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QUARTERLY ECONOMIC COMMENTARY

Summer 2009

ALAN BARRETT
IDE KEARNEY
JEAN GOGGIN

The forecasts in this Commentary are based on data available by 9 July 2009

RESEARCH BULLETIN

09/2

EDITOR: TIM CALLAN

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Alan Barrett is a Research Professor, Ide Kearney is an Associate Research Professor and both are Editors of the *Commentary*, Jean Goggin is a Research Assistant at the Economic and Social Research Institute (ESRI).

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SUMMARY TABLE

	2007	2008	2009	2010
OUTPUT				
(Real Annual Growth %)				
Private Consumer Expenditure	5.9	-1.0	-7.0	-3.0
Public Net Current Expenditure	6.9	2.6	-0.0	-3.0
Investment	2.1	-15.5	-30.5	-17.2
Exports	8.6	-1.0	-3.9	-1.4
Imports	5.6	-2.1	-8.6	-4.8
Gross Domestic Product (GDP)	6.0	-3.0	-7.9	-2.3
Gross National Product (GNP)	4.4	-2.8	-8.9	-2.3
GNP per capita (constant prices)	2.0	-4.6	-9.1	-2.3
PRICES				
(Annual Growth %)				
Harmonised Index of Consumer Prices (HICP)	2.8	3.3	-1.6	0.2
Consumer Price Index (CPI)	4.9	4.1	-4.6	-0.3
Wage Growth	3.5	1.9	-3.0	-1.6
LABOUR MARKET				
Employment Levels (ILO basis (000s))	2,123	2,100	1,916	1,819
Unemployment Levels (ILO basis (000s))	101	141	276	348
Unemployment Rate (as % of Labour Force)	4.6	6.3	12.6	16.1
PUBLIC FINANCE				
Exchequer Balance (€m)	-1,619	-12,714	-25,722	-19,326
General Government Balance (€m)	346	-13,276	-20,106	-18,349
General Government Balance (% of GDP)	0.2	-7.3	-12.2	-11.4
General Government Debt (% of GDP)	25.1	44.2	60.8	73.8
EXTERNAL TRADE				
Balance of Payments Current Account (€m)	-10,128.0	-9,439.0	-1,309.9	2,308.8
Current Account (% of GNP)	-6.3	-6.1	-0.9	1.7
EXCHANGE AND INTEREST RATES				
US$/€ Exchange Rate (annual average)	1.39	1.47	1.33	1.33
STG£/€ Exchange Rate (annual average)	0.69	0.79	0.91	0.90
Main ECB Interest Rate (end of year)	4.00	2.50	1.00	1.00

SUMMARY

All of the *Quarterly Economic Commentaries* between Spring 2007 and Spring 2009 contained downward revisions to our forecasts, first for 2008 and then for 2009. For this reason, possibly the most noteworthy feature of this *Commentary* is that our forecast for GNP growth in 2009 is almost unchanged from the Spring issue, at -8.9 per cent. For 2010, we now expect GNP to contract by 2.3 per cent. While this is a downward revision on our Spring forecast for 2010 (which was -1.2 per cent), the broad conclusion to be drawn is that the size of the recession is becoming clearer.

The contraction in the economy is expected to continue through this year and into next, with a very modest rate of growth now expected to emerge in mid-2010. At that time, output will be over 13 per cent below its peak in 2007 and will be lower than the level recorded in 2005. GNP per head will be lower than its value in 2002.

Given that our growth forecasts are largely unchanged from Spring, the same applies to most of the other, more detailed figures. But there are a number of changes. Our forecast for a fall in exports this year (-3.9 per cent) is less severe than in Spring (-5.0 per cent), as a result of relatively favourable export data for the year so far. Our forecast for the fall in the volume of public consumption in 2010 is now -3.0 per cent, compared to our zero per cent forecast in Spring. The actual outcome will depend on how further savings are achieved in the public finances and whether greater emphasis is placed on reductions in public service pay or numbers.

With regard to the labour market, our forecast for unemployment in 2010 is now 16.1 per cent, down from 16.8 per cent in Spring. It should be stressed that this change does not result from a more favourable view on possible employment losses. Instead, we expect a faster fall in participation and also a higher rate of outward migration over the period of the forecasts. We now expect a net outflow of 40,000 in 2010, partly as a result of a sharp increase in unemployment among non-nationals.

We expect CPI inflation to average -4.6 per cent in 2009 and -0.3 per cent in 2010. On wages, we expect falls of 3 per cent in 2009 and of 1.6 per cent in 2010.

Our forecasts for the public finances show a General Government Deficit of 12.2 per cent of GDP this year and of 11.4 per cent next year. This is based on the full implementation in 2010 of the savings measures announced for that year in the Supplementary Budget of April last. It does not include any provision in respect of the National Asset Management Agency (NAMA).

In the *General Assessment*, we discuss how the likely extent of the downturn appears to be clearer now. While this is positive news in some respects, Ireland needs favourable outcomes in a number of areas if robust growth is to be restored beyond 2010. These include the global economic environment, the banking system, the public finances and competitiveness. In the case of each, concerns exist. For example, the objective behind NAMA of removing development related loans from the books of the banks is correct from the perspective of enabling banks to resume lending activities. However, there is no guarantee that such lending will result. Similarly, while progress has been achieved in restoring sustainability to the public finances, a huge amount of adjustment is still required. The challenge of restoring competitiveness in the context of a fixed exchange rate remains considerable.

NATIONAL ACCOUNTS 2008 (Estimate)

A: Expenditure on Gross National Product

	2007	2008 Estimate	Change in 2008				
			€m		%		
	€m	€m	Value	Volume	Value	Price	Volume
Private Consumer Expenditure	91,948	93,863	1,915	-893	2.1	3.1	-1.0
Public Net Current Expenditure	27,275	28,901	1,626	716	6.0	3.3	2.6
Gross Fixed Capital Formation	49,429	39,474	-9,955	-7,663	-20.1	-5.5	-15.5
Exports of Goods and Services (X)	153,481	151,896	-1,585	-1,606	-1.0	0.0	-1.0
Physical Changes in Stocks	-146	317	464	447			
Final Demand	**321,986**	**314,451**	**-7,535**	**-8,998**	**-2.3**	**0.5**	**-2.8**
less:							
Imports of Goods and Services (M)	134,112	133,002	-1,110	-2,846	-0.8	1.3	-2.1
less:							
Statistical Discrepancy	-1,876	-365	-1,511	392			
GDP at Market Prices	**189,751**	**181,815**	**-7,936**	**-5,760**	**-4.2**	**-1.2**	**-3.0**
less:							
Net Factor Payments (F)	-28,507	-27,218	1,289	-1,276	-4.5	0.0	-4.5
GNP at Market Prices	**161,244**	**154,596**	**-6,648**	**-4,484**	**-4.1**	**-1.4**	**-2.8**

B: Gross National Product by Origin

		2007	2008 Estimate	Change in 2008	
		€m	€m	€m	%
Agriculture, Forestry, Fishing		3,249	2,890	-359	-11.0
Non-Agricultural:	Wages, etc.	77,328	78,929	1,601	2.1
	Other:	70,587	63,088	-7,499	-10.6
Adjustments:	Stock Appreciation	-648	-186		
	Statistical Discrepancy	-1,876	-365		
Net Domestic Product		**148,641**	**144,357**	**-4,283**	**-2.9**
less:					
Net Factor Payments		-28,507	-27,218	1,289	-4.5
National Income		120,133	117,139	-2,994	-2.5
Depreciation		18,597	17,770	-827	-4.4
GNP at Factor Cost		**138,731**	**134,909**	**-3,821**	**-2.8**
Taxes less Subsidies		22,514	19,687	-2,826	-12.6
GNP at Market Prices		161,244	154,596	-6,648	-4.1

C: Balance of Payments on Current Account

	2007	2008 Estimate	Change in 2008
	€m	€m	€m
Exports (X) less Imports (M)	19,369	18,894	-475
Net Factor Payments (F)	-28,507	-27,218	1,289
Net Transfers	-990	-1,115	-125
Balance on Current Account	**-10,128**	**-9,439**	**689**
as % of GNP	-6.3	-6.1	0.2

D: GNDI and Terms of Trade

	2006	2007 Estimate	2007 Volume Change	
	€m	€m	€m	%
Terms of Trade Loss or Gain		1,961.0		
GNP Adjusted for Terms of Trade	161,244	154,799	-6,445	-4.0
GNDI*	160,254	153,699	-6,556	-4.1
National Resources**	160,293	153,767	-6,527	-4.1

* GNDI is GDP adjusted for terms of trade and net international transfers.

** GNDI including capital transfers.

FORECAST NATIONAL ACCOUNTS 2009

A: Expenditure on Gross National Product

	2008 Estimate €m	2009 Forecast €m	Change in 2009 €m Value	Volume	% Value	Price	Volume
Private Consumer Expenditure	93,863	86,420	-7,443	-6,570	-7.9	-1.0	-7.0
Public Net Current Expenditure	28,901	26,647	-2,254	0	-7.8	-7.8	0.0
Gross Fixed Capital Formation	39,474	25,721	-13,753	-12,204	-34.8	-6.3	-30.5
Exports of Goods and Services (X)	151,896	146,746	-5,150	-5,902	-3.4	0.5	-3.9
Physical Changes in Stocks	317	-400	-717	-807		0.0	-254.1
Final Demand	**314,451**	**285,133**	**-29,318**	**-26,074**	**-9.3**	**-1.2**	**-8.2**
less:							
Imports of Goods and Services (M)	133,002	120,254	-12,748	-11,397	-9.6	-1.1	-8.6
less:							
Statistical Discrepancy	-365	-365	0	-147		0.0	0.0
GDP at Market Prices	181,815	165,245	-16,570	-14,531	-9.1	-1.3	-7.9
less:							
Net Factor Payments (F)	-27,218	-26,687	531	531	-2.0	0.0	-2.0
GNP at Market Prices	154,596	138,558	-16,039	-13,978	-10.4	-1.6	-8.9

B: Gross National Product by Origin

		2008 Estimate €m	2009 Forecast €m	Change in 2009 €m	%
Agriculture, Forestry, Fishing		2,890	3,333	442	15.3
Non-Agricultural:	Wages, etc.	78,929	69,965	-8,964	-11.6
	Other:	63,088	61,251	-1,837	-2.8
Adjustments:	Stock Appreciation	-186	-200		
	Statistical Discrepancy	-365	-365		
Net Domestic Product		**144,357**	**133,984**	**-10,373**	**-7.3**
less:					
Net Factor Payments		-27,218	-26,687	531	-2.0
National Income		**117,139**	**107,297**	**9,842**	**-8.5**
Depreciation		17,770	16,709	-1,061	-6.0
GNP at Factor Cost		**134,909**	**124,006**	**-10,903**	**-8.2**
Taxes less Subsidies		19,687	14,552	-5,135	-26.3
GNP at Market Prices		**154,596**	**138,558**	**-16,039**	**-10.5**

C: Balance of Payments on Current Account

	2008 Estimate €m	2009 Forecast €m	Change in 2009 €m
Exports (X) less Imports (M)	18,894	26,492	7,598
Net Factor Payments (F)	-27,218	-26,687	531
Net Transfers	-1,115	-1,115	0
Balance on Current Account	**-9,439**	**-1,310**	**8,129**
as % of GNP	-6.1	-0.9	5.2

D: GNDI and Terms of Trade

	2008 €m	2009 Estimate €m	2009 Volume Change €m	%
Terms of Trade Loss or Gain		2,401		
GNP Adjusted for Terms of Trade	154,596	143,198	-11,398	-7.4
GNDI*	153,481	142,071	-11,411	-7.4
National Resources**	153,549	142,371	-11,179	-7.3

* GNDI is GDP adjusted for terms of trade and net international transfers.

** GNDI including capital transfers.

FORECAST NATIONAL ACCOUNTS 2010

A: Expenditure on Gross National Product

	2009 Forecast €m	2010 Forecast €m	Change in 2010 €m Value	Volume	% Value	Price	Volume
Private Consumer Expenditure	86,420	84,246	-2,173	-2,593	-2.5	0.5	-3.0
Public Net Current Expenditure	26,647	25,048	-1,599	-799	-6.0	-3.1	-3.0
Gross Fixed Capital Formation	25,721	20,204	-5,517	-4,433	-21.5	-5.1	-17.2
Exports of Goods and Services (X)	146,746	145,367	-1,379	-2,113	-0.9	0.5	-1.4
Physical Changes in Stocks	-400	400	800	702		0.0	-175.4
Final Demand	**285,133**	**275,265**	**-9,869**	**-9,602**	-3.5	-0.1	-3.4
less:							
Imports of Goods and Services (M)	120,254	114,791	-5,462	-5,770	-4.5	0.3	-4.8
less:							
Statistical Discrepancy	-365	-365	0	-16		0.0	0.0
GDP at Market Prices	**165,245**	160,839	-4,406	-3,816	-2.7	-0.4	-2.3
less:							
Net Factor Payments (F)	-26,687	-27,152	-465	580	1.7	4.0	-2.2
GNP at Market Prices	138,558	133,687	-4,871	-3,235	-3.5	-1.2	-2.3

B: Gross National Product by Origin

	2009 Forecast €m	2010 Forecast €m	Change in 2010 €m	%
Agriculture, Forestry, Fishing	3,333	3,833	500	15.0
Non-Agricultural: Wages, etc.	69,965	65,237	-4,728	-6.8
Other:	61,251	60,780	-471	-0.8
Adjustments: Stock Appreciation	-200	-200		
Statistical .Discrepancy	-365	-365		
Net Domestic Product	133,984	129,284	-4,700	-3.5
less:				
Net Factor Payments	-26,687	-27,152	-465	1.7
National Income	**107,297**	**102,132**	**-5,164**	**-4.8**
Depreciation	16,709	16,211	-499	-3.0
GNP at Factor Cost	124,006	118,343	-5,663	-4.6
Taxes less Subsidies	14,552	15,344	792	5.4
GNP at Market Prices	138,558	133,687	-4,871	-3.5

C: Balance of Payments on Current Account

	2009 Estimate €m	2010 Forecast €m	Change in 2010 €m
Exports (X) less Imports (M)	26,492	30,576	4,083
Net Factor Payments (F)	-26,687	-27,152	-465
Net Transfers	-1,115	-1,115	0
Balance on Current Account	-1,310	2,309	3,619
as % of GNP	-0.9	1.7	2.7

D: GNDI and Terms of Trade

	2009 €m	2010 Estimate €m	2009 Volume Change €m	%
Terms of Trade Loss or Gain		936		
GNP Adjusted for Terms of Trade	138,558	135,667	-2,891	-2.1
GNDI*	137,443	134,555	-2,888	-2.1
National Resources**	137,511	134,855	-2,656	-1.9

* GNDI is GDP adjusted for terms of trade and net international transfers.
** GNDI including capital transfers

THE INTERNATIONAL ECONOMY

Main Developments

The projections for growth in GDP across countries, as shown in Table 1, confirm the severity of the current global recession, with OECD countries expected to contract collectively by over 4 per cent in 2009. While this rate of downturn is large by historic standards, it is a marginal improvement since April of this year when the OECD was forecasting an area-wide downturn of 4.3 per cent. A view is emerging from the OECD and others[1] that an end to the global downturn is in sight and that a return to very modest growth could occur later this year in the US. That the global recession may be bottoming out is partly explained by the aggressive stimulatory polices that have been pursued. In addition, the OECD sees signs of normalisation in money markets.

The main source underlying this upward revision is a more favourable view of prospects in the US. In April, the OECD was forecasting that the US would contract by 4 per cent in 2009 and that growth would be zero in 2010. The most recent forecasts from June see the US contracting at a lower rate in 2009 (2.8 per cent). With the US economy expected to stabilise in the middle of 2009 and to register quarter-on-quarter growth towards the end of the year, albeit at a very modest pace, the OECD now expects growth of 0.9 per cent in the US in 2010.

The rate of contraction in the Euro Area is now expected to be 4.8 per cent this year, i.e. steeper than the US. In addition, growth is expected to re-emerge in the Euro Area more slowly than in the US. The OECD expects the Euro Area economy to begin to grow in the middle of 2010, again at a pace which is expected to be weak. For the year 2010, output growth is expected to be zero. Within the Euro Area, Germany is expected to contract by 6.1 per cent this year and to register a small growth rate in 2010 of 0.2 per cent. France is expected to contract by 3 per cent in 2009 and to grow by just 0.2 per cent next year. For the UK, GDP is forecast to contract by 4.3 per cent this year and to remain constant, year-on-year, in 2010.

Japan is experiencing one of the steepest declines in the OECD and its GDP is expected to fall by 6.8 per cent in 2008. China provides some better news, with the OECD now believing that a recovery is underway there already. Growth in China is expected to be 7.7 per cent this year and 9.3 per cent next year.

[1] Such as the International Monetary Fund.

Table 1: Short term International Outlook

	GDP Output Growth			Consumer Price Inflation*			Unemployment Rate %			General Government Balance % of GDP		
Country	**2008**	**2009**	**2010**	**2008**	**2009**	**2010**	**2008**	**2009**	**2010**	**2008**	**2009**	**2010**
UK	0.7	-4.3	0.0	3.6	1.9	1.2	5.5	8.2	9.7	-5.5	-12.8	-14.0
Germany	1.0	-6.1	0.2	2.8	0.3	0.4	7.3	8.7	11.6	-0.1	-3.7	-6.2
France	0.3	-3.0	0.2	3.2	0.3	0.7	7.4	9.7	11.2	-3.4	-6.7	-7.9
Italy	-1.0	-5.5	0.4	3.5	1.1	1.2	6.8	8.4	10.2	-2.7	-5.3	-5.8
Euro Area	0.5	-4.8	0.0	3.3	0.5	0.7	7.5	10.0	12.0	-1.9	-5.6	-7.0
USA	1.1	-2.8	0.9	3.8	-0.6	1.0	5.8	9.3	10.1	-5.9	-10.2	-11.2
Japan	-0.7	-6.8	0.7	1.4	-1.4	-1.4	4.0	5.2	5.7	-2.7	-7.8	-8.7
China	9.0	7.7	9.3	7.2	2.0	0.5				9.9	9.6	7.8
OECD	0.8	-4.1	0.7	3.2	0.6	0.8	5.9	8.5	9.8	-3.2	-7.7	-8.8
Ireland	-3.0	-7.9	-2.3	3.3	-1.6	0.2	6.3	12.6	16.1	-7.3	-12.2	-11.4

Source: OECD.

* HICP for Euro Area countries and the UK.

Implications for Ireland

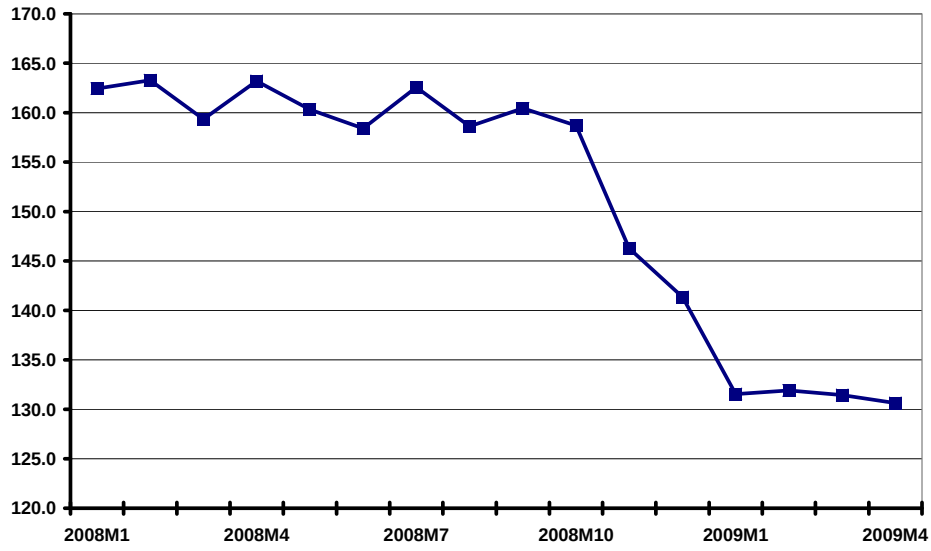
EXPORT MARKETS

While the falls in output across the world in the latter part of 2008 and the early part of 2009 were large by any measure, the fall in world trade was substantially higher. According to the OECD, world trade fell at an annualised rate of 26 per cent between Q3 and Q4 of 2008 and at a rate of 32.1 per cent between Q4 2008 and Q1 2009 (again annualised).

