & Layte, R. (2011). The effect of breastfeeding on children's educational test scores at nine years of age: Results of an Irish cohort study. *Social Science & Medicine* (in press).



The Economic & Social Research Institute
Whitaker Square
Sir John Rogerson's Quay
Dublin 2, Ireland
+ 353 1 863 2000 www.esri.ie
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