Quarterly Economic Commentary

David Duffy
Joseph Durkan
Eddie Casey

Autumn 2012

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Quarterly Economic Commentary

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David Duffy and Eddie Casey

Special Articles

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12/3

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Table of Contents

Summary Table

	2009	2010	2011	2012	2013
Output (Real Annual Growth %)					
Private Consumer Expenditure	-5.4	1.0	-2.4	-2.3	-2.0
Public Net Current Expenditure	-4.4	-6.5	-4.3	-2.2	-2.2
Investment	-27.6	-22.6	-12.6	-5.4	4.1
Exports	-3.8	6.2	5.1	5.6	6.2
Imports	-9.7	3.6	-0.3	2.2	5.5
Gross Domestic Product (GDP)	-5.5	-0.8	1.4	1.8	2.1
Gross National Product (GNP)	-8.1	0.9	-2.5	-0.2	0.7
Prices (Annual Growth %)					
Consumer Price Index (CPI)	-4.5	-1.0	2.6	1.9	1.8
Growth in Average Hourly Earnings	2.5	-1.5	0.1	0.5	0.0
Labour Market					
Employment Levels (ILO basis (000s))	1,929	1,848	1,810	1,796	1,793
Unemployment Levels (ILO basis (000s))	259	292	304	313	307
Unemployment Rate (as % of Labour Force)	11.8	13.6	14.4	14.8	14.6
Public Finance					
Exchequer Balance (€bn)	-24.6	-18.7	-24.9	-18.1	-14.1
General Government Balance (€bn)	-22.5	-48.4	-20.2	-13.1	-12.4
General Government Balance (% of GDP)	-13.9	-30.9	-12.7	-8.1	-7.5
General Government Balance excluding bank costs (% of GDP)	-11.5	-10.8	-9.0	-8.1	-7.5
General Government Debt, % of GDP	65	92	106	115	119
External Trade					
Balance of Payments Current Account (€bn)	-3.8	1.8	1.8	2.3	3.3
Current Account (% of GNP)	-2.8	1.4	1.4	1.8	2.6

Note: Detailed forecast tables are contained in an Appendix to this *Commentary.*

Summary

Notwithstanding the considerable obstacles to growth facing Ireland's main trading partners, results for 2011 show that output grew for the first time in four years, expanding by 1.4 per cent in GDP terms. However, domestic demand remained very weak and GNP, which we consider to be a better measure of Ireland's economic performance, fell again, contracting by 2.5 per cent. We expect that GNP will fall marginally again this year, before increasing modestly in 2013. Unemployment will remain high at 14.8 per cent, declining only slightly next year and the balance of payments surplus is expected to continue to rise. The fiscal targets are likely to be comfortably met this year and next year, with the appropriate changes in taxes and expenditure, the targets should be met.

In the past two to three years uncertainty about the international environment has limited Ireland's recovery. Looking forward, the recent measures introduced by the European Central Bank have proved more convincing to date than previous attempts and look set to provide the necessary foundations upon which wider demand conditions can gradually improve. Most observers expect a modest revival of growth in the UK and eurozone next year and, provided uncertainties relating to the US federal debt ceiling are resolved, the Irish economy should benefit from a relatively more benign external environment in 2013.

Services exports are likely to be the main driver of export growth this year, although goods exports, particularly those of indigenous industries, are likely to contract modestly. On the domestic front, fiscal retrenchment is almost certain to constrain domestic demand over the forecast horizon, yet renewed investment expenditure looks set to partly offset this impact next year, with strong FDI inflows, development projects undertaken by NAMA and the Government's investment stimulus providing some impetus for growth.

In the *General Assessment* we express some reservations about the potential impact of the investment stimulus on the Irish economy, in spite of its contribution to near-term growth. In addition, despite the improvement in the Irish public finances so far, the scale of the adjustment still required is still very substantial. Looking at the main areas of expenditure, current transfers and current expenditure on goods and services account for 42 per cent and 40 per cent of total underlying expenditure, respectively, so that it is difficult to see how cuts in these areas can be avoided.

National Accounts 2011

A: Expenditure on Gross National Product

	2010	2011	Change in 2011		
	€ bn	€ bn	Value	Price	Volume
Private Consumer Expenditure	82.1	81.3	-0.9	1.5	-2.4
Public Net Current Expenditure	26.2	25.4	-2.9	1.5	-4.3
Gross Fixed Capital Formation	18.7	16.1	-14.0	-1.7	-12.6
Exports of Goods and Services	157.8	166.8	5.7	0.6	5.1
Physical Changes in Stocks	-0.6	0.2			
Final Demand	**284.2**	**289.8**	**2.0**	**0.8**	**1.2**
less:					
Imports of Goods and Services (M)	128.3	131.9	2.8	3.1	-0.3
Statistical Discrepancy	0.6	1.0			
GDP at Market Prices	**156.5**	**159.0**	**1.6**	**0.2**	**1.4**
Net Factor Payments (F)	-26.3	-32.0			
GNP at Market Prices	**130.2**	**127.0**	**-2.4**	**0.0**	**-2.5**

B: Gross National Product by Origin

	2010	2011	Change in 2011	
	€ bn	€ bn	€ bn	%
Agriculture	2.6	3.2	0.7	27.1
Non-Agriculture: Wages, etc.	68.7	67.8	-0.9	-1.4
Other	54.4	58.1	3.6	6.6
Adjustments: Stock Appreciation	-0.5	-0.6		
Statistical Discrepancy	-0.6	-1.0		
Net Domestic Product	**124.6**	**127.4**	**2.9**	**2.3**
Net Factor Payments	-26.3	-32.0	-5.7	21.7
National Income	**98.3**	**95.5**	**-2.8**	**-2.9**
Depreciation	16.0	15.8	-0.2	-1.0
GNP at Factor Cost	**114.3**	**111.3**	**-3.0**	**-2.6**
Taxes less Subsidies	15.9	15.8	-0.2	-1.2
GNP at Market Prices	**130.2**	**127.0**	**-3.2**	**-2.4**

C: Balance of Payments on Current Account

	2010	2011	Change in 2011
	€ bn	€ bn	€ bn
X – M	29.5	34.9	5.4
F	-26.3	-32.0	-5.7
Net Transfers	-1.4	-1.2	0.3
Balance on Current Account	**1.8**	**1.8**	**0.0**
as % of GNP	1.4	1.4	0.0

National Accounts 2012

A: Expenditure on Gross National Product

	2011	2012	Change in 2012		
	€ bn	€ bn	Value	Price	Volume
Private Consumer Expenditure	81.3	80.9	-0.5	1.8	-2.3
Public Net Current Expenditure	25.4	25.8	1.4	3.6	-2.2
Gross Fixed Capital Formation	16.1	15.2	-5.5	0.0	-5.4
Exports of Goods and Services	166.8	177.9	6.7	1.0	5.6
Physical Changes in Stocks	0.2	-0.1			
Final Demand	**289.8**	**299.7**	**3.4**	**1.4**	**2.0**
less:					
Imports of Goods and Services (M)	131.9	138.9	5.3	3.0	2.2
Statistical Discrepancy	1.0	1.0			
GDP at Market Prices	**159.0**	**161.8**	**1.8**	**0.0**	**1.8**
Net Factor Payments (F)	-32.0	-35.5			
GNP at Market Prices	**127.0**	**126.3**	**-0.5**	**-0.4**	**-0.2**

B: Gross National Product by Origin

	2011	2012	Change in 2012	
	€ bn	€ bn	€ bn	%
Agriculture	3.2	3.0	-0.3	-8.0
Non-Agriculture: Wages, etc.	67.8	67.7	-0.1	-0.1
Other	58.1	61.0	2.9	5.0
Adjustments: Stock Appreciation	-0.6	-0.6		
Statistical Discrepancy	-1.0	-1.0		
Net Domestic Product	**127.4**	**130.0**	**2.6**	**2.0**
Net Factor Payments	-32.0	-35.5	-3.5	11.1
National Income	**95.5**	**94.5**	**-0.9**	**-1.0**
Depreciation	15.8	15.5	-0.3	-2.0
GNP at Factor Cost	**111.3**	**110.0**	**-1.3**	**-1.1**
Taxes less Subsidies	15.8	16.3	0.6	3.6
GNP at Market Prices	**127.0**	**126.3**	**-0.7**	**-0.5**

C: Balance of Payments on Current Account

	2011	2012	Change in 2012
	€ bn	€ bn	€ bn
X – M	34.9	38.9	4.0
F	-32.0	-35.5	-3.5
Net Transfers	-1.2	-1.2	0.0
Balance on Current Account	**1.8**	**2.3**	**0.5**
as % of GNP	1.4	1.8	0.4

National Accounts 2013

A: Expenditure on Gross National Product

	2012	2013	Change in 2013		
	€ bn	€ bn	Value	Price	Volume
Private Consumer Expenditure	80.9	80.6	-0.4	1.6	-2.0
Public Net Current Expenditure	25.8	24.3	-5.6	-3.5	-2.2
Gross Fixed Capital Formation	15.2	15.9	4.2	0.1	4.1
Exports of Goods and Services	177.9	193.3	8.6	2.3	6.2
Physical Changes in Stocks	-0.1	1.0			
Final Demand	**299.7**	**315.0**	**5.1**	**1.4**	**3.6**
less:					
Imports of Goods and Services (M)	138.9	149.8	7.9	2.3	5.5
Statistical Discrepancy	1.0	1.0			
GDP at Market Prices	**161.8**	**166.2**	**2.7**	**0.6**	**2.1**
Net Factor Payments (F)	-35.5	-38.9			
GNP at Market Prices	**126.3**	**127.3**	**0.7**	**0.0**	**0.7**

B: Gross National Product by Origin

	2012	2013	Change in 2013	
	€ bn	€ bn	€ bn	%
Agriculture	3.0	3.2	0.2	7.5
Non-Agriculture: Wages, etc.	67.7	67.5	-0.2	-0.3
Other	61.0	64.1	3.1	5.1
Adjustments: Stock Appreciation	-0.6	-0.6		
Statistical Discrepancy	-1.0	-1.0		
Net Domestic Product	**130.0**	**133.2**	**3.2**	**2.4**
Net Factor Payments	-35.5	-38.9	-3.4	9.6
National Income	**94.5**	**94.3**	**-0.2**	**-0.2**
Depreciation	15.5	15.5	0.0	0.0
GNP at Factor Cost	**110.0**	**109.8**	**-0.2**	**-0.2**
Taxes less Subsidies	16.3	17.5	1.2	7.1
GNP at Market Prices	**126.3**	**127.3**	**0.9**	**0.7**

C: Balance of Payments on Current Account

	2012	2013	Change in 2012
	€ bn	€ bn	€ bn
X – M	38.9	43.2	4.4
F	-35.5	-38.9	-3.4
Net Transfers	-1.2	-1.2	0.0
Balance on Current Account	**2.3**	**3.3**	**1.0**
as % of GNP	1.8	2.6	0.8

1

Introduction

The International Economy

The immediate outlook for the world economy remains poor amid persistent tensions in the eurozone and a weakening performance in emerging markets, with all major economic regions now facing varying degrees of slowdown in economic activity. Any prospect of a global recovery is, therefore, likely to remain somewhat distant until a satisfactory resolution of these tensions is evident.

Large emerging economies such as Brazil, India and China have been relatively insulated from the financial crisis to date, with rapid convergence and sound fiscal and monetary policies the key to underpinning their continued growth. Downside risks have risen slightly in many of these economies since the last *Commentary*, however. Potential spillover effects (in the form of lower external demand) and tighter financing conditions (resulting from on-going turmoil in the eurozone) pose the most prominent risk to growth in the near term. In addition, reduced manoeuvrability in terms of fiscal policy in many of these economies is proving to be a greater source of concern now as activity elsewhere wanes.

Turning to the US, fears of a large-scale discontinuation of Government support measures in 2013, originally introduced to allay the impact of recent economic declines, have resulted in more subdued domestic demand and are contributing to a deceleration in economic activity. Widespread declines in items of consumer spending and a weakening in both residential and non-residential fixed investment were visible over the second quarter. This slowdown is also becoming more marked as the possibility rises that political deadlock could result in a failure to raise the federal debt ceiling. Such an outcome would involve a fiscal retrenchment that could severely inhibit a nascent recovery in the US economy and it seems that the situation is unlikely to be resolved in full before the US presidential election in November. With this in mind, the recent decision by the Federal Reserve to extend its quantitative easing operations in order to target weak employment growth is welcome, given that it should reduce long-term interest rates and boost aggregate demand. It is unclear at this stage, however, just how effective additional rounds of monetary easing will be and whether or not this approach will be sufficient to counteract existing obstacles to growth.

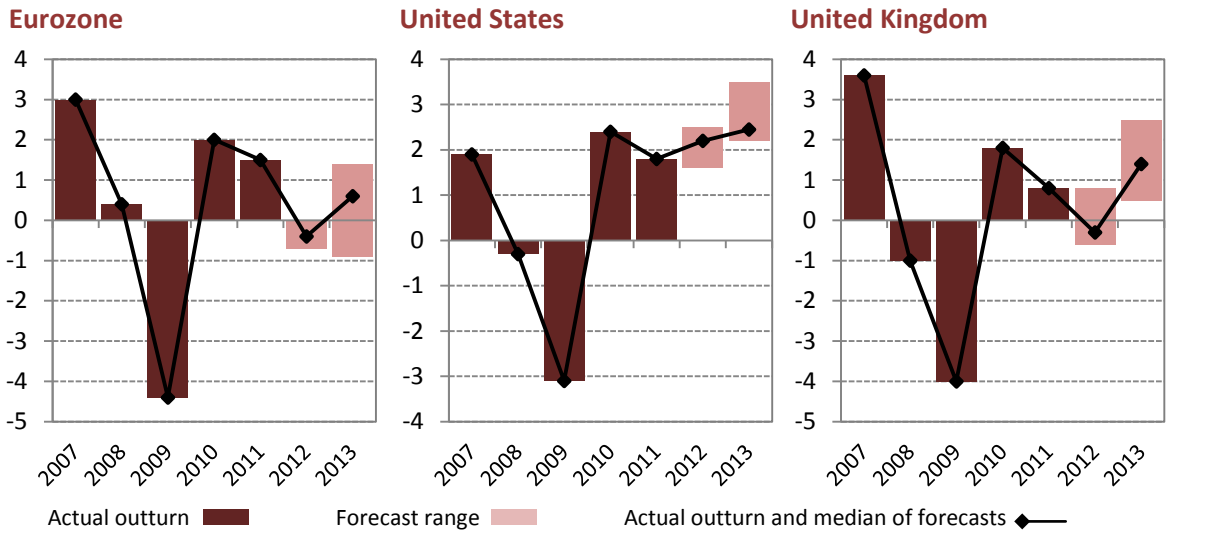
The UK authorities are facing difficulties in meeting commitments to consolidate public finances over the next five years, while simultaneously attempting to avoid stagnation in economic growth. Signs of recovery thus far have been muted, with output growth effectively flat during the past two years. Below-average growth is anticipated to continue over the forecast horizon, with considerable risks to the downside. Eurozone strains again pose a serious problem to the pace of recovery in the UK given that member states represent the UK's main trade partner, accounting for a half of all goods exported from the UK on average over the period 2006 to 2011 and just over a third of annual services exports on average between 2007 and 2010. Unfavourable external developments have accompanied weak prospects on the domestic side where a legacy of significant private and public sector indebtedness exists. Deleveraging in both sectors has weighed heavily on output growth and is likely to do so further over the near term. In addition, tighter credit conditions and heightened uncertainty with respect to employment and earnings prospects have weakened household spending, while capital investment by businesses is not expected to recover until signs of a wider recovery in demand become evident. As such, planned consolidation measures may ease over the forecast horizon so as to avoid stifling further an already subdued growth path. It is also hoped that non-standard Bank of England measures, such as the 'Funding for Lending Scheme', which may well expand in future, might spur some modest pick-up in domestic demand.[1]

The eurozone has been at the core of recent concerns regarding a weakening in global economic activity. Growth across member states has lost significant momentum since mid-2011, with each of the main countries showing very modest or slightly negative output growth quarter-on-quarter. The largest of these, Germany, which had looked like it could represent an engine of growth driving any recovery in the eurozone, has also seen growth mired at relatively low rates in recent quarters. German investment, particularly in industry, has declined as the outlook for export demand diminishes and consumer spending, although relatively buoyant in the second quarter, is likely to suffer in turn. This is corroborated by the latest available indicators for Germany and the eurozone, which suggest that an originally anticipated improvement in the second half of the year may well be postponed. Qualitative business and consumer indicators for the eurozone as a whole point to a further deterioration in July and August. This follows a further intensification of on-going banking sector and sovereign debt concerns in the eurozone, particularly in relation to the Spanish economy. Despite some tentative signs of moderation in the pace of contraction in France, Italy and Spain, an apparent entrenchment in German weakness at the beginning

[1] The Bank of England's £80 billion 'Funding for Lending Scheme' launched in July 2012 is intended to incentivise more household and business lending in the UK by providing direct central bank loans to banks or building societies below market interest rates. If these institutions subsequently decrease such lending, then the associated cost of obtaining this funding from the Bank of England is subject to an increase.

of the third quarter is expected to constrain near-term growth. At the earliest, conditions may pick up in 2013, although this assumption is heavily predicated on the adequacy of measures taken to resolve tensions across the monetary union over the remainder of this year. The recent announcement to undertake Outright Monetary Transactions (OMTs) in secondary markets for sovereign bonds in the eurozone by the ECB is a step in the right direction. But the system as a whole still requires confidence that banking systems are sufficiently capitalised before the wholesale money markets can return to their proper functioning.[2]

FIGURE 1 Real GDP Growth (% change, year-on-year)

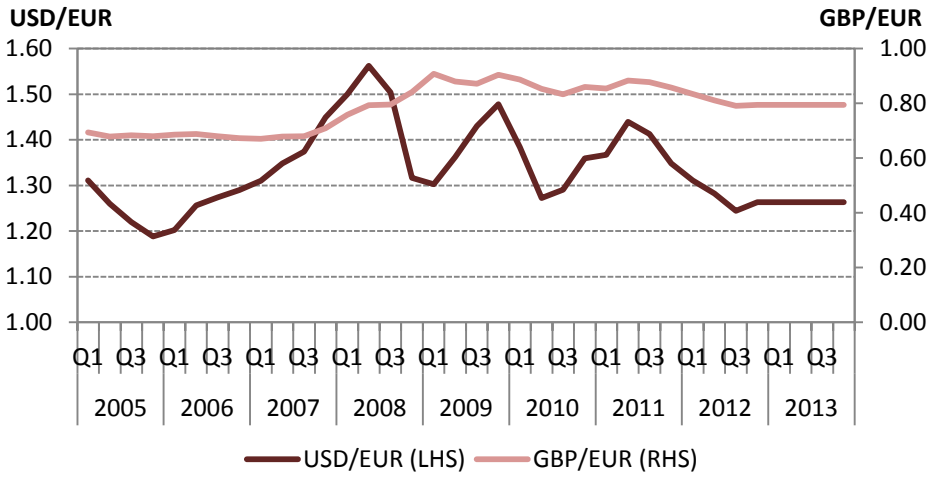


Sources: FocusEconomics, Eurostat, IMF, OECD, HM Treasury and Federal Reserve.

Figure 1 assembles data for official GDP growth rates in recent years for the US, UK and eurozone along with the range of latest forecasts from various international forecasting bodies for 2012 and 2013. A modest contraction in the eurozone now seems inevitable for this year, with very weak growth likely in 2013. At best, US activity will continue to recover at a very slow pace. Risks are tilted to the downside, however, due to the damaging impact of political wrangling over federal debt levels, while the UK economy is not expected to recover dramatically next year as public and private balance sheets continue their reparations. Our exchange rate assumptions for 2012 anticipate a weak euro exchange rate for 2012 and 2013 vis-à-vis the US dollar and sterling relative to previous years (see Figure 2).

[2] Outright Monetary Transactions entail the purchase by the European Central Bank (ECB) of sovereign bonds on the primary or secondary markets and are focused on securities with a maturity of one to three years. This funding is to be provided so long as strict conditions attached to a macroeconomic adjustment programme or a precautionary programme are met.

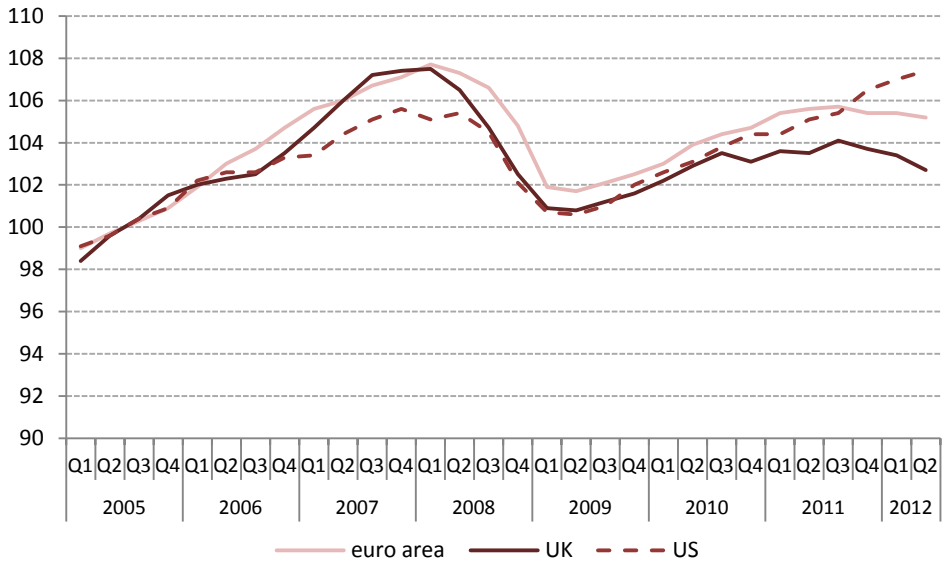
FIGURE 2 Exchange Rates



Sources: Central Bank of Ireland and ESRI assumptions.

While media commentary has correctly highlighted the risks of renewed recession in some major economies on the basis of defining a recession as two consecutive quarters of negative GDP growth, this definition of a recession does not deserve the emphasis given to it. Figure 3 shows the evolution in the levels of real GDP over the past eight years for the eurozone, US and UK. While underlying quarterly growth rates would appear to indicate mixed performances in recent years, levels of economic output outside of the US have, in fact, remained weak and have not been sufficient to return real activity to levels that prevailed before the downturn. Quarterly growth rates, on average, have not been greater than 0.3 per cent in either of these economies. Pre-crisis peaks have not yet been surpassed, except in the US economy. This is reflected in the level of output, so that the concept that a sustained recovery has taken hold since troughs were reached in early 2009 is also less obvious.

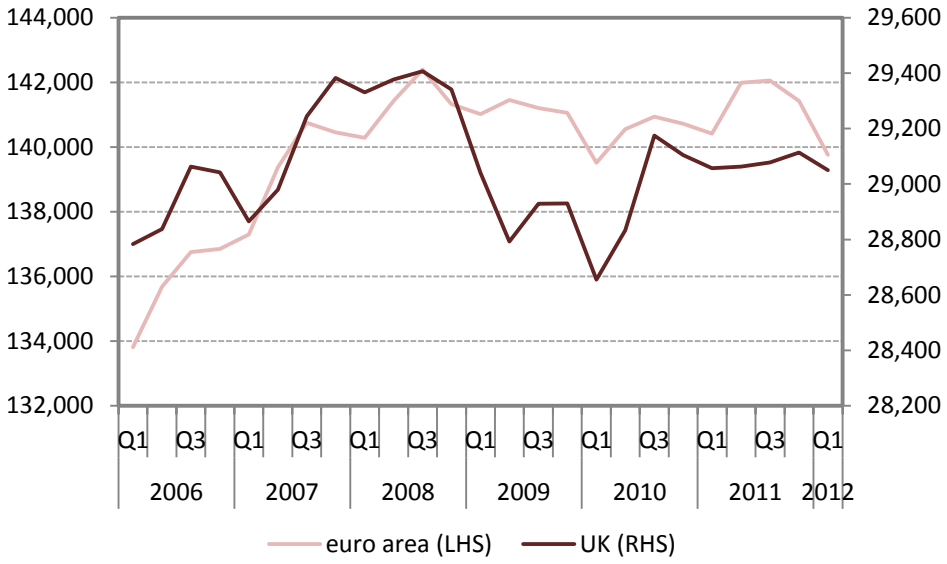
FIGURE 3 Real GDP Indices for Selected Economies (Base: 2005 = 100)



Sources: FocusEconomics, Eurostat, IMF, OECD, HM Treasury and Federal Reserve.