Such a contraction in world trade should clearly be a huge concern to Ireland given the openness of the economy. However, the degree of concern can at least be tempered by the precise sources of this downturn. The fall off in demand for capital goods has had a large impact on the profile of world trade but has had little or no impact on Irish exports. As discussed in the text below, the fact that Irish exports on aggregate have not collapsed in the context of this massive contraction in world trade is related to the nature of our exports, in particular the pharmaceutical component.[2]

The huge decline in world trade seen in the last months of 2008 and the first months of 2009 appears to have ceased. In Figure 1, we present data on world trade volumes from the Dutch Centraal Planbureau and the levelling off in world trade volumes is apparent. Between September 2008 and January 2009, the index fell by 18 per cent. Since January, no further dramatic falls have been observed. However, no increases have been observed either, although carryover from the fall between September and January will imply a large negative reading for 2009 as a whole even if this stability continues.

Figure 1: Index of World Trade Volumes, January 2008 - April 2009 (2000=100)



Source: *World Trade Monitor,* Centraal Planbureau, The Netherlands (June 2009).

For 2009, the OECD expects world trade to contract by 16 per cent. A return to world trade growth is then expected, with the forecast for 2010

[2] Differing outcomes across sub-sectors of Irish industry are also illustrated in the section below on output. While the "modern" sector has seen output grow strongly in the first quarter of 2009, the "traditional" sector has seen output continue to decline.

being growth of 2.1 per cent. Of particular relevance to Ireland are the forecasts for import growth in 2009 and 2010 for our major export markets and we report these projections in Table 2.

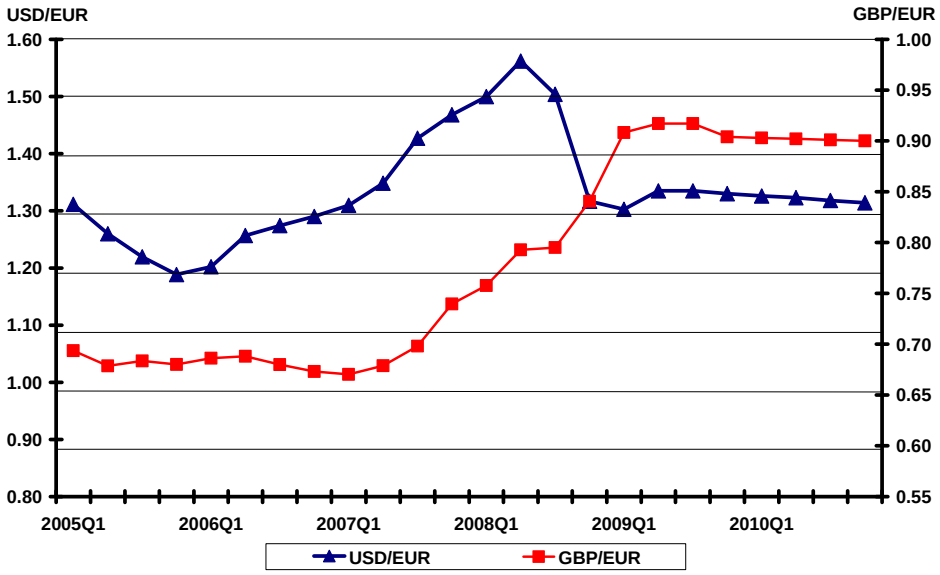
Table 2: Selected OECD Forecasts for Import Volume Growth 2009 and 2010 (with Estimates for 2008)

	2008	2009	2010
UK	-0.6	-13.5	-1.0
Germany	3.9	-10.8	0.9
France	0.6	-11.4	-1.8
US	-3.5	-15.7	1.2

Source: OECD *Economic Outlook* June 2009.

It is clear from the table that the collapse in import demand across our major trading partners this year is presenting Irish exporters with an enormous challenge. As noted already, the composition of our exports seems to be insulating Ireland somewhat but this should not deflect attention from the overall challenging environment. While 2010 should provide a more favourable environment by comparison, it is also clear that the pace of recovery in the world economy, and in import demand, will be weak. For this reason, it is not possible to envisage a situation in which the world economy will help to lift Ireland out of recession to any great degree in 2010.

Figure 2: Exchange Rates



Source: Central Bank & Financial Services Authority of Ireland (historic) and NIESR *Economic Review* No. 208 (forecast).

Of course, Ireland's export performance in the years ahead will be determined by changes in its competitiveness, along with changes in import demand across our trading partners. In this context, the figures on forecasts for inflation across the countries listed in Table 1 are interesting. Ireland appears likely to experience negative rates of inflation in both 2009 and 2010. Apart from Japan, this is not expected to be the case for the other countries. Continuing a theme that has featured in many *Commentaries* in recent years, should this translate into a slower rate of wage growth in Ireland relative to elsewhere competitiveness gains can be achieved. Against this, the continuing weakness of sterling remains a further challenge to Ireland's competitiveness especially for those domestic

producers who export into the UK or who compete with UK producers here and elsewhere. As can be seen from Figure 2, the value of sterling (in euro terms) has risen relative to its low point late last year but it still remains below the level that pertained for much of the recent past.

INTEREST RATES

As concerns about the Euro Area economy rose during the course of 2008 and into 2009, interest rates were cut accordingly. Between October of last year and May of this year, the European Central Bank's main official rate has fallen from 4.25 to 1 per cent. It is not clear how rates will move from here onwards. The OECD has recommended that rates be cut further, based in part on the view that inflationary pressures are largely absent. This view is influenced by recent trends in inflation and also by estimates of the emerging output gap in the Euro Area. While it is difficult to predict whether rates will be cut, it does seem reasonable to assume that rates will not be raised until well into 2010 at the earliest.

However, a view is beginning to be expressed that inflationary pressures in the near future are inevitable as a result of the remarkable combination of expansionary fiscal and monetary policies throughout the world and also the various forms of quantitative easing. This in turn has led to discussions about how policymakers will implement a tightening of policy as recovery takes hold. The balancing act that will need to be achieved is as follows. Monetary and fiscal policy will need to be tightened so that rising rates of inflation do not become embedded in expectations. However, such tightening must not be implemented in such a way that any fragile recovery is choked off.

This will be a difficult task. From an Irish perspective, a big concern relates to the possibility that ECB rates might be increasing at a time when the Euro Area is experiencing recovery overall but when economic activity in Ireland is still stagnant. Just as Ireland faced an inappropriate monetary policy during the course of the boom, it might again experience an inappropriate policy at the trough of the recession. Given this, the need for flexibility within the economy is again apparent.[3]

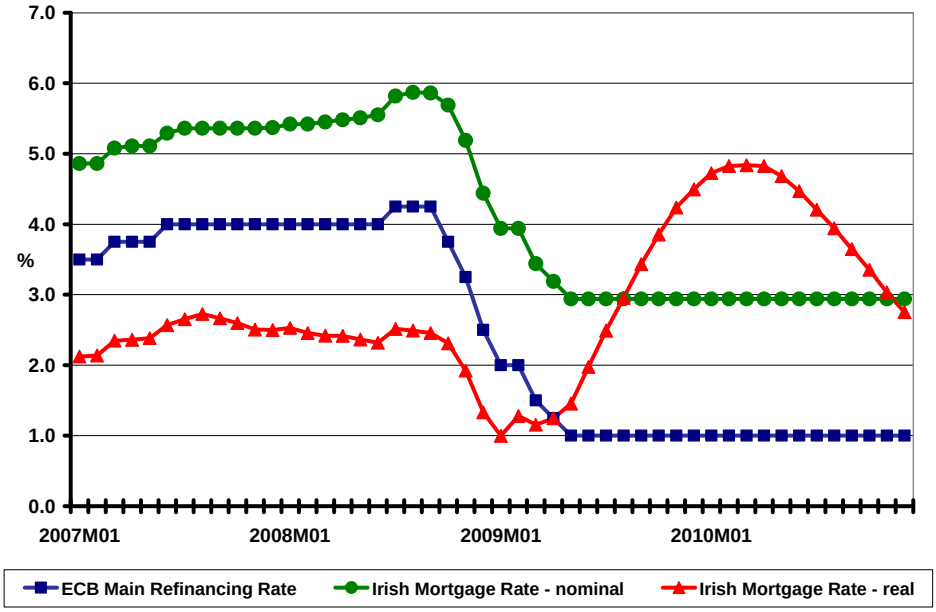
As a final point on interest rates, it is important to stress that Irish borrowers could face interest rate rises even in the absence of increases in ECB rates. In its recent report on Ireland, the International Monetary Fund noted how average interest rate margins were lower in Ireland than elsewhere. Given the state of the Irish banking industry, it is hard to see how this could be sustained and so an upward drift in rates seems likely. Indeed, the question can be asked as to why this has not occurred already, with ECB rate cuts generally being passed on to variable rate mortgage holders. One possible answer relates to the state guarantee under which the six main lending bodies are working. Given the political desirability of keeping borrowing rates as low as possible, it could be argued that rates are

[3] It is worth noting at this point that Ireland continues to benefit from ECB actions aimed at providing liquidity to the banking system. More broadly, it is important to state that Ireland's membership of the single currency is positive on balance for Ireland, even if ECB monetary policy is inappropriate on occasions.

being kept low as a result of the blurring in the respective roles of the banks and the government.[4] But as we say, this is just a possibility.

On balance, the international economy is unlikely to provide a significant lift to Ireland in 2010, at least at the level that would see us emerge from the downturn to any great extent. Beyond 2010, we would hope that such a lift will be present. However, even with the world recovering there are concerns about how strong the impact will be on Ireland.

Figure 3: Interest Rates*



*Mortgage rate used is the Home Purchase Loans Average Interest Rate.
Source: Central Statistics Office.

[4] Another possible channel through which interest rate may be distorted is if rates to businesses are raised in an effort to offset losses on mortgages. Such a distortion could have important medium-term consequences for investment.

THE DOMESTIC ECONOMY

We expect a very sharp contraction in economic activity in 2009 followed by a more moderate contraction in 2010. Overall, the depth of the recession is such that output could fall by over 13 percentage points from its 2007 peak with unemployment exceeding 16 per cent of the labour force by 2010 despite a resumption of net emigration. Underlying our forecasts is a moderate pick-up in activity in the second half of 2010. This is partly based on forecasts for the international economy but also on a maintained assumption that current efforts to stabilise the Irish banking sector will succeed and that credit markets will be functioning properly by then. In addition, we have assumed that the very ambitious budgetary retrenchment measures announced for 2010 will be implemented in full.

The forecasts presented in this *Commentary* are broadly similar to those presented in the Spring *QEC*. We have made a number of minor changes to our exports and imports numbers and labour force growth. In relation to external trade, the most recent data indicate that exports have been performing more strongly than expected in the first months of 2009. In addition, there has been a significant revision to the preliminary *Quarterly National Accounts* (*QNA*) data for imports in 2008 which suggest that imports did not fall as fast as the provisional data indicated[5] and this revision has had knock-on base effects for our forecasts. In relation to labour force growth, the most recent *QNHS* data suggest that the drop in the rate of labour force participation has been much faster than we anticipated. This means that our forecast labour force growth for 2010 is lower and consequently our unemployment rate is slightly lower. Our forecast for employment remains broadly unchanged.

In addition to these changes we have revised downwards our forecast of the volume of public consumption in 2010. The April 2009 Supplementary Budget figures forecast an unchanged level of public consumption in 2010 even with a planned cut of €1.5 billion in current expenditure; however, it is possible that the cuts in levels of current expenditure will also affect volume consumption of services in 2010. Our forecast of a fall of -3 per cent in the volume public consumption adds an additional half a percentage point to the percentage fall in GDP in 2010.

In relation to the quarterly pattern of economic activity, the most recent data for the first quarter of 2009 (seasonally adjusted) suggest that the

[5] Preliminary data had volume change in imports of -4.4 per cent, the revised data suggest a change of -2.1 per cent.

single biggest contraction in GDP occurred in the final quarter of 2008, with a quarter-on-quarter fall of -5.4 per cent. In the first quarter of 2009 this contraction was smaller at -1.5 per cent. Figure 4 shows an indicative pattern for GDP underlying the forecasts presented in this *QEC*. As can be seen, our forecasts are consistent with GDP not growing at a significant rate until the second half of 2010.

Figure 4: GDP Quarter-on-Quarter Growth Rates (Seasonally Adjusted)

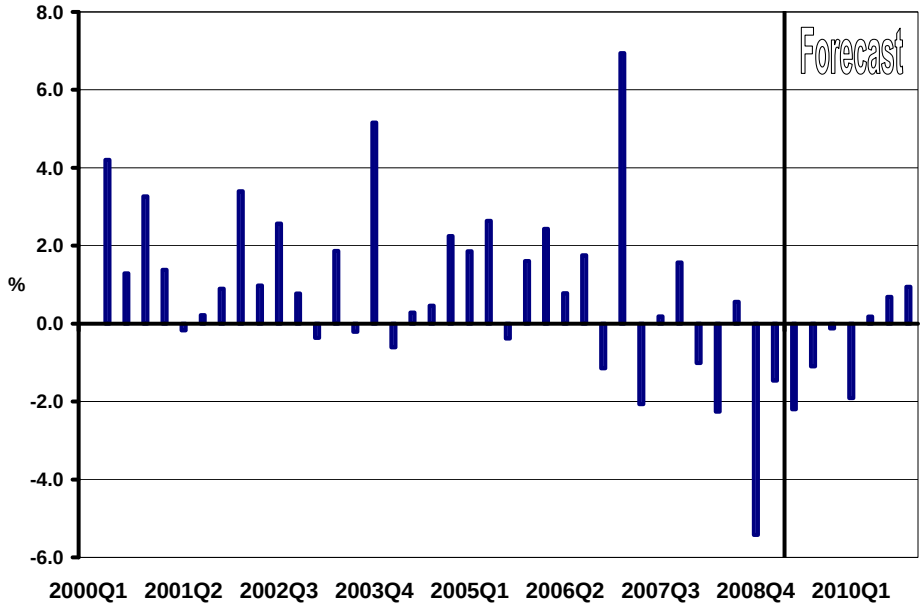


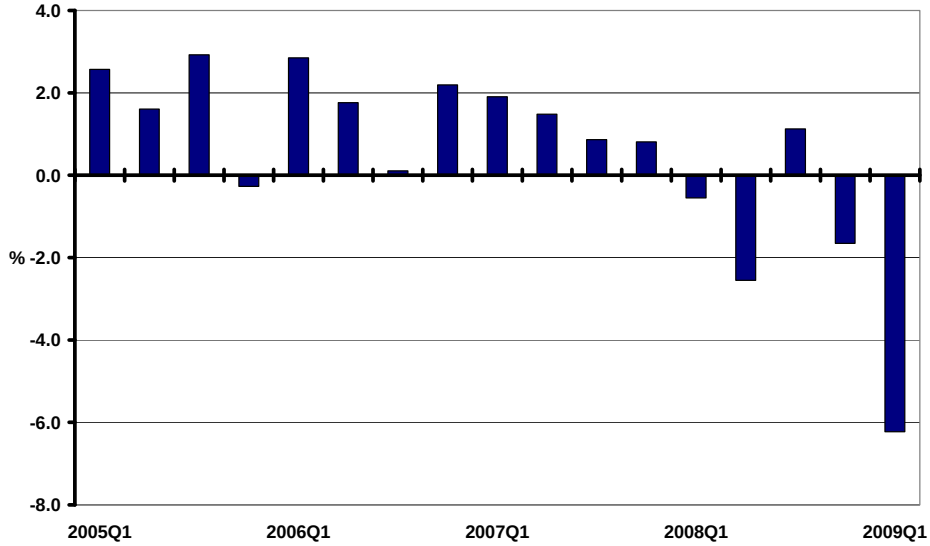
Table 3 shows the implied carryover figures across all expenditure headings from the most recent *QNA* data. Carryover is the annual change in a variable if it were to remain at its level in the last known quarter. This essentially measures the impact of past changes; it is not a forecast. Were economic activity to remain unchanged from the level recorded in the first quarter of 2009 then GDP would contract by 5.8 per cent. However, as shown in Figure 4, we expect further contractions in economic activity throughout 2009, particularly in investment, so that our forecast suggests GDP will fall by 8 per cent in 2009. In 2010, we anticipate that a further tight, but necessary, budget will reduce consumption, investment and imports further. By the end of 2010 our figures suggest that GDP will be below the level recorded in 2005, having contracted by over 13 per cent from its 2007 peak.

Table 3: Implied Carryover

		Carryover	QEC Forecast	
	2008	2009	2009	2010
	%	%		
Private Consumer Expenditure	-0.9	-7.5	-7.0	-3.0
Public Net Current Expenditure	2.6	0.8	0.0	-3.0
Investment	-15.6	-26.6	-30.5	-17.2
Exports	-1.0	-2.1	-3.9	-1.4
Imports	-2.0	-8.4	-8.6	-4.8
GDP	-3.0	-5.8	-7.9	-2.3
GNP	-2.8	-8.5	-8.9	-2.3

Consumption

Figure 5: Private Consumption, Quarter-on-Quarter Volume Growth (Seasonally Adjusted)



The most recent *QNA* data indicate that volume private consumption fell very sharply in the first quarter of 2009 by over 6 per cent (see Figure 5). This very sharp contraction is consistent with a range of indicators, all of which point to a dramatic contraction in consumption in the first quarter of 2009 with slight evidence of a stabilisation in subsequent months.

The seasonally adjusted index of monthly retail sales figures peaked in October 2007, since then it has fallen by over 21 per cent. Excluding motor trade, retail sales have recorded falls in every month between November 2008 and March 2009, before rising marginally in April 2009. Sales of new vehicles have collapsed since January 2008, with especially big declines in the first few months of 2009. In May 2007 a total of 27,000 new vehicles were licensed, in May 2009 that figure was below 7,000. Similarly, growth in overseas travel by Irish residents switched from growth of 12 per cent in the first quarter of 2008 to a fall of over 12.5 per cent in the first quarter of 2009.

All of these trends are reflected in the performance of consumption taxes receipts (customs, excise and VAT) which have been declining throughout 2008 and have shown dramatic declines since the beginning of 2009. Of course, part of the more recent declines in retail sales and consumption taxes are related to the growth of cross-border shopping, while in relation to VAT receipts these falls are partly related to the collapse in the housing market.

Table 4: Recent Indicators of Consumption

	Consumer Sentiment Index	Retail Sales	Excluding Motor Trade	Consumption Taxes*	New Vehicles	Overseas Travel
	(1)	(2) %	(2) %	(3) %	(3) %	(4) %
2008M01	67.0	0.1	0.0	1	8	
2008M02	63.5	-1.5	-0.9	-1	-7	
2008M03	63.3	-3.6	-1.6	0	-26	11.9
2008M04	56.0	1.5	0.8	-1	-16	
2008M05	48.8	-3.3	-0.9	-3	-36	
2008M06	42.2	-2.5	-1.8	-3	-45	0.1
2008M07	39.6	5.4	0.3	-5	-7	
2008M08	43.4	-4.9	-2.1	-6	-36	
2008M09	45.0	2.2	1.2	-6	-35	3.1
2008M10	42.0	-1.5	-1.1	-6	-47	
2008M11	44.8	0.6	0.3	-6	-54	
2008M12	50.2	-0.8	-1.6	-7	-42	-5.7
2009M01	49.6	-19.7	-0.6	-19	-67	
2009M2	44.2	6.4	-0.4	-21	-65	
2009M3	44.1	0.0	-1.1	-22	-64	-12.6
2009M4	46.8	2.2	0.6	-24	-68	
2009M5	45.5			-22	-60	
2009M6	53.4			-22		

* Customs, Excise and VAT Exchequer Returns. (1) Q4 1995=100; (2) percentage change on previous month, seasonally adjusted; (3) percentage change on same month in previous year; (4) percentage change on same quarter in previous year.

We forecast a total fall in volume private consumption of 7 per cent in 2009. Given the very large fall in the first quarter, this figure implies a stabilisation of consumption for the rest of the year consistent with the most recent trends in retail sales and consumer sentiment.[6] However, we expect consumption to fall further in 2010 following the implementation of the very austere budgetary package pre-announced in April 2009, with a volume decline of 3 per cent. In terms of prices, we expect the personal consumption deflator to fall by 1 per cent in 2009 and to increase slightly by 0.5 per cent in 2010. Overall these figures imply that the level of consumption per capita in 2010 will be at levels last recorded in 2003. Since the very sharp adjustment in consumption exceeds the fall in disposable incomes, the savings rate increases sharply (see *Incomes* section below). This adjustment in part reflects the sharp worsening in the net financial position of Irish households since 2006 (see box).

Box A: Net Financial Position of Irish Households

By Thomas Conefrey

The Central Statistics Office institutional sector accounts provide a comprehensive picture of Irish households' net asset position by presenting a household balance sheet which shows household assets as well as

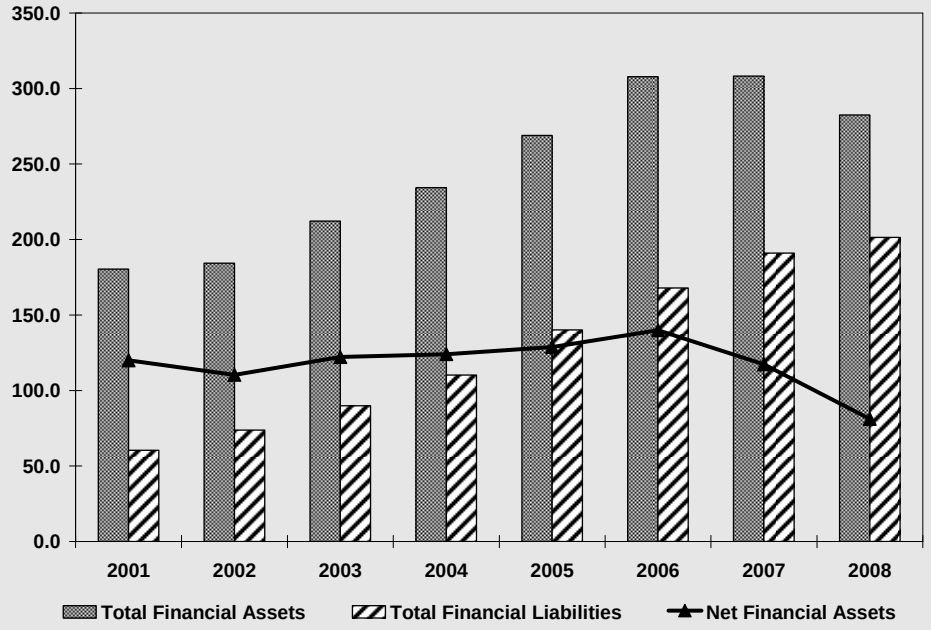
[6] Technically these numbers would imply a slight increase in consumption for the final nine months of the year. However, this would fall well within the margin of error in forecasting this item.

household debt. The accounts show that the indebtedness of Irish households grew dramatically between 2001 and 2008 with the financial liabilities of households rising by 233 per cent over the period (Figure A and Table A). The increase in financial liabilities reflected the very large rise in net borrowing by households for mortgage and other purposes with borrowing in the form of long-term loans accounting for almost 90 per cent of the rise in total financial liabilities from 2001-2008.

Table A: Net Financial Position of Irish Households

	2001	2002	2003	2004	2005	2006	2007	2008
Total Financial Assets	180.4	184.3	212.2	234.4	269.0	307.8	308.3	282.5
Total Financial Liabilities	60.4	73.8	90.0	110.3	140.1	167.9	191.0	201.4
Net Financial Assets	120.0	110.4	122.2	124.1	128.8	139.9	117.3	81.2

Figure A: Net Financial Assets, Household Sector

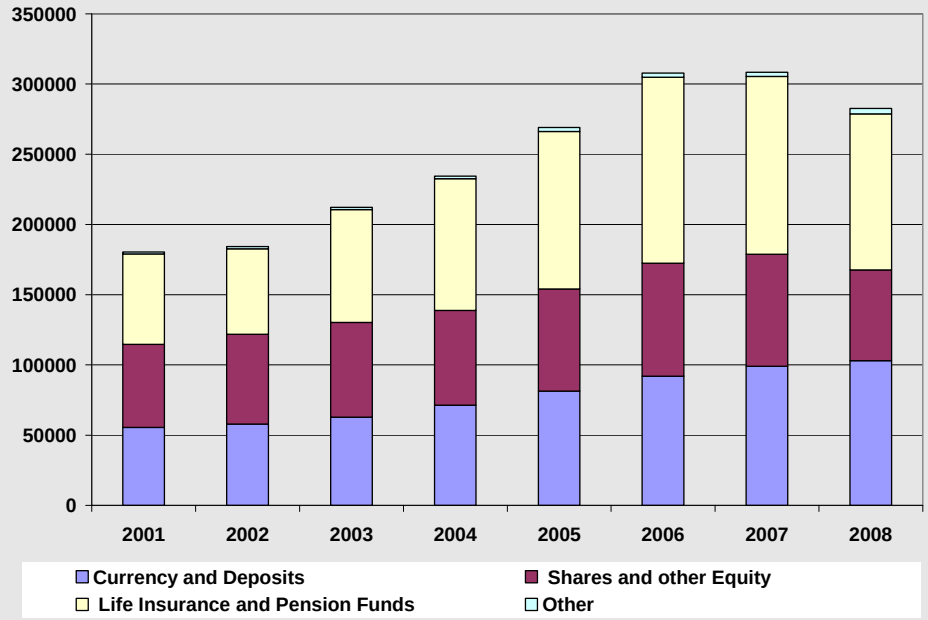


The accounts also provide information on the financial assets held by Irish households. These mainly take the form of currency and deposits, shares and insurance and pension assets held by households as illustrated in Figure B. The financial assets of the household sector rose rapidly between 2001 and 2006 as shown in Figure A and Table A. By 2006 total households assets had increased by 71 per cent to almost €308 billion. In addition, the counterpart to the rise in financial liabilities has been a net acquisition by households of housing assets which are not included here. This meant that in 2006, despite the massive rise in household borrowing, the net financial position of Irish households remained positive.

However, the financial position of households deteriorated significantly over the course of 2008 with net financial assets falling by €36.1 billion from their peak in 2007. This fall was driven primarily by a sharp decline in the value of households' financial assets, notably insurance and pension assets and shares, of €25.8 billion. The increase in households' financial liabilities of €10.5 billion in 2008 was much smaller than in previous years (average increase 2001-2008 €19.8 billion) reflecting a very large decline in

net borrowing for mortgage and other purposes. Thus, despite this large decline in net borrowing, the sharp fall in the value of their financial assets resulted in a significant weakening in the financial position of Irish households in 2008. With the majority of household liabilities in the form of property related loans, the continuing fall in house prices represents a further threat to the net financial position of Irish households.

Figure B: Composition of Household Financial Assets



Investment

The sharp contraction in investment that characterised much of 2007 and accelerated rapidly throughout 2008 has continued into the first quarter of 2009, according to the latest figures from the *Quarterly National Accounts*. As shown in Figure 6, the seasonally adjusted volume of investment fell by over 13 per cent in the first quarter of the year, compared to the final quarter of 2008.

Figure 6: Quarter-on-Quarter Growth in Investment (Seasonally Adjusted), Constant Prices

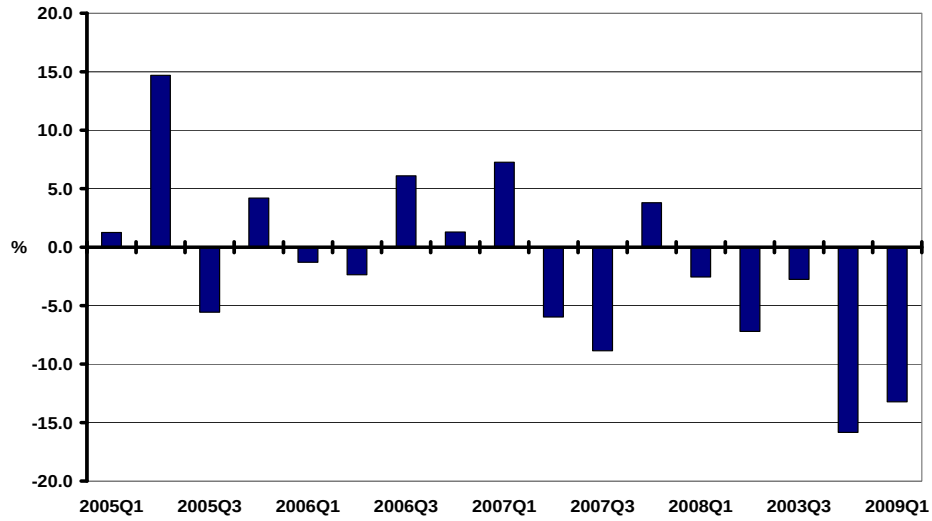


Table 5: Gross Fixed Capital Formation

	2007	% Change in 2008		2008	% Change in 2009		2009	% Change in 2010		2010
	€m	Volume	Value	€m	Volume	Value	€m	Volume	Value	€m
Housing	21,542	-26.3	-29.8	15,123	-46.9	-50.2	7,708	-20.2	-23.8	5,870
Other Building	13,351	8.6	-1.2	13,193	-20.0	-28.0	9,499	-20.0	-28.0	6,839
Transfer Costs	3,373	-42.6	-50.2	1,681	-35.0	-40.0	1,008	-15.0	-20.0	807
Building and Construction	38,266	-15.5	-21.6	29,997	-34.1	-39.9	18,215	-19.8	-25.8	13,516
Machinery and Equipment	11,163	-15.4	-15.1	9,477	-20.0	-20.8	7,506	-10.0	-10.9	6,687
Total	**49,429**	**-15.5**	**-20.1**	**39,474**	**-30.9**	**-35.3**	**25,721**	**-17.2**	**-21.5**	**20,204**

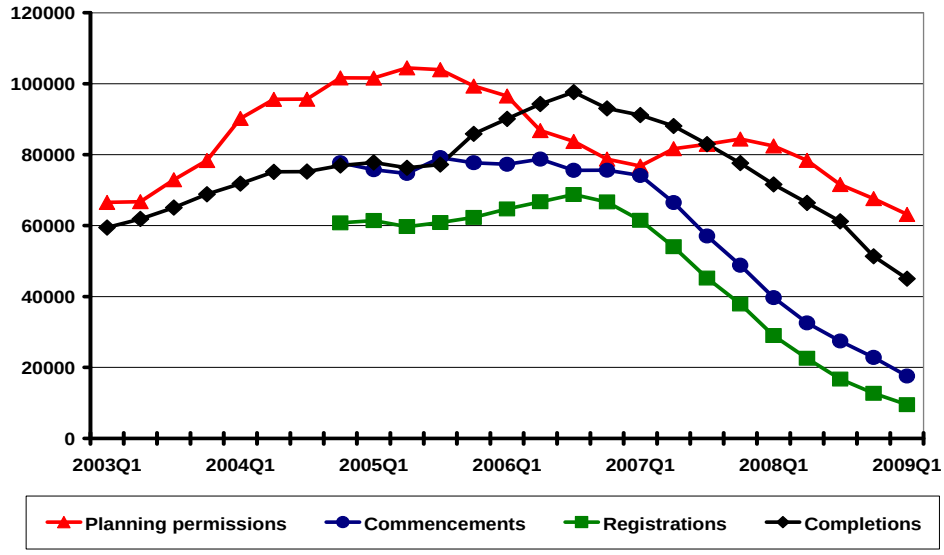
On an annualised basis, the volume of investment in housing fell by 34.2 per cent in 2008, while house completions amounted to 51,324. The latest figures suggest a further sharp contraction in 2009. In the first five months of the year, the number of house completions was just over 12,000 – just under half the number of completions of 23,000 in the same five months last year. The statistics also show a rapid decline in commencements and house registrations (see Figure 7). In the year ending March 2009, commencements fell by 56 per cent, while registrations were down 67 per cent. Based on these figures, we now expect total house completions of 20,000 in 2009, and 12,500 in 2010.

Turning to house prices, the dwellings deflator fell by 5.6 per cent in 2008, as shown in Table 6. The latest figures from the *Quarterly National Accounts* indicate a further decline, and the dwellings deflator is estimated to have fallen by 11 per cent in the first quarter of 2009, compared to the same period last year. According to quarterly data from the Department of the Environment, Heritage and Local Government, the prices of new houses fell by over 6 per cent in 2008, while in the final quarter of the year the prices of new houses had fallen 15 per cent from their peak in 2007 Q2. According to the monthly ptsb/ESRI House Price Index, new house prices peaked in February 2007. The latest figures suggest that by May 2009 new house prices had fallen 20 per cent from that peak. As shown in Table 6, we are forecasting a fall of 10 per cent in the dwellings deflator this year, and a further 10 per cent fall in 2010. This implies a cumulative fall of over one-third in new house prices relative to the February 2007 peak.

Table 6: Growth Rate in Different Measures of House Prices

	2004	2005	2006	2007	2008	2009f	2010f
Dwellings Deflator	12.2	3.4	7.9	2.0	-5.6	-10.0	-10.0
DoEHLG new house prices	11.0	10.8	10.6	5.6	-7.7	-12.2	-12.2
ptsb/ESRI new house prices	12.8	8.7	12.5	1.7	-7.7	-14.0	-14.0

Figure 7: Housing Statistics, Annualised Numbers



With regard to non-residential investment, we expect the volume of investment in other building and construction (excluding transfer costs) to contract by 20 per cent in 2009, and by a further 20 per cent in 2010. Underlying these figures is a 10 per cent contraction in the volume of public investment this year, and an additional fall of 5 per cent in 2010. Our forecasts also include a 29 per cent decline in investment in commercial and retail building in 2009, and a further fall of 37 per cent in 2010. Combining these estimates with our forecasts for housing investment, we expect total investment in building and construction to contract by a third this year and by a fifth next year, in volume terms. In value terms we are forecasting larger contractions, consistent with the general fall in prices in this sector. We expect the value of investment to fall by 39 per cent in 2009 and by 26 per cent in 2010.

Investment in machinery and equipment fell by a third in the first quarter of this year, compared to the same period last year. If we exclude the purchase of aeroplanes the contraction is even larger, estimated at 50 per cent. For 2009 as a whole, we are forecasting a contraction of 20 per cent in the volume of investment in machinery and equipment. With the business environment likely to remain subdued next year, we expect a further volume contraction of 10 per cent in 2010.

Based on these forecasts, we expect the volume of total investment to contract by 31 per cent 2009, and by 17 per cent in 2010. In value terms, we are forecasting a fall of 35 per cent this year, and 22 per cent next year. If realised, these figures imply that the overall share of investment in GDP would fall sharply from a peak of 32 per cent in 2005 to 15 per cent in 2010.

Government Spending and Public Finances

The Exchequer Returns for June showed that tax revenues were 17.3 per cent below the level for the corresponding period in 2008. The pattern of shortfall across tax headings is now familiar. Stamp duties and capital gains tax show the largest proportionate falls. Consumption related taxes are also well down on their 2008 levels. The fall in income tax looks less dramatic but this is partly related to the introduction of, and the subsequent increase in, the income levy. Similarly, the increase in corporation tax is largely the result of a change in the timing of collections, as opposed to an improvement in performance.

Table 7: Tax Revenues, January to June 2008 and 2009

	2008	2009	Percentage Change
Customs	134,931	102,927	-23.7
Excise	2,790,765	2,141,044	-23.3
Capital Gains Tax	623,305	199,407	-68.0
Capital Acquisitions Tax	166,674	122,297	-26.6
Stamps	962,022	344,339	-64.2
Income Tax	5,922,984	5,433,897	-8.3
Corporation Tax	1,430,976	1,880,054	31.4
Value-Added-Tax	7,077,905	5,569,534	-21.3
Training & Employment Levy	447	867	94.0
Unallocated Tax Receipts	17,355	15,127	-12.8
Total	19,127,364	15,809,493	-17.3

On the spending side, voted expenditure for the first six months of 2009 was almost 1 per cent higher than in the same period in 2008. The large percentage increase for Social and Family Affairs is related to increased spending on jobseekers' benefits and allowances. Another large increase percentage (not shown in the table) arose in the case of Agriculture and Food. In this case, the increase is related to spending under the Farm Waste Management Scheme.

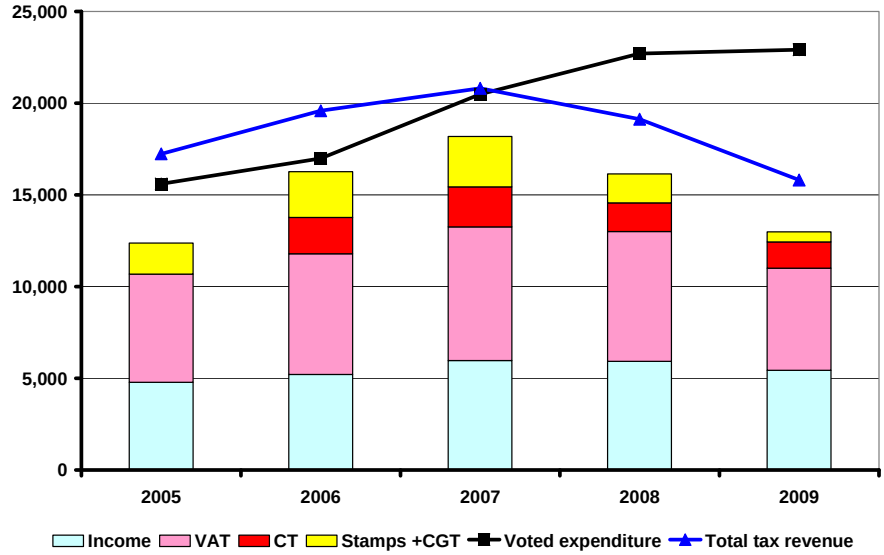
Overall, the half-year Exchequer Returns showed an Exchequer deficit of €14.7 billion, well above the figure for the first six months of 2008 which was €5.6 billion. It is important to note that over €5 billion of the gap between the figures for 2008 and 2009 can be explained by transactions relating to the banking crisis. A payment of €3 billion was made to Anglo-Irish Bank while a further €3 billion was paid into the National Pension Reserve Fund (NPRF), as part of the process of recapitalising the major banks. At this point last year, payments into the NPRF amounted to €845 million so the additional payments so far this year amount to almost €2.2 billion. For the purposes of calculating the General Government Balance, both of these transactions are treated as being investments in financial assets where a return is expected. Hence, they have no impact on the General Government Balance, apart from the associated interest payments.

Table 8: Expenditure, January to June 2008 and 2009, for Departments Spending €1 Billion or More over the Period

	2008	2009	% Change
Education & Science	4,272,742	4,183,584	-2.1
Environment, Heritage & Local Government	1,187,591	1,221,974	2.9
Health & Children	6,809,289	6,952,967	2.1
Justice	1,231,154	1,154,678	-6.2
Social & Family Affairs	4,358,150	4,804,199	10.2
Transport	1,283,494	1,094,936	-14.7
Total (including departments not shown)	22,702,477	22,910,880	0.9

If we can take a longer term perspective on trends in tax revenues, we can see the huge deterioration. In Figure 8, we show the trend in total revenue (and voted expenditure) for the January to June period from 2005 to 2009. We also show trends in four specific headings: stamp duties and capital gains tax, corporation tax, VAT and income tax. The total tax take for the first six months of 2007 was €21.1 billion; hence, the fall between 2007 and 2009 is 24 per cent. The corresponding fall for stamp duties and capital gains taxes were 80 and 81 per cent respectively. The fall for income tax was 9 per cent while for VAT it was 24 per cent.

Figure 8: Exchequer Returns, 1st January - 30th June



Looking ahead, we now expect that the Exchequer deficit will reach €25.7 billion in 2009, or 18.6 per cent of GNP. We expect that General Government Deficit will be €20.1 billion, equal to 12.2 per cent of our forecast GDP level. As noted above, some of the difference between the two is explained by the transfer of money to the banks as part of the programme of recapitalisation. This treatment of the transactions is entirely in line with official guidelines. However, we believe that there is a qualitative difference between current investments in the banks for recapitalisation purposes and earlier investments by the NPRF in assets purchased on international markets. The prospects for a positive return on the assets of these banks, some of whom have reported particularly heavy losses in recent times, depend crucially on their future profit and loss profiles. The performance of these assets requires careful monitoring over the coming years so that their impact on the General Government Balance can be assessed.