The National Bureau of Economic Research (NBER), which act as the official arbiter of the business cycle in the US, typically deliberate extensively over the classifications of periods of expansion and recession in the US economy. In its assessments, it considers a range of indicators aside from GDP data alone. One such indicator is employment data. Looking at aggregate employment levels in the eurozone, where wide internal divergences exist, it is not entirely apparent whether a recession has been exited and is threatening to return more recently or whether developments reflect an on-going recession, having failed to exhibit any sustained recovery since declines began in late 2008 (see Figure 4). The UK economy, on the other hand, appears to have had recovered some ground in 2010 after a relatively worse contraction in employment, although this was not sustained beyond the third quarter of that year. On the basis of these measures, it can be seen that current activity has not returned to levels visible prior to the downturn and neither the eurozone nor the UK have clearly exited what might well be conceived of as a prolonged recession.

FIGURE 4 Seasonally Adjusted Employment Levels for Selected Economies (Persons, Thousands)



Source: Eurostat.

2

Exports of Goods and Services

Annual results from *National Income and Expenditure Accounts* show that the volume of exports of goods and services grew by 5.1 per cent in 2011 and by 5.7 per cent in value terms, indicating that the overall export price deflator showed moderate growth at just 0.6 per cent. Trade data indicate that the main driver of growth last year were services exports, which grew by 7.7 per cent in volume compared with 2.7 per cent in the volume of merchandise trade.

The value of goods exported in the first half of 2012 was marginally less than the value of goods exported in the first half of 2011. The interpretation of the data for this period is complicated by some pharmaceutical products coming off-patent, where significant price falls might be expected. For other exports, prices might have increased as the euro had depreciated against the dollar. Looking at some categories of exports the value of food and beverages exports was down 2.7 per cent, medicinal and pharmaceutical products were down by 9.3 per cent, while other chemical products exports were virtually unchanged. Exports of professional equipment rose by 6 per cent, while electrical machinery exports fell by 6.3 per cent. The general weakness in exports following the dip in demand in the UK and the Eurozone economies from the second half of last year has continued into 2012. As discussed in the accompanying research note "Trends in Irish Exports", the dependence on currently weak economies is a serious constraint on any recovery in Irish exports. This matters in particular for indigenous firms in the food and drink sectors, from where the bulk of output from the traditional sector comes. The counterpart to weak export sales is weak production. Traditional sector output in 2011 was virtually unchanged from its level in 2010, but declined from its third quarter peak by 1.9 per cent in the fourth quarter and a further 3.9 per cent in the first quarter of 2012, before recovering slightly in the second quarter. The level in that quarter was 3.5 per cent below the average level for 2011 as a whole. By contrast, modern sector output has continued to grow, output of chemicals and pharmaceuticals rose on the first half of the previous year, though turnover was down significantly, reflecting the fall in the price of off-patent drugs, among other factors.[3] The patent issue is one that has affected the value of production, the value of exports, and the amount of profits of firms affected. There may also be some volume effects on production and exports depending on how a product out of patent is treated. It could be argued that with the expiry of patent protection there is a loss of intellectual

[3] The "modern" sector comprises of a number of high-technology and chemical sectors.

property and the products affected are now new products, although the active ingredient is unchanged. It remains to be seen what procedure is adopted. Typically, when changes occur then a convention is adopted for treating the change and there may be some discontinuities in the data and difficulties in interpretation.

Taking the year as a whole we expect traditional sector exports to fall by about 3.5 per cent and exports of the modern sector to increase by 4.5 per cent, both in volume terms, with price increases of 2 and 3 per cent, respectively. Overall, merchandise export volumes may rise by about 2.5-3 per cent this year. For 2013, as discussed earlier, we expect no major increase in output and demand in the eurozone or in the UK economies. Thus, traditional sector exports are unlikely to grow rapidly, though there could be some growth in exports to the UK as firms competitiveness has improved. Modern sector exports are likely to continue to grow rapidly. Significant output is coming on stream from early 2013 from the expansion of existing firms in the pharmaceutical and electronics sectors, so that overall merchandise exports might grow by about 6 per cent.

Tourism receipts this year have also been affected by the slowdown in the world economy. The number of tourists from the UK and the US in the first half of the year are down on the first half of 2011. However, the number of those from Europe and the rest of the world have increased. Overall the number may be slightly up on last year, but much less than previously forecast, primarily because of the downturn in the UK and the eurozone economies. There may be modest growth again in 2013, but a further deterioration in the EU economies could easily make this look wildly optimistic.

Exports of other services are dominated by a small number of multinationals in the high-tech area. Sales from these companies reflect a still strong demand situation, particularly in communications, software and back-office support services. Thus, we expect continued rapid growth in these services this year and next, by about 8.5 per cent and 6.5 per cent respectively.

TABLE 1 Exports of Goods and Services

	2011	2011	2012	2013
	Value	Volume Change		
	€ billion	%	%	%
Merchandise	84.9	2.7	3.0	6.0
Tourism	3.3	4.0	2.8	3.5
Other Services	78.2	7.9	8.5	6.5
Exports of Goods and Services	**166.8**	**5.1**	**5.6**	**6.2**

Note: Value of total exports of goods and services includes FISM adjustment.
Source: Central Statistics Office and ESRI Forecasts.

3

Investment

Gross fixed capital formation continued to contract in 2011, although at a slower pace than had been experienced in 2009 and 2010. The estimated volume fall of 12.6 per cent was the fourth successive year of contraction and is higher than previously estimated. With the investment deflator continuing to contract the value of investment fell by 14 per cent.

In light of the weaker growth in 2011 and the available indicators for 2012, we have revised downwards our forecast for this year. Investment in both residential and other building appears to be still contracting, although our view is now that prospects for residential investment are weaker than we had previously thought, while the contraction in other building will be more moderate. Construction costs seem to have stabilised so that overall new housing and other construction prices are likely to remain relatively unchanged. Prices for existing houses look set to fall by approximately 15 per cent this year and perhaps by up to 10 per cent. Overall, building and construction is forecast to decline by close to 13 per cent in 2012, marginally less than in 2011. Investment in machinery and equipment is forecast to increase by 3.4 per cent in volume, a substantial improvement on the contraction of over 8 per cent recorded in 2011. Thus, total gross fixed capital formation in 2012 is forecast to decline by 5.4 per cent in 2012.

The biggest change to our forecast since the previous *Commentary* is to our forecast for investment in 2013. In addition to the announcement by NAMA that it would undertake some investment in residential and commercial construction, the government has announced an infrastructure stimulus package involving projects for the Departments of Health, Justice, Education and Transport. The lead in time on the announced projects suggests that the impact on 2012 will be small and that most of the impact will be in 2014, though there will be some effect in 2013 if the projects go ahead promptly. Foreign Direct Investment (FDI) appears to be holding up well, with new firms locating in Ireland in services and the expansion of existing firms in both services and manufacturing. Potentially, there are still some projects that could be located here – notably a further expansion of Intel. On the basis of these factors, total investment is expected to rise in 2013, by 4.1 per cent in volume terms.

TABLE 2 Gross Fixed Capital Formation, % Change in Volume

	2011	2011	2012	2013
	Value	Volume Change		
	€ billion	%	%	%
Housing	3.9	-11.9	-18.9	0.0
Other Building	4.9	-18.7	-7.5	8.0
Total Building and Construction	**8.8**	**-15.8**	**-12.6**	**4.7**
Machinery and Equipment	7.3	-8.3	3.4	3.5
Total	**16.1**	**-12.6**	**-5.4**	**4.1**

Source: Central Statistics Office and ESRI Forecasts.

4

Incomes, Prices and Consumption

Incomes

Data in the *National Income and Expenditure* for 2011 show that income in agriculture, forestry and fishing rose to €3.2 billion, reflecting strong output and price growth. With output this year affected by poor weather it is likely that incomes in this broad sector will be weaker in 2012, although they should show some recovery in 2013 if more normal weather conditions prevail.

Aggregate non-agricultural wages, salaries and pensions, including employers' social welfare contributions fell by 1.4 per cent in 2011. It would appear that this is mainly due to the fall in employment during the year as data on average earnings suggest that these remained broadly unchanged in 2011. With employment expected to continue to decline this year and wage growth remaining weak, a further decline in non-agricultural wages etc. is forecast for this year, although at just 0.1 per cent this represents a return to some stability following three successive years of sharper declines. The decline in employment is forecast to continue into 2013, although this will be smaller than in recent years. Allowing for our assumption that average earnings will be unchanged, we expect non-agricultural wages and salaries to show a marginal decline next year. Other non-agricultural incomes, (interest, dividends, rent and self-employed earnings) also declined in 2011 resulting in total income falling by 1.4 per cent. Total income is expected to decline this year and remain broadly unchanged in 2013. Transfer payments are expected to decline this year and again in 2013, while personal taxation is expected to continue to grow as further revenue raising measures are introduced. Thus, aggregate personal disposable income, which is estimated at €85.9 billion last year, will decline to €84.1 billion in 2012 and €82.9 billion in 2013.

According to data from the latest *National Income and Expenditure,* the personal savings rate fell sharply in 2010 to 6.8 per cent from 11.4 per cent in 2009. The sharp decline continued into 2011 with the savings rate being recorded at 5.4 per cent. This savings rate contrasts with the high level of savings depicted by the Institutional Sector Accounts.[4] This decline is consistent with the view, expressed

[4] The difference arises due to the fact that the sector accounts provide a broader measure of savings by including non-life insurance premiums and claims, and private sector social contributions and benefits as well as some other items. Savings in the Institutional Sector Accounts is a gross figure, whereas National Accounts show net savings.

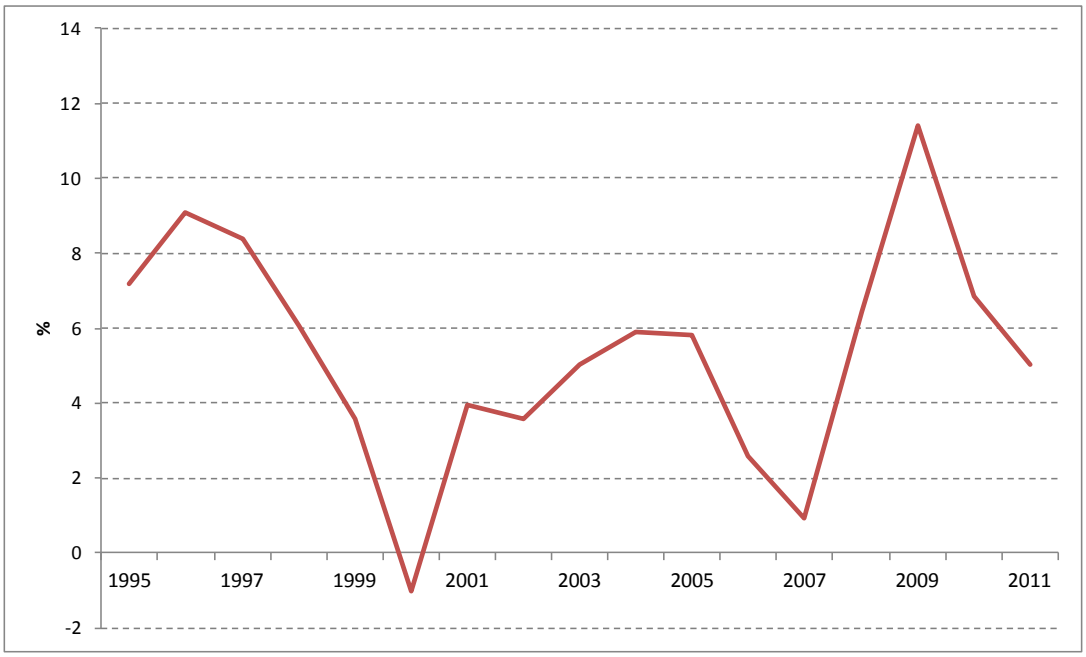
in the last *Commentary*, that the fall in household incomes has reduced household resources and that much of personal savings relates to the repayment of debt rather than the accumulation of savings. Indeed, the evidence from the National Accounts suggests that it is possible that personal consumption levels are being maintained by reducing savings, see Table 3. With saving levels reduced as substantially as they have been they are unlikely to support consumption going forward. With decline forecast in disposable income our view is that personal savings will continue to decline and so we expect that the saving rate will fall to 2.8 per cent in 2013.

TABLE 3 Personal Disposable Income

	2010	2011	2012	2013
	€ bn	€ bn	€ bn	€ bn
Agriculture, etc.	2.6	3.2	3.0	3.2
Non-Agricultural Wages	68.7	67.8	67.7	67.5
Other Non-Agricultural Income	12.5	11.5	11.0	11.0
Total Income Received	83.7	82.5	81.7	81.7
Current Transfers	25.2	25.8	25.4	24.7
Gross Personal Income	109.0	108.4	107.1	106.5
Direct Personal Taxes	20.9	22.4	23.0	23.6
Personal Disposable Income	88.1	85.9	84.1	82.9
Consumption	82.1	81.3	80.9	80.6
Personal Savings	6.0	4.6	3.2	2.3
Savings Ratio	6.8	5.4	3.8	2.8
Average Personal Tax Rate	19.2	20.7	21.5	22.1

Source: Central Statistics Office and ESRI Forecasts.

FIGURE 5 Personal Savings Rate, Personal Savings as a % of Personal Disposable Income



Source: Based on CSO, *National Income and Expenditure Accounts* 2011.

Consumer Prices

The annual increase in consumer prices averaged 1.9 per cent in the seven months to end-July. Having peaked this year to date at an annual rate of 2.2 per cent in March, the index has declined steadily with annual inflation running at 1.6 per cent in July. However, the weaker exchange rate and high energy prices means we expect inflation to increase over the second half of this year, although this could be moderated if the euro/dollar rate improves on the back of the new ECB measures. On this basis we are forecasting an annual average rate of inflation of 1.9 per cent this year. With energy prices expected to remain high and some pick-up in activity, we anticipate that inflation will remain at around this level in 2013.

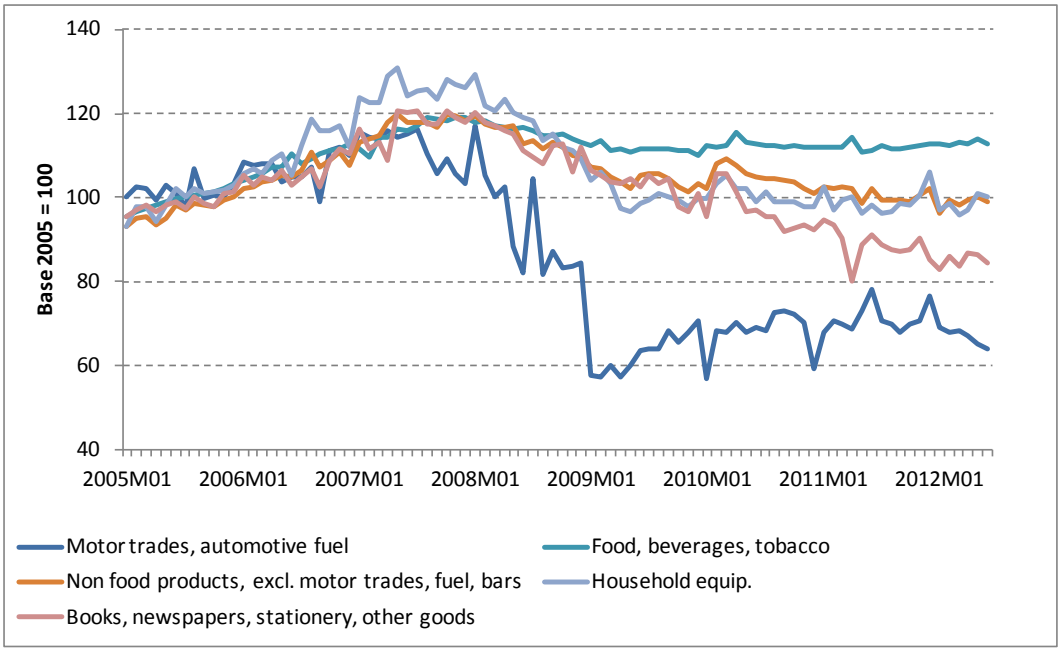
Personal Consumption

According to the National Accounts, the volume of personal consumption in 2011 fell by 2.4 per cent. The personal consumption deflator grew by 1.5 per cent compared with a fall in 2009 and 2010. Thus, the fall in the value of personal consumption was just 0.9 per cent.

Figures for the first half of 2012 indicate that the volume of retail sales has continued to decline, and that the retail sales deflator has remained positive but moderate. Data from the retail sales index shows a mixed picture for the performance of different retail sectors. The motor trade (cars and fuel) has

shown a sharp decline in sales, partly reflecting the end of the car scrappage scheme. The sale of books, newspapers, stationary and other goods has also declined. Although other sectors have declined there are some signs of stability. However, there is need for caution. The category entitled household equipment has been relatively stable in the past number of years. The more disaggregated data show that, within this group, sales of furniture and lighting, and hardware, paints and glass have continued to decline, while in recent months there has been strong growth in retail sales of electrical goods.

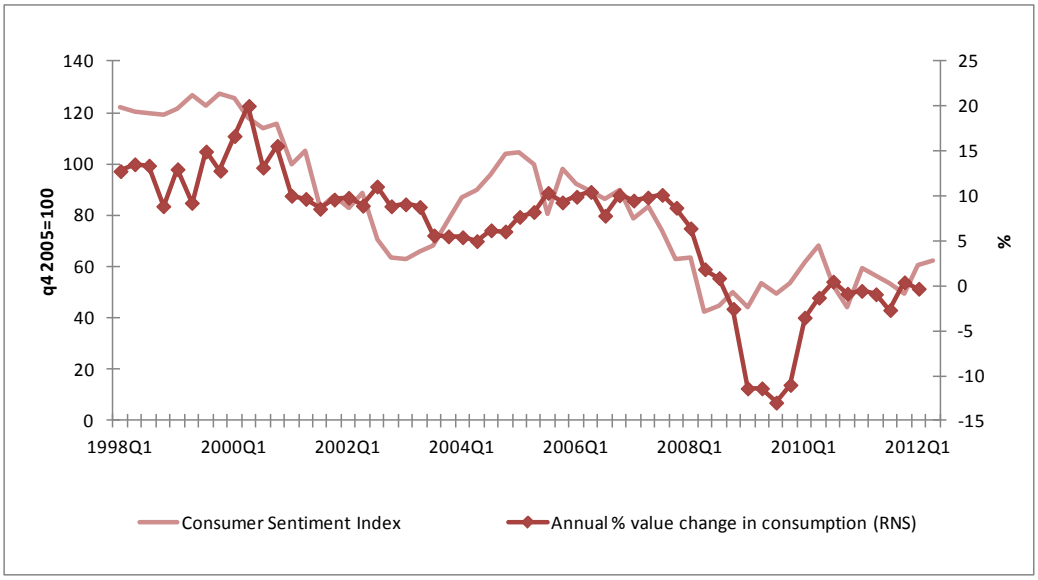
FIGURE 6 Retail Sales, Volume Index, Base year 2005=100



Source: Central Statistics Office.

In recent months the KBC Bank Ireland/ESRI Consumer Sentiment Index has risen. While not perfectly aligned, this would suggest, historically, some growth in the value of consumption. However, in the present situation household finances are constrained and disposable incomes are likely to contract further following December's Budget. Thus, over the remainder of the year it seems likely that overall retail sales will remain weak. With concerns about personal income levels associated with the introduction of the property tax and the next Budget, we continue to expect that personal consumption volumes will contract in 2012 and 2013, although the contraction in 2013 will be more moderate than that experienced in recent years. With the deflator on personal consumption averaging 1.6 per cent in 2013, the value of personal consumption is forecast to decline by 0.4 per cent in 2013. In volume terms personal consumption is expected to contract by 2.3 per cent this year and by 2.0 per cent in 2013.

FIGURE 7 Consumer Sentiment and Growth in Personal Consumption (Value)



Source: KBC Bank Ireland and Central Statistics Office.

5

Public Finances

The Exchequer returns for August indicate that in aggregate terms the public finances are broadly consistent with the outcome for the year set out in Budget 2012. Table 4 compares the 2012 and 2011 revenue outcomes for the year to end August. The adjusted figures for 2012 allows for the carryover into 2012 of corporation tax from 2011 of €251 million and a reclassification of PRSI receipts to income tax this year amounting to €254 million to end August. The adjustments allow us to consider the underlying revenue position. For the first eight months overall revenue growth has been strong – particularly income tax including the Universal Social Charge (USC). Unfortunately, the data do not separate out the USC from the total, though this should be possible and should be published. VAT receipts have increased but as there was an increase in the standard rate from 21 per cent to 23 per cent the increase in revenue is not surprising – in spite of the general weakness in household and investment spending. Corporation tax receipts have increased – though a significant proportion of the payments are due in the final quarter. Receipts from excise duties have fallen, partly it seems as a result of timing issues related to the increase in motor registration tax, while the increase in the duty on tobacco products may have reduced purchases through retail outlets.

TABLE 4 Tax Revenue, € million, January-August 2011 and 2012

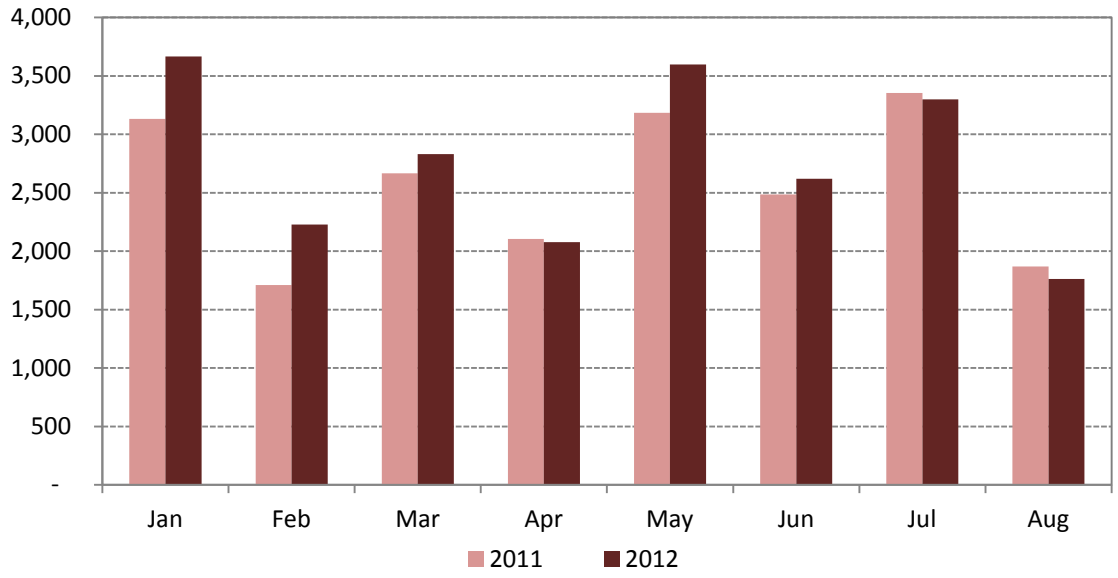
	Jan.-Aug	Jan.-Aug	Jan-Aug adjusted	% change 2011-adjusted 2012
	2011	2012	2012	
Income tax (incl. USC)	8,288	9,356	9,092	9.7
VAT	6,620	6,827	6,827	3.1
Corporation Tax	1,762	2,131	1,877	6.5
Excise	2,983	2,938	2,938	-1.5
Other	849	824	824	-2.9
Total	20,502	22,076	21,558	5.2

Source: Analysis based on Dept. of Finance data.

While the figures for the year to end-August are good, the figures for both July and August were running below those for the same period in 2011. There were special factors at work in July 2011 which increased the revenue figures and these were not present this year. In aggregate for the two months, the decline is 3.1 per cent. There is a high degree of variability in monthly and quarterly figures so that the

revenue position must be monitored. At present, the overall targets for the year seem realisable with total tax revenue coming in at €36 billion, or at about the same level as in the Stability Programme Update (SPU). The forecast General Government Balance (GGB) of 8.1 per cent is marginally better than the original Troika target of 8.6 per cent, partly reflecting the higher level of nominal GDP. Generally, the revenue figures have been close to the time profile expected on a cumulative basis, though monthly the data are more varied, as might be expected (Figure 8).