For 2010, we expect the Exchequer deficit to be €19.3 billion, or 14.5 per cent of forecast GNP. Our forecast for the General Government Deficit next year is €18.3 billion or 11.4 per cent of forecast GDP. These figures imply an increase in the gross debt from 25 per cent of GDP in 2007, to 74 per cent in 2010. We should point out that these figures do not include any provision for NAMA.[7] The figures are based, however, on the assumption that the tax increases and spending cuts for 2010, as announced in April's Supplementary Budget, are fully implemented. In

[7] For a discussion of the possible impacts of NAMA on the public finances, see Bergin *et al.* (2009), *Recovery Scenarios for Ireland*, ESRI Research Series Paper No. 7. In that report, and for illustrative purposes only, the authors take a figure of €50 billion as the cost of purchasing development-related loans. This implies an increase in the national debt of 31 percentage points of GDP. Based on our figures, this would imply that the gross debt will exceed 100 per cent of GDP in 2010.

particular, we assume that a tax package amounting to €2.5 billion is implemented along with cuts in current spending of €1.5 billion and cuts in capital spending of €750 million.[8]

Table 9: Public Finances

	2007 €m	% Change	2008	% Change	2009	% Change	2010
Current Revenue	47,887	-13.1	41,624	-18.6	33,879	8.4	36,718
Current Expenditure	40,896	9.3	44,692	3.7	46,365	9.4	50,737
of which: *Voted*	36,959	10.3	40,757	-0.6	40,510	6.0	42,941
Current Surplus	6,991	-143.9	-3,068	306.9	-12,486	12.3	-14,019
Capital Receipts	1,408	-0.8	1,398	7.2	1,499	11.1	1,665
Capital Expenditure	10,019	10.2	11,043	33.4	14,735	-52.7	6,972
of which: Voted	7,650	11.8	8,556	-19.8	6,864	-10.5	6,140
Capital Borrowing	-8,610	12.0	-9,645	37.2	-13,236	-59.9	-5,307
Exchequer Balance	-1,619.2		-12,713.5		-25,721.8		-19,326.1
as % of GNP	-1.0		-8.2		-18.6		-14.5
General Government Balance*	345.8		-13,275.5		-20,106.1		-18,348.8
as % of GDP	0.2		-7.3		-12.2		-11.4
Gross Debt as % of GDP	25.1		44.2		60.8		73.8
Net Debt as % of GDP**	12.2		22.6		42.6		58.3

* 2008 - 2010 numbers are based on National Accounts estimates.
**Net of NPRF, Social Insurance and Exchequer Balances.

It should be noted that the achievement of this budgetary outcome, while desirable from the perspective of managing the public finances, will not be easy in either political or administrative terms. In order to put this point into context, Table 10 summarises the fiscal measures taken and announced since October.[9] The fiscal measures relating to 2009 were announced over three stages. In total, and on a full-year basis, the savings amounted to over €9 billion or 5.5 per cent of GDP. The measures that were pre-announced for 2010 imply further savings equal to almost 3 per cent on GDP. Adding the savings across two years, the total savings would be €14 billion. By any standard this is fiscal adjustment on a huge scale and so maintaining the pace of adjustment will not be easy, although we would stress again that it is necessary. We return to this point in the *General Assessment* below.[10]

[8] The Minister has indicated that the overall target of achieving savings of €4.75 billion is central and that a lower emphasis on taxation may be applied. It should also be noted that the figure of €4.75 billion refers to the full year effect. The actual amount to be achieved in 2010 is €4 billion

[9] Savings in the order of €500 million were announced in July 2008 but are not included in the table. We should also note that the table does not include the decision not to pay a pay award due in September 2009.

[10] It should be noted that at the time of writing, no decision had been made on the publication of the Special Group on Public Service Numbers and Expenditure Programmes report on public spending.

Finally, we have made a change in our forecast for the volume of public consumption in 2010, as between this *Commentary* and the previous issue. We are now forecasting a 3 per cent volume decline although changes in the forecasts for declines in value terms are negligible. In the last *Commentary*, we relied on the figures presented in the April Supplementary Budget document which showed that the balance of spending adjustment in both 2009 and 2010 would occur through reductions in prices as opposed to cuts in the volume of services. This may turn out to be the case but our figures now imply a 6 per cent fall in the value of public consumption, made up of 3 per cent cuts in both price and volume. Hence, an element of pay reduction is still present in our forecasts.

Table 10: Budgetary Measures (full-year effects shown)

	Announced Relating to 2009			2009	2010
	October 2008 Budget	January 2009 Addendum	April 2009 Supplementary Budget[11]	Accumulated Impacted of Previous 3 Columns Full Year	April 2009 Supplementary Budget
Tax Revenue	1,900		1,800	5,450	2,500
Current Expenditure	*	1,800	886	3,200	1,500
Capital Expenditure	*		576	576	750
Total	1,900	1,800	3,262	9,226	4,750
% GDP	1.1%	1.1%	2.0%	5.5%	2.9%

* No specific target mentioned, but reference to "strict containment of expenditure".

Box B: Measures Implemented by the Government (September 2008 – May 2009) in Response to the Financial Crisis

20 September	**Statutory Deposit Guarantee:** Increase in the statutory limit for the deposit guarantee scheme for banks and building societies from €20,000 to €100,000 per depositor per institution. The cover applies to 100 per cent of each individual's deposit.
30 September	**Credit Institutions (Financial Support) Scheme 2008:** Guarantee arrangement with six Irish financial institutions[12] to safeguard all deposits (retail, commercial, institutional and inter-bank), covered bonds, senior debt and dated subordinated debt (lower tier II), effective from 30 September 2008 until 29 September 2010. The guarantee is provided at a charge to the institutions concerned and is subject to specific terms and conditions. This guarantee scheme was also offered to certain foreign-owned banks[13] on 9 October. In June

[11] *Macroeconomic and Fiscal Framework 2009-2013 April 7 2009.*
[12] Allied Irish Banks, Bank of Ireland, Anglo Irish Bank, Irish Life and Permanent, Irish Nationwide Building Society and the Educational Building Society (EBS).
[13] Ulster Bank, First Active, Halifax Bank of Scotland, IIB Bank and Postbank.

	2009 legislation was passed allowing for the extension of this guarantee arrangement beyond September 2010 if deemed necessary by the Minister for Finance.[14]
21 January	**Nationalisation of Anglo Irish Bank**: As result of both a weakening of the bank's funding position and the serious reputational damage arising from unacceptable practices within the bank, Anglo Irish Bank was taken into public ownership.
11 February	**Recapitalisation of AIB and Bank of Ireland:** Agreement reached on a comprehensive recapitalisation package, with the main features of the Government's investment as follows:[15] • The Government will provide €3.5 billion in Core Tier 1 capital for each bank. In return, the Minister will get preference shares with a fixed dividend of 8 per cent payable in cash or ordinary shares in lieu. • The recapitalisation programme will be funded from the National Pensions Reserve Fund: €4 billion will come from the Fund's current resources while €3 billion will be provided by means of a frontloading of the Exchequer contributions for 2009 and 2010.
7 April	**National Asset Management Agency (NAMA)**: In the Supplementary Budget, the Government announced plans for a National Asset Management Agency, which will operate as an independent commercial entity under the aegis of the National Treasury Management Agency (NTMA): • The NAMA will buy property-related loans of between €80 billion and €90 billion from the covered banks at an appropriate discount and will pay for them by the issue of Irish Government bonds directly to the banks. • The income from the assets and the proceeds from their eventual sale will accrue to the NAMA and will mitigate the cost to the Exchequer of servicing the additional debt. If on wind-up the NAMA has made a profit, this will accrue to the State. If it makes a loss, the Government will apply a levy to the banks to recoup the shortfall.

[14] Financial Measures (Miscellaneous Provisions) Bill 2009.
[15] For full details see www.finance.gov.ie

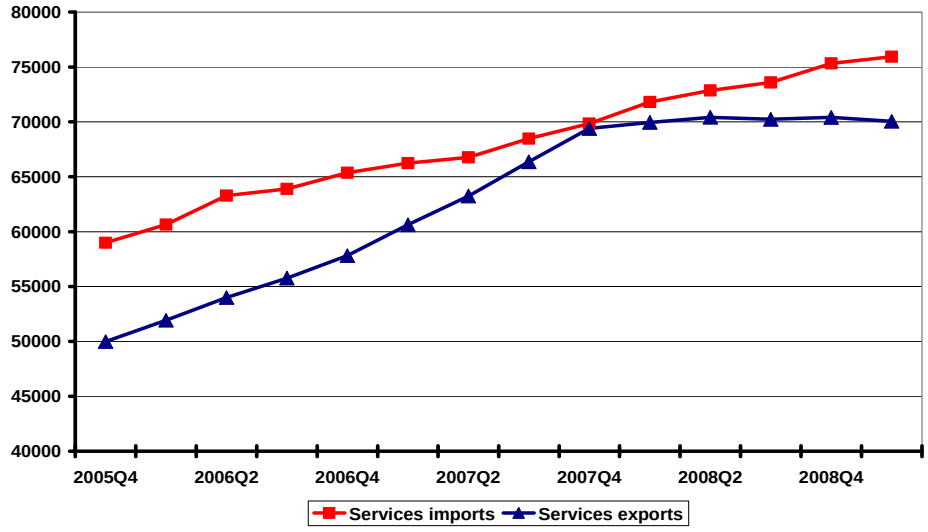
Exports

The international recession and collapse in world trade has had a significant effect on the demand for Irish exports. The revised estimates for 2008 suggest that the volume of exports sold fell by 1 per cent in 2008;[16] this pattern continued in the first quarter of 2009 with a quarter-on-quarter fall of 0.7 per cent. While the latest data suggest that there was no change in the price of exports in 2008, this figure masks a significant fall in the price of merchandise exports (-2.3 per cent) and a rise in the price of services exports (2.8 per cent).

The decline in exports in Ireland is significantly less dramatic than that being experienced in our major trading partners or than current estimates of the fall in world trade. This is partly due to the composition of Irish manufacturing which has little reliance on capital goods or automobile production which have both been badly hit by the international recession. Over half of total merchandise exports (Jan-Mar 2009) were chemicals and related products (mainly organic chemicals and pharmaceutical products) a sector which is still growing despite the international slump in trade. We expect merchandise exports to continue to decline in 2009 and 2010, by 3 per cent and 1 per cent in volume terms. The smaller decline in 2010 is predicated on an assumption that by the second half of 2010 international trade will have begun to pick up and that Irish goods exports will begin to grow in that period.

The picture for services exports is much more mixed. For a number of years services exports have grown rapidly so that the deficit in services trade was all but closed by the end of 2007. However, since the end of 2007 exports of services have stagnated (Figure 9). Within this stagnation there have been very large falls in exports of financial services. Given the ongoing international banking crisis, it is likely that this trend will continue throughout 2009 and into 2010. Because of this we expect exports of services to fall by more than merchandise, with a volume fall of 5 per cent in 2009 and 2 per cent in 2010.

Figure 9: Exports and Imports of Services in Current Prices, € millions, Annualised[17]



[16] The preliminary figure was -0.4 per cent.
[17] These numbers are annualised to eliminate seasonal effect;, seasonally adjusted data are not available.

Table 11: Exports of Goods and Services

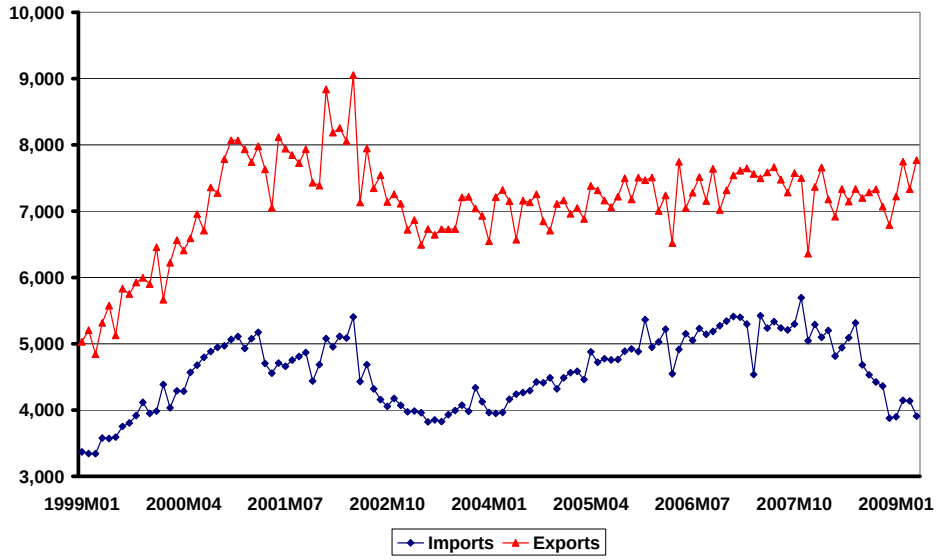
	2007	% Change in 2008		2008	% Change in 2009		2009	% Change in 2010		2010
	€m	Volume	Value	€m	Volume	Value	€m	Volume	Value	€m
Merchandise	84,079	-0.8	-3.1	81,495	-3.0	-2.0	79,865	-1.0	-0.0	79,865
Tourism	4,426	-5.8	-3.3	4,279	-3.1	-5.0	4,065	-4.0	-3.0	3,943
Other Services	63,534	-1.0	2.2	64,924	-5.1	-5.0	61,678	-1.9	-2.0	60,444
Exports of Goods and Services	152,039	-1.0	-0.9	150,698	-3.9	-3.4	145,608	-1.4	-0.9	144,252
FISIM Adjustment	1,442			1,198			1,138			1,115
Adjusted Exports	153,481	-1.0	-1.0	151,896	-3.9	-3.4	146,746	-1.4	-0.9	145,367

On carryover alone, the latest *QNA* data suggest that volume exports could fall by 2 per cent in 2009. Our forecasts suggest a decline in exports of 4 per cent in 2009 and 1.4 per cent in 2010. This is consistent with further declines in volume exports until the second half of 2010. The forecast for 2009 is slightly higher than our Spring *QEC* estimate; this revision is based on the relative resilience of Irish merchandise exports in recent months despite the worldwide collapse in trade.

Imports

The collapse in consumption and investment in Ireland has led to a very sharp reduction in imports, especially merchandise imports (see Figure 10). In 2008 merchandise imports fell by almost 11 per cent in volume terms driving an overall decline in imports of over 2 per cent. Services imports grew by over 5 per cent with a volume increase of 11 per cent in tourism imports.

Figure 10: Merchandise Imports and Exports, Current Prices, €millions (Seasonally Adjusted)



This rapid decline in imports continued in the first quarter of 2009 with volume imports down almost 4 per cent on a seasonally adjusted basis. Merchandise imports continued to fall in the first three months of 2009, with particularly sharp declines in imports of cars and petroleum products. Current price data from the Balance of Payments (not seasonally adjusted) suggest that services imports increased in the first quarter of 2009 relative to the first quarter of 2008, in particular imports of royalties and business services. Tourism imports recorded a decline in the first quarter as did imports of insurance and financial services.

On the basis of our forecasts for consumption and investment in 2009 and 2010, we expect the volume of merchandise imports to fall by almost 16 per cent in 2009 and 4.5 per cent in 2010. The picture on services imports is less dramatic, we are forecasting a modest decline of 3 per cent in the volume of other services imports in 2009 rising to 5.5 per cent in 2010.

Table 12: Imports of Goods and Services

	2007	% Change in 2008		2008	% Change in 2009		2009	% Change in 2010		2010
	€m	Volume	Value	€m	Volume	Value	€m	Volume	Value	€m
Merchandise	64,268	-10.7	-10.3	57,675	-15.7	-17.0	47,870	-4.5	-4.5	45,716
Tourism	6,300	10.9	12.0	7,055	-2.5	-3.0	6,843	-1.0	-0.5	6,809
Other Services	62,781	5.3	7.5	67,519	-3.0	-4.0	64,818	-5.4	-5.0	61,577
Imports of Goods and Services	133,349	-2.1	-0.8	132,249	-8.6	-9.6	119,532	-4.8	-4.5	114,103
FISIM Adjustment	763			753			722			689
Adjusted Imports	134,112	-2.1	-0.8	133,002	-8.6	-9.6	120,254	-4.8	-4.5	114,791

Balance of Payments

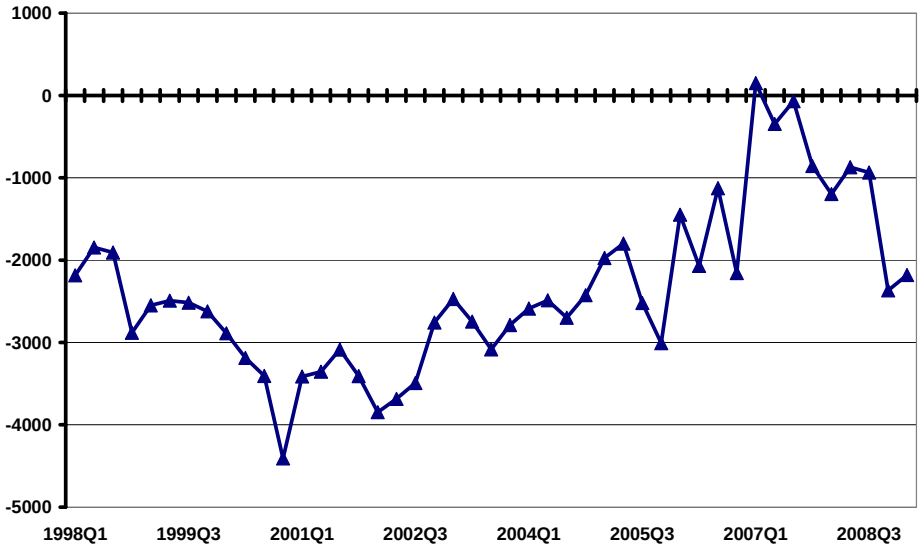
In 2007 the very strong growth in services exports led to the service trade balance approaching zero. However, since then the fall in exports of services has seen this balance widen once again (Figure 11). The reverse has happened in terms of the merchandise trade balance, the very dramatic collapse in merchandise imports in recent months has led to a very big increase in the merchandise trade balance in 2008. On the basis of our forecasts, we expect the merchandise trade balance to grow strongly in 2009. This should see the overall trade balance move from 12 per cent of GNP to 19 per cent of GNP in 2009 and 23 per cent of GNP in 2010.

Table 13: Balance of Payments*

	2007 €m	Change %	2008 €m	Change %	2009 €m	Change %	2010 €m
Merchandise Trade Balance	19,811	20.2	23,820	34.3	31,995	6.7	34,149
Service Trade Balance	-1,121	379.1	-5,371	10.2	-5,919	-32.4	-3,999
Trade Balance in Goods and Services on BoP Basis	18,690	-1.3	18,449	41.3	26,076	15.6	30,150
% of GNP	11.6		11.9		18.8		22.6
Total Debit Flows	112,737	-1.9	110,605	-8.0	101,766	-5.6	96,033
Total Credit Flows	84,911	-1.3	83,835	-9.9	75,495	-8.2	69,307
Net Factor Flows	-27,826	-3.8	-26,770	-1.9	-26,271	-1.7	26,726
Net Current Transfers	-990		-1,115		-1,115		-1,115
Balance on Current Account	-10,126		-9,436		-1,310		2,309
Capital Transfers	39		68		300		300
Effective Current Balance	-10,087		-9,368		-1,010		2,609
% of GNP	-6.3		-6.1		-0.7		2.0

* This table includes adjustments to *Balance of Payments* basis.

Figure 11: Balance of Trade on Services, Current Prices

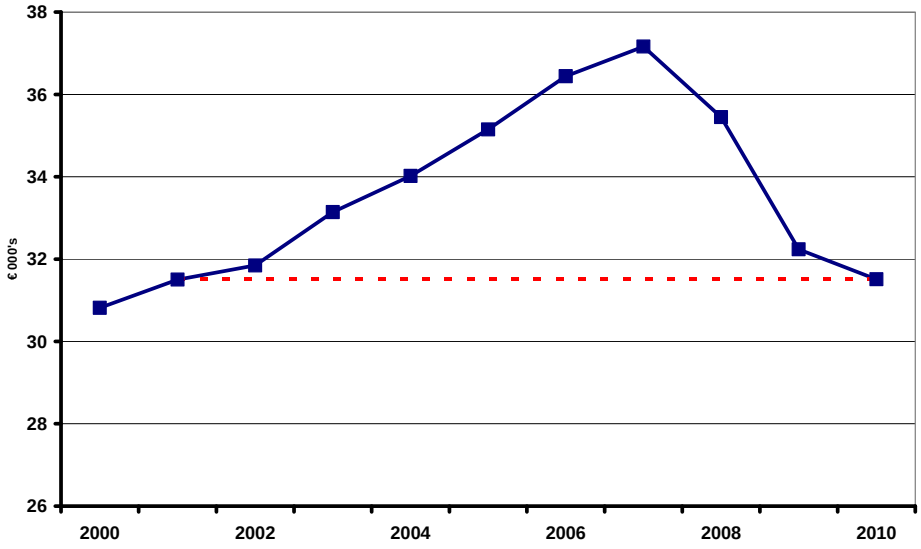


The most recent data from the Balance of Payments suggest the current account deficit was 6.1 per cent of GNP in 2008,[18] unchanged from 2007. However, the quarterly pattern of data suggest that the deficit began to close rapidly throughout 2008. In the first quarter of 2009 the deficit widened again, mainly driven by a large fall in investment income inflows. However, these are preliminary data,[19] and on balance we expect the rapid increase in the trade balance to lead to a very rapid closure of the current account deficit. In 2010 we expect a surplus of 2 per cent of GNP.

Measures of Growth

Our forecasts for GNP imply a contraction of 8.9 per cent in 2009 and a further 2.3 per cent in 2010. Gross National Disposable Income provides a more complete measure of the overall level of income, as it takes account of changes in the terms of trade and net international transfers. Since our forecasts include an improvement in the terms of trade both this year and next year, the contractions in GNDI are expected to be slightly more modest, at 7.4 per cent in 2009 and 2.1 per cent in 2010. GNP per capita adjusts for changes in the population size. Given our forecasts for net outflows, the decline in GNP per capita (at 9.1 per cent) is slightly larger than the decline in GNP this year. Next year we expect a decline of 2.3 per cent. If these contractions are realised, in 2010 GNP per capita will fall to a level last seen in 2001, as shown by Figure 12.

Figure 12: GNP Per Capita, 2000-2010



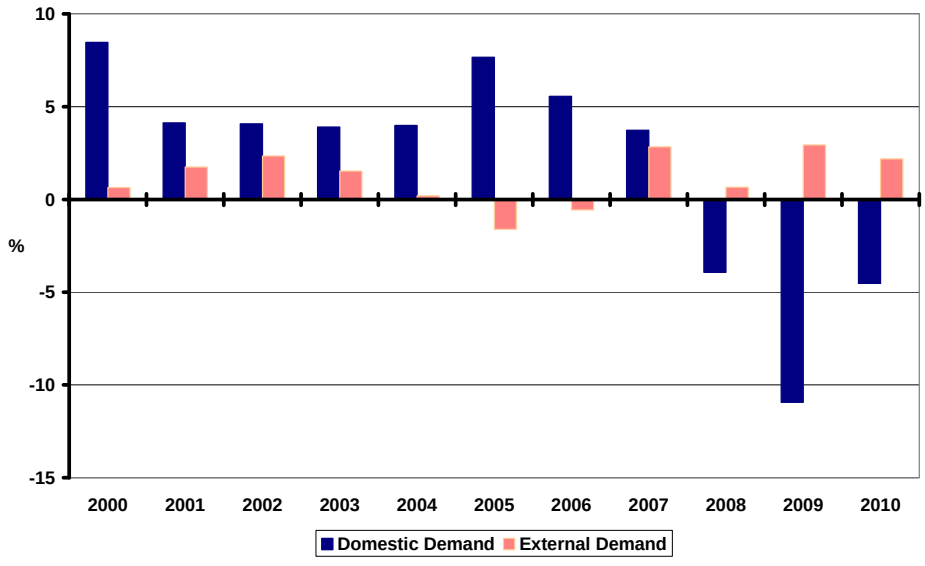
[18] A revision from 5.3 per cent in the provisional estimates.
[19] The net errors and omissions for 2009 Q1 are estimated at €6,362 million while the current balance is -€2,530 million.

Table 14: Measures of Growth

Growth Indicators	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GNP	3.8	2.9	5.7	4.3	5.6	6.3	4.4	-2.8	-9.0	-2.2
GNP adjusted for Terms of Trade	4.8	4.1	4.6	3.6	4.5	5.3	1.9	-4.0	-7.5	-1.5
GNDI	4.0	4.5	4.3	3.5	4.4	4.7	1.6	-4.1	-7.6	-1.5
National Resources	3.4	4.3	3.9	3.7	4.4	4.7	1.5	-4.1	-7.4	-1.5
GNP per capita (constant prices)	2.2	1.1	4.1	2.6	3.3	3.7	2.0	-4.6	-9.2	-2.1
Consumption per capita (constant prices)	3.5	2.2	1.4	2.2	4.3	3.9	3.5	-2.8	-7.1	-2.9
Investment in Housing/GNP	9.7	10.1	11.7	13.4	14.9	14.8	13.4	9.8	5.4	5.1
Investment/GNP	26.7	26.4	26.5	28.9	31.5	31.2	30.7	25.5	18.5	15.8
Domestic Demand				4.2	8.7	6.3	3.7	-4.4	-12.0	-4.1

Figure 13 shows the contributions of the domestic and external sectors to the overall rate of GDP growth.[20] The data for 2008, combined with our forecasts for 2009 and 2010 indicate that the contractions in GDP in each of these three years are entirely driven by domestic demand. In 2007, the external sector contributed 2.8 per cent to the overall growth rate – its largest contribution since 1999. Our forecasts suggest that the external sector will contribute 2.9 per cent in 2009. However, it should be stressed that the reason for this is the considerably larger expected contraction in imports, rather than a robust export performance.

Figure 13: Contributions to Growth



[20] The growth rates in domestic and external demand are weighted by their respective share in GDP. Therefore, these two growth rates sum to the overall growth in GDP.

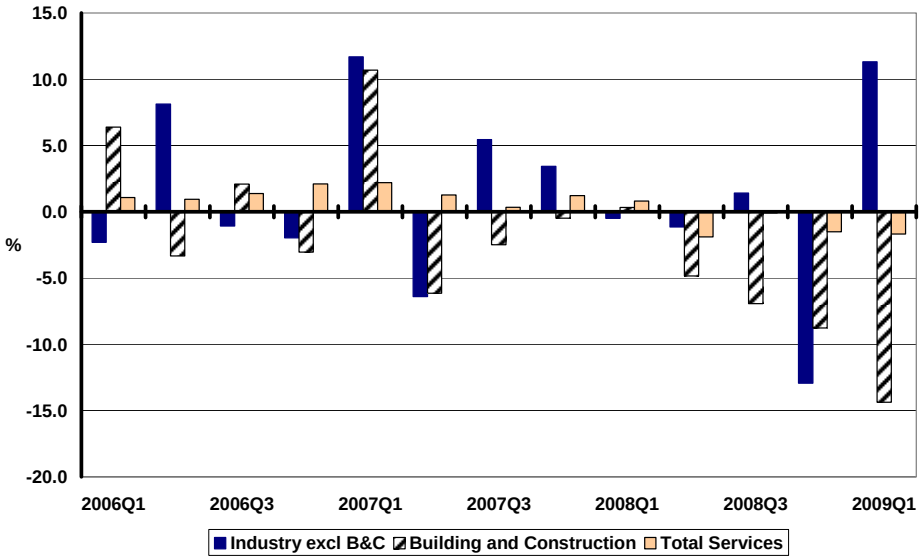
Sectoral Output

Recent trends in output by sector are shown in Figure 14, where we graph quarter-on-quarter growth rates (seasonally adjusted) up to Q1 2009. As can be seen, construction began to contract in Q2 2007. Output in the sector then stabilised around Q1 2008 but since then it has fallen at an accelerating pace. In Q1 2009, output fell by 14.4 per cent.

Industry (excluding building and construction) has shown dramatic swings in output in the last two quarters. Output fell by 12.9 per cent in Q4 2008; however, it bounced back in Q1 2009 and grew by 11.3 per cent. As discussed in the section on exports, this reflects a strong performance in exports relative to most other countries.

The services sector has been much less volatile. However, output growth has been in negative territory since Q2 2008. The most recent observation, from Q1 2009, showed output falling by 1.7 per cent.

Figure 14: Output Growth by Sector, Quarter-on-Quarter (Seasonally Adjusted)

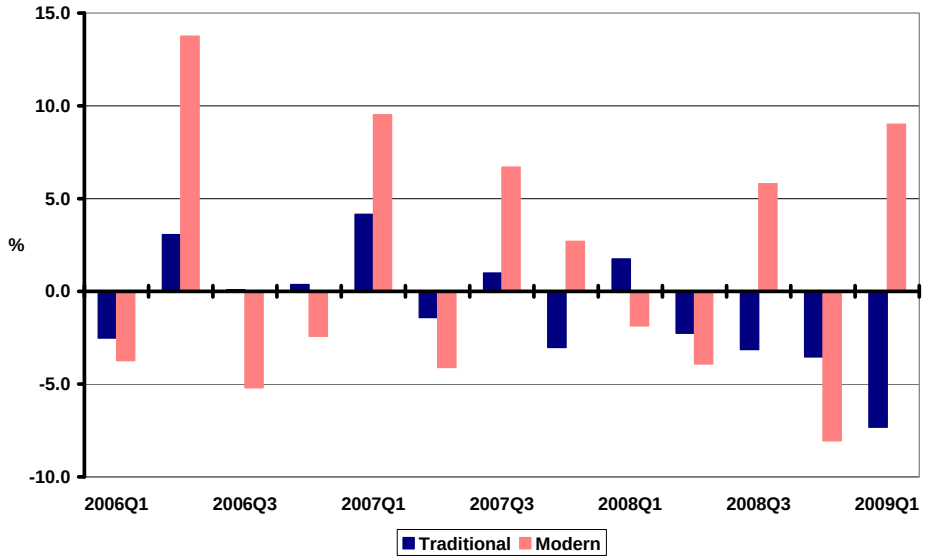


The large swing between Q4 2008 and Q1 2009 in industrial output is also seen in Figure 15 which shows quarter-on-quarter changes in the index of industrial production. Figure 15 also allows us to see the contrasting outcomes for the traditional and modern sectors. The bounce back in output in Q1 2009 was entirely due to the modern sector. Its output grew by 9 per cent in Q1, having fallen by 8.1 per cent in Q4 2008. For the traditional sector output fell in Q1 2009, by 7.3 per cent. This comes on top of a series of output falls. In Q1 2009, the level of output was over 15 per cent lower than in Q1 2008.

Table 15: GDP by Sector

	2007	% Change		2008	% Change		2009	% Change		2010
	€m	Volume	Value	€m	Volume	Value	€m	Volume	Value	€m
Agriculture	3,985	-0.9	-7.9	3,669	1.0	-2.0	3,594	1.0	0.0	3,594
Industry:	55,809	-3.6	-6.5	52,163	-9.3	-10.4	46,758	-3.9	-3.9	44,954
Other Industry	39,633	-0.3	-3.1	38,388	-0.5	0.0	38,388	0.0	1.0	38,772
Building & Construction	16,176	-11.7	-14.8	13,775	-33.5	-39.2	8,371	-20.1	-26.1	6,183
Services:	109,320	0.3	-2.4	106,661	-3.4	-5.6	100,654	-1.9	-3.4	97,311
Public Administration & Defence	5,842	1.8	6.1	6,197	-0.5	-8.3	5,682	-3.5	-6.5	5,313
Distribution, Transport and Communications	25,664	-3.3	-1.2	25,349	-5.0	-4.0	24,342	-3.0	-2.9	23,644
Other Services (including rent)	77,814	1.4	3.5	75,115	-3.1	-5.9	70,681	-1.4	-3.3	68,355
GDP at Factor Cost	169,114	-1.0	-3.9	162,493	-5.2	-7.0	151,058	-2.4	-3.4	145,860

Figure 15: Quarter-on-Quarter Growth in the Index of Industrial Production (Seasonally Adjusted)



Looking ahead, industry (excluding building and construction) is forecast to contract by 0.5 per cent in volume terms in 2009. In the context of an economy contracting by 9 per cent this is a strong performance and is explained largely by exports. In 2010, we expect this sector to be static in volume terms. We expect output from building and construction to fall by 34 per cent this year and by 20 per cent next year. As discussed in the section on investment, this is the results of a fall off in all aspects of construction, including public infrastructure. Finally, our forecast for services is for the sector to contract by 3.4 per cent in 2009 and by 1.9 per cent in 2010, both in volume terms. Expectations of wage falls leads us to expect falls in the value of output in services that exceed the expected falls in the volume of output.

It has been commented upon regularly in discussions of the Irish economy that construction had grown to an unsustainable level relative to other sectors. According to our forecasts, construction should account for just over 4 per cent of national output in 2010, down from its peak of 10 per cent in 2006.[21] Hence, the required adjustment in construction will have largely happened by the end of 2010, thereby removing this huge drag on the Irish economy which resulted from the contraction in building activity.

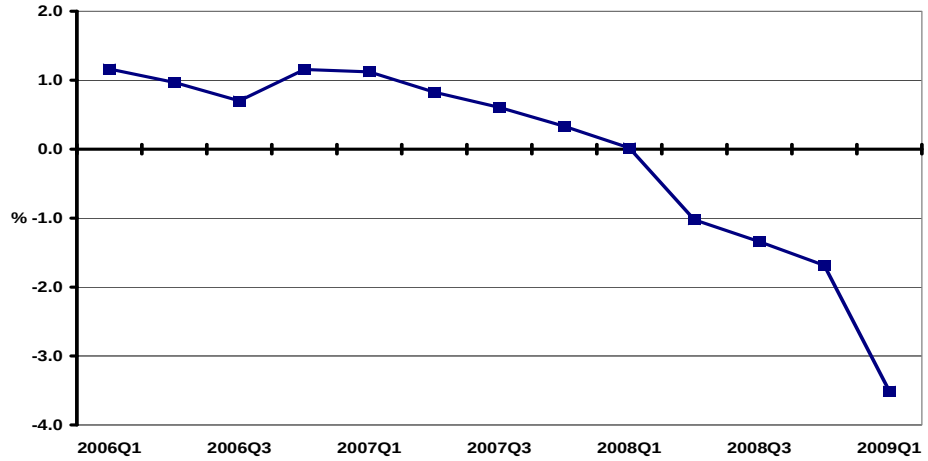
[21] These figures are on a gross value-added basis. The corresponding figures on an expenditure basis would be 20 per cent of GNP in 2006 and 10 per cent in 2010, with housing alone being 15 per cent in 2006 and 5 percent in 2010.

Employment

During the course of 2008, as the full extent of the recession began to emerge, much public discussion focused on the banks and the public finances. However, the surge in unemployment that has occurred since the start of this year has meant that the depressed state of the labour market is now gaining equal prominence in discussion.

The latest *Quarterly National Household Survey* (for Q1 2009) showed that employment has now fallen below 2 million.[22] In Q1 2009, employment stood at 1.97 million, down 158,000 since Q1 2008 or 7.5 per cent. In the last *Commentary*, we noted how the rate of employment decline had accelerated throughout 2008. The *QNHS* figures show how this accelerating pace of employment loss continued into 2009. As shown in Figure 17, the quarter-on-quarter rate of job loss for Q1 2009 (seasonally adjusted) was 3.5 per cent, compared with a rate of 1.7 per cent for Q4 2008.

Figure 16: Quarter-on-Quarter Employment Growth (Seasonally Adjusted)

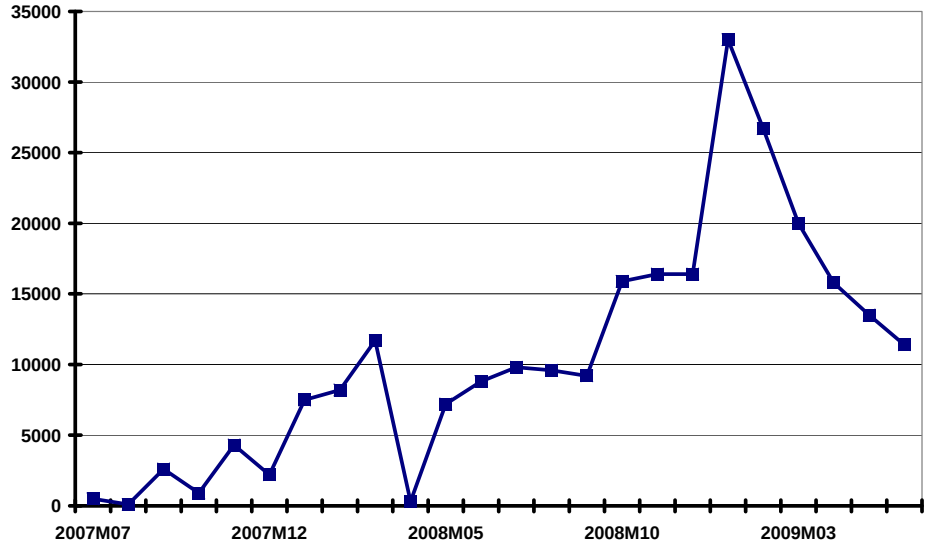


This increasing pace of job losses in the first quarter was also reflected in the pattern of net entry onto the Live Register. As shown in Figure 17, the net inflow of people onto the Live Register peaked at 33,000 in January (seasonally adjusted). The rates of net inflow for February and March, at 26,700 and 20,000, were lower but still above the rates of inflow in the last quarter of 2008. It can also be seen in the figure that the rate of net inflow onto the Live Register has eased somewhat in the most recent months. In June, an extra 11,400 people signed on. This was well down on the January peak and as such contributed to the broader picture of a slowing down in the rate of contraction in the economy.

According to the *QNHS*, the rate of unemployment was 10.2 per cent in Q1 2009. As discussed in recent *Commentaries*, the pace of change in the labour market is such that the Live Register needs to be consulted for the most up-to-date observation of unemployment, in spite of its short-comings in measuring unemployment. According to the Live Register figures for June, the standardised unemployment rate was 11.9 per cent.

[22] We should note that the CSO moved to a calendar quarter basis in presenting the *QNHS* for Q1 2009, as opposed to a season quarter basis as was previously its practice. This means that some of the historic figures presented here will differ from those reported in earlier *Commentaries*. All figures within this *Commentary* are now on the calendar basis.

Figure 17: Monthly Increase in the Live Register (Seasonally Adjusted)



A number of other interesting trends can be seen in the *QNHS* data. Employment fell by 158,500 between Q1 2008 and Q1 2009. However, the fall in full-time employment exceeded this and amounted to 176,200. The difference is explained by a rise in part-time employment of 17,700 (or 4.6 per cent). In turn, this shift towards part-time employment appears to be reflected in a fall in average hours over the course of the year. In Q1 2008, average hours worked per week was 36.2; in Q1 2009, the corresponding figure was 35.4, a fall of 2.2 per cent.

This shift towards part-time work and lower hours can be viewed in a positive light if it is interpreted as reflecting a labour market in which flexibility is being shown in the face of a severe downturn. As around two-thirds of the increase in part-time employment is among people describing themselves as being "under-employed", it certainly seems to be the case that the rise is indeed related to the overall economic climate. The more worrying perspective on this increase in part-time employment is that it may be an intermediate development between full-time employment and layoff, as firms initially try to maintain their workforce but may ultimately fail to do so.

Trends in participation are also revealing. Overall, the participation rate fell by 1.5 percentage points between Q1 2008 and Q1 2009, from 63.5 per cent to 62 per cent. The fall was highest among those aged 15-19 years (5.1 percentage points), followed by those aged 20-24 years (3.4 percentage points). In the case of these younger age cohorts, the hope would be that lower rates of labour force participation will be reflected in higher rates of participation in training and education.

Table 16: Employment and Unemployment

	Annual Averages 000s			
	2007	**2008**	**2009**	**2010**
Agriculture	110.6	114.6	102.0	100.0
Industry	564.5	520.4	416.4	375.0
Services	1,447.7	1,464.6	1,397.6	1,343.9
Total at Work	2,122.8	2,099.7	1,916.0	1,818.9
Unemployed	101.4	141.2	276.5	347.8
Labour Force	2,224.1	2,240.8	2,192.5	2,166.7
Unemployment Rate %	4.6	6.3	12.6	16.1
Net Migration	67.3	38.5	-30.0	-40.0
of which: Inward Migration	109.5	83.8	20.0	20.0
Change in Participation Rate*	1.1	-0.3	-1.8	-1.1

* *Note:* Participation rate measured as share of population aged 15-64 years; based on Q2 figures as are migration figures.