FIGURE 8 Exchequer Tax Revenues (euro millions)



Source: Analysis based on Dept. of Finance data.

The expenditure side for the year to end August is more difficult to interpret. The budget projections (modified in the Revised Estimates for the Public Services 2012, February 2012 and adjusted later in April) envisaged a decline of 2.2 per cent in gross voted current expenditure and of 13.4 per cent in gross voted capital expenditure with overall expenditure falling by 3.3 per cent. The data to end August indicate an increase in net voted current expenditure of 2.4 per cent and a decline of 20.9 per cent in capital expenditure, with total expenditure increasing by 0.8 per cent. The main difficulty with the interpretation of the data relates to the concept of "net" expenditure, particularly in relation to social protection. The figures for social protection are net of PRSI receipts so that a reduction in PRSI receipts appears as increased expenditure. Since PRSI receipts are running below expectations then welfare payments appear to be increasing. In the same way, the reclassification of some PRSI receipts to income tax can affect relative comparisons. A similar issue arises in the health vote as payments from the UK Department of

Health which "reduce" expenditure, were received in July, somewhat earlier than expected. In both of these departments expenditure was running ahead of that planned. The problem of interpretation could readily be resolved by treating PRSI receipts as tax revenue and other receipts, as with Health, as miscellaneous receipts on the revenue side. In spite of these difficulties in the interpretation of the data it is apparent that expenditure will increase this year by a modest amount.

It is necessary to place this analysis within our forecasting framework. This year there has been a significant reduction in public sector employment following the early retirement package, normal retirement and restrictions on recruitment. The lump sum payments add to expenditure this year, so that the value of net current expenditure on goods and services will increase but next year these payments will not be made and there will be some carryover on pay savings from this year. By year end public employment excluding state bodies could be 3 per cent down and this has implications for 2013. With continued restrictions on non-pay expenditure in general government we expect the volume of net current expenditure to fall by about 2 per cent this year and again in 2013. The deflator for public consumption will increase this year as a result of lump sum payments but will decline in 2013 as the total pay bill (including public sector pensions) falls.

TABLE 5 Exchequer Finances

	2010	2011	2012	2013
	Outcome €bn	Outcome €bn	Forecast €bn	Forecast €bn
Net current expenditure	47.0	48.0	51.1	50.9
Net voted expenditure	40.5	41.4	42.5	41.5
Non-voted expenditure	6.5	6.6	8.6	9.4
Current Revenue	34.4	36.8	38.7	39.0
Tax revenue	31.8	34.0	36.0	37.0
Non-Tax revenue	2.7	2.8	2.7	2.0
Current Budget Balance	-12.6	-11.2	-12.4	-11.9
Capital Resources	1.8	2.5	1.8	1.8
Capital Expenditure	8.0	16.2	7.5	4.0
Capital Expenditure - Voted	5.9	4.3	4.1	3.0
Capital expenditure - non voted	2.0	11.9	3.4	1.0
Capital Budget Balance	-6.2	-13.7	-5.7	-2.3
Exchequer Balance	-18.7	-24.9	-18.1	-14.1
as % of GDP	-12.0	-15.7	-11.2	-8.5
General Government Balance	-48.4	-20.2	-13.1	-12.4
as % of GDP	-30.9	-12.7	-8.1	-7.5

Note: The Exchequer Balance figure for 2012 is adjusted to take account of the arrangement made for the March promissory note payment of €3 billion.

Source: Stability Programme Update and own forecasts.

The public finance position remains very difficult. After five years of adjustment the deficit remains high and while the targets set with the Troika are being met there is still a considerable amount to do before balance is restored. The extent of the deterioration in the public finances is still little appreciated so that it is worthwhile to look at the numbers.

TABLE 6 Receipts and Expenditure of Government, € million

	2002	2007	Change 2002-2007	2011	Change 2007-2011
	€ million	€ million	€ million	€ million	€ million
Receipts					
Taxes on income and wealth	*14,381*	*20,904*	*6,523*	*18,642*	*-2,262*
Social Insurance taxes	*5,517*	*9,053*	*3,536*	*7,532*	*-1,521*
Taxes on expenditure	*15,828*	*25,216*	*9,388*	*17,678*	*-7,538*
Rental, investment income etc.	*1,557*	*2,238*	*681*	*2,620*	*382*
Miscellaneous receipts (1)	*1,703*	*2,933*	*1,230*	*3,991*	*1,058*
Total Current Receipts (2)	38,986	60,345	*21,359*	50,464	-9,881
Taxes on capital (3)	*770*	*3,486*	*2,716*	*1,123*	*-2,363*
Loan Repayments and Equity Sales	*1,197*	*861*	*-336*	*759*	*-102*
Other capital receipts (4)	*1,488*	*2,531*	*1,043*	*303*	*-2,228*
Total Capital Receipts	3,455	6,880	*3,425*	2,185	-4,695
Total Receipts	42,441	67,223	*24,782*	52,649	-14,574
Expenditure					
Subsidies	*788*	*870*	*82*	*639*	*-231*
National debt interest	*1,758*	*1,957*	*199*	*5,143*	*3,186*
Transfer payments	*13,429*	*23,180*	*9,751*	*28,319*	*5,139*
Expenditure on goods and services (5)	*19,107*	*29,530*	*10,423*	*27,111*	*-2,419*
Of which wages, salaries and pensions	*11,973*	*19,838*	*7,865*	*18,854*	*-984*
Total current expenditure (6)	35,082	55,537	*20,455*	61,213	5,676
Grants to enterprises (7)	*617*	*823*	*206*	*6,060*	*5,237*
Gross physical capital formation (8)	*5,342*	*8,788*	*3,446*	*4,249*	*-4,539*
Redemption of securities/loans etc.	*13,003*	*8,223*	*-4,780*	*1,936*	*-6,287*
Other capital expenditure (9)	*597*	*1,051*	*454*	*391*	*-624*
Total Capital Expenditure	19,559	18,885	*-674*	12,636	-6,249
Total Expenditure	54,641	74,422	*19,781*	73,849	-573
Net Lending/Borrowing (2+3+4-6-7-8-9)	**-394**	**166**	***560***	**-20,023**	**-20,189**
General Government Balance (GGB)	**-460**	**170**	***630***	**-20,158**	**-20,328**
Net Expenditure on goods and services excl. Depreciation (5-1)	17,404	26596	*9,192*	23,119	-3,477
Depreciation	1,597	2400	*803*	2,291	-109
Net expenditure on goods and services	**19,000**	**28997**	***9,997***	**25,410**	**-3,587**

Source: National Income and Expenditure Accounts 2011.

*Figures in brackets refer to redemptions of securities and loan repayments.

The data in the table summarise the public finance position associated with the bubble economy and the recession over the period 2002 to 2011. In the period of the boom both revenue and expenditure expanded rapidly. Nominal current expenditure increased by almost 10 per cent per annum over the five years 2002 to 2007 with transfer payments and pay increasing by about 11.5 per cent per annum. Total receipts increased more rapidly than total expenditure with the General Government Balance moving from a small deficit in 2002 to a small surplus in 2007. The data also show the extraordinary turnabout since 2007. The net effect is captured by Net Lending/Borrowing which has moved from a small surplus in 2007 to a deficit of over €20 billion (of which €5.8 billion arises due to the costs to the state of recapitalisation of banks in 2011). Both revenue and expenditure have been affected. Total receipts fell by €14.6 billion (-21.7 per cent). The decline was widespread across all major categories of taxation – income taxes, social insurance taxes, VAT, and Capital Gains taxes. On the expenditure side national debt interest has increased significantly, reflecting the increased government borrowing associated with the recession, and the rapid growth in total transfer payments. Other current expenditure has been cut, and investment expenditure has fallen by over half.

6

Population and the Labour Market

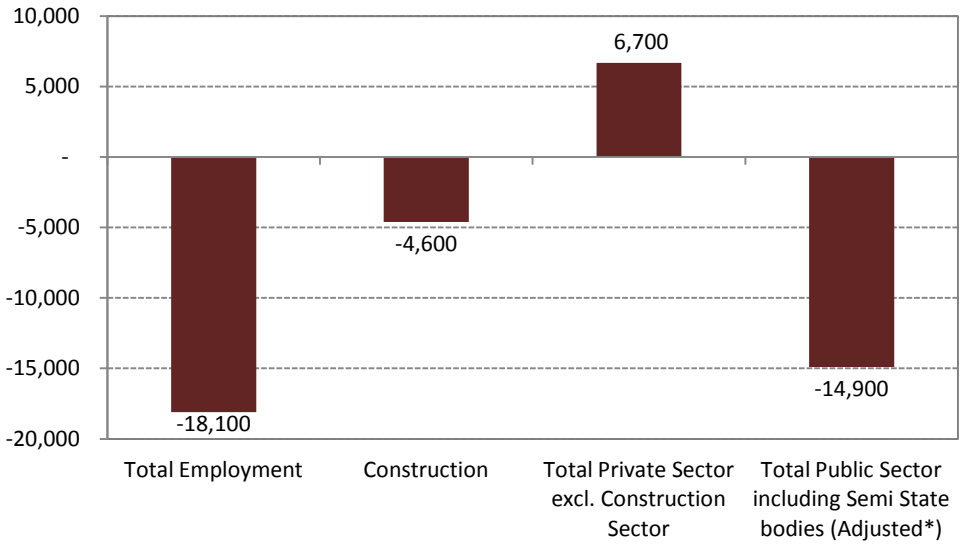
Despite remaining at very high levels, data from the *Quarterly National Household Survey (QNHS)* suggest some continued moderation in the fall in the number of people at work, with signs of sectoral stabilisation emerging. After declining by 38,000 in 2011, *QNHS* data for the first quarter of 2012 showed a fall in the total number of people at work of 18,000, when compared to the same period of 2011. The labour force also contracted in the first quarter, down by 4,800 year-on-year after an annual average decline in 2011 of almost 26,000, while the participation rate, which stabilised last year at just over 60 per cent, is forecast to remain broadly unchanged.

The latest *QNHS* data for the first quarter of 2012 reveal a headline unemployment rate of 14.8 per cent. Live Register data place unemployment at about the same rate in the period since. Employment continued to weaken in the first quarter across most sectors, although the pace of decline moderated and sectoral differences were apparent. It is now forecast that there will be an annual average level of employment in 2012 of 1,796,000, representing a fall of 12,000 for the year as a whole. It is expected that the fall in aggregate employment in 2012 will mask some stabilisation in private sectors other than in the services sector, where a reduction in the numbers employed in financial services is envisaged. Industrial employment should stabilise as growth in industrial output and exports continues, despite headwinds from the external environment. Construction employment is also likely to stabilise this year on the back of the investment stimulus, planned NAMA developments and construction work arising from FDI inflows (although much of these inflows are not expected to be particularly capital-intensive). Stronger economic growth in 2013 should see a more moderate fall in the numbers employed of just 5,000, signifying some degree of stabilisation in the overall labour market.

Private and public sector employment trends have diverged more recently as an on-going consolidation of public finances continues to prompt reductions in the public sector, although private sector conditions appear less strained, when compared to previous years (see Figure 9). The *QNHS* release for the first quarter of 2012 estimated the impact of the additional temporary Census field staff employed during the first half of 2011 as adding 5,300 persons to the public sector workforce. When these are excluded, the *Earnings and Labour Costs* release shows that public sector numbers (including semi-state bodies) fell by

20,500 persons year-on-year in the second quarter of 2012 (14,900 as of the first quarter). A large share of this is on the back of the incentivised early retirement scheme. Excluding the weakened construction sector, where there was a fall of 4,600 persons, private sector employment actually increased by 6,700 persons annually in the first quarter of 2012.

FIGURE 9 Employment Changes Between Q1 2011 and Q1 2012 (Number of Persons)



Source: Central Statistics Office.
Note: *Adjusted total public sector data excludes any decline owing to temporary Census staff.

The number of persons on the Live Register has remained within a relatively narrow range for almost three years now. Looking through short- term volatility, this corroborates the view that some degree of stabilisation is evident in the labour market, despite sectoral divergences. A key feature of this stabilisation, however, is the continued fall in the labour force, with net outward migration lessening the impact of falling employment on headline numbers.

Long-term unemployment represents a major concern with the number of persons unemployed for longer than one year close to 187,000 as of the first quarter of 2012, when compared to approximately 26,000 persons in the first quarter of 2007. As noted in the previous *Commentary*, males accounted for the largest increase in long-term unemployed during this period, with those aged between 25-34 years strongly represented. The share of long-term unemployed males with relatively high levels of educational attainment (i.e. Leaving Certificate or higher) has also increased, rising from just 36.5 per cent in the first quarter of 2007 to 59.1 per cent in the final quarter of 2011, while for females the rate increased from 41.9 per cent to 74.4 per cent over the same period.

TABLE 7: Employment and Unemployment

	Annual Averages, 000s			
	2010	2011	2012	2013
Agriculture	85	83	81	81
Industry	360	342	338	340
of which: Construction	120	107	103	103
Services	1,403	1,385	1,376	1,372
Total at work	1,848	1,810	1,796	1,793
Of which: non-agri. employees	1,446	1,427	1,421	1,422
Others	317	300	295	290
Unemployed	292	304	313	307
Labour Force	2,140	2,114	2,110	2,100
Unemployment Rate, %	13.6	14.4	14.8	14.6
Participation rate, %	61.3	60.7	60.3	60.3

Sources: Central Statistics Office and ESRI Forecasts.

The annual average number of unemployed in 2012 is expected to be higher than in 2011 at 313,000 and is expected to decline in 2013 to 307,000, see Table 7. Much of the decline over the two years is due to high emigration levels, with the participation rate relatively unchanged, with our forecasts implying a further labour force contraction in 2013. Employment opportunities are expected to remain subdued, with no significant thrust stemming from relatively less labour-intensive growth in the expanding export sectors.

7

Imports and the Balance of Payments

The annual *National Income and Expenditure Accounts* show that the volume of goods and service imported declined by 0.3 per cent in 2011. In value terms total imports grew by 2.8 per cent, resulting in a price deflator for imports of 3.1 per cent.

The value of goods imported in the first half of the year was marginally below that in the first half of 2011. Oil and gas imports were virtually unchanged but most other major categories of imports fell in value. Unfortunately, we have no price indices for imports for the same period but given the rise in basic energy prices and the depreciation of the euro, import prices must have increased so that the volume of imports has fallen. When imports by end-use are examined then a similar picture of decline in capital goods, consumer goods and materials for further production emerges – though the capital goods decline is relatively small. Looking at the time path there is a high degree of variability by month and by quarter so that trends are not obvious. Imports rose sharply in the first quarter of the year from the levels in the second half of 2011, but fell back by 9 per cent in the second quarter. We think there may have been a stock cycle underway in the first half of the year and this may explain the relatively high level of imports in the first quarter and the decline in the second quarter. If this is the case, then imports could pick up in the second half of the year, but we are still forecasting a modest 0.5 per cent volume decline in merchandise imports, with a price increase of about 3 per cent. If this occurs then the carryover into 2013 will be positive. Given the profile for domestic and export demand, merchandise import volumes should then increase in 2013 and we are forecasting a rise of 5 per cent.

TABLE 8 Imports of Goods and Services, % change, Volume

	2011	2011	2012	2013
	Value	Volume Change		
	€ billion	%	%	%
Merchandise	48.3	-2.3	-0.5	5.0
Tourism	5.0	-7.2	-7.0	-3.0
Other Services	78.2	1.4	4.5	6.3
Imports of goods and services	131.9	-0.3	2.2	5.5

Note: Value of total imports of goods and services includes FISM adjustment.
Source: Central Statistics Office and ESRI Forecasts.

Service imports, as with service exports are much more difficult to predict. The new service export companies have very big margins and very large volumes of business. While they initially load a large gross margin into their Irish operations they tend to incur significant management charges in zero-tax countries, so that, although service exports are very large, so too are service imports. This year such imports could increase by 4.5 per cent in volume, but next year the increase could be 6.3 per cent. Tourism imports, on the other hand are set to fall this year by as much as 7 per cent. Next year the decline could be similar, as disposable income levels are expected to fall again. Overall, we expect imports of goods and services to rise by 2.2 per cent this year and 5.5 per cent in 2013.

Net Factor Income

Net factor income is the difference between two large gross flows and while it has often loosely been referred to as the profits of multinationals the size and composition of the gross flows indicate that it is much more than this. On the debit side, direct investment income is important, but there is also considerable portfolio investment income. National debt interest paid abroad is not separately identified by heading (interest and other) but the total is given. On the debit side Irish multinationals also earn substantial amounts abroad and there are also significant flows of equity and interest on debt. The following summarises the data for 2011.

TABLE 9 Net Factor Payments 2011, € million

	Credits	Debits	Net
	€ mn	€ mn	€ mn
Total Direct Investment Income	14,573	41,114	26,541
Income on Equity			
- Dividends	1,697	13,888	12,191
- Reinvested Income	9,134	22,918	13,784
Income on Debt	3,743	4,305	562
Portfolio Investment Income	23,141	30,571	7,430
- Income on Equity	5,346	14,419	9,073
- Income on debt	17,795	16,150	-1,645
Other Investment Income	17,629	15,272	-2,357
Compensation of employees	539	760	221
Total (Factor Income BoP)	55,882	87,717	31,835
Net Factor Income (National Accounts)			31,977
National Debt Interest	139	4,394	4,255

Source: Balance of International Payments Quarter 1 2012; National Income and Expenditure Annual Results for 2011, Central Statistics Office.

Data for the first quarter of 2012 indicate that while total income inflows have increased income outflows have increased more rapidly. National debt interest payments were relatively stable in that quarter but are projected to increase very significantly for the year as a whole. Overall, we expect net factor income to increase by about €3.5 billion to €35.4 billion this year and by somewhat less in 2013 if income levels and profits and dividends from abroad pick up.

The Balance of Payments

Revised Balance of Payments figures for 2010 put the Balance on Current Account surplus at €1.782 million or 1.4 per cent of GNP. We expect an increase in the size of the surplus both this year and next, shown in Table 10.

TABLE 10 Balance of Payments

	2011	2012	2013
	€ bn	€ bn	€bn
Exports of goods and services	166.8	177.9	193.3
Imports of goods and services	131.9	138.9	149.8
Net factor payments	-32.0	-35.5	-38.9
Net transfers	-1.2	-1.2	-1.2
Balance on current account	1.8	2.3	3.3
As a % of GNP	1.4	1.8	2.6

Source: Central Statistics Office and ESRI Forecasts.

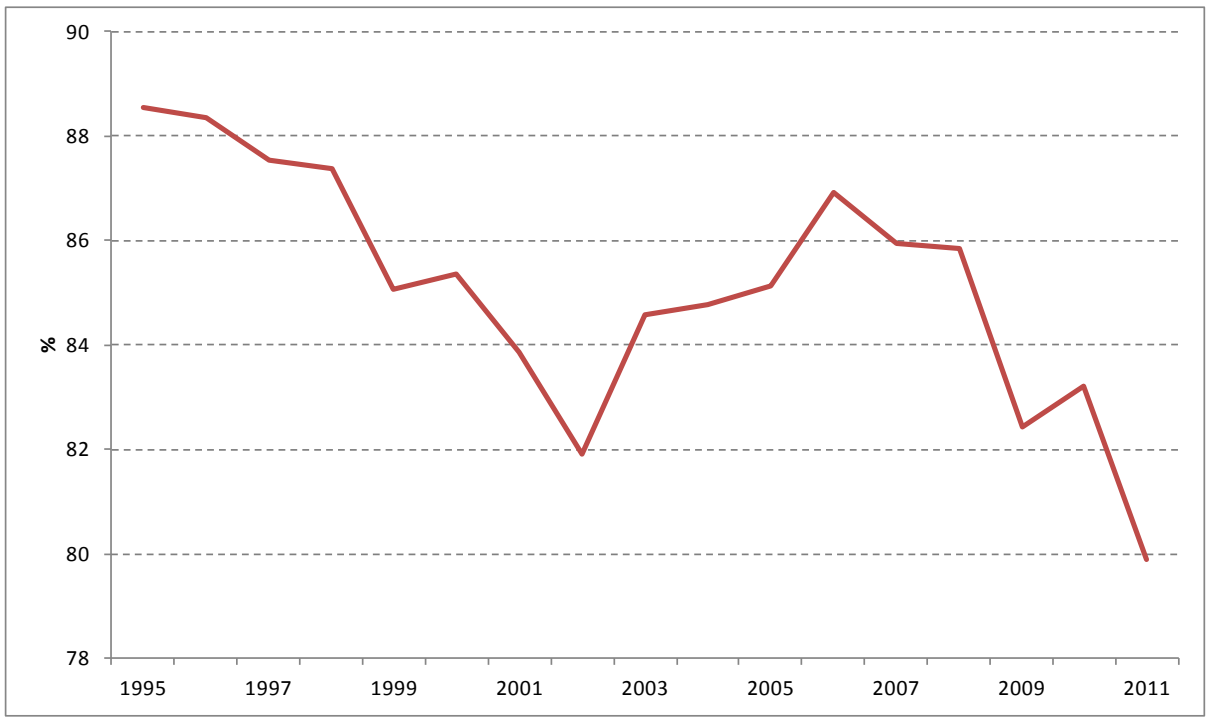
8

GDP and GNP

We have argued in previous *Commentaries* that GDP is a poor measure of what is happening in the economy. The logic of this position is that transfer pricing between subsidiaries of multinationals leaves the profits' figures based on tax planning rather than true arms length prices – whatever they may be in some cases. This situation may be further complicated by transfer pricing by way of management charges which have the effect of reducing GDP to minimise tax liabilities in Ireland. The complication arises in that the link between sales revenue and output is unclear. The fundamental point is that when we look at some components of net factor payments it is clear that while the profits of foreign multinationals are generated in Ireland they do not form part of income that accrues to people here. The element that accrues is the amount of corporation tax paid in Ireland by these firms as this is netted out from their profits. In spite of this GDP seems to be the preferred measure used by the Troika to evaluate economic performance. The rationale behind this seems to be based in the first instance on comparability across countries, i.e. we are using the same measures, so that if the concern is the level of the deficit or the debt, we are using equivalent relative measures. A second reason seems to be that it is believed that in principle net factor payments in some senses are taxable. Earlier we have shown that the net factor payments figure is the difference between two gross flows. The inflow may already have been taxed and is subject to double tax agreements with other countries, while profit repatriations have been subject to Irish taxation. If this were raised then, as we have seen, tax planning could easily eliminate the tax base. National debt interest paid abroad is not subject to Irish taxation.

Of much greater importance is the continuing increase in the gap between GDP and GNP (Figure 10). This is set to continue to increase, not least on foot of increased interest payments on the national debt.

FIGURE 10 GNP Relative to GDP (%)



Source: Central Statistics Office.

Domestic demand has declined each year since 2007 – the fall in 2009 being particularly marked at 11 per cent. By 2011 domestic demand was 21 per cent below the 2007 peak. This year we expect final demand to fall again, by 2.8 per cent, slightly less than in 2011, but next year the decline could be even lower at 0.2 per cent.

Sectoral Output

A relatively low pace of expansion in manufacturing industries is expected in 2012, with growth owing much to the resilience of the modern sector. In volume terms, the broad chemicals sector is likely to contribute the largest share of growth, where it appears that volumes may be broadly maintained in spite of patent expiries. Signs of growth amongst manufacturers involved in production of computer, electronic, optical and electrical equipment will also boost manufacturing output within the modern sector. The traditional sector, while faring less poorly in recent months, is still likely to show a decline in output for the year as a whole. Provided our expectations for some improvement in the international environment materialise next year, we forecast output in manufacturing to rise by 3.0 per cent in 2013, following a more subdued rise of just 2.3 per cent this year. Total industry (i.e. including building and construction) is likely to be less expansive this year as a result of weaknesses in the construction sector. These are likely to be offset by continued FDI inflows as well

as planned development by NAMA and the investment stimulus in 2013, so that the first expansion in six years is expected.

Output in total services output is expected to rise marginally for 2012, up by 1.9 per cent, with a slightly improved pace of expansion forecast in 2013 at 2 per cent. We expect that non-market services will be highly constrained, with falling numbers in public services prompting a sharper drop in the volume of public administration and defence this year. The cost of these early retirements is likely to cause this sector to expand in price terms for 2012. The absence of these early retirements next year will unwind this impact resulting in a reversal of the price deflator. Market services are still expected to rise in line with some recovery in the demand for international services and some substitution between public and private healthcare services remains likely. As such, we anticipate growth in other services volumes of 2.1 per cent and 2.2 per cent for 2012 and 2013, respectively.

Gross output in agriculture may fall slightly this year. The poor weather conditions have adversely affected output – milk output for the first seven months is down 1.3 per cent. Grass growth and grain production have also been adversely affected and input prices are set to increase.

9

Monetary Sector Developments

Bank Funding

Since the last *Commentary*, recurrent tensions in the eurozone banking system, recently aggravated further by increased concerns relating to the recapitalisation of the Spanish banking system and elections in Greece, have had some negative impact on areas of bank funding in Ireland. This impact was visible in data covering all resident credit institutions (i.e. including IFSC operations), yet developments relating to the deposits of the Irish covered banks, which are of more significance, continue to show solid growth in deposits from households and businesses.[5] Recent actions taken by the ECB and a €500 million issuance of treasury bills at considerably improved interest rates may also bode well for funding at the covered banks.

While deposits in the entire set of credit institutions (including IFSC) have weakened this year, the situation for the covered Irish banks is far more favourable and reflects a return of some confidence in the system. Customer deposits (both resident and non-resident) increased by just over €14 billion in value since the trough of €140 billion in July 2011.[6] Part of the reason for the recent increase comes from the weakness in the value of the euro vis-à-vis Sterling, a feature which has boosted the UK-sourced deposits. Central Bank data on deposits from credit institutions and central banks in the covered banks, however, (only available to end-March 2012) show that this side of the deposit base continued to shrink in the first quarter, falling by €3.1 billion to €124.6 billion.[7] Although deposit funding in the covered banks looks more benign of late, signs of disintegration in eurozone financial markets could weaken near-term prospects of obtaining renewed access to other private sector funding channels at sustainable levels. Progress in terms of the rehabilitation of distressed EU banks is on-going and is not expected to near completion before the end of next year, while progress has also been restricted somewhat by the breadth of

5 The Covered Banks include AIB Group (including EBS Building Society), Bank of Ireland Group, Permanent TSB and IBRC.

6 Note that these data come from the value series published by the Department of Finance. They exclude NTMA deposits held prior to re-capitalisation and AIB's Polish operations, while they include the acquisition of Northern Rock deposits by Permanent TSB.

7 These figures adjust for changes in non-transaction related effects such as changes in reporting populations, revaluations and exchange rates by analysing cumulative transactions data.

concurrent deleveraging operations.[8] Moreover, the need to approach deleveraging primarily through large-scale asset reductions is further necessitated by the difficulties facing EU banks in terms of attracting additional capital in light of sustained adverse conditions. In this context, recent moves by the ECB to loosen collateral requirements, particularly instruments denominated in non-euro currencies such as sterling, are likely to help the covered banks to access finance at reduced costs. Renewed NTMA access to debt markets, which appears to have been met with some international demand, also bodes well for the capacity of the Irish banks to obtain market funding.

Recourse to Emergency Liquidity Measures (ELM), which has replaced money market funding to a large extent, has declined at Irish covered banks, while the amount of ELM availed of by the overall group of domestic lenders (i.e. including foreign-owned banks) has remained broadly the same since the final quarter of last year. Total Eurosystem borrowing at the covered banks has fallen by more than a third since it reached a peak of €93.0 billion in January 2011 shortly after the EU-IMF programme commenced, amounting to some €60.9 billion as of end-July 2012. Central Bank emergency liquidity assistance (accounted for under "other claims on eurozone credit institutions denominated in euro" on the financial statement of the Central Bank of Ireland) was €41.6 billion in July having declined in value by €2.6 billion since end-December 2011 and is down from a peak of €70.1 billion in February of last year. In a July statement, IMF staff noted that, while Irish banks recently obtained repo funding secured on UK collateral, future bond maturities may increase their reliance on Eurosystem funding, a development which may undermine prospects for a revival of lending.

The ECB regards ELM financing as unsustainable and Irish covered banks are expected to complete deleveraging requirements by December 2013 (see Central Bank *Financial Measures Programme Report, 2011*) in order to wean themselves off such funding. This target seems achievable as of now and its attainment may well produce a smaller, cleaner banking system more conducive to sustainable funding under normal market conditions. However, financial systems remain strained and it is difficult to envisage a sustainable return to private financing for Irish banks until tensions in the eurozone are dealt with decisively. The downsizing of the Irish banking system will have little effect if reform commitments to break the link between sovereigns and banking systems, to create a eurozone banking union and to allow direct recapitalisation of eurozone banks through the ESM are not adequately implemented. With this in mind, the European Commission's recent proposals for a unified banking supervisory

[8] Out of 58 key EU-based banks studied by the IMF, 24 announced detailed business plans indicating asset reduction measures amounting to some €2 trillion for the period 2012 to 2013. Three-quarters of the reduction measures are expected to come from sales of subsidiaries, securities and noncore assets, with the remainder likely to occur through a reduction in loans. See *Global Financial Stability Report*, International Monetary Fund, April 2012, pp.6,33.

mechanism represent another step in the right direction towards restoring confidence in the financial system.

In addition to weaker profit opportunities owing to tightened interest margins, high cost structures and additional costs arising from the state guarantee of eligible liabilities, deteriorating asset quality also remains at the forefront of immediate problems facing Irish banks. Despite some reduced momentum in the rate of increase in mortgage arrears, the number of mortgages in repayment difficulties is likely to continue to increase through this year and next. The latest data for employment, incomes and rents offer some tentative evidence of stabilisation. This, combined with reduced interest rates is likely to be beneficial to developments in arrears in future, although research suggests that any immediate impact is unlikely to be felt over the short term.[9] Instead, arrears are more likely to sustain an upward momentum before any positive influence from macroeconomic developments translates into a recovery in the number of mortgages in arrears.

Recent Lending Developments:

Irish household lending, once non-transaction related effects are accounted for, continued to decline in the first half of 2012, although the pace of decline is moderating slowly. Loans for house purchases were down 2.1 per cent in July, in annual terms, representing the slowest pace of decline since August 2010 (see Table 10).[10] Underlying this fall, year-on-year declines available to March of this year show that lending for purchases of buy-to-let properties (-3.2 per cent) and holiday homes (-5.5 per cent) declined at a much faster pace than that directed towards owner principal dwellings (-2.1 per cent). Consumer credit also continued to fall substantially, down 11.0 per cent in July, year-on-year.

Lending to Irish resident Small and Medium Enterprises (SMEs) has garnered a substantial degree of attention recently, due in part to the significance of SMEs for domestic employment and the relatively greater dependence such firms have on bank lending.[11] Official data show that, after an accelerated contraction in the first quarter, the rate of contraction in lending to SMEs moderated in the second quarter, declining by 1.7 per cent, year-on-year. 'Core lending' (i.e. that which excludes financial intermediation and property related sectors) reveal a similar trend, although the rate of contraction is sharper than in the total, falling by 4.6

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9 See McCarthy, Y. and R. Lydon, 2011. "What Lies Beneath? Understanding Recent Trends in Irish Mortgage Arrears", 14/RT/11, Central Bank of Ireland.

10 These figures adjust for changes in non-transaction related effects such as changes in reporting populations, revaluations and exchange rates.

11 Recent evidence suggests that SMEs account for 72 per cent of private sector employment outside of construction and agriculture in Ireland (see Lawless, M., F. McCann and T. McIndoe-Calder, 2012. "SMEs in Ireland: Stylised facts from the real economy and credit market". Conference paper, Central Bank of Ireland.

per cent in the second quarter of this year. While still pointing to a sharp contraction in outstanding lending, these figures represent the slowest rates of annual decline since the Central Bank started collecting data in March 2011. Underlying business lending activity for twelve of the main 'core' subsectors, as indicated by quarterly transactions data, show that the only subsectors to have recorded an increase in net lending (gross new lending less repayments) in the first half of 2012, when compared to the end of 2011, were primary industries (i.e. agriculture, forestry, logging, mining and quarrying), manufacturing (primarily chemicals sectors, rubber/plastic products, other non-metallic mineral products) the electricity, gas, steam and air conditioning supply subsector and the education subsector. The increase in net lending over the first half of 2012 to firms in these subsectors amounted to some €62 million, whereas the remaining nine 'core' subsectors recorded a substantial net decrease in lending of some €668 million since the end of 2011. Box 1 also examines firm-level survey data from the ECB's Survey on the Access to Finance, which suggests that Irish resident SMEs may currently be availing of non-traditional forms of lending to a greater extent than elsewhere in the eurozone.

TABLE 11: Lending to Irish Households and Irish Resident SMEs (% Change, Year-on-Year)

		Irish Household Lending			Small and Medium Enterprise Lending		
	End-Month	All Lending	For House Purchases	Consumer Credit	Total	Total excl. Financial Intermediation	Total excl. Financial Intermediation & Property Related Sectors
2009	Mar	6.0	7.8	-0.6	-	-	-
	Jun	2.9	4.8	-3.6	-	-	-
	Sep	0.2	1.9	-5.4	-	-	-
	Dec	-1.1	0.6	-7.3	-	-	-
2010	Mar	-2.6	-0.2	-10.6	-	-	-
	Jun	-4.5	-0.8	-13.1	-	-	-
	Sep	-4.5	-0.9	-14.1	-	-	-
	Dec	-5.5	-1.4	-21.1	-	-	-
2011	Mar	-5.0	-2.0	-15.0	-8.8	-11.3	-9.2
	Jun	-3.9	-2.2	-14.4	-9.1	-12.5	-10.6
	Sep	-4.0	-2.5	-13.7	-5.4	-8.2	-8.9
	Dec	-3.6	-2.5	-6.9	-3.0	-5.4	-6.2
2012	Mar	-3.9	-2.4	-11.6	-3.9	-4.9	-6.3
	Jun	-3.7	-2.2	-11.1	-1.7	-2.9	-4.6
	Jul	-3.6	-2.1	-11.0			

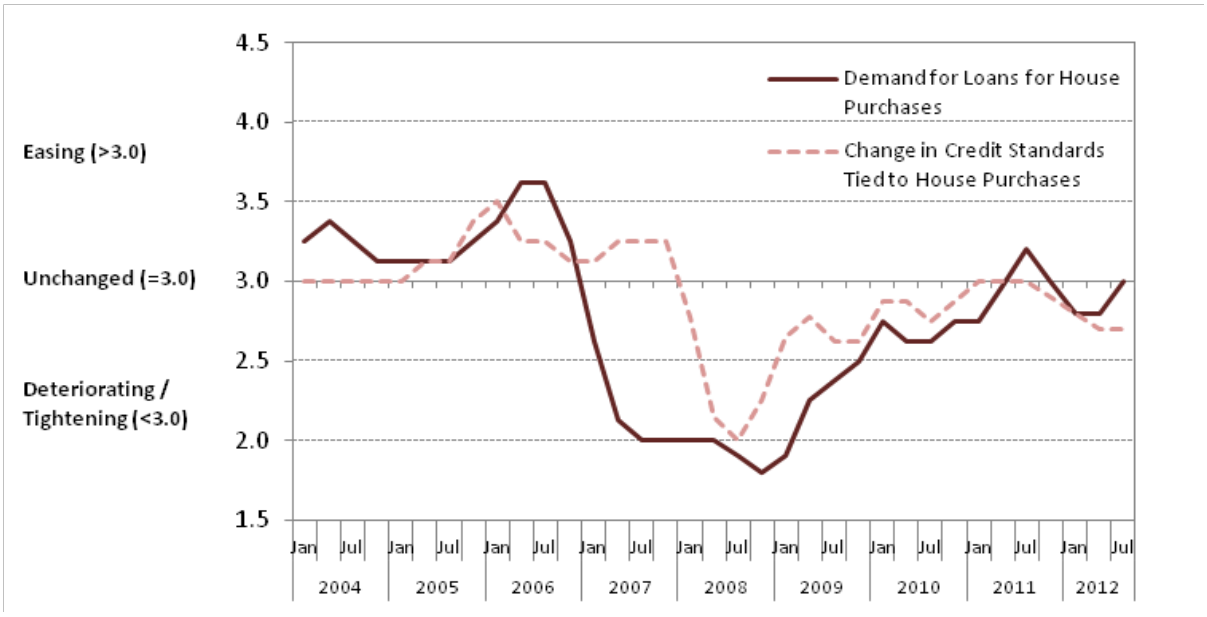
Source: Central Bank of Ireland *Money and Banking Statistics*.

Looking at the most recent qualitative data on supply and demand conditions, the ECB Bank Lending Survey for July 2012 suggests that, for Irish households, demand for loans for house purchases appears to have stabilised, having

moderated gradually from late-2008 onwards and experienced a modest easing in mid-2011. Credit standards attached to such lending, however, continue to tighten (see Figure 11).[12] Risk perceptions in relation to expectations of general economic activity and housing market prospects appear to have been the foremost issues reported amongst lenders as contributing to tighter credit standards that have emerged since late 2011. Both factors have also been cited as proving more influential in tightening credit conditions during the three months to July, when compared to the previous two periods.

The current signs of heightened risk aversion among credit institutions are largely predictable given that any evidence of a stabilisation in the residential property market is still very tentative and varies greatly depending on location. Furthermore, the capacity of borrowers to finance future repayments remains unusually uncertain now given the precariousness of the wider economic environment.

FIGURE 11 Reported Change in Funding Conditions (2 Quarter Moving Average)



Source: ECB Bank Lending Survey 2012.

[12] The ECB's Eurozone Bank Lending Survey supplements existing quantitative data by giving some impression of the willingness of banks to lend, reflected in changes in their credit standards and in terms and conditions attached to loans or lines of credit. It is addressed to senior lending officers in participating banks, with over 100 eurozone banks participating in the survey on a voluntary basis each three month period, of which 5 are from Ireland. Changes in credit standards over the past three months are examined, with respondents indicating to what extent they feel that credit standards have deteriorated or eased over the recent quarter.

BOX 1: Alternative Financing in Irish SMEs

by Eddie Casey

Recent work from the Central Bank (McCann and Holton, 2012) highlighted the current difficulties facing Irish SMEs in terms of credit supply using two firm-level survey datasets. In particular, they note how Irish SMEs during the six month period to March 2012 reported the second highest rejection rates for credit applications in all eurozone countries, as well as showing how the share of discouraged borrowers (i.e. those who do not apply for credit despite having demand for it) is double the eurozone average. The survey evidence also fails to indicate demand conditions that are substantially lower than that visible elsewhere in the eurozone. This Box looks at just one of the survey datasets used in the above study, in order to highlight the extent to which SMEs may have turned to alternative, often more expensive, forms of financing.

The ECB's Survey on the Access to Finance of SMEs in the eurozone (SAFE) provides a range of comparable firm-level survey findings every six months on financing conditions in the eurozone. SMEs here are defined as firms with 1-249 employees. The findings from this report also appear to indicate a strained credit environment for Irish SMEs relative to eurozone counterparts, when analysed in terms of the alternative forms of financing sought more recently. The results in Table 1.1 show that during the six month period to March 2012, Irish SMEs were more than twice as likely to have reported availing of trade credit as a source of financing, when compared against the eurozone average and were almost one and a half times more likely to have availed of retained earnings or asset sales as alternatives. In addition, firms reported that they were 44 per cent more likely to have used sources of financing such as bank overdrafts, credit lines, or credit card overdrafts. Other loans (such as loans from family and friends or from a related company or shareholders, excluding trade credit) were also far more likely to be availed of, with 19 per cent of Irish SMEs reporting their usage in the past six months compared to the eurozone average of 13 per cent. The share of firms that reported using traditional bank loans, however, was actually above the reported eurozone average. Instead of indicating a high degree of substitution among Irish SMEs away from traditional bank loans in response to apparent credit constraints, these finding suggest that firms may require additional forms of non-traditional financing over and above that available through traditional bank loans in light of current difficulties.

TABLE 1.1 Share of SMEs Reported to Have Used Various Forms of Finance in the Past Six Months for Normal Day-to-Day Business Operations or More Specific Projects or Investments

	Retained earnings or sale of assets		Grants or subsidised bank loan		Bank overdraft, credit line or credit cards overdraft		Bank loan		Trade credit		Other loan		Leasing or hire-purchase or factoring	
	Rank	**%**	**Rank**	**%**	**Rank**	**%**	**Rank**	**%**	**Rank**	**%**	**Rank**	**%**	**Rank**	**%**
1	PT	3.4	NL	6.6	GR	11.1	PT	22.6	FR	14.3	IT	7.5	GR	11.5
2	FR	12.1	FR	8.7	FI	26.0	GR	25.3	DE	18.1	GR	7.5	BE	18.3
3	NL	15.0	FI	11.6	PT	36.3	NL	29.2	AT	21.7	PT	7.6	ES	21.3
4	BE	15.2	DE	13.1	BE	37.1	FI	30.8	PT	22.1	FR	7.8	PT	21.7
5	GR	17.4	***IE***	***13.4***	ES	39.0	ES	34.7	BE	22.4	AT	12.5	IT	23.5
6	IT	22.5	AT	14.5	DE	39.7	AT	35.1	NL	30.5	BE	17.1	***IE***	***34.3***
7	ES	23.5	GR	14.6	FR	40.4	IT	35.3	ES	40.5	DE	17.5	FR	37.1
8	DE	35.1	IT	14.7	AT	41.0	DE	35.9	GR	44.3	ES	18.1	NL	38.5
9	***IE***	***35.3***	BE	16.4	NL	49.6	***IE***	***36.5***	IT	51.0	FI	18.2	FI	42.5
10	AT	38.5	PT	17.8	IT	52.8	FR	38.8	FI	54.6	***IE***	***18.6***	AT	43.7
11	FI	57.4	ES	18.7	***IE***	***60.2***	BE	40.5	***IE***	***64.7***	NL	22.8	DE	46.1
Avg.	**EA**	**23.8**	**EA**	**13.5**	**EA**	**41.8**	**EA**	**34.7**	**EA**	**31.2**	**EA**	**13.3**	**EA**	**32.4**

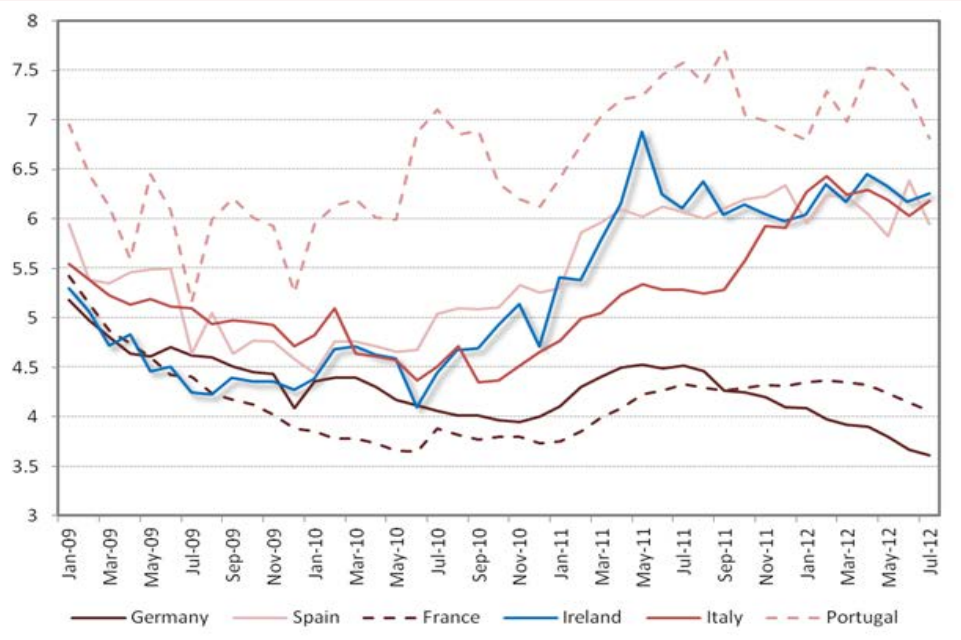
Source: European Central Bank: Survey of Access to Finance of Small and Medium Enterprises.

The findings appear to be in line with research elsewhere showing that firms which are credit-constrained, either in the sense that applications for credit are denied or are not sought due to borrowers being discouraged, are more likely to obtain finance using both credit cards (Blanchflower and Evans, 2004) and trade credit (Peterson and Rajan, 1997). While these sources of funding are typically easier to obtain than traditional bank loans, they are also typically more expensive. More worryingly, research on new businesses in the US (Scott, 2009) showed that for every $1,000 increase in company credit card debt, the probability of a firm's closure rose by 2.2 per cent. Such findings reveal the significance that various forms of business credit can have in determining the viability of a firm's operations.

Figure 1.1 offers some further explanation as to why SMEs may be seeking alternative sources of financing. A recent rise in the average interest rates on new business lending in Ireland, also visible in other peripheral eurozone economies, may be impacting on traditional borrowing. Irish rates on loans over 1 year, up to €1 million in value are more closely aligned with those in Italy and Spain, with data from the ECB showing that Irish non-financial corporations were paying an average annual rate of 6.3 per cent on new lending as of July this year. This compares to an annual average rate of 4.6 per cent for both 2009 and 2010 and contrasts with German rates, which have fallen further more recently to just 3.6 per cent, the lowest since ECB figures commenced in January 2003. Commentators have cited this as a symptom of reduced cross-border exposures,

which have contributed to increased average interest rates on new business lending in peripheral eurozone economies.[13]

FIGURE 1.1 Average rate on new loans to non-financial corporations, over 1 year, up to €1m in value (%)



Source: European Central Bank, Statistical Data Warehouse.

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[13] See *Financial Times*, "Loan Rates Point to Eurozone Fractures", September 3, 2012.

10

General Assessment of the Irish Economy

Economic Outlook

GNP is forecast to decline by 0.2 per cent in real terms this year, unemployment will remain high at 14.8 per cent, the balance of payments surplus will increase, and the public finance targets, expressed as a percentage of GDP, are likely to be met. GDP itself is set to increase by 1.8 per cent.

We have revised upwards the forecast for GNP growth in 2013. We are now forecasting that real GNP growth will amount to 0.7 per cent. GDP is forecast to grow more rapidly, at 2.1 per cent. The drivers behind this growth are, on the external side, a more rapid growth in exports of both goods and services primarily due to the impact of new firms and new products from existing firms, while on the domestic demand side, the main contributor to growth will be a more positive outlook on the volume of investment, though the necessity for fiscal retrenchment is exerting significant downward pressure on domestic demand.

The increase in investment is partly due to the impact of the announced government stimulus package. In our Summer *Commentary* we expressed our reservations about the benefits that would accrue to the Irish economy from a fiscal stimulus because of the open nature of the economy. The recent package is based on specific investment projects. Our reservations remain – the projects need to be subjected to cost-benefit analysis and should only go ahead if they meet the relevant criteria.

These projects will have the effect of generating some economic activity in the localities of the projects and may also offer some employment for the construction sector, so there will be positive demand effects. The reliance of the Irish economy on imported materials means that, inevitably, some of the benefit will flow out of the economy, both directly through the projects and indirectly through expenditure of incomes. In addition, it must be recognised that the stimulus provided by such a package is short term in nature, with the main employment benefit being enjoyed in the years when most of the spending occurs. Furthermore, as the projects will be financed by asset sales or through the public private partnership mechanism, the package will not increase the national debt level. However, it is not clear at present as to how private sector involvement will be encouraged and how the private sector will achieve a sufficient return.

The persistence of long-term unemployed numbers is a serious concern, with those in long-term unemployment (i.e. over one year) accounting for nearly 61 per cent of total unemployment in the first quarter of this year. Rather than implementing an investment stimulus, which is likely to yield a modest and highly transient boost to construction sector employment, further measures to help firms overcome the constraints they face, for instance measures to improve SME lending and to facilitate effective individual training programmes, might be better suited to redirecting resources towards sectors of the economy where the jobs are more sustainable in the long run.[14]

The Public Finances

The fiscal consolidation programme agreed with the Troika requires cuts in expenditure and increases in taxation to reduce the General Government Balance to about 3 per cent of GDP by 2015. This year the required adjustment is €3.8 billion (€1.6 billion in tax changes and €2.2 billion in expenditure changes) and in aggregate the targets set are likely to be met. For 2013 the required total consolidation amount is €3.5 billion of which €2.25 billion relates to expenditure cuts and €1.25 billion to revenue growth. For 2014 and 2015 respectively the total consolidation amounts are €3.1 billion and €2.0 billion respectively.

Tax Changes

For 2013 the carryover from tax changes in previous years is counted as part of the consolidation. From Budget 2012 this is estimated at €0.3 billion so that new measures amounting to €0.95 billion are needed. The proposed first stage of the property tax, if the rate is set at 0.25 per cent, would lead to additional revenue of some €0.5 billion. The remaining gap can be partially filled by a reform of the vehicle registration tax scheme introduced in mid-2008, so that it has the effect of achieving its original objective of being revenue neutral (there were serious revenue losses associated with its introduction) and by an associated reform of the annual vehicle taxation.

During the period of the boom the income tax base was eroded by a policy designed specifically to reduce the numbers liable to income tax. By 2010 some 45 per cent of income earners were not liable for income tax (Budget 2011). This was financed by unsustainable property associated taxes. This policy needs to be reversed. The Universal Social Charge was introduced to partially address this. Changes in tax credits and in the width of relevant bands could also increase the tax base.

[14] The Government estimates that the number of jobs generated by the stimulus will be in the region of 13,000, while the number of persons unemployed in the first quarter of 2012 totalled 309,000. It is also not certain that these jobs will necessarily be filled by individuals who are currently unemployed.

Expenditure Changes

The successful sale of Irish government debt by the NTMA indicating the willingness of international investors to invest in Ireland represents an important milestone in the recovery of the Irish economy. However, while this willingness is a positive development, it does not lessen the need for continued reform and public expenditure cuts. Indeed, the success of the measures to date to rebalance the public finances has contributed to the ability to raise funds internationally. Despite the progress that has been made, there remains a significant amount of adjustment and reform that has to occur to achieve the substantial reductions that are still required.

At a macro level the scale of the cuts in expenditure is easy to see. At a micro level it is more difficult to see where cuts should be made. At the beginning of the downturn there was a view that there was serious waste in the public sector and the elimination of this could be undertaken with relative ease. Even where there is still some obvious waste, cutting this inevitably involves cutting employment directly or indirectly through reduced expenditure. It is hard to think of cuts that will not leave some people unaffected. The main question is which group will be affected. We have looked at the main areas of expenditure by major spending heads.

TABLE 12 Main Heads of Government Expenditure, 2011, € million

	Education	Health	Social Security	Total	Other	Grand Total
			€ million			
Subsidies	-	-	-	-	639	639
Current transfer payments	1,541	2,383	20,646	24,570	3,749	28,319
Current Expenditure on goods and services	6,571	10,473	891	17,935	9,176	27,111
Capital grants to enterprises	-	-	-	-	6,060	6,060 (283)*
Gross physical capital formation	524	248	80	852	3,397	4,249
Other capital expenditure	66	5	3	74	2,255	2,329
National Debt Interest	-	-	-		5,142	5,142
Total	8,702	13,109	21,620	43,431	30,418	73,849 (68,072)*

Source: *National Income and Expenditure Accounts* 2011.
*excludes funds for the recapitalisation of banks.

Current transfer payments account for almost 42 per cent, while current expenditure on goods and services accounts for almost 40 per cent, of total underlying (i.e. excluding recapitalisation cost) expenditure. Given that government has no leeway in relation to national debt interest payments, the

bulk of the adjustment to current expenditure must come from these two categories of expenditure. Education and health expenditure account for just less than two-thirds of current expenditure on goods and services, so that it is difficult to avoid the conclusion that further cuts in these areas are inevitable.

Over two-thirds of transfer payments arise in the provision of social security and other welfare payments, so it is difficult to see how further reductions in these headings of expenditure can be avoided also.

The situation is particularly difficult in that social security and welfare expenditure is very demand driven. If unemployment increases then expenditure must rise. Similarly, in healthcare if the number entitled to medical cards increases then expenditure must rise. If total expenditure in these areas is to be contained there are several alternatives. For example, total cash limits could be imposed – in terms of welfare this would mean that per capita payments would decline or eligibility would be reduced. In terms of healthcare, people might not get treatment once the cash limits have been reached or rules of entitlement could be changed, reducing the eligibility of the population to particular public health services. Alternatively, given that these services are demand driven, cuts and productivity gains under the Croke Park Agreement could be used to finance the expenditure.

The principle behind the Croke Park Agreement is that pay rates in the public service, including education and most of health, would not be cut further, but that reorganisation, removal of restrictive practices and increased productivity, would allow services to be more or less maintained as numbers declined. There are obvious difficulties with this in particular cases, as for example where the sole teacher of a subject in a school retires or a particular skill is lost in a hospital or primary care centre. However, with some flexibility and a continuation of early retirement options, it may be possible to effect further significant pay cost savings. For this to happen the pace of change would need to be accelerated and realistic estimates produced on savings. This would provide the basic information required to see what other adjustments are needed on pay, public sector employment and other expenditure.

The precise cuts in public expenditure that are implemented reflect political judgement about the relative merits of different forms of expenditure. If all expenditure had equal marginal benefits, even at the political level, then expenditure cutting would be relatively easy as across the board cuts would suffice. Detailed analysis, as set out in the *Report of the Special Group on Public Service Numbers and Expenditure Programmes* (July 2009) and, more recently, the *Comprehensive Expenditure Report* suggests that using judgement about

programmes could minimise the damage to services. Whether action is based on across-the-board decisions, or based on judgement, these cuts need to be implemented.

Other Policy Considerations

The effect of fiscal consolidation of €3.5 billion in 2013 is to reduce domestic demand and output growth. Some part of the consolidation includes the carryover from tax measures introduced this year so that new measures introduced in the budget for next year would be about €3.2 billion or about 2.5 per cent of GNP. The effect on the economy depends, not just on the direct demand impact, but also on the reaction of the household and corporate sector. The latter is likely to be more favourable next year as foreign direct investment has remained strong. The commitment to correcting the public finances remains an important indicator of stability and hence contributes to the flow of foreign investment.

A feature of the forecasts, which highlights the difficulty arising from a continued use of borrowing, is that while total government expenditure is virtually unchanged over the forecast period, debt service costs rise so that the remainder of expenditure has to be cut. With continued borrowing, debt service costs are set to increase further and in the absence of growth will eat into other expenditure. There remains a significant primary budget deficit (i.e. the general government balance excluding interest payments – in 2012 €13.2billion-€6.3billion= €6.9billion). The dynamics of the debt are still working against the economy and while the primary deficit will fall to €3.4billon in 2013, it is still dragging economic growth down because of the need to contain the deficit by tax increases and expenditure cuts.

The recently announced policy shift by the ECB is a step in the right direction and should keep yields on government paper closer to real long-run numbers. There are still considerable short-comings in the eurozone financial system as the wholesale money market is not functioning properly. Some part of this reflects the perceived undercapitalisation of the banking system and concerns about future banking losses associated with exposure to countries where the debt overhang will continue to exert pressure on national budgets, corporate profits, and household debt. The failure of the wholesale money market to function and the subsequent assumption of that function by the ECB lies behind the attempts to deleverage the Irish banking system. This is effectively reducing resources for bank lending. While the use of the ESM to provide funds for recapitalisation across the eurozone is welcome in that it will divorce bank and sovereign debt, there needs to be some retrospection covering the banking debt incurred in Ireland. The details in relation to recapitalisation need to be considered carefully as debt for equity swaps may not be ideal.

Finally, while any relief on the debt issue is to be welcomed it needs to be remembered that the budget deficit is still very substantial. The level of debt also reflects the collapse of the economy from previous unsustainable levels. Thus while debt relief, of some aspects of the bank-related debt, would make life easier it would not resolve the budget problem. It is cautionary to remember that even if there were no debt and hence no interest payments, the budget deficit would still be large – day-to-day expenditure continues to outstrip revenue.

Detailed Forecast Tables

FORECAST TABLE A1 Exports of Goods and Services

	2010	% change in 2011		2011	% change in 2012		2012	% change in 2013		2013
	€ bn	Value	Volume	€ bn	Value	Volume	€ bn	Value	Volume	€ bn
Merchandise	82.6	2.7	2.7	84.9	4.0	3.0	88.3	9.2	6.0	96.4
Tourism	3.1	5.6	4.0	3.3	4.7	2.8	3.4	5.2	3.5	3.6
Other Services	71.2	9.8	7.9	78.2	9.6	8.5	85.7	8.2	6.5	92.7
Exports Of Goods and Services	156.9	6.0	5.1	166.3	6.7	5.6	177.4	8.6	6.2	192.7
FISM Adjustment	0.9			0.5			0.5			0.6
Adjusted Exports	157.8	5.7	5.1	166.8	6.7	5.6	177.9	8.6	6.2	193.3

FORECAST TABLE A2 Investment

	2010	% change in 2011		2011	% change in 2012		2012	% change in 2013		2013
	€ bn	Value	Volume	€ bn	Value	Volume	€ bn	Value	Volume	€ bn
Housing	4.6	-15.4	-11.9	3.9	-18.9	-18.9	3.2	1.0	0.0	3.2
Other Building	5.8	-21.8	-21.8	4.5	-6.8	-7.2	4.2	10.9	10.0	4.7
Transfer Costs	0.4	4.9	31.3	0.4	-8.9	-10.0	0.3	-10.7	-12.0	0.3
Building and Construction	10.8	-18.2	-15.8	8.8	-12.2	-12.6	7.7	5.9	4.7	8.2
Machinery and Equipment	8.0	-8.5	-8.3	7.3	2.7	3.4	7.5	2.5	3.5	7.7
Total Investment	18.7	-14.0	-12.6	16.1	-5.5	-5.4	15.2	4.2	4.1	15.9

FORECAST TABLE A3 Personal Income

	2010	% change in 2011		2011	% change in 2012		2012	% change in 2013		2013
	€ bn	%	€bn	€ bn	%	€bn	€ bn	%	€bn	€ bn
Agriculture, etc	2.6	27.1	0.7	3.2	-8.0	-0.3	3.0	7.5	0.2	3.2
Non-Agricultural Wages	68.7	-1.4	-0.9	67.8	-0.1	-0.1	67.7	-0.3	-0.2	67.5
Other Non-Agricultural Income	12.5	-7.8	-1.0	11.5	-4.4	-0.5	11.0	0.0	0.0	11.0
Total Income Received	83.7	-1.4	-1.2	82.5	-1.0	-0.8	81.7	0.1	0.0	81.7
Current Transfers	25.2	2.3	0.6	25.8	-1.7	-0.4	25.4	-2.7	-0.7	24.7
Gross Personal Income	109.0	-0.6	-0.6	108.4	-1.2	-1.3	107.1	-0.6	-0.6	106.5
Direct Personal Taxes	20.9	7.3	1.5	22.4	2.6	0.6	23.0	2.4	0.6	23.6
Personal Disposable Income	88.1	-2.4	-2.1	85.9	-2.2	-1.9	84.1	-1.4	-1.2	82.9
Consumption	82.1	-0.9	-0.8	81.3	-0.5	-0.4	80.9	-0.4	-0.3	80.6
Personal Savings	6.0	-23.2	-1.4	4.6	-31.4	-1.5	3.2	-27.3	-0.9	2.3
Savings Ratio	6.8			5.4			3.8			2.8
Average Personal Tax Rate	19.2			20.7			21.5			22.1

FORECAST TABLE A4 Public Finances, Exchequer

	2009	2010	2011	2012	2013
	Outcome, €bn	Outcome, €bn	Outcome, €bn	Forecast, €bn	Forecast, €bn
Net Current Expenditure	45.2	47.0	48.0	51.1	50.9
Net Voted Expenditure	40.3	40.5	41.4	42.5	41.5
Non-Voted Expenditure	5.0	6.5	6.6	8.6	9.4
Current Revenue	33.9	34.4	36.8	38.7	39.0
Tax Revenue	33.0	31.8	34.0	36.0	37.0
Non-Tax Revenue	0.8	2.7	2.8	2.7	2.0
Current Budget Surplus	-11.4	-12.6	-11.2	-12.4	-11.9
Capital Resources	1.5	1.8	2.5	1.8	1.8
Capital Expenditure	14.7	8.0	16.2	7.5	4.0
Capital Expenditure – Voted	6.9	5.9	4.3	4.1	3.0
Capital Expenditure - Non Voted	7.8	2.0	11.9	3.4	1.0
Capital Borrowing	-13.3	-6.2	-13.7	-5.7	-2.3
Exchequer Balance	-24.6	-18.7	-24.9	-18.1	-14.1
as % of GDP	-15.3	-12.0	-15.7	-11.2	-8.5
General Government Balance	-22.5	-48.4	-20.2	-13.1	-12.4
as % of GDP	-13.9	-30.9	-12.7	-8.1	-7.5

FORECAST TABLE A5 Public Finances, National Accounts

	2005	2006	2007	2008	2009	2010	2011	2012	2013
	€ bn	€ bn	€ bn	€ bn	€ bn	€ bn	€ bn	€ bn	€ bn
Total Receipts : Current	51.1	57.7	60.3	56.8	49.8	49.8	50.5	51.4	52.6
Total Receipts : Capital	4.0	5.6	6.0	3.6	1.6	0.8	1.4	2.2	1.7
Total Receipts - Current And Capital	55.1	63.2	66.4	60.4	51.4	50.6	51.9	53.6	54.3
Total Expenditure – Current	45.2	49.8	55.5	60.7	62.7	61.7	61.2	61.7	61.8
Total Expenditure – Capital	7.2	8.2	10.7	12.8	11.2	37.3	10.7	5.0	4.9
Total Expenditure - Current And Capital	52.4	58.0	66.2	73.5	73.9	99.0	71.9	66.7	66.7
General Govt. Balance	2.7	5.2	0.2	-13.1	-22.5	-48.4	-20.2	-13.1	-12.4
As % of GDP	1.6	2.9	0.1	-7.3	-13.9	-30.9	-12.7	-8.1	-7.5

FORECAST TABLE A6 Imports of Goods and Services

	2010	% change in 2011		2011	% change in 2012		2012	% change in 2013		2013
	€ bn	Value	Volume	€ bn	Value	Volume	€ bn	Value	Volume	€ bn
Merchandise	46.9	3.0	-2.3	48.3	2.5	-0.5	49.5	7.9	5.0	53.4
Tourism	5.4	-6.1	-7.2	5.0	-4.2	-7.0	4.8	-1.5	-3.0	4.7
Other Services	75.6	3.5	1.4	78.2	7.6	4.5	84.2	8.4	6.3	91.3
Imports of Goods and Services	127.8	2.9	-0.3	131.5	5.3	2.2	138.5	7.9	5.5	149.4
FISM Adjustment	0.5			0.3			0.4			0.4
Adjusted Imports	128.3	2.8	-0.3	131.9	5.3	2.2	138.9	7.9	5.5	149.8

FORECAST TABLE A7 Balance of Payments

	2011	2012	2013
	€ bn	€ bn	€ bn
Exports of Goods and Services	166.8	177.9	193.3
Imports of Goods and Services	131.9	138.9	149.8
Net Factor Payments	-32.0	-35.5	-38.9
Net Transfers	-1.2	-1.2	-1.2
Balance on Current Account	1.8	2.3	3.3
As a % of GNP	1.4	1.8	2.6

FORECAST TABLE A8 Employment and Unemployment, Annual Average

	2010	2011	2012	2013
	000s	000s	000s	000s
Agriculture	85	83	81	81
Industry	360	342	338	340
Of which: Construction	120	107	103	103
Services	1,403	1,385	1,376	1,372
Total at Work	1,848	1,810	1,798	1,793
Unemployed	292	304	313	307
Labour Force	2,140	2,114	2,111	2,100
Unemployment Rate, %	13.6	14.4	14.8	14.6

Research Notes

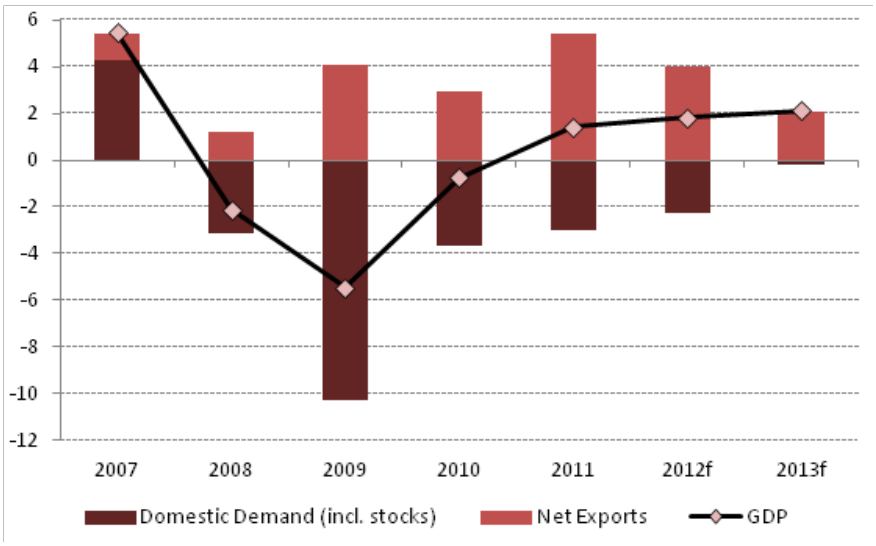
Trends in Irish Exports

David Duffy and Eddie Casey

Introduction

Exports of both Irish goods and Irish services have performed well over much of the recession. Indeed, it is net trade that has ensured that there has been growth in the Irish economy. Figure 1.1 shows the contribution to economic growth over the past number of years. What is evident is the contribution that net trade has made to growth. At a time when domestic demand has been contracting the external sector has been the sector of the economy that has been growing.

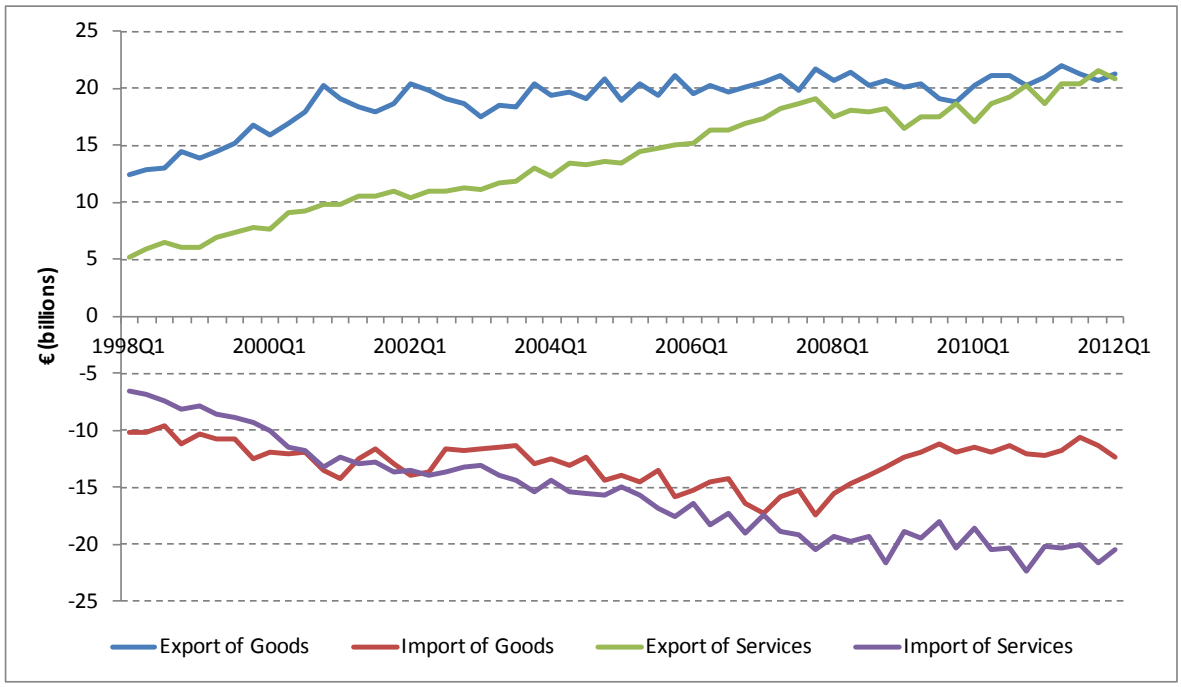
FIGURE 1.1 Contributions to GDP Growth, Constant Prices (Percentage Points, Year-on-Year)



Sources: Calculations based on data from Central Statistics Office, *National Income and Expenditure Accounts* and ESRI forecasts.

The *Quarterly National Accounts* also provides data on trade in goods and in services. Over the time span of the data, exports in services have shown steady growth, narrowing the gap with goods exports. Interestingly, the preliminary data, for the final quarter of 2011, which is subject to revision, shows that, in volume terms, exports of services exceeded those of goods volumes for the first time, although the surplus was small.

FIGURE 1.2 Trade in Goods and Services, Quarterly National Accounts, Constant Prices (Euro, billions)



Sources: Central Statistics Office, *Quarterly National Accounts*.

Exports of Goods

Data from the Central Statistics Office allows us to examine trends in the countries to which we export and the products we export. In terms of value, more than three-quarters of goods exported in 2011 went to the eurozone, US and UK. The eurozone accounted for the largest share of exports comprising almost 35 per cent of all goods exported in 2011, while the US (23 per cent) and the UK (16 per cent) also comprised a major share of Irish trade in the goods sector. Figure 1.3 shows the evolution in terms of the destinations for Irish goods exports over selected years between 1990 and 2011. The bulk of exports shipped to US and EU countries other than the UK are typically foreign-sector exports, while most indigenous-firm exports go to the United Kingdom. In 2010, for example, indigenous exports amounted to some €12.4 billion, with foreign-owned firms accounting for €114.6 billion. The latter, equating to a share of roughly 90 per cent of the total, has remained largely unchanged since 2001 (Forfás, 2012).

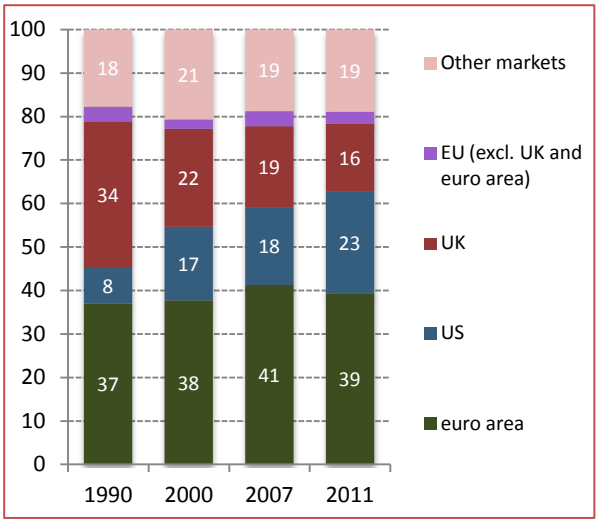
In terms of the commodities that are exported, the vast majority relate to the broad chemicals sector, where a rapidly growing share has emerged in recent years. In 2011, €56.1 billion of the total €91.7 goods exported internationally were in chemicals and related products, signifying a rise in the share from just 16 per cent of goods exported from Ireland in 1990 to 61 per cent in 2011. The other major category, albeit one that has been in decline more recently, is that of machinery and transport equipment, within which office machines/automatic data processing equipment and electrical machinery/appliances, etc. are key components. The decline in these subsectors in the late 1990s and on into the

early part of the new millennium, particularly in the areas of computer hardware, reflected an increasing preference among foreign-owned manufacturing firms to either downsize or relocate assembly operations away from Ireland to lower-wage economies. Among others, Apple, IBM and Intel shifted labour-intensive motherboard assembly activities from Ireland to economies such as those in the Far East, while some element of substitution into related services sectors and more highly skilled manufacturing activities was visible domestically (Barry and Van Egeraat, 2005). This decline coincided with a shift in the growth dynamic of the Irish economy towards a credit-fuelled property bubble in 2002 and a sharp rise in Irish relative unit labour costs during the period 2001 to 2008 (O' Brien and Scally, 2012) in the order of over 42 per cent. As highlighted by Casey (2012), however, these competitiveness losses have tended to be more persistent in manufacturing sectors of the economy typically classed as 'traditional' (primarily comprised of food and beverage subsectors) since the recent downturn began. Lost momentum relating to inward investment during this time accompanied the significant declines in overseas earnings by manufacturers located in Ireland. More recently, weakened performance in this subsector was further compounded by the closure of Dell's manufacturing operations in Ireland in 2009.

Food, live animals and beverages' exports make up another large and relatively stable share of goods traded (averaging 10 per cent of total goods exported since 2000) as do various miscellaneous manufactured articles, with medical devices a major subcategory here. Reflecting the significance of the 'modern sector', the latest data from the Irish Exporters Association (2012) show that eight of the twenty-one largest export companies in Ireland (in terms of turnover) are from the ICT sector, with computer services exports heavily represented; seven are from the pharmaceutical/medical devices sector, while three are from the agri-food sector.

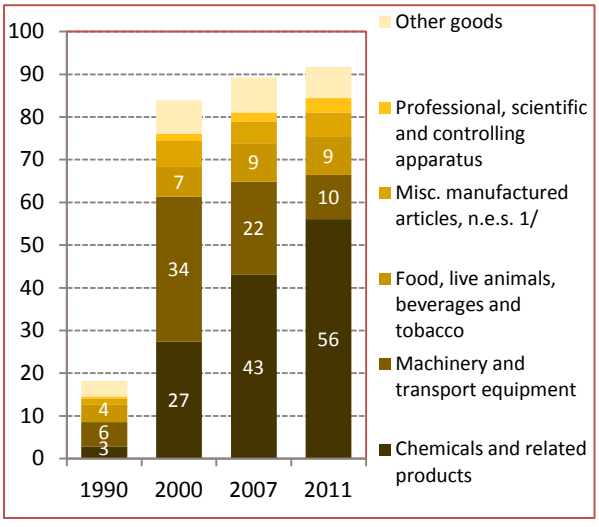
FIGURES 1.3 AND 1.4

1.3 Share of Irish Goods Exports by Region for Selected Years (% of total goods exports)



Sources: CSO and OECD.

1.4 Irish Goods Exports in Selected Years (euro, billions)



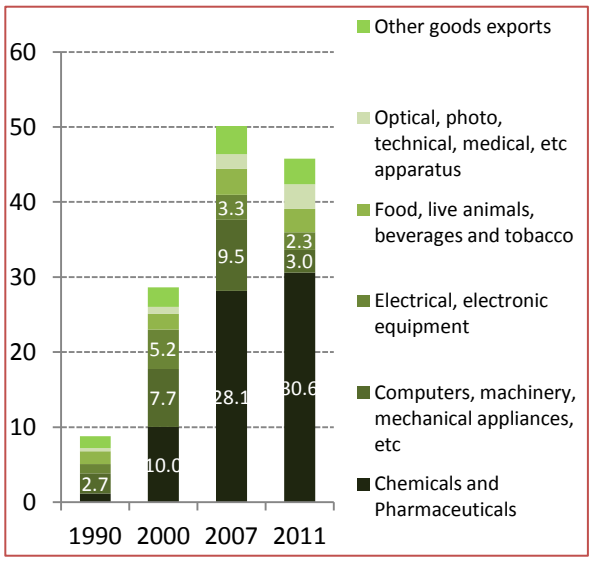
Sources: CSO and OECD.

Exports of Goods to the Eurozone

Looking at the changing composition of exports destined for eurozone countries, it is clear that the bulk of goods exported in recent times have become dominated by modern industries. Chemicals and pharmaceuticals' exports, having represented a modest share (13.1 per cent) of Irish exports to the eurozone in 1990, accounted for over two-thirds (67 per cent) of all goods exported to eurozone economies in 2011 (see Figures 1.5 and 1.6). The same industries represented close to €31 billion in goods exported from Ireland to eurozone member states in 2011, up from €1.1 billion in 1990 and €10 billion in 2000. The contrast with food and live animal exports is substantial, where exports equivalent to €1.7 billion in 1990 have since risen by just €1.4 billion. Various high-tech exports classified under the headings of optical, photo, technical, medical apparatus, etc. represented some €3 billion (7 per cent) of total exports in 2011 and have slowly grown in importance during the previous two decades. Exports of computers, machinery, mechanical appliances and similar products also increased in terms of their share of total Irish goods exported to eurozone economies during the same period. More recently, however, closures of key firms in the industry and a winding down in the scale of operations caused a sizeable deterioration in exports related to these areas. A peak of €9.5 billion (19 per cent) of total goods exports in these industries had fallen to less than one-third of that by 2011 in value terms standing at €3 billion (6.6 per cent). Exports of goods in the areas of electrical and electronic equipment met a similar fate earlier in the decade, down from over €5 billion in nominal terms to half of that in 2011 at €2.3 billion (signifying a collapse in the share of total exports to the eurozone from 18.3 per cent of the total to just 5.1 per cent).

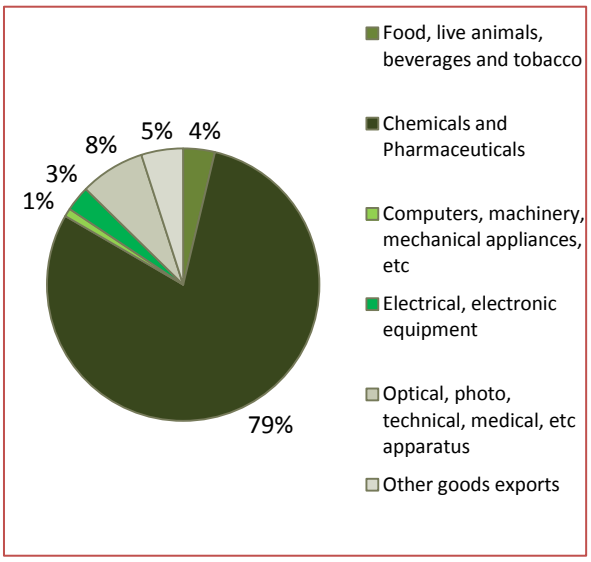
FIGURES 1.5 AND 1.6

1.5 Exports to the Eurozone in Selected Years (euro, billions)



Source: OECD.

1.6 Percentage of Total Increase in Exports to the Eurozone Due to Various Sectors, 1990-2011 to the Eurozone in Selected Years (euro, billions)



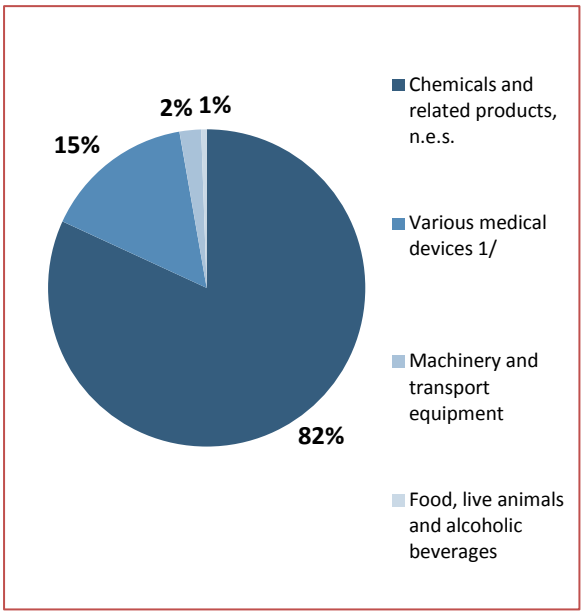
Source: OECD.

Exports of Goods to the US

The importance of the US as a trade destination for Ireland has been a key feature of the changing landscape in Irish manufacturing over recent years. Between 1990 and 2011, the share of exports from Ireland to the US rose from 8.2 per cent of total goods exports to 23.1 per cent. During this time, the increasing predominance of sectors involved in the production of chemicals and related products together with manufacturers of medical devices has been staggering. Having accounted for just over one-third (36.5 per cent) of all exports in 1990, these sectors combined now produce over 90 per cent of total goods exported to the US, in value terms. Their contribution to the growth in the value of goods exports to the US over the last two decades is emphasised further by the fact that some €19 billion of the €20 billion increase in exports since 1990 can be attributed to growth in these sectors alone (see Figures 1.7 and 1.8).

FIGURES 1.7 AND 1.8

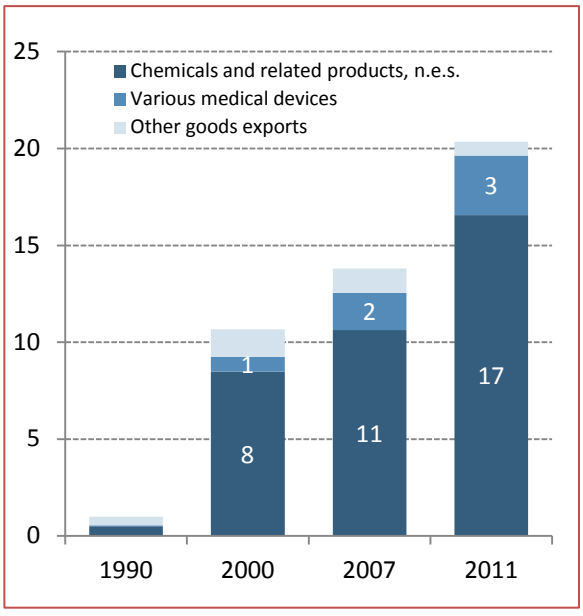
1.7 Percentage of Total Increase in Exports to the USA Due to Various Sectors, 1990-2011 (% of total increase in goods exports)



Sources: CSO and Eurostat.

Note: 1/ Various medical devices primarily comprised of medical instruments, appliances, implants, pacemakers etc.

1.8 Exports to the USA in Selected Years (euro, billions)



Sources: CSO and Eurostat.

Exports of Goods to the UK

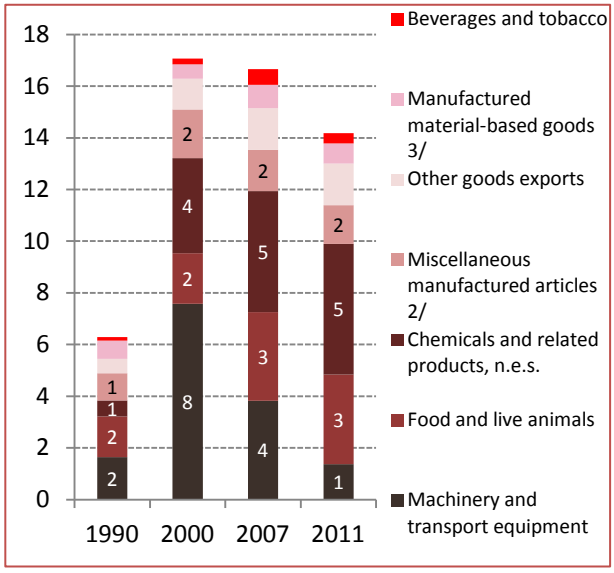
The UK, traditionally a mainstay for Irish trade, has declined in significance as a destination for goods manufactured in Ireland over the past decade, largely as a result of this export market having been dwarfed by the performance of the broad chemicals sectors in Ireland. In 1990, the UK accounted for more than one-third of Irish exports (33.7 per cent). This dependence has more than halved since then,

with the British market accounting for just 15.6 per cent of total goods exported in 2011. Underlying this apparent reallocation, however, there remains a considerable reliance on the UK market for indigenous exporters.

Although the export share related to the broad chemicals sector has increased in importance in recent years (see Figure 1.9), the UK market is still relatively diversified as regards Irish goods' exports. Chemicals and related products accounted for 35.6 per cent of all goods exports to the UK in 2011, up from 10 per cent in 1990. The next largest component is exports of food and live animals, representing close to one-quarter (24.5 per cent) of all goods exported to the UK in 2011. This subsector has been a relatively stable source of trade for the Irish economy, with the bulk of exports here consisting of agri-food produce. Various manufactured articles classified as miscellaneous items, but primarily consisting of optical media, medical devices, plastic goods, printed materials and items of clothing make up another 10 per cent of the overall share of exports. A further 10 per cent is accounted for by machinery and transport equipment producing manufacturers, although the share of exports here has seen a considerable decline in the last decade, as discussed earlier, declining from a peak of 44.4 per cent of all exports to the UK in 2000. This decline has provided the major contribution to falling goods' exports to the UK over this period (see Figure 1.10).

FIGURES 1.9 AND 1.10

1.9 Exports to the UK in Selected Years (euro, billions)

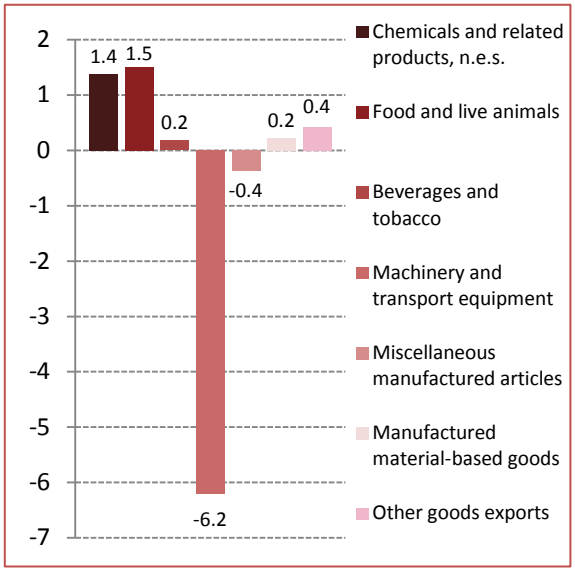


Source: CSO and Eurostat.

Note: 2/ Includes optical media, medical devices, plastic articles, etc.

3/ Includes wood-based goods, paper-based goods, construction materials, etc.

1.10 Change in Exports to the UK by Major Sectors, 2000-2011 (euro, billions)



Source: CSO and Eurostat.

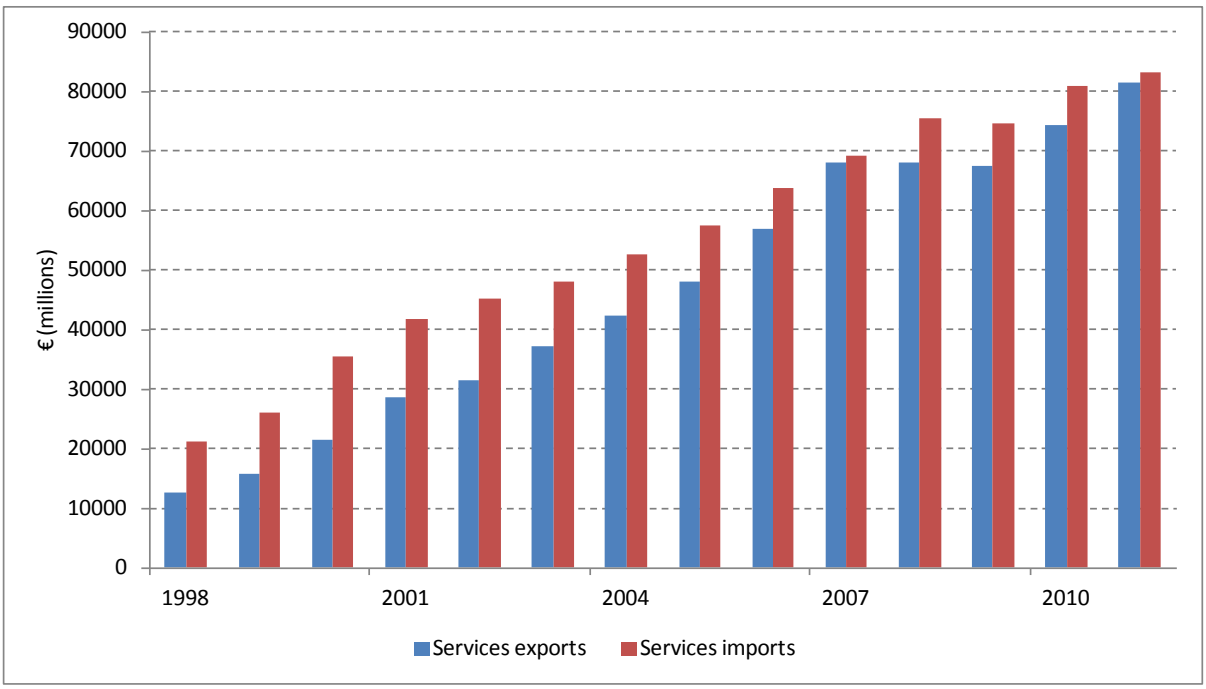
As highlighted by Barry and Van Egeraat (2005), some manufacturing activities in the ICT sectors that experienced outsourcing or relocation by multinationals in the late 1990s and 2000s were offset by a restructuring into related services sectors. This has been a sustained feature of the evolving export sector in Ireland, reflected in the amount of new services-sector FDI projects attracted to here more recently as well as in the changing share of employment in manufacturing, when compared to services sectors. Employment data for ICT sectors from Forfás (2012) reveal that the numbers employed in computer, electronic and optical equipment manufacturing sectors declined by 5,600 between 2002 and 2011, yet this was almost entirely offset by a rise in ICT related services sectors of just over 5,500 during the same period.

Trends in Service exports

Increasingly the service sector and service sector exports have become more important in the Irish economy, with exports of services amounting to €81.4 billion in 2011. Balance of Payments statistics allow some insight into what sectors contribute to services exports. The data for trade in services shows that Ireland has had a deficit in service trade in the past, although this narrowed substantially in 2011.

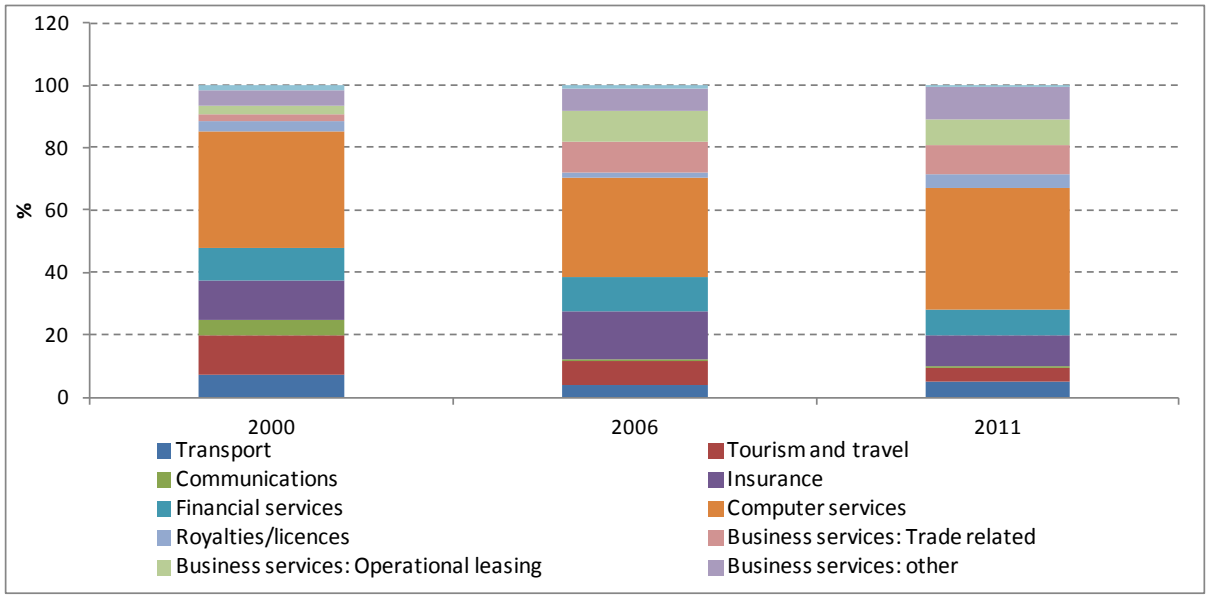
The same data can be used to see what Ireland's most important service exports are. Figure 1.12, using data for selected years, shows that computer services, e.g. computer software and software licences, are the main service export, accounting for 39 per cent of service exports in 2011.

FIGURE 1.11 Trade in Services, Current Prices



Source: CSO, Balance of Payments.

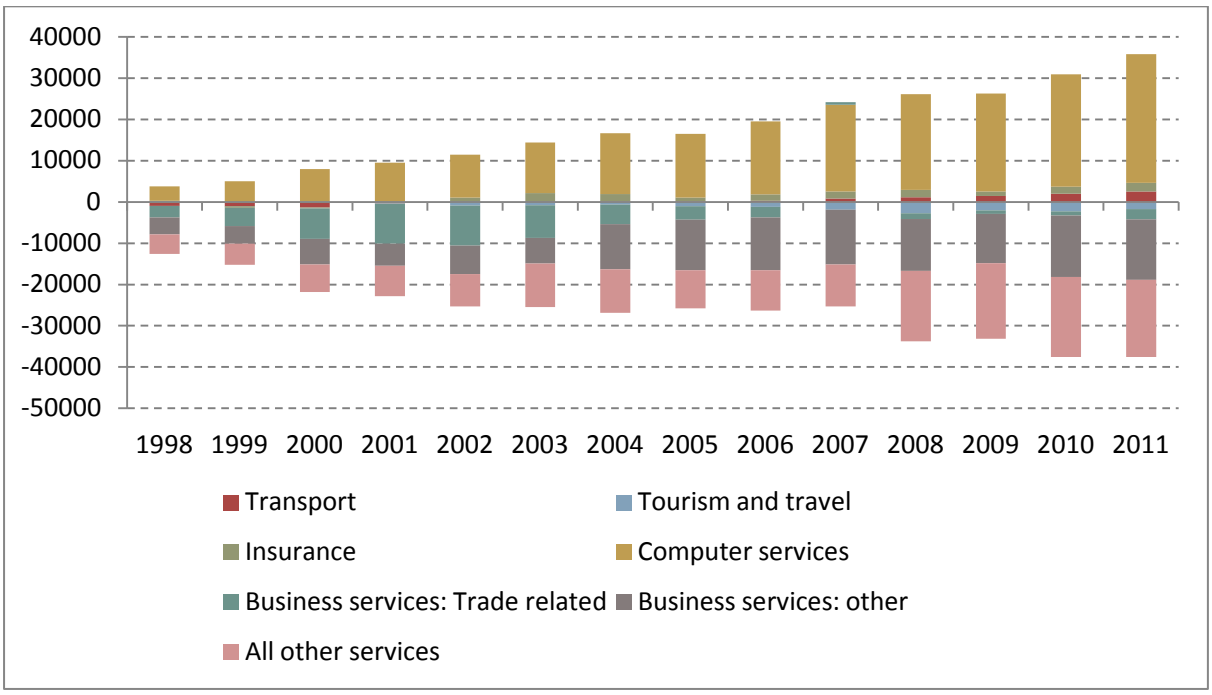
FIGURE 1.12 Service Exports by Sector, as % of Total Service Exports, Current Prices



Source: CSO, Balance of Payments.

Not only are computer services our largest service sector export, but we have consistently enjoyed a surplus on trade in this component. In recent times there has also been a surplus on the export of transport services, and insurance services, see Figure 1.13.

FIGURE 1.13 Service Exports by Sector, Euro Million, Current Prices



Source: CSO, Balance of Payments.

A more recent CSO release on service trade, extending what was previously available in the Balance of Payments data, provides us with some insights into our service export markets. This is summarised in Table 1.1. It is evident that Europe is the main market for Irish service exports, accounting for close to 64 per cent of service exports in 2011, a small decline on the proportion for 2009 and 2010. Although the UK has become less important as a destination for goods exports, it is our most important single country market, accounting for 18.5 per cent of total service sector exports, higher than for goods exports which stands at 15.7 per cent. Asia is an important market for service exports, accounting for €8.6 billion in 2011, equivalent to 10.5 per cent of total service exports. The data shows that in 2011 services exports to China accounted for nearly 26 per cent of Ireland's Asian service exports. The USA, at 7.2 per cent, is also an important market, though not as large a market as it is for goods exports.

TABLE 1.1 Service Exports by Destination

	2009	2010	2011	2009	2010	2011
	€ bn	€ bn	€ bn	%	%	%
Europe	46.6	49.7	52.0	69.4	66.9	63.8
of which:						
Belgium	*1.6*	*1.2*	*1.4*	*2.4*	*1.6*	*1.8*
France	*4.5*	*4.8*	*4.8*	*6.7*	*6.5*	*5.9*
Germany	*6.6*	*7.8*	*7.7*	*9.8*	*10.4*	*9.4*
Italy	*4.3*	*4.2*	*4.7*	*6.4*	*5.6*	*5.7*
Luxembourg	*0.8*	*1.1*	*1.0*	*1.3*	*1.4*	*1.2*
Netherlands	*3.1*	*3.4*	*3.4*	*4.6*	*4.5*	*4.1*
Spain	*2.3*	*2.5*	*2.4*	*3.4*	*3.4*	*3.0*
Sweden	*1.2*	*1.3*	*1.8*	*1.8*	*1.7*	*2.2*
Switzerland	*1.7*	*1.7*	*3.7*	*2.5*	*2.3*	*4.6*
UK	*13.6*	*14.6*	*15.1*	*20.3*	*19.7*	*18.5*
	0.6	0.6	1.1	0.9	0.8	1.4
Canada	4.3	5.5	5.8	6.4	7.4	7.2
USA	2.3	2.4	1.9	3.4	3.2	2.3
Central America	0.4	0.4	0.6	0.6	0.5	0.7
South America	5.7	7.2	8.6	8.6	9.6	10.5
Asia	1.1	1.3	1.3	1.7	1.8	1.6
Africa	0.7	1.1		1.1	1.5	
Oceania	5.4	6.2	8.6	8.0	8.3	10.5
Other	67.1	74.3	81.4	100.0	100.0	100.0
	46.6	49.7	52.0	69.4	66.9	63.8

Source: Calculations based on CSO data.
Note: % are of total service exports.

Although the CSO have to suppress the data for some sectors and countries for confidentiality reasons, the data allows us to get some insights into what service exports go to our main markets. Computer services were the main service export to the UK in 2011 at €4 billion, followed by transport services, €2.5 billion. Our main markets for computer service exports were Germany at €4.9 billion in 2011, the UK at €4 billion, Asia at €3.6 billion and France at €2.5 billion. The top three

markets for insurance exports were the UK, €2 billion, Italy €1.7 billion, and the USA, at €1.1 billion.

Outlook

Using medium-term growth forecasts from the IMF for Ireland's major international trading partners, it is possible to get a sense of the immediate growth prospects likely for our principal export markets. Table 1.2 classifies these economies into three categories (high, moderate and low growth) based on the IMF forecasts, while also showing the share and value of goods exported to each economy in both 2007 and 2011 derived from detailed CSO trade statistics.

Table 1.2 illustrates how a large concentration (almost 93 per cent) of Irish traded goods were destined for markets in 2011 that are likely to have low or moderate growth prospects over the next five years, giving a clear indication of the difficulties faced by Irish exporting manufacturers in the current environment. Of particular concern is the fact that the eurozone, the largest destination for Irish goods exports, represents the economy with the most sluggish outlook for growth out of all of Ireland's major trading partners. In addition, the indications for the US and the UK, Ireland's next largest export markets, point to fairly moderate demand growth over the next five years, with both economies positioned towards the low end of the moderate growth spectrum (defined here as annual growth in the region of an average of 2 to 4 per cent). Taken together, almost 87 per cent of our major export markets are likely to have annual average GDP growth rates of 3 per cent or lower over the period 2012 to 2017.

In assessing the outlook for Irish trade one issue is the effect on trade statistics of drugs manufactured here coming off-patent. Trade statistics for the first six months of the year show a €1.3 billion decline in exports of medical and pharmaceutical products, much of which is attributed by analysts to the drug Lipitor coming off patent. The manufacture of cheaper generic drugs will reduce the value of exports, (with a corresponding reduction in profit and in net factor outflows). However, the impact on the volume of exports is less certain. If the pharmaceutical company continues to locate the production of its generic alternative in Ireland the impact on the volume of pharmaceutical exports will not be as great as the impact on the value.

The difficulties faced in terms of firms breaking into new export markets where rapid growth potential exists is evidenced by the small share of exports to areas such as China, Hong Kong and Saudi Arabia. Traditionally, barriers such as geographical distance, the lack of a common language, internal geography (typically measured as population density), business or import costs associated

with specific export markets and relatively weaker communications infrastructures have been highlighted as variables which may explain the lack of progress in terms of the number of firms accessing such markets (for example, see Lawless, 2009).

TABLE 1.2 Key Export Regions Classified By Medium Term Growth Prospects and Share of Irish Goods Exports

	Forecast % GDP Growth (Avg. Y-Y)	Goods Exports (% of Total)		Goods Exports (€bn)	
High Growth (>4%)	2012 - 2017	2007	2011	2007	2011
Hong Kong SAR	4.0	0.8	0.9	0.7	0.9
Saudi Arabia	4.5		0.6		0.5
Malaysia	4.9	0.8	0.5	0.7	0.5
China	8.6	1.4	1.8	1.3	1.6
Total (High Growth)	5.5 (avg.)		3.8		3.5
Moderate Growth (2% - 4%)					
Norway	2.1	0.7	0.4	0.6	0.4
United Kingdom	2.3	18.6	15.6	16.6	14.5
Canada	2.3	0.5	0.7	0.4	0.6
Sweden	2.4	1.1	1.0	1.0	0.9
Czech Republic	2.7	0.4	0.5	0.4	0.4
United States	2.9	17.7	23.1	15.8	21.4
United Arab Emirates	3.2		0.3		0.3
Romania	3.4	0.2	0.4	0.2	0.3
Australia	3.4	0.9	0.8	0.8	0.7
Poland	3.5	0.7	0.7	0.6	0.6
Mexico	3.5	0.7	0.6	0.6	0.5
Israel	3.5		0.5		0.5
South Africa	3.6	0.4	0.3	0.4	0.3
Singapore	3.8	0.6	0.6	0.5	0.6
Turkey	3.8	0.5	0.5	0.4	0.5
Brazil	3.9	0.2	0.3	0.2	0.3
South Korea	3.9	0.5	0.4	0.5	0.4
Russia	3.9	0.4	0.5	0.3	0.5
Total (Moderate Growth)	3.2 (avg.)		47.2		43.9
Low Growth (<2%)					
Eurozone	1.2	41.3	38.9	36.8	36.1
Japan	1.5	1.9	1.9	1.7	1.8
Denmark	1.5	0.6	0.5	0.6	0.5
Switzerland	1.7	3.6	4.0	3.2	3.7
Finland	1.8	0.5	0.3	0.4	0.3
Total (Low Growth)	1.5 (avg.)	47.9	45.6	42.8	42.4

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Special Articles

Measuring Fiscal Stance 2009-2012

Ide Kearney[1]

1. Introduction

Over the period since mid-2008 the Irish government has introduced a series of austerity measures equivalent to approximately 15 per cent of GDP. These measures were taken to try and reverse the deterioration in the government deficit that began in 2008. It is never a straightforward exercise to assess the outcome of such a package of discrete policy changes on the public finances. It is made more difficult in circumstances where the economy is going through a precipitous collapse in output and employment as occurred in Ireland between 2008 and 2011. This collapse caused a dramatic decline in taxation revenues and an increase in unemployment-related expenditures, both of which serve to worsen the public finance position. In such circumstances, it is important to disentangle the effect of policy decisions (e.g. higher tax rates or lower transfer payments) which affect the discretionary fiscal position from those changes which are driven by the collapse in the economy.

To address this issue we look at the fiscal stance adopted in individual budgets over the period 2008-2012 in this paper. The fiscal stance indicator we use is an attempt to isolate for each year discretionary changes in the budget balance from the total budget balance. In effect it looks at the difference between the actual budget outcome and the outcome that would have arisen assuming no change in policy, an "indexed" budget.

We estimate an indexed budget using a set of detailed indexation rules which are included in the ESRI *HERMES* macroeconomic model. Using these rules, we simulate the *HERMES* model in successive years to estimate the budget balance that would have pertained in the absence of any discretionary budgetary changes in that year. The difference between the actual budget balance and this indexed budget is a measure of fiscal stance.

We examine budgetary outcomes for each of the years since the onset of the fiscal and banking crisis in Ireland in 2008. Over the years 2009-2012 our results suggest that the cumulative effect of discretionary fiscal policy has been to

[1] I would like to thank Adele Bergin, David Duffy, Joe Durkan, John FitzGerald, Petra Gerlach, Diarmaid Smyth, two anonymous referees and participants at an internal ESRI seminar for comments on an earlier draft of this article. I would further like to thank Patrick Quill of the Department of Finance for advice on collating the 2011 and 2012 budgetary data.

reduce the deficit by 5½ percentage points of GDP. Our results suggest that the impact of the very large package of measures introduced in 2009 was very modest. This was partly due to the very rapid deflation that occurred in 2009, our estimates suggest that this deflation served to more than offset the nominal current expenditure cuts that were introduced in that budget. In 2010 and 2011 the impact of fiscal policy has been much more marked, knocking between 1 ½ and 2 percentage points of GDP off the deficit in each year. We estimate that the effects of the 2012 Budget could also reduce the deficit by 1 ¾ percentage points of GDP.

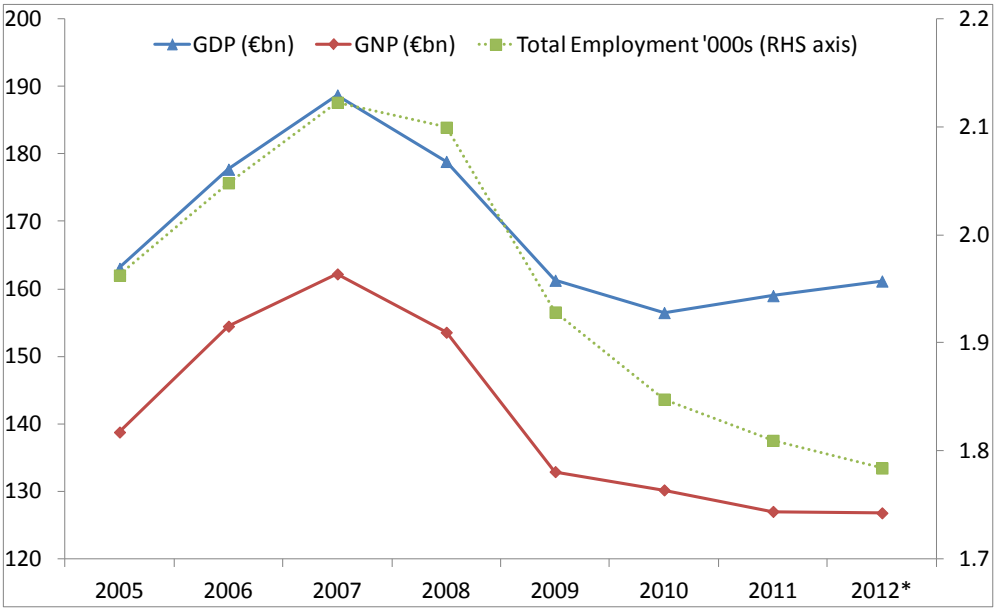
Looking further back to the last major crisis in the public finances in the 1980s, the estimates we present here suggest that the effect of the current fiscal consolidation for the years 2009-2012 has been much deeper than the fiscal consolidation in the period 1982-1986. In both periods, austerity measures were introduced against a backdrop of low or negative growth and rapidly rising unemployment.

The structure of the paper is as follows. In Section 2 we review the public finance position. In Section 3 we outline the methodology used to estimate the fiscal stance using the ESRI *HERMES* macroeconomic model. In Section 4 we present our estimates of the fiscal stance for each of the years 2008-2012. Section 5 discusses the results.

2. The Actual Budget Balance 2008-2012

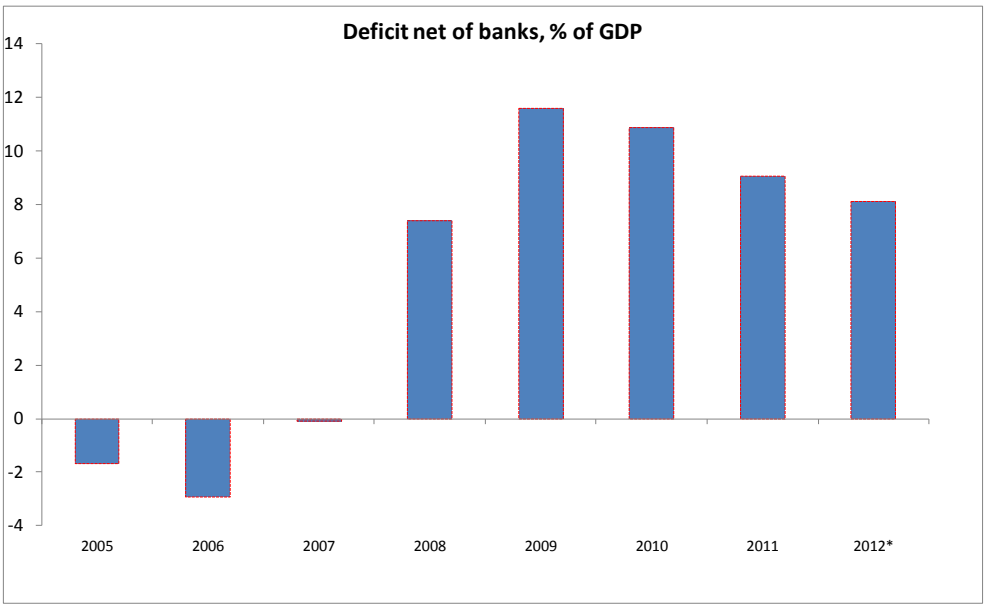
The Irish economy went into freefall in 2008, with output, income and prices collapsing. By 2011 GDP in current prices had fallen 16 per cent from its 2007 peak, while GNP in current prices had fallen by almost one-quarter. The deep recession affected both output levels and prices. This caused a massive erosion of the tax base with a consequent collapse in government revenue. The heavy reliance on property-related taxes in the years preceding the collapse further exacerbated this, and exposed the narrowness of the tax base. Furthermore, the crisis led to a 15 per cent fall in the level of employment, which in addition to eroding the tax base, added to unemployment-related expenditures (transfer payments).

FIGURE 1 The Collapse in GDP, GNP and Employment 2008-2012



The government accounts were broadly in balance in 2007. However this masked the deep structural weakness in the underlying fiscal position that was revealed once the housing and banking crisis began. The gap between revenue and expenditure widened to a peak of almost €18.5 billion[2] in 2009 with the underlying deficit as a share of GDP reaching almost 12 per cent (Figure 2). It narrowed slightly to €17 billion in 2010, however, given that GDP was also falling, its share of GDP barely changed. In 2011 the deficit fell to €14 billion or 9 per cent of GDP, and it is projected to narrow to €13 billion in 2012.

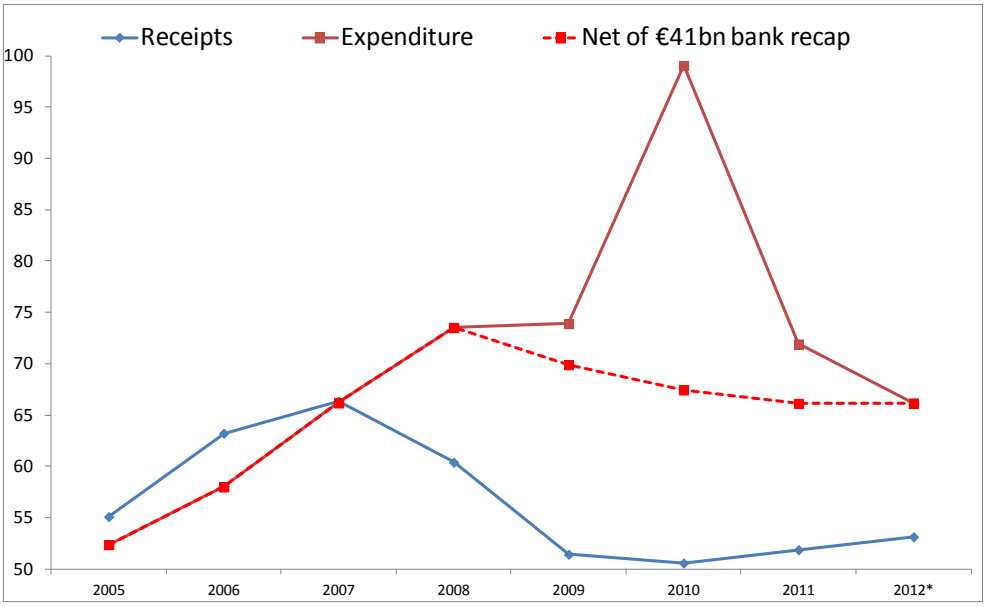
FIGURE 2 General Government Deficit Net of Transfers to Banks



2 Excluding transfers to the banks.

Figure 3 shows the path of government expenditure and revenue since 2005.[3] It was in the years preceding 2007 that the property bubble and credit bubble were allowed to inflate (Bergin *et al.* 2011), with government revenues booming. In 2008 both bubbles burst and the public finance and bank funding crises emerged. Figure 1 shows the speed with which general government revenue collapsed from 2007 onwards, with total government revenue one-quarter or €16 billion lower in 2010 compared to 2007. By the end of 2012, after five years of fiscal consolidation, total tax revenue is forecast to be €13 billion lower than in 2007. It is this collapse in tax revenues, and in particular property-related taxes, which is the proximate cause of the public finance crisis in Ireland.

FIGURE 3 General Government Expenditure and Revenue, €billion



On the expenditure side, total government expenditure continued to increase in 2008 despite the crisis in revenues, rising by over €7 billion. From 2008 onwards total expenditure, excluding the cumulative €41 billion in monies transferred to the banks,[4] has been falling and is projected to return to 2007 levels by 2012.

3 In this note we use detailed data for general government revenue and expenditure from the *National Income and Expenditure 2011, Tables 19-25.* For 2012 we use numbers supplied by the Department of Finance which are based on the *Stability Programme Update,* Department of Finance April 2012. This provides the most recent estimates for the official forecasts/targets for 2012 (2012 figures have an asterix to indicate forecast). See Appendix 2 for details.

4 By the end of 2011 the government had made direct transfers of almost €63 billion to the banking sector. This consisted of €34.7 billion provided to Anglo Irish Bank and INBS (IBRC) by way of promissory notes issued by the exchequer. A further €28 billion was provided by the NPRF and the exchequer consisting of €20.8 billion to AIB and EBS, €4.7 billion to Bank of Ireland and €2.7billion to ILP. At the time of writing, €5.8 billion of these bank recapitalisation monies are being treated as a capital transfer in the national accounts, and are included in the 2011 general government expenditure figures in Figure 2. The €31billion promissory note payment to IBRC in 2010 and the €4 billion exchequer payment in 2009 were already included in the general government expenditure figures in the national accounts in both these years. The total figure for capital transfers to the banks which is included in general government expenditure is thus €41 billion.

However the composition of total expenditure has changed significantly over that period, shifting from expenditure on goods and services (including capital expenditure) to transfer payments (see Table 1). Expenditure on current goods and services and capital expenditure are projected to have fallen by €8.8 billion between 2007 and 2012, while transfer payments are forecast to have increased by €9.0 billion, €4.5 billion related to personal transfer payments (unemployment benefit, pensions, other social welfare payments) and €4.5 billion of which relates to an increase in national debt interest payments to service the explosion in government debt.[5]

TABLE 1 Government Revenue and Expenditure 2007-2012

Change 2007-2012 €bn				
Taxes on income and wealth	-3.0	Expenditure:		-9.0
Taxes on expenditure	-6.8	Capital Expenditure	-6.4	
Taxes on capital	-2.4	Current goods and services	-2.4	
Other receipts	-1.0	Subsidies	-0.2	
		Transfer payments:		9.0
		National debt interest	4.5	
		Other	4.5	
Total government receipts	-13.2	Total expenditure		0.0
General Government Balance	**-13.0**	**% of 2012 GDP**		**8%**

3. Methodology

The actual budget balance reflects both cyclical developments and discretionary budgetary decisions. Fluctuations in economic activity significantly affect budget receipts and expenditure. During expansions tax receipts increase while some expenditures, such as unemployment benefits, decline and the reverse occurs in recessions. The movements in these budgetary categories are referred to as "automatic stabilisers" that operate to offset the effects of the economic cycle and lead to counter-cyclical movements in aggregate demand in the absence of any discretionary changes by the fiscal authorities.

However, the collapse in the economy that occurred between 2008 and 2011 is far from a "cyclical" event or a fluctuation in economic activity. The bursting of the housing and credit bubbles, and the collapse in economic activity, prices and employment, exposed a structural weakness in the public finances which swiftly led to double digit deficit ratios. Within the maelstrom of this collapse in the

5 See FitzGerald and Kearney (2011) for details.

public finances, it is difficult to disentangle the effects of policy on the widening deficit.

The fiscal stance indicator is an attempt to capture in a single indicator the combined macroeconomic effects of all the various decisions taken in a budget in respect of public expenditure and taxation. The macroeconomic impact of a government's budget is typically judged on whether the fiscal stance is considered to be expansionary or contractionary in terms of either boosting or dampening aggregate demand in the domestic economy.

3.1 The *HERMES* Measure of Fiscal Stance

Our method of estimating fiscal stance is to use a macroeconomic model (the ESRI-*HERMES* model) to simulate the effects of an indexed budget, where indexation is based on assuming no policy change relative to the previous year's budget. The difference between the indexed budget balance and the actual budget balance is then a measure of fiscal stance. A positive (negative) difference indicates a loosening (tightening) of fiscal policy. This is based on an incremental approach and so can be cumulated over time. Using a macroeconomic model for estimation allows for the implementation of detailed indexation rules for different items of revenue and expenditure.

Effectively, the indexed budget is intended to simulate a "what if there were no policy changes" budget relative to the previous year. In practice average tax rates and average expenditure rates are held unchanged relative to the previous year, where detailed indexation rules are used for individual tax and expenditure items. Appendices 3 and 4 give details on the indexation rules employed. We then compare this "indexed" outcome with the actual outturn in each year. The difference between the indexed and actual outcome provides an estimate of the fiscal stance.

The full indexed budget is computed assuming no change in average tax and expenditure rates from the previous year, and applying the actual growth rate to the revenue and expenditure base. The use of average tax and expenditure rates ensures full indexation of the tax and welfare system. There is one exception to these indexation rules. Indexation of non-cyclical expenditure assumes it grows at its "long-run" growth rate which we implement as a nine-year average growth rate. This is intended to capture a measure of indexation that is neutral with respect to the cycle.

The derivation of an indexed budget using the *HERMES* macroeconomic model can be illustrated in a simplified example as follows. Define T as total revenue, GTR as cyclical expenditure (transfers) and GO as non-cyclical expenditure, then the actual budget balance B in year t is:

$$B_t = T_t - GTR_t - GO_t$$

Define t as the average tax rate (T/Y), rtr as the average rate of cyclical expenditure (GC/Y), rgo as the average rate of non-cyclical expenditure (GO/Y). Then the budget balance can be expressed as a function of average tax and expenditure rates, which are discretionary policy instruments, times the base Y, where the base is determined by the rate of economic growth:

$$B_t = t_t Y_t - rtr_t Y_t - rgo_t Y_t$$

Now define z_t as the actual growth rate of Y in year t and z* as the "long-run" growth rate in non-cyclical expenditure. The budget balance indexed on the previous year's budget is then:

$$\tilde{B}_t = t_{t-1} Y_{t-1}.z_t - rtr_{t-1} Y_{t-1}.z_t - rgo_{t-1} Y_{t-1}.z^*_t$$

where $z_t \,.\, Y_{t-1} = Y_t$. With some manipulation this can be derived as:

$$\tilde{B}_t - B_t = -\left(\Delta t_t - \Delta rtr_t - (rgo_t - rgo_{t-1}.\frac{z^*}{z}) \right).Y_t$$

From the formula we can see that increases in average tax rates will tighten fiscal stance while increases in average transfer rates will loosen fiscal stance. The last term implies that if non-cyclical expenditure grows faster than its long-run growth rate, this will loosen fiscal stance.[6]

3.1.1 Tax Indexation Rules

The main tax revenues are determined as the product of a tax "rate" by a "tax base":

$$T_{it} = t_{it} \,.\, BASE_{it}$$

For the purposes of indexation, there are detailed separate revenue categories identified. These include expenditure taxes (VAT receipts, customs taxes, excise

6 This can be seen by rewriting this third term as follows:

$$rgo_t - rgo_{t-1}.\frac{z'}{z} = \frac{G_t - G_{t-1}.z'}{Y_t}$$

taxes, agricultural levies, motor vehicle duties, etc.) and income taxes (personal income taxes, social security contributions, corporate income taxes, DIRT taxes, agricultural income taxes, etc.). Appendix 3 and 4 give the detailed indexation rules applied for each category of revenue. Typically indexation to the previous year's budget is implemented by setting the tax rate equal to that of the previous year, as follows:

$$\tilde{T}_{it} = t_{it-1} . BASE_{it}$$

There are some exceptions to this rule built in to the model to ensure accurate indexation. For example, the rate of excise duty is indexed to the deflator of private consumption because excise duties are levied on volumes.

3.1.2 Expenditure Indexation Rules

The indexation of expenditure items is more complicated because not all items of expenditure are cyclical. For cyclical items the indexation rules used can be summarised as follows:

Unemployment transfers, GTRU, are modelled as the product of an unemployment transfer "rate" ru, applied to the "base" of total numbers unemployed, U:

$$GTRU_t = ru_t . U_t$$

Because numbers employed is a volume base, the rate must be indexed to the appropriate price. In the *HERMES* model indexation of the rate of transfer payments uses a weighted average of the private consumption deflator and the average wage rate as the price term:

$$\tilde{GTRU}_t = ru_{t-1}.(\alpha\dot{P}_t + (1-\alpha)\dot{W}_t) . U_{it}$$

Indexation of other personal transfers applies a similar price adjustment. In addition, because these transfers are mainly to the elderly (pensions) and the young (children's allowance) there is a volume adjustment based on the growth in the dependency rate (the proportion of the population over 65 and under 14 years of age).

Indexation of subsidy payments imposes a growth rate equal to the growth in the relevant subsidy base. For example, agricultural subsidies are assumed to grow at the same rate as agricultural output.

For non-cyclical expenditure items, we assume no volume growth as a pure indexation rule. Indexed values of four categories of public investment, two categories of employment and public consumption were all computed on this basis.[7] In normal times such an indexation rule would be deflationary[8], however given the collapse in the economy, this no growth rule could in itself be regarded as having an expansionary bias in the years 2009 and 2010. To the extent that this is the case, our estimate of the fiscal stance in those years will in effect overstate the contractionary effect of fiscal policy. On balance we considered that a long-run no-growth indexation rule was the best approximation for a realistic no policy change stance over the period in question.

4. Empirical Results

4.1 The Official Austerity Package 2008-2012

In July 2008 the authorities began a policy of corrective action (see Appendix 2 for details) to help control the burgeoning deficit. Official estimates suggest that €24 billion in discretionary budgetary measures have been implemented since mid-2008. This is equivalent to 15 per cent of 2011 GDP or 19 per cent of 2011 GNP. These are nominal amounts which state the *ex ante* policy position, that is to say that they do not take account of the negative effects on employment, output and prices which reductions in expenditure and increases in taxation have on economic activity.

TABLE 2 *Ex Ante* and *Ex Post* Estimates of Austerity, €billion

	2008	2009	2010	2011	2012	2009-2012
Estimated *Ex Ante* Measures Announced since mid-July 2008, €bn.						
Revenue	0.0	-5.6	0.0	-1.4	-1.6	-8.6
Expenditure	-1.0	-3.9	-4.3	-3.9	-2.2	-14.3
of which capital:	0.0	-0.6	-1.0	-1.9	-0.8	-4.2
Total	-1.0	-9.4	-4.3	-5.3	-3.8	-22.9
% of GDP	-0.6%	-5.9%	-2.7%	-3.4%	-2.4%	
Estimated *Ex Post* Effects of budgetary policy, €bn.						
Revenue	0.4	-0.3	-0.6	-0.9	-0.9	-2.7
Expenditure	2.0	-0.3	-2.4	-1.5	-2.0	-6.2
of which capital:	0.3	-1.3	-1.3	-0.3	-0.8	-3.7
Total	2.4	-0.6	-3.0	-2.3	-2.9	-8.8
% of GDP	1.3%	-0.4%	-1.9%	-1.5%	-1.8%	

7 These are investment in public administration, health and education, local authority housing and roads, water supply and sewerage; employment in public administration, and health and education; and government's purchases of goods and services. See Appendix 3 and 4 for details.

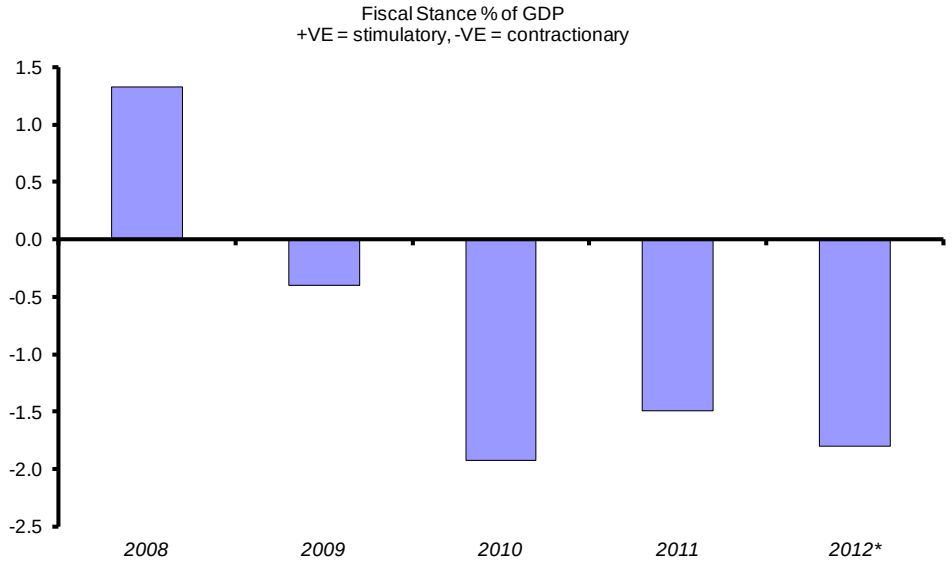
8 In Kearney *et al*. (2000) and Barrett *et al*. (2009) we used a long-run volume growth rate, estimated using a nine-period centred moving average as an indexation rule.

Our estimates of the fiscal stance suggest that the cumulative effect of the fiscal consolidation package 2009-2012 (excluding 2008 because it only partially covers the fiscal consolidation period) is estimated to be €8.8 billion for a package of €23 billion, just over one-third.[9] This is on the low side, typically we would expect the *ex post* outturn to be roughly half the original *ex ante* measure. This anomaly can be traced to the 2009 Budget which had a rather perverse outcome. Our results suggest that in 2009 *ex ante* current expenditure measures of €3.6 billion introduced in the budget had an *ex post* stimulatory effect equivalent to €1 billion. This highlights the difficulty of introducing austerity measures at a time of significant deflation.

4.2 Individual Year Estimates of the Fiscal Stance 2008-2012

Figure 4 shows the overall measure of fiscal stance based on the difference between an indexed and actual budget balance (GGB). A positive result implies an expansionary budget, a negative sign indicates a contractionary budget.

FIGURE 4 Estimate of Fiscal Stance



The results are interesting and instructive. At a first glance they suggest that it was not until 2010 that fiscal policy measures adopted began to have a significant impact on the deficit.

2008: We estimate a strongly stimulatory budgetary stance of 1.3 per cent of GDP. This is not a surprising result. The policy of fiscal consolidation began in July

9 In comparing with the *ex ante* position we compare full-year effects. Indexation assumes policy changes are implemented as a full year effect, including all carryover effects.

2008 when the government introduced a package of cuts equivalent to €1 billion on a full-year basis. However, this was only a small part of the overall budgetary measures introduced in 2008, all of which are captured in the *HERMES* indexed budget.

2009: We estimate a mildly contractionary budgetary stance of -0.4 per cent of GDP. This is at first glance a very surprising result; given that the announced package of cuts is estimated to have been equivalent to almost 6 per cent of GDP. However, this occurred in the year when the economy was in freefall, and prices of consumer and investment goods both fell sharply. It points to the difficulties of implementing austerity cuts in a period of deflation.[10] This means that a policy of no change in nominal expenditure levels, which in "normal" times would imply a discretionary tightening of policy, in 2009 would on average have led to a real increase in expenditure. Our estimate of the fiscal stance for 2009 suggests that current expenditure had a stimulatory effect on the economy equivalent to 0.6 per cent of GDP (Figure 4).

2010: We estimate a highly contractionary budgetary stance of 1.9 per cent of GDP. This is lower than the announced package of €4.3 billion (2.7 per cent of GDP) however, allowing for the negative effects of austerity on growth and employment, and against a backdrop of continued deflation, this estimate looks consistent with the *ex ante* numbers.

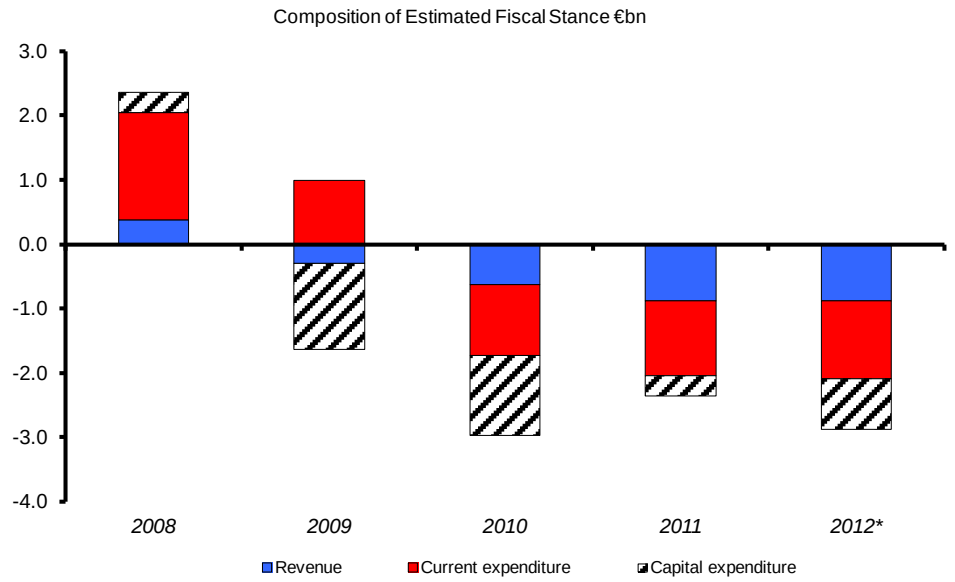
2011: We estimate a strongly contractionary budgetary stance of 1.5 per cent of GDP. Again this is lower than the *ex ante* package of €5.3 billion or 3.4 per cent of GDP.

2012: We estimate a contractionary budgetary stance of 1.8 per cent of GDP. These figures are based on the latest official forecasts of the general government deficit from the Stability Programme Update, April 2012.

Figure 5 breaks down the composition of the fiscal stance measure among the main categories of expenditure. Scanning across the graph it is clear that changes in current expenditure have been the most discretionary element of recent budgetary policy. What is most noticeable is had current expenditure been fully indexed in 2009, the fiscal stance would have been significantly more contractionary than the actual outcome.

[10] For example during 2009 consumer prices as measured by the private consumption deflator fell by 7 per cent.

FIGURE 5 Composition of Fiscal Stance



4.3 Comparison with Other Measures of Fiscal Stance

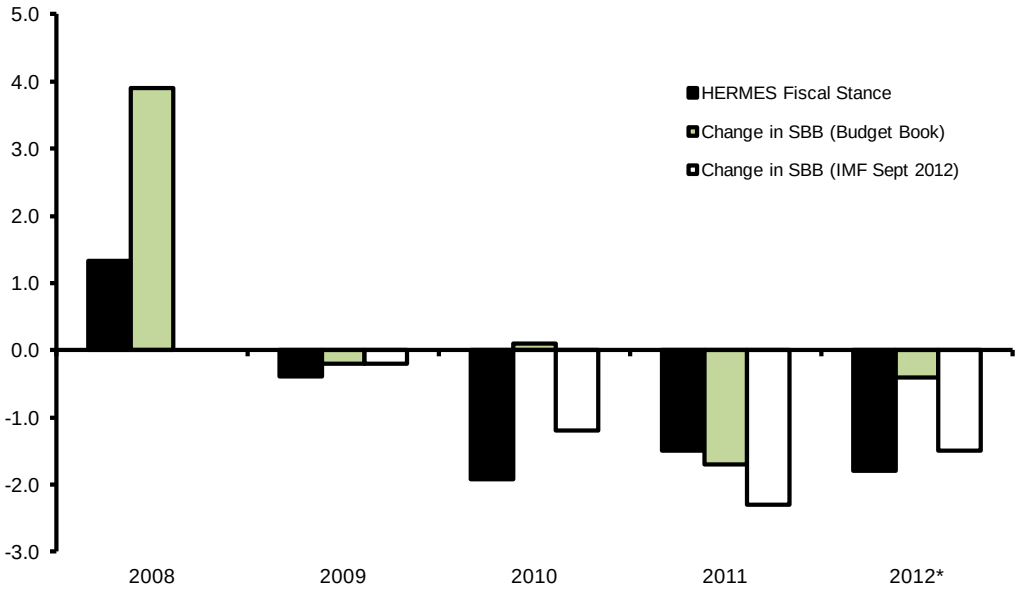
The standard approach is to estimate a cyclically adjusted or "structural" budget balance. This is referred to as the "gaps and elasticities" approach that involves estimating an output gap measure and then using this along with elasticity measures to adjust budgetary items. This measure is defined as what the budget balance would be were the economy operating at capacity, where capacity is typically defined as full employment output or trend output. Many international institutions, including the OECD, the European Commission and the IMF produce estimates of cyclically adjusted budget balances based on this definition.

Even in normal times there are a number of difficulties in interpreting the structural budget balance as an indicator of fiscal stance. First, there are methodological difficulties surrounding the definition and measurement of capacity output to generate the gap measure and the underlying elasticities in the measures favoured by the international agencies. These difficulties are significantly exacerbated following the sort of collapse in the economy that Ireland has just witnessed. Second, the structural budget balance (SBB) measures the total effects of discretionary policy, which is a cumulative measure, and does not measure the impact of the current year's budget relative to the previous year's budget. Because of these difficulties many institutions now use the change in the SBB as a measure of fiscal stance, which is an incremental measure. If the SBB increases (decreases) in a given year, this would imply a tightening (loosening) of fiscal policy in that year's budget. To arrive at an estimate of the total stance of discretionary fiscal policy over a number of years, these changes can be aggregated over time.

Figure 6 shows the estimated fiscal stance from *HERMES* together with estimates of changes in the structural budget balance (SBB) from the Department of Finance budget book, which are based on European Commission estimates, and the September 2012 IMF estimates. The Budget Book estimate shown here is the change in the cyclically adjusted budget balance or the structural budget balance published in successive budget book publications.[11]

The differences in individual years are striking. In 2009 all three measures agree that the very large package of measures introduced in that year had virtually no effect on the deficit. Similarly, all three measures are close in their assessment of the 2011 Budget, with the IMF estimating a reduction in the structural balance of 2.3 per cent of GDP compared to a Budget Book estimate of 1.7 and a *HERMES* estimate of 1.5. However, the results diverge sharply for 2010 and 2012. For 2010 the *HERMES* estimate suggests that the budgetary stance was strongly contractionary at 1.9 per cent of GDP. The IMF estimate for 2010 is significantly lower at 1.2 per cent of GDP but it still estimates a strong contractionary fiscal stance. By contrast the Budget Book estimate suggests that the 2010 Budget had no effect on the structural deficit.

FIGURE 6 Comparison with Official and IMF Estimates 2008-2012



A similar divergence emerges for 2012 with the *HERMES* and IMF estimates much closer than the European Commission figures. The Budget Book estimate of the change in the SBB for 2012 is estimated at just 0.4 per cent of GDP. This is very

[11] In each case we take the most recently published estimate of the SBB. The 2008 and 2009 estimates are from *Budget 2009,* the 2010 estimate is from *Budget 2010,* the 2011 estimate from *Budget 2011.* The 2012 estimate is taken from Table A5 of the SPU, April 2012.

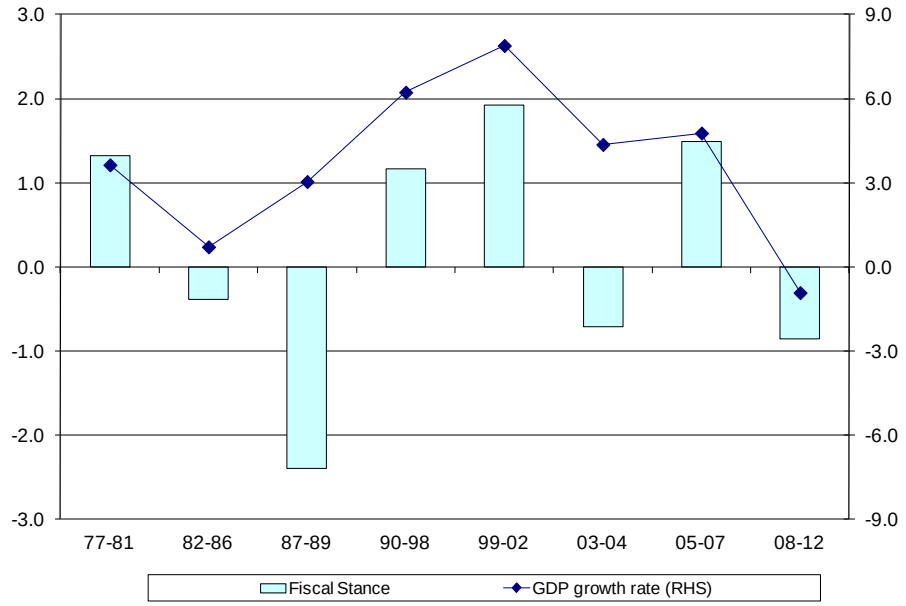
different to that estimated by the IMF which implies a change of 1.5 percentage points in the structural balance, much closer to the *HERMES* 1.8 estimate of fiscal stance.[12]

4.4 Fiscal Policy is Predominantly Pro-cyclical

Figure 7 shows our estimate of the fiscal stance from 1976 to 2012 cumulated over successive periods[13] of expansionary or contractionary budgetary stance. The graph also shows the average annual growth rate in those periods. At first glance it is clear that fiscal policy has been broadly pro-cyclical throughout the last three and a half decades, with the exception of the years 1987-1989 when the government introduced a successful fiscal consolidation during a period of positive growth.

The period 1977-1981 shows a cumulative expansionary effect, reflecting the strong expansion in current expenditure in that period. Following this, the budgets of the early and mid-1980s show up as mildly contractionary coupled with growth rates averaging just 0.7 per cent per annum. This was followed in the 1987-1989 period by a period of very sharp fiscal adjustment which occurred at a time of a strong recovery in growth in the Irish economy.

FIGURE 7 Fiscal Stance (LHS) and GDP Growth Rate (RHS), Annual Averages



12 The Department of Finance have regularly expressed concerns that estimating the SBB using the EU common methodology is problematic for open economies such as Ireland. In the most recent 2012 Budget they again urged caution in interpreting the SBB figures.

13 These periods are chosen to correspond to distinct periods of fiscal policy stance. See Barrett *et al.* (2009) for details.

During the 1990s, as growth began to take off, the average fiscal stance was mildly expansionary, accelerating in the period 1999-2002 which shows a significant expansionary fiscal stance. There was some fiscal retrenchment in 2003-2004 following the dot-com recession before strong expansion in the years 2005-2007. What is interesting about the 2005-2007 period is the similarity in the growth rate and the magnitude of the fiscal stance to the earlier 1977-1981 period of expansion. By contrast, the subsequent fiscal consolidation of 2008-2012 has been deeper than that estimated in the period 1982-1986 when very little progress was made *ex post* in discretionary budgetary adjustments. In both cases, the austerity measures were introduced against a backdrop of low or negative growth and rapidly rising unemployment. The fiscal consolidation in the 1980s was only successfully completed in the latter part of the decade during a re-emergence of strong growth in external demand which helped to offset the very sharp fiscal contraction of the years 1987-1989.

5. Conclusions

In this paper we present estimates of the fiscal stance based on an analysis of the fiscal consolidation budget packages introduced over the period 2008-2012. Our results suggest that the *ex post* effects of austerity were initially quite modest. In particular we find that the 2009 Budget was broadly neutral despite a very large package of cuts. In the years 2010 through to 2012, we estimate that fiscal policy has had a significant effect on the deficit, with a cumulative reduction in the structural deficit of over 5 ½ percentage points.

While fiscal stance measures can be used to assess the likely expansionary or contractionary impact of budgetary policy on economic activity, they are silent on the appropriate stance of budgetary policy. Given the crisis that the Irish government faced in 2009 and 2010 with the precipitous collapse in its budget balance, the yawning pit of mounting bank losses all funded by the general government purse, and the sovereign's eventual inability to independently raise funding on financial markets, there was little choice but to commence an aggressive fiscal consolidation programme to bring the public finances under control. This austerity programme, pursued over the past five years, which served initially to stabilise and more recently to reduce the deficit on the public finances, has occurred against a backdrop of a very deep recession in terms of output, employment and incomes. As in the 1980s, the Irish authorities find themselves once again in a position where they are pursuing an aggressive austerity programme against the tide, with a deeply pro-cyclical fiscal stance.

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APPENDIX 1 The General Government Balance 2006-2012

€million	2006	2007	2008	2009	2010	2011	2012
Current receipts							
Taxes on income and wealth	19,945	20,904	19,231	16,651	16,143	18,642	19,925
Social Insurance contribution	8,159	9,053	9,259	8,924	8,701	7,532	7,000
Taxes on expenditure	24,666	25,216	22,246	18,271	17,922	17,678	18,375
Gross trading income	0	0	0	0	0	0	0
Gross rental income	536	568	676	495	535	524	475
Investment income	1,239	1,615	2,172	1,979	2,167	2,044	2,400
Transfers from ROW*	210	55	149	97	113	52	200
Miscellaneous receipts	2,906	2,933	3,058	3,418	4,180	3,991	3,400
Total receipts - current	57,661	60,345	56,792	49,835	49,759	50,464	51,775
Capital receipts							
Taxes on capital	3,442	3,488	1,767	801	582	1,123	1,113
Transfers from ROW	193	162	76	175	48	132	150
Other receipts	1,930	2,369	1,766	628	200	171	108
Total receipts - capital	5,566	6,019	3,609	1,604	831	1,426	1,371
Total receipts	63,227	66,364	60,400	51,438	50,590	51,890	53,146
Current expenditure							
Subsidies	775	870	939	893	879	639	625
National debt interest	1,828	1,957	2,376	3,246	4,937	5,143	6,450
Transfer payments	20,390	23,180	26,214	28,317	27,859	28,319	27,671
Goods and services:	26,813	29,530	31,167	30,273	28,026	27,111	27,149
Wages,salaries and pensions	*18,106*	*19,838*	*21,136*	*20,468*	*19,050*	*18,854*	*19,174*
Other	*8,707*	*9,692*	*10,030*	*9,805*	*8,976*	*8,257*	*7,975*
Total current expenditure	49,806	55,537	60,695	62,729	61,701	61,213	61,896
Capital expenditure							
Grants to enterprises	593	823	2,046	4,844	32,160	6,060	725
Recapitalisation of Financial Institutions				*4,000*	*31,575*	*5,777*	
Other transfer payments	701	1,016	985	241	-375	364	550
Gross physical capital formation	6,810	8,788	9,769	6,069	5,512	4,249	2,937
Payments to the rest of the world	105	35	31	18	27	27	50
Total capital expenditure	8,209	10,662	12,830	11,173	37,325	10,701	4,262
Total expenditure	58,014	66,198	73,525	73,901	99,025	71,913	66,158
Net lending / net borrowing	5,212	166	-13,125	-22,463	-48,435	-20,023	-13,012
General Government Balance	5,193	170	-13,129	-22,467	-48,426	-20,158	-13,012

Source: *National Income and Expenditure 2011* Table 21 for 2006-2011. Stability Programme Update (SPU) April 2012 background tables for 2012 as supplied by Department of Finance. The data for 2012 are directly comparable with Table 21 in the *National Accounts* and are slightly different to the published data in Table A1 in the SPU.

*ROW= Rest of World.

APPENDIX 2 *Ex Ante* Discretionary Measures 2008-2012

	Measure	Source	€bn
2008	Expenditure