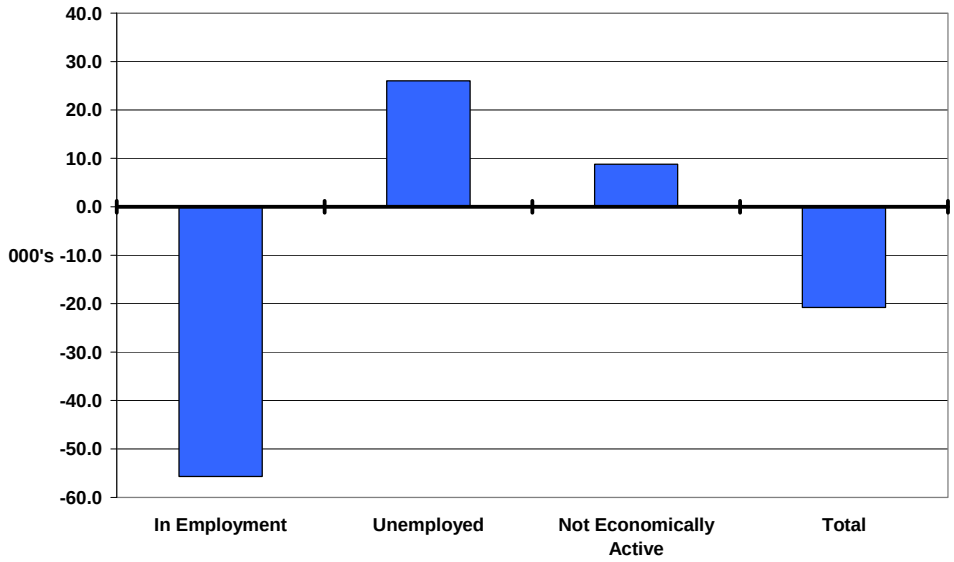
A further set of useful insights into current dynamics in the labour market can be derived from a closer examination of the information on non-nationals in the *QNHS*. From Figure 18, we can derive some sense of how the recession is impacting upon non-Irish nationals and how they are reacting to changed labour market opportunities. Between Q1 2008 and Q1 2009, the number of non-nationals employed fell by 55,700 or 16 per cent. By contrast, the rate of employment fall for Irish nationals was considerably lower at just under 6 per cent. The unemployment rate among non-Irish nationals is now 15 per cent, well above the figure for Irish nationals of 9 per cent. Although unemployment is typically higher among non-nationals across many countries, the gap between the national and non-national unemployment rates had not exceeded 3 per cent since 2004. Hence, the rapid deterioration in the labour market outcomes of non-nationals relative to nationals in Q1 2009 is noteworthy.[23]

According to the *QNHS* although employment of non-nationals fell by over 55,000, the number of non-nationals aged 15 years and over in the country fell by just 20,800. The difference between the employment fall and the population fall (34,900) is made up of an increase in the number of unemployed non-nationals (+26,000) and an increase in the number who are inactive (+8,800). Given the nature of the data, we cannot conclude that the people shown in the first bar of Figure 18 are represented in the latter three bars, in that different people could be flowing in and out of the various categories. Nevertheless, the pattern shown in the figure is certainly consistent with a situation in which many immigrants are initially responding to job losses by remaining in Ireland.

[23] A similar picture emerges from the Live Register. Immigrants now make up 20 per cent of those on the Live Register. A year ago, this proportion was 16.5 per cent. While eligibility for benefits might explain some of the rise, the data from the *QNHS* show that declining prospects for immigrants in the labour market are likely to be a stronger source of this rise.

While remaining in Ireland may be an initial reaction to job losses, it is difficult to predict how immigrants will react in the longer term to job losses. It is likely a proportion will leave if job prospects remain poor. However, it is also likely that a proportion of Ireland's immigrants will have established roots here and so will remain. The relative sizes of these proportions should emerge over the course of time.

Figure 18: Labour Market Changes for Non-Nationals, Q1 2008 to Q1 2009



Looking ahead, we now expect that the numbers employed will average 1.9 million in 2009, a fall of 9 per cent relative to 2008. For 2010, we expect a further fall of 5 per cent, bringing the annual average for that year to 1.8 million, thereby bringing employment back to a level seen in 2004. We expect unemployment to average 12.6 per cent this year and 16.1 per cent next year. These forecasts represent modest downward revisions relative to our last *Commentary*. However, it should be stressed that the changes result largely from changes to our expectations concerning outward migration and falls in participation as opposed to any significant alteration to our forecast on employment. We expect that the net outflow for the year ended April 2009 will have been 30,000. For the year ended April 2010, we expect an outflow of 40,000. Some of this net outflow could well be made up of Irish nationals, if emigration again becomes one of the responses to unemployment for Irish people. A clearer view of this will emerge when official migration statistics are published later this year.

Incomes

The most recent earnings statistics available from the CSO relate to the final quarter of 2008. At that time, annual wage growth remained relatively strong across a variety of sectors, particularly in industry and in financial and insurance activities, as shown in Table 17. However, in most sectors the pace of annual wage growth in 2008 had moderated somewhat from its 2007 level, and in the motor trade sector wage levels actually fell by 0.3 per cent in 2008. Construction sector wage growth slowed to 1.2 per cent in 2008, and in the final quarter of the year average weekly earnings were 2.4 per cent lower than in the final quarter of 2007. Based on these survey data, we estimate that for the economy as a whole, average nominal compensation per non-agricultural employee increased by approximately 2 per cent in 2008. However, these survey data tend to be highly volatile,

particularly the more recently introduced Earnings, Hours and Employment Costs Survey, and therefore, this estimation has a wide margin of error.

Table 17: Annual Wage Growth[24] (%)

	2007Q3	2007Q4	2008Q1	2008Q2	2008Q3	2008Q4
Industry*	5.1	5.2	5.0	4.4	5.1	4.9
Manufacturing*	5.3	5.8	5.3	4.6	4.9	4.4
Financial and insurance activities*	10.2	1.8	0.8	0.1	1.7	4.7
Public sector (excluding Health)	4.4	4.6	4.3	3.4	3.1	2.9
Motor trade	7.8	6.0	4.5	2.7	0.9	-0.3
Wholesale trade	3.7	2.0	1.3	1.4	1.3	2.6
Retail trade	4.5	5.3	6.3	5.8	5.1	3.7
Business services	5.4	3.9	3.8	2.7	1.8	2.4
Construction	4.8	5.8	5.8	5.0	3.4	1.2

*Earnings, Hours and Employment Costs Survey (EHECS), otherwise Sectoral Earnings Surveys.

In light of the rapidly deteriorating situation in the labour market in recent months, it is likely that any wage increases in the first half of 2009 have been modest, and anecdotal evidence suggests that nominal wages may have declined in some areas of the private sector. Bearing this in mind, and taking account of the public service pension levy (which we treat as a pay cut), we expect nominal wages to fall by 3 per cent in 2009, and by 1.6 per cent in 2010. It should be noted that these forecasts are subject to a high degree of uncertainty. In theory, the rapid rise in unemployment should lead us to expect a decline in nominal wages. However, historically nominal wage reductions are rarely observed although the severity of this downturn and the more globalised nature of the world provide a different context. The measures implemented in the recent Supplementary Budget, combined with the expectation of potential future tax increases, will reduce the willingness to accept nominal wage cuts. On the other hand, if a nominal wage reduction of 3 per cent is realised, our expectations for CPI inflation imply that wages would still increase in real terms.

Combined with our employment projections, these wage forecasts result in a decline in the economy-wide non-agricultural pay bill of 11.4 per cent in 2009. Current transfers are expected to increase by 23.5 per cent this year, due to the rapid increase in the numbers on the Live Register. As a result, we are forecasting an overall decline of 3.2 per cent in personal disposable income this year. For 2010, we expect the non-agricultural wage bill to decline by 6.8 per cent. Taking account of the tax changes implemented in April, and those announced for 2010, we expect direct personal taxes to rise by 11.6 per cent. These figures imply a fall in personal disposable income of 2.7 per cent next year. In light of our forecasts for personal consumption this year and next year, we expect the savings rate to increase to 10.5 per cent in 2009 and 2010.

[24] Based on weekly earnings, except for construction which is hourly.

Table 18: Personal Disposable Income

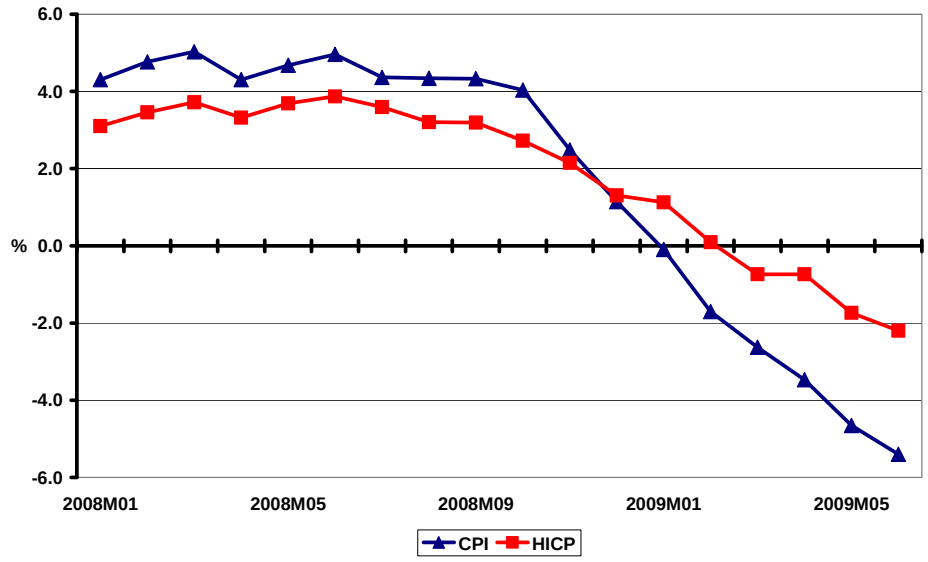
	2007	Change		2008	Change		2009	Change		2010
	€m	%	€m	€m	%	€m	€m	%	€m	€m
Agriculture, etc.	3,249	-11.0	-359	2,890	15.3	442	3,333	15.0	500	3,833
Non-Agricultural Wages	77,328	2.1	1,601	78,929	-11.4	-8,964	69,965	-6.8	-4,728	65,237
Other Non-Agricultural Income	17,912	7.0	1,245	19,157	-1.1	-219	18,938	16.7	3,160	22,098
Total Income Received	98,490	2.5	2,487	100,977	-8.7	-8,741	92,236	-1.2	-1069	91,168
Current Transfers	20,060	10.6	2,123	22,182	23.5	5,223	27,406	4.0	1,109	28,515
Gross Personal Income	118,550	3.9	4,610	123,159	-2.9	-3,518	119,642	0.0	41	119,682
Direct Personal Taxes	23,562	-0.8	-186	23,376	-1.4	-329	23,047	11.6	2,674	25,721
Personal Disposable Income	94,988	5.0	4,795	99,784	-3.2	-3,189	96,595	-2.7	-2,634	93,961
Consumption	91,948	2.1	1,915	93,863	-7.9	-7,443	86,420	-2.5	-2,173	84,246
Personal Savings	3,041			5,921			10,175			9,715
Savings Ratio	3.2			5.9			10.5			10.3
Average Personal Tax Rate	19.9			19.0			19.3			21.5

Consumer Prices

The Consumer Price Index (CPI) decreased by 5.4 per cent in June 2009 compared to June 2008. According to the Central Statistics Office, this is the sharpest pace of decline since 1933. The EU Harmonised Index of Consumer Prices (HICP) for Ireland fell by 2.2 per cent in June, compared to June 2008. The HICP inflation rate turned negative in March 2009 for the first time since the index began in 1996.

The mortgage interest component has been the most significant driver of downward pressure on the CPI since late 2008. Figure 19 shows the CPI and HICP inflation rates from January 2008 to June 2009. Having peaked in June 2008, both measures of inflation have been falling ever since. Furthermore, the pace of decline in the CPI has accelerated significantly since October. In that month, the European Central Bank began cutting its main refinancing rate, and it has now fallen by a cumulative 325 basis points. The majority of Irish mortgage lenders have committed to passing on these rate cuts to the consumer. According to figures from the Central Statistics Office, the average home purchase loan interest rate fell by over 250 basis points between September and May. The HICP does not include mortgage interest,[25] and as a result is not as sensitive to movements in ECB interest rates as the CPI.

Figure 19: CPI and HICP Inflation Rates, January 2008-June 2009



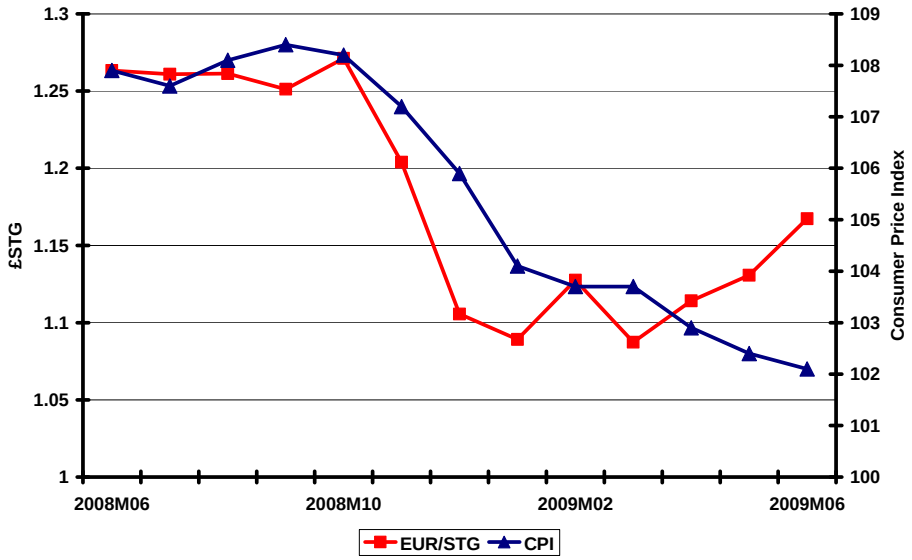
Falling commodity prices continue to contribute to the overall decline in the CPI in recent months. The prices of oil-related products have fallen substantially from their mid-2008 peaks. In June, the sub-indices of the CPI representing petrol, diesel and home-heating oil registered year-on-year declines of 11 per cent, 24 per cent and 43 per cent respectively.

The sharp depreciation of sterling relative to the euro since October 2008 coincided with the fall in domestic retail prices, as shown in Figure 20. The impact of these exchange rate movements is strongest on the prices of goods that are heavily imported from the UK, in particular clothing and food items. In June the clothing and footwear sub-indices of

[25] The HICP excludes mortgage interest, building materials, concrete blocks, union subscriptions, motor car insurance, dwellings insurance, motor car tax and motorcycle tax.

the CPI both decreased by 12 per cent, compared to the same month last year. Combined with the VAT differentials between the UK and the Republic of Ireland, the sterling depreciation has led to an increase in cross-border shopping. In a recent report,[26] the Competition Authority noted that Irish retailers have reacted to the behaviour of increasingly price-conscious consumers. This is particularly evident in the groceries sector, where the large retailers and wholesalers have been able to obtain reduced prices and promotions from suppliers. Where these reductions have not been achieved from suppliers, retailers have sought alternatives. Between January and May of this year, food prices have fallen by over 2 per cent.

Figure 20: EUR/STG Exchange Rate, Consumer Price Index, June 2008-June 2009



Turning to our forecasts, we expect consumer prices to continue falling for the remainder of this year and into 2010. We expect CPI inflation to average -4.6 per cent this year, and -0.3 per cent in 2010. As always, our CPI forecasts are highly sensitive to our assumptions regarding ECB interest rates. As discussed in the *International* section, it is difficult to predict what course interest rates will take from here. At the July meeting of the ECB Governing Council, ECB president Jean-Claude Trichet dismissed the likelihood of serious deflation in the Euro Area, indicating that a further reduction in the main refinancing rate is unlikely. With the OECD forecasting a return to modest growth only mid-way through 2010, it seems reasonable to assume that interest rates will remain at 1 per cent over the forecast horizon. For the HICP, we are forecasting an average rate of -1.6 per cent this year, and 0.2 per cent next year.

Table 19: Inflation Measures (%)

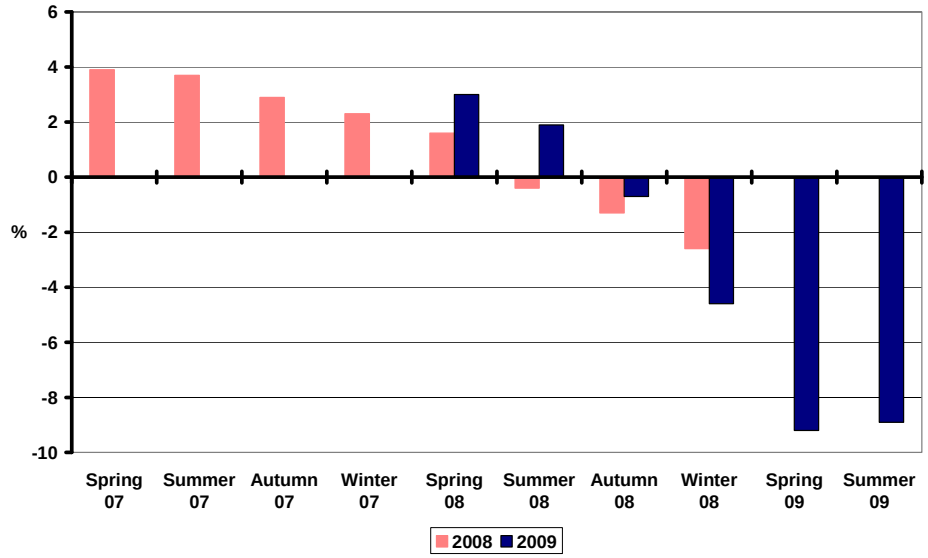
	2004	2005	2006	2007	2008	2009	2010
CPI	2.4	3.9	4.9	4.9	4.1	-4.6	-0.3
Mortgage Interest	12.3	31.4	40.4	40.4	15.0	-41.3	-9.8
HICP (Ireland)	2.2	2.7	2.9	2.9	3.1	-1.6	0.2
HICP (Euro Area)	2.2	2.2	2.1	2.1	3.4	0.5	0.7

[26] "Retail-related Import and Distribution Study", May 2009.

GENERAL ASSESSMENT

The most striking point to emerge from this *Commentary* is most easily demonstrated by graphing how our forecasts have evolved since Spring 2007. We do this in Figure 21. As can be seen from the figure, our forecasts for GNP growth for both 2008 and 2009 were revised downwards continuously for most of this period.[27] What is more, the size of the revisions also increased. However, in this *Commentary* our forecast for 2009 is essentially unchanged from the previous issue.

Figure 21: Forecasts for GNP Growth Contained in the *QEC*, Spring 2007 - Summer 2009



We are beginning to have a clearer sense as to the likely extent of the downturn. We think that the contraction will end in mid-2010. At that time, output will be over 13 per cent below its peak in 2007 and will be lower than the level recorded in 2005. GNP per head will have returned to the level seen before 2002. As stated in the previous *Commentary*, this is an enormous contraction in both historic and international terms. The associated pain of unemployment, lower disposable income and outward migration are all being experienced and will continue to be felt into next year. While tax increases have impacted upon a large fraction of employees, it should be noted that the distribution of recession-related pain tends to be uneven, with those suffering job losses being more severely affected.

[27] Such downward revisions were, of course, a feature of the forecasts for many organisations and in many countries. For example, in Summer 2008, the National Institute for Economic and Social Research in the UK was forecasting growth of 1.4 per cent in 2009; their most recent forecast is now for a UK contraction of 4.3 per cent in 2009.

At one level, this ending of continual downward revisions to our forecasts can be seen as positive news. However, it is important to stress that the growth we foresee in the latter part of 2010 will be very modest. In order for a return to more robust rates of growth, a number of factors need to operate in Ireland's favour. These have been spelt out in previous *Commentaries* and in Bergin *et al.* (2009)[28] but we see a value in assessing how matters unfold with regard to these areas both here and in *Commentaries* in the near future. The areas in question are: the global economy; the banking system; the public finances; competitiveness.

Looking first at the global economy, and as discussed in the *International* section above, there are reasons for optimism. A broad range of indicators suggest that the worst of the global recession may have passed and that growth may return to the US in 2009 and to the Euro Area in 2010. However, it is less clear how strong any return to growth will be. Many governments will face the challenge of restoring their public finances to a sustainable path, following the introduction of large stimulus packages. Similarly, central banks will have to guard against any prospects of inflation expectations rising. In the case of US consumers, the accumulation of large debts in recent years may result in a period of elevated savings as household balance sheets are repaired. Given these factors, it is certainly possible to see a drag on growth in the world economy.

The banking system remains a source of concern as we look ahead, both in terms of its ability to facilitate economic recovery through lending and in terms of potential impacts on the public finances. The principles underpinning the National Asset Management Agency (NAMA) appear to be correct in that the development-related loans which are currently on the books of the banks would almost certainly impair their ability to play a positive financing role in the economy. But while removing these loans from the banks may be a necessary condition for the re-establishment of a vibrant banking sector, it may not be a sufficient condition. For example, just as bankers may have been overly optimistic in the boom when making lending decisions, it could be that they will be overly pessimistic in the near future and so overly cautious. It will be important to monitor developments in lending over the course of the next year, in order to assess if lending expands in the context of a levelling off in economic activity. Were lending to stay depressed, this could contribute to a more prolonged period of low growth.

The public finances are the one area where progress has been made. As discussed in the previous *Commentary*, the April Supplementary Budget was a welcome development as it brought an end to a period of piecemeal actions on the part of the government in the face of a mounting fiscal crisis. But as discussed in the section above on the Public Finances, huge challenges still lie ahead. In total, the Government must achieve savings of €4.75 billion (in a full year) in the Budget for 2010 if they are to adhere to the commitments spelt out in the April Supplementary Budget. Coming on top of the measures implemented in 2009, this will be a difficult, although necessary, task. Any rolling back on those commitments, or any perception that measures announced may not be delivered, could lead to an increasing cost of borrowing for the government. Given that NAMA will lead to a jump in the National Debt as assets are acquired from the banks, it is

[28] Bergin *et al.* (2009), *Recovery Scenarios for Ireland*, ESRI Research Series Paper No. 7.

imperative that the General Government Balance be kept at manageable levels.

Turning to the issue of competitiveness, the importance of restoring some of the ground lost in recent years in order for Ireland to benefit from a global upturn is becoming more widely understood. The sharp falls in consumer prices which we are observing are a positive development. What would be more encouraging still would be evidence of falling nominal wages. As discussed in the *Incomes* section above, such falls have not been seen as yet in the official data, although there are plenty of anecdotes suggesting that nominal wage falls are occurring. The latest data on earnings relate to the last quarter of 2008 so it could be that wage falls will be reflected in the next set of earnings figures covering early 2009. However, until such falls are shown in official data it will be difficult to be confident that competitiveness is being restored at a sufficiently fast pace. It is likely that the surge in employment losses that occurred in the first three months of 2009 would have had a dampening effect on wages. However, the losses in after-tax wages as a result of the measures in the April Supplementary Budget may have worked in the opposite direction. Our forecast for wages in 2009 (-3 per cent) reflects our belief that on balance the deteriorating situation in the labour market will lead to reductions in the level of wages. But as with the other factors discussed above, we will need to monitor developments in the coming months in order to assess if the scenarios set out in Bergin *et al.* (2009) are to be achieved.

IMPROVING ACCESS TO PRIMARY CARE IN IRELAND: DO GP CHARGES MATTER?

Richard Layte[*]*, Anne Nolan*[*]

Economic and Social Research Institute, Dublin, Ireland

Introduction

Media coverage of health care in Ireland tends to focus almost exclusively on hospital services, waiting lists and patients waiting on trolleys in accident and emergency departments. Hospital care is certainly an important component of health care but research evidence shows that investment in primary care is more important for maintaining and improving population health. Routine access to primary care improves primary prevention and disease avoidance, while also allowing for early intervention and amelioration. Such activities improve population health more effectively and cost efficiently than expensive hospital intervention at later stages of illness. The potential role of primary care can only become more crucial as the Irish population ages over the next two to three decades and chronic diseases which can be managed but not cured increasingly dominate. As the most important component of primary care, GP services have a vital and increasing role to play in maintaining and improving population health, and it is this component of primary care that we focus on in this research overview.

Access to Primary Care in Ireland

The effectiveness of primary care depends on its structure and interaction with other health services; this remains a concern, particularly in the light of the slow implementation of the Primary Care Strategy since its publication in 2001. GP care is important in its own right but GPs also act as gatekeepers to secondary care, and as such, are the first point of contact for most individuals' interactions with other health services. Unfortunately, the Irish system of financing of primary care gives rise to particular concerns over equity of access to GP services. While 30 per cent of the population on low incomes are entitled to free primary care (medical card patients), the remaining 70 per cent must pay the full cost (private patients). This leads to concerns that the extent of co-payment required by private patients leads to significant barriers to access, while medical card patients face no constraints on use. Recent work by ESRI researchers provides important evidence about the impact of this structure of primary care financing on access to GP services. Here we examine published evidence on the impact of income and medical card eligibility on access to GP services in Ireland.

[*] richard.layte@esri.ie; anne.nolan@esri.ie

Conflicting Incentives

The Irish system of eligibility for free primary care services is unusual among OECD countries in the extent to which access to free services is restricted to a small proportion of the population. Eligibility for a medical card is decided primarily on the basis of an income means test which is currently set at €184 for a single person under 66 years and €201.50 for those aged 66-69 years.[1] These figures should be put in context. In 2007, the latest year for which figures are available, the income level at which individuals were said to be at risk of poverty was €229, while the average industrial wage in June 2007 was €627, so the threshold is set at a low level relative to average income. Between 2001 and January 2009 over 70s in Ireland were eligible for a medical card without a means test but since January those with an income of over €700 a week have had their eligibility for a medical card revoked. Up to 2005, the proportion of the population with a medical card fell steadily (from 38 per cent in 1987 to 27 per cent in 2005), as income thresholds increased annually in line with price inflation, while incomes grew at a faster rate. A 25 per cent increase in the income thresholds in 2005 increased the proportion of the population with a medical card slightly, but as of 2007, the proportion of the population with a medical card has remained under 30 per cent.

The major concern with the current medical card system is that whilst 30 per cent of the population face no financial disincentive to visit their GP, the rest of the population pay the full fee (which varies between €45 and €60), plus the first €100 of the prescription fee per family per month. Does this financial disincentive influence an individual's decision to visit their GP? To answer this question, we need to control for other factors such as age, health problems, household location, education and employment status that may also affect an individual's decision to visit their GP. Doing so reveals that those without a medical card are significantly less likely to visit their GP and visit less often on average than medical card patients. It is hard to say whether this difference in visiting is a result of under utilisation among those without a card or over utilisation among those with[2] but it is clear that charges (or the absence of them) do influence GP visiting behaviour.

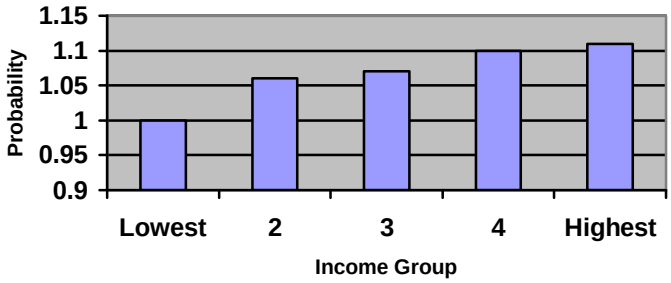
[1] Those who previously held a medical card but who participate in specific training and employment schemes are also allowed to retain their card for a period of up to 4 years. Other smaller numbers of individuals with particular health needs are also granted a 'discretionary' medical card.

[2] The extent of 'inappropriate' use of primary care is a thorny issue. Although medical card patients appear to have higher numbers of visits for the same observed characteristics including health, other analyses suggest that this may be due in part to lower access to secondary care on their part. Higher GP use may thus reflect an inability to access specialist care because of public healthcare queues.

The Cost of Care Influences Patient Choices

There is real concern that those just above the income threshold are in a particularly difficult position and this led to the implementation of the 'doctor only' medical card in October 2005 which has income thresholds 50 per cent higher than the standard medical card. Unfortunately take-up of the doctor only card has been disappointing, so does the level of income influence choices regarding GP attendance for those above the medical card thresholds? ESRI research (Nolan, 2008a) shows that relative to medical card patients, private patients are significantly less likely to visit their GP, with private patients on the lowest incomes having the lowest probability of visiting. Moreover, if we leave medical card patients out of the analysis we find that the probability of visiting the GP is lowest for those on low incomes and increases with the level of personal income (see figure below).

Probability of Visiting a GP in the Last Year by Income Group (Private Patients Only)



Source: Nolan 2008a.

These analyses show clearly that the primary differentiation is between those with a medical card and those without since the latter never attain the same levels of visiting even at the highest income levels (controlling for health and other factors). However, among those without a card income clearly matters and leads to inequities between groups in terms of their utilisation relative to need.

We get another measure of the impact of the medical card on GP visiting behaviour if we follow the same individuals through time and observe what happens if they either receive or lose access to a medical card. Research using this approach showed that those gaining a medical card increased the annual number of GP visits by approximately 27 per cent to 39 per cent per annum after controlling for a large range of other factors including the person's health. The fall in GP visits on withdrawal of a medical card appears to be even higher with the average number of annual GP visits falling by between a third and a half (Nolan, 2008b).

The Over 70s Medical Card

The extension of the medical card to all over 70s in 2001 offered another opportunity to examine the impact of charges on GP visiting behaviour, although this time only among older patients. Older individuals are far more likely to have a chronic illness and to be in need of quality health care but old age is also accompanied by decreasing income and mobility, both of which may limit access to primary care. Given this, it was important to examine the impact which the change in medical card eligibility had on GP visiting among older Irish people. Research shows (Layte et al 2009) that although the average number of GP visits by the over 70s had not increased three years after the change in eligibility, the overall probability of visiting in the last year had, with the proportion visiting in the last year increasing by over 4% between 2000 and 2004. However, this change was not significantly different from the similar increase in the probability of visiting observed for the under 70s over the same period, although the rise among over 70s was larger. Abolishing GP charges for the over 70s may not have led to clear increases in GP visits among the over 70s, although it is possible that other barriers to access, such as transport, may be relatively more important for the older population.

Does Use of Primary care Influence Health?

As a society, we are concerned with ensuring equity of access to health care, and with ensuring that access to health care is distributed on the basis of need for care, rather than other considerations such as ability to pay. Distributing health care on the basis of ability to pay would simply exacerbate the existing differentials in health across Irish society which stem from differences in income, social class and education. Ultimately, we are interested in how financial incentives and the structure of eligibility for free health care impacts on health status. Evidence on the impact of access to free primary care on health is hard to come by as we need data gathered over an extended period and this is expensive and difficult. For instance, even the extensive RAND Health Insurance Experiment in the US, which randomly assigned individuals to different insurance plans over the period 1972-1981, found significant effects of charges on use of health services, but little effect on overall health status. However, the extension of the medical card to all over 70s in 2001 did present some opportunities to speculate on the link between access to free GP care and health status. Layte et al (2009) showed that levels of disability among older people in Ireland fell between 2000 and 2004 even though levels of chronic illness actually increased. The fact that older Irish people were more likely to see their GP during this period could suggest that increased GP care lessened the impact of illness and reduced disability. This question is still under investigation but there is little doubt from previous ESRI research that the way we finance primary care in Ireland influences access and utilisation and this has implications for equity across groups. It would be surprising if this did not have an impact on health.

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ASSESSING VULNERABILITY OF SELECTED SECTORS UNDER ENVIRONMENTAL TAX REFORM

John Fitz Gerald[*]*, Mary Keeney*[**]*and Sue Scott*[*]

Economic and Social Research Institute, Dublin, Ireland

A carbon tax, or a well-designed trading scheme that ensures a credible long-term price on all emissions, would certainly be part of an efficient global system for the reduction of carbon emissions. But what if only some countries impose a carbon price? Could it be that energy-intensive industries would be made uncompetitive in the countries which impose a carbon price? John Fitz Gerald, Mary Keeney and Sue Scott examine whether such fears are justified for key industrial sectors in a recent paper.[†]

Six EU member states have already introduced carbon/energy taxes, namely, Sweden, Denmark, Netherlands, Finland, Germany and the UK. The taxes were introduced in these countries since 1990 as part of a policy called environmental tax reform (ETR) that combines the introduction of carbon taxes with the recycling of revenues to reduce other taxes. The analysis looked at potentially vulnerable sectors, selected from those that were energy intensive and had high trade exposure. A more crucial attribute and the focus of this study is whether or not these sectors could pass on an increase in their costs. If they could pass on the increased cost of higher taxes as higher prices without affecting their market share they would have less to fear from carbon pricing. The study examined this question, and the prospects for Ireland, where carbon prices may increase due to the trading scheme now in place.

A sector's ability to pass on its costs depends on its pricing power in its key markets, which was tested by examining the sector's pricing behaviour in the past. The paper examined whether sectors were price-takers, setting prices based on what competitors do, or price-setters, in which case able to pass on to consumers the cost of increased environmental taxes. Market power would indicate that a sector is less vulnerable and this would be the case if its pricing is found to be set as a mark-up on domestic costs.

[*] john.fitzgerald@esri.ie; sue.scott@esri.ie
[**] mary.keeney@centralbank.ie

A model of long-run price-setting behaviour was specified and applied to quarterly data running from 1975 to 2003, sourced from OECD and Eurostat. For each country the six major sectors analysed included chemicals, food beverages and tobacco, non-metallic mineral products (consisting mainly of cement), paper and paper products, wood and wood products and basic metals. The two sets of influences on price, namely, the foreign or 'world' price and secondly the mark-up over marginal costs, were specified in the model. The world price was proxied by the US price, the US being a dominant trading bloc. In a second trial the 'world' price was proxied by the German price, representing the EU price. The domestic manufacturing wage in each country was used to represent domestic costs. Different speeds of adjustment to the long-run equilibrium price were allowed, by means of an error-correction representation.

The results of the analysis were statistically significant and plausible. Among the selected sectors, basic metals were found to have least market power and were, therefore, most vulnerable, while non-metallic minerals (cement) had most market power and was least vulnerable. Where the foreign price was a dominant determinant, it was the EU-price (proxied by the German price) that tended to dominate. The important implication is that it is the price set by EU firms rather than firms elsewhere in the world that represents the major competition in each of the sectors. There were a few exceptions, in particular basic metals, where the world price is also a constraint, but for the most part, the results suggest that an EU-wide application of the environmental tax would not adversely affect firms in most of the sectors commonly regarded as vulnerable. Thus, the results support the view that application of environmental tax reform on an EU-wide basis is feasible in most sectors and, by contrast with unilateral application by individual countries, would reduce their concerns about loss of competitiveness.

An advantage of environmental tax reform over environmental regulations lies in the availability of tax revenues that can be used to reduce labour costs and help competitiveness. Use of the market power criterion assessed here can help to identify true vulnerability. The scope for sectors to make profitable adjustments to their technology also has an important bearing on reducing their vulnerability and on their ultimate effect on the environment.

[†]Fitz Gerald, J., M. Keeney and S. Scott, 2009. "Assessing Vulnerability of Selected Sectors under Environmental Tax Reform: The issue of pricing power", *Journal of Environmental Planning and Management*, Vol. 52 No 3 April. The study was part of the COMETR project (Competitiveness Effects of Environmental Tax Reform) funded by the European Commission: www2.dmu.dk/cometr/

DRINKING WATER QUALITY

Nicola Commins, Seán Lyons and Richard S.J. Tol[*]
Economic and Social Research Institute, Dublin, Ireland

The water we drink should be safe. The cryptosporidiosis outbreak in Galway in 2007 reminded us that it sometimes is not. But bad water quality does not only cause acute health problems. It also causes chronic ailments, including cancer. Therefore, the drinking water quality is monitored by the City and County Councils, overseen by the Environmental Protection Agency (EPA). A recent paper by Tol *et al.,* examines the quality of drinking water in Ireland over time.[1]

Let us first have a look at the facts. Figure 1 shows the fraction of people, by county, whose drinking water failed to meet at least one of the EU regulations in 2007. The numbers range from 52 per cent in Cork North to 100 per cent in the cities. Figure 2 shows the same data, but per water quality parameter. In 2007, 35 of the 48 standards were breached by at least one sample of Irish drinking water. In most cases, only a small number of people are affected. However, more than 5 per cent of people had their drinking water polluted with manganese, iron, lead or aluminium. The share of people suffering from biological contamination (enterococci, colony, e-coli, clostridium, coliform) is even larger. At first sight, these results are alarming. There are substances in Irish drinking water that make people ill. However, one can also conclude that monitoring is working. Problems are identified. But are they also solved?

In 2007, water quality was not much better than in 2006. In 2006, 88 per cent of people had something wrong with their water and in 2007 this was 85 per cent. Figure 3 compares breaches of water quality standards between 2006 and 2007. Figure 3 reveals that many sources that reported a problem in 2006 continued to report the same problem in 2007. While some of the problems were adequately dealt with, many other cases of biological and chemical contamination linger. These results are alarming.

How can this be? The European Union has stipulated that drinking water quality be monitored, and so the EPA publishes a report every year. To date this has not captured the public imagination. It deserves much greater attention from the general public and from policymakers. Previously, the EPA could only advise the county councils to take corrective action. The EPA only

[*] Nicola.Commins@esri.ie; Sean.Lyons@esri.ie; Richard.Tol@esri.ie
[1] Tol, R.S.J., N. Commins, N. Crilly, S. Lyons and E. Morgenroth, 2009, "Towards Regional Environmental Accounts for Ireland", Journal of the Statistical and Social Inquiry Society of Ireland, forthcoming.

recently acquired the authority to enforce its decisions. It is too early to judge how much difference its new powers will make. However, there are a number of structural factors which need to be addressed in improving the quality of water to the Irish public. Maintaining drinking water quality requires particular skills and expertise as well as resources. Given the results set out above, it is questionable whether the existing system, with the local authorities at the centre, is equipped to guarantee drinking water quality. The local civil service does not offer a career perspective for specialists, and many of the counties have too few people to hire a full-time expert. A sorry illustration is the high concentrations of trihalomethanes (THMs). These carcinogenic substances are byproducts of the improper chemical treatment of biological contamination. These problems can be addressed: for example county councils could outsource the operation of drinking water facilities to specialised companies or responsibility for water services could be transferred to a single national authority.

Figure 1: The Percentage of People who are Supplied with Drinking Water that Violates at Least One of 48 Water Quality Standards, Per County, for 2007

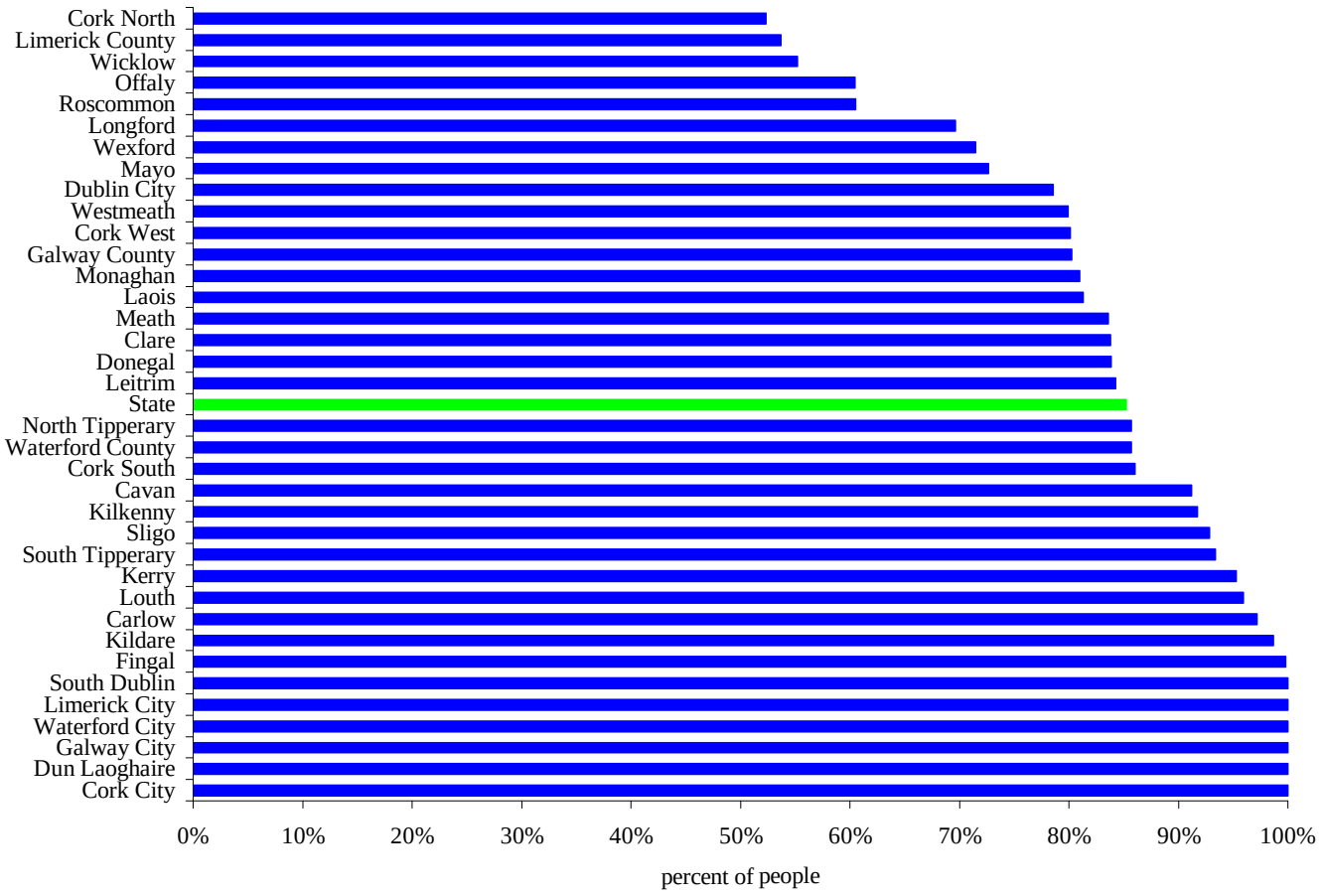


Figure 2: The Percentage of People who are Supplied with Drinking Water that Does not Meet the EU Quality Standard, Per Water Quality Parameter, for 2007

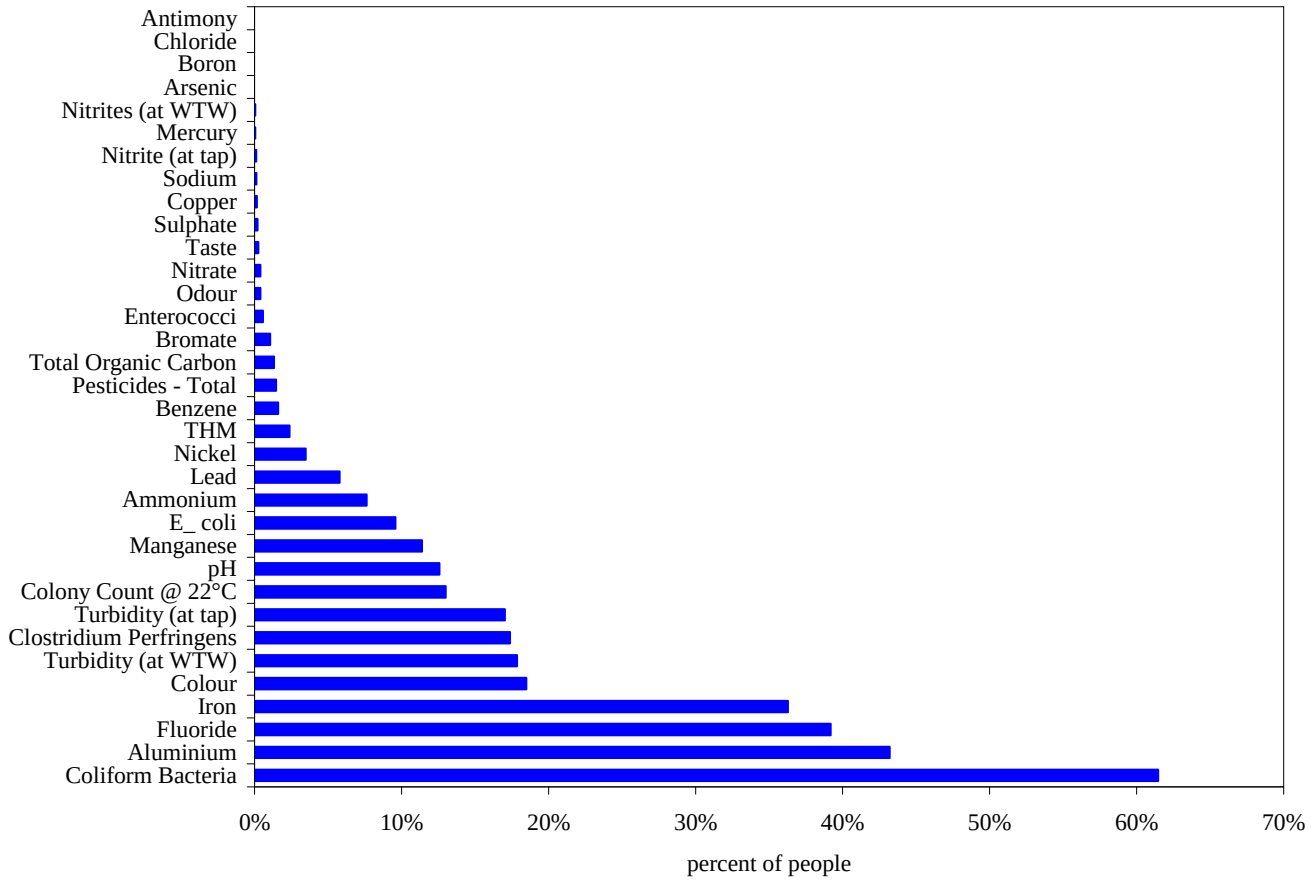
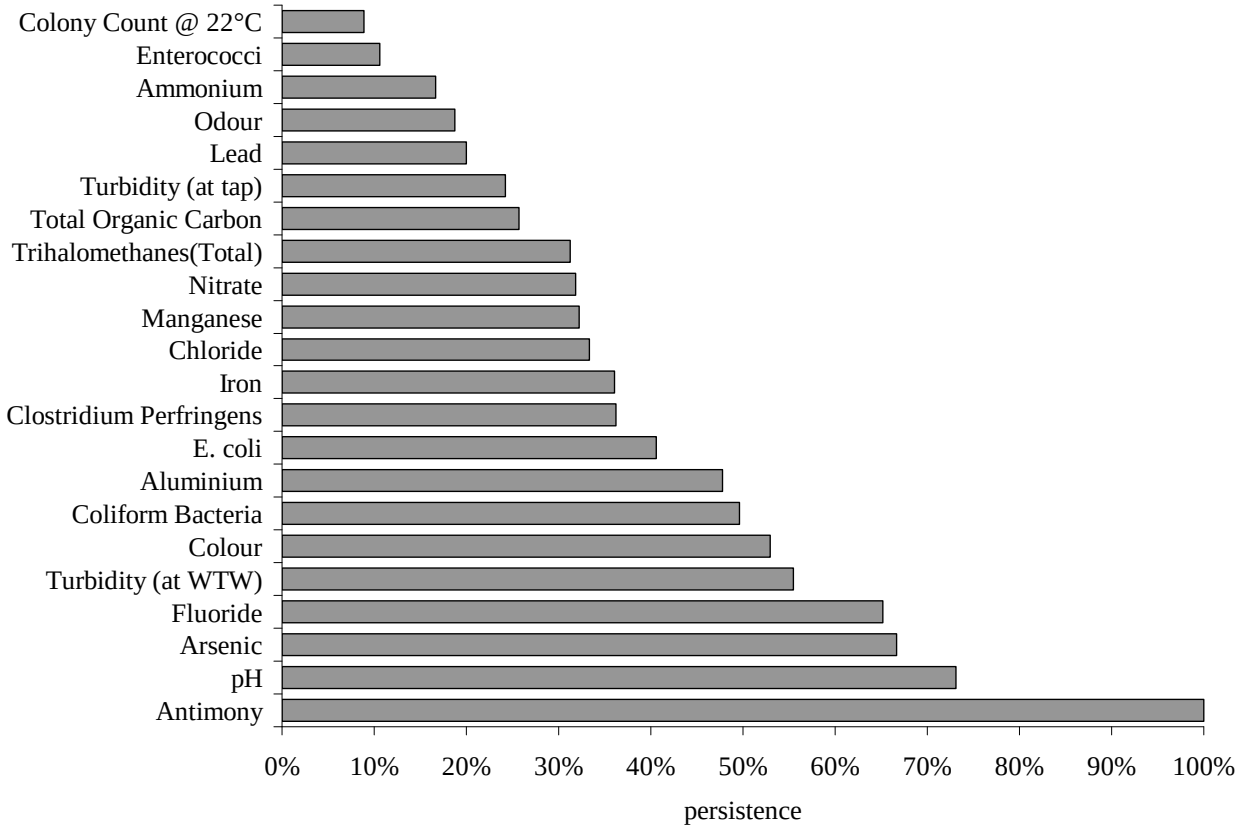


Figure 3: The Persistence of Breaches of Water Quality Standards Between 2006 and 2007 Per Water Quality Parameter



DID IRELAND BECOME MORE UNEQUAL DURING THE BOOM?

Seamus McGuinness, Frances McGinnity, Philip J. O'Connell[*]
Economic and Social Research Institute, Dublin, Ireland

The Irish economy almost doubled in size between 1990 and 2000 in terms of Gross Domestic Product (GDP), leading to a rapid convergence of GDP per capita with the EU average, and dramatic growth in employment and incomes. Economists writing about the impact of technology on the labour market in recent years have tended to emphasise the idea that as an economy grows, technology is biased in favour of skilled workers and against unskilled workers (This is termed skill-biased technical change, SBTC.) A large body of evidence documents a striking correlation between the adoption of computer-based technologies and the increased use of university-educated labour. The idea of SBTC has primarily been used to explain rising wage inequality in, for example, the UK and the US. Has rapid growth in Ireland led to a similar rise in wage inequality, favouring higher educated workers – and if not, what factors have tended to offset the influence of skill-biased technological change? These issues have been investigated by Seamus McGuinness, Frances McGinnity and Philip O'Connell in a recent paper.[†] They draw on data from the Living in Ireland Survey for 1994, 1997 and 2001 to examine the consequences of the boom for wage dispersion and returns to education in Ireland.

The structure of the Irish labour market changed radically over the 1994 to 2001 period. First, employment grew very rapidly, by almost 500,000 or 40 per cent between 1994 and 2001. Consequently, the employment rate, expressed in proportion to the population aged 15-64 years, increased from 53 per cent in 1994 to 66 per cent in 2001. Second, there was a sharp and sustained increase in women's employment. Total female employment increased by 60 per cent between 1994 and 2001, almost twice the growth rate among men. These differential growth rates resulted in a shift in the balance of employment between men and women, and women's share of total employment increased from 37 per cent in 1994 to over 42 per cent in 2001. Third, unemployment fell from just under 15 per cent in 1994 to less than 4 per cent in 2001. Long-term unemployment fell precipitously: from 125,000 in 1994 to 20,000 in 2001 – a net decline of almost 105,000.

However, from a sectoral perspective it is not at all clear that growth was heavily concentrated in industries employing a high concentration of skilled

[*] Seamus.McGuinness@esri.ie; Frances.McGinnity@esri.ie; Philip.O'Connell@esri.ie

labour. Among women, employment growth was most rapid in Transport and Communication, and Finance and Business, sectors largely characterised by medium to high skills. Among males, the most rapid growth occurred in Construction, where employment doubled, but which is largely characterised by low to medium skills. The other expanding sector was Finance and Business services, where medium to high skill levels are in demand.

What happened to wage inequality during this period of rapid economic growth? Within the Irish labour market as a whole, the level of wage inequality fell markedly over the period but most particularly between 1997 and 2001. When the data was split according to gender some disparities again emerged. While earnings inequality fell within the male distribution over both periods, inequality increased slightly in the female labour market from 1994 to 1997 before falling dramatically between 1997 and 2001. Thus, it would appear that a central prediction of SBTC, that income inequality will tend to increase during periods of rapid economic growth, failed to transpire in the case of Ireland.

Rates of return to schooling did not change markedly over the period, counter to the predictions of the skill biased technical change hypothesis. Specifically, for men the study found largely stable returns to education throughout the period, partly explained by a strong growth in demand for unskilled labour, which helped maintain low-skilled wages. For women, while relative demand grew more quickly for educated labour, the rapid increase in the numbers of educated females entering (or re-entering) the labour market over the period was such, that the increase in labour supply actually exceeded the growth in demand, consequently, the premium to a university degree actually fell somewhat.

What are the implications of our findings? The Irish case suggests that high levels of economic growth did not lead to a growth in inequality, at least not in this period. For men, demand did not grow more for highly skilled labour, as might have been expected. Demand grew for both high and low-skilled male workers. For women, demand for high skilled labour did grow more rapidly than for low skills, but because of rapid increases in supply, the premium for high skills did not rise as expected. The Irish example shows that one needs to take account of both the specific changes in the nature of labour demand and the nature and extent of concomitant changes in labour supply in any theoretical approach relating economic growth to inequality

[†]McGuinness, S., F. McGinnity and P.J. O'Connell. "Changing Returns to Education during a Boom? The Case of Ireland". *LABOUR: Review of Labour Economics and Industrial Relations*, 2009, Vo. 23, pp. 197-221.

JOB MOBILITY IN IRELAND

Adele Bergin[*]

National University of Ireland, Maynooth and Economic and Social Research Institute, Dublin, Ireland

The movement of workers from one job to another allows workers and firms to adapt to changing economic and personal circumstances. Job mobility contributes to the efficient working of the labour market; as workers can seek out new jobs in which they can be more productive and for which they will be better rewarded. Internationally, changing jobs appears to be an important part of worker's experience in the labour market. However, little is known about job mobility in an Irish context. Recent research by Adele Bergin helps to establish the prevalence of job changing in Ireland, how it has changed over time, and the types of worker most likely to switch jobs.

Using a sample of workers aged 20 to 60 years from the Living in Ireland Survey covering the period 1995 to 2001, the paper finds that each year approximately 10 per cent of workers changed jobs. However, this figure masks an important trend evident in the data. In 1995 fewer than 7 per cent of workers changed jobs and this rate almost doubled by 2000. In addition, in each year the bulk of job changes were voluntary – essentially workers finding better jobs – and the rate of voluntary mobility trebled over the period 1995 to 2000. This is unsurprising, as during upturns there is an increase in vacancies and there are more potential employment opportunities available to workers. The rate of involuntary mobility – workers who were made redundant, dismissed or lost their job through the closure of a business – remained relatively constant at around 2½ per cent each year.

Which workers are more (or less) likely to change jobs? Younger workers are more likely to switch jobs, as they are more likely to try a variety of jobs in order to acquire knowledge of the labour market and their own preferences and ability for different jobs (a process known as "job shopping" in the literature). Workers who change jobs are around 8/9 years younger than the sample average. There are several reasons to expect that there might be gender differences in mobility rates. For example, women may be less likely to change jobs if they are more constrained by non-market variables such as their partner's location or the rearing of children. The paper finds that once other characteristics are controlled for, that gender does not affect the probability of changing jobs. A higher level of general education does not make a person more or less likely to change jobs; but an occupation specific qualification – which may tend to be specific to a particular job, and of less value to other

[*] Adele.Bergin@esri.ie

employers – makes a person less likely to change jobs. Workers in the public sector are less likely to change jobs.

The paper also decomposes the extent to which the increase in voluntary mobility is attributable to changes in the composition or characteristics of workers (in particular by the increase in the number of young workers in the labour force) and how much of the increase is attributable to other factors. It finds that only 30 per cent of the increase in mobility is due to compositional changes. The improving labour market conditions facing workers is found to be an important factor in explaining the increase in voluntary mobility. However, a substantial part of the increase in job mobility over the period remains unexplained. It may be that there has been an increase in job instability over the period, although this is not necessarily worrying as the increase in mobility was voluntary in nature. At the same time, worker preferences may also have changed over the period, with a decline in the importance of the idea of a "job for life".

[†]Adele Bergin, 2009. "Job Mobility in Ireland", *The Economic and Social Review,* Vol. 40, No. 1, Spring, pp. 15-47.

WHAT DO WE KNOW ABOUT LARGE SCALE IMMIGRATION AND IRISH SCHOOLS?

Emer Smyth[*]*, Merike Darmody, Frances McGinnity, Delma Byrne*

Economic and Social Research Institute, Dublin, Ireland

The period since the 1990s has seen immigration into Ireland of a scale and speed unprecedented in comparative context. After decades of net emigration from Ireland, the strong economic growth of the last decade and resulting rapid immigration of non-Irish nationals from a wide range of countries has transformed Ireland into a country of net immigration. In recent years the inflow of migrants has become more diverse, with many nationalities represented, and return Irish migration declining from 50 per cent of the inflow in 1996 to less than 25 per cent in 2006. In little over a decade Irish society has become more diverse in terms of nationality, language, ethnicity and religious affiliation as the population share of non-national immigrants increased from 3 per cent in 1993 to 6 per cent in 2002 to 10 per cent in 2006. As a result, immigrant children are now reflected in the composition of the student body at both primary and second level. While a number of small scale studies have been conducted on the experiences of immigrant students in Irish schools, national level data on how immigrant students are distributed across Irish schools, and on their levels of knowledge of English, have not been available. A new study by the ESRI *Adapting to Diversity** addresses this gap. Emer Smyth, Merike Darmody, Frances McGinnity and Delma Byrne conducted a nationwide survey of principals of primary and second-level schools. In addition, they carried out qualitative interviews in 12 case study schools. The study estimates that immigrant students made up approximately 10 per cent of the primary school-going population and 6 per cent of the second-level population in 2007.

The study points to demographic trends and residential segregation, school characteristics, parental choice of schools and school admission policies as factors that contribute to the placement of immigrant children in schools. Internationally studies of this type have been driven by a concern about segregation among the immigrant population. We have found no evidence of school segregation in relation to immigrant students relative to international

[*] Emer.Smyth@esri.ie

comparisons, as most immigrant students are in schools with a low proportion of immigrant students. Our findings indicate that the distribution of immigrant students across schools in Ireland is more evenly distributed than in other international contexts. There are however, a number of differences between the primary and second-level sectors. First, while around 90 per cent of second-level schools record immigrant students in their student body, this is the case for just 56 per cent of primary schools. Thus, the level of 'clustering' is much more pronounced in primary schools than in second-level schools. Second, we find that most second-level immigrant students are in schools with a low proportion (between 2-9 per cent) of other immigrant students. Only 2 per cent attend schools with an immigrant student intake of 40 per cent or more. That is, most immigrant students do not attend second-level schools with a high immigrant student intake. However, we see a different pattern for primary schools; almost half of immigrant students attending primary schools are in schools with an immigrant student body of over 20 per cent and one in five are in schools with an immigrant student intake of over 40 per cent. These findings are consistent with how the two sectors operate and interact in the Irish education system. Primary schools tend to draw students from their local area, while second-level schools have a much larger catchment area. Typically, a number of primary schools feed into any given second-level school, so even if one feeder primary school had no immigrant students, the second-level school in the area would record immigrant students if there were immigrant students in other primary schools in the area.

Differences between the primary and second-level sectors are likely to be due to residential patterns of immigrants, as the availability of places in schools, coupled with residential patterns, means that immigrant students are more highly represented in urban schools and those already catering for more disadvantaged populations. However, the research does note that where schools are oversubscribed, enrolment criteria, such as 'first come, first served' and priority given to siblings of children already in the school, are likely to favour settled communities and thus immigrant students will be under-represented in these schools.

Immigration has meant that the student body is much more diverse than before, particularly within second-level schools. The majority of immigrant students in Ireland are from non-English speaking countries (over three-quarters in primary schools and over 70 per cent in second level). As a result, over half of both primary and second-level principals reported language difficulties among a significant proportion of their immigrant students. School principals and teachers indicate that language difficulties have marked consequences for the academic progress and social integration of immigrant students. The study highlights a number of areas which would further enhance provision for immigrant students in Irish schools. First, language support provision would benefit from a greater emphasis on combining withdrawal and within-class support, flexibility (e.g. tapering) in resource allocation, training and support for specialist and mainstream teachers, and access to suitable teaching resources and materials. Second, language support within the school needs to be situated within the wider context, in terms of language support for the adult population and access to translation/interpretation services for schools. Third, social integration is likely to benefit from the promotion of

intercultural awareness within and outside schools, consistent practice regarding bullying, and the use of student mentors to counter such behaviour.

The period since this study was conducted has seen a rapidly changing economic and policy climate. A number of recent measures, including changes in the criteria for allocating language support teachers, may negatively affect the educational experiences of immigrants. Recessionary conditions may prompt net emigration but, such was the scale of inward migration, it is clear that Irish society will remain culturally diverse for the foreseeable future. In the context of scarce resources, it is important to note that our findings clearly indicate that supporting more differentiated teaching methods and promoting a positive school climate would benefit immigrant and Irish students alike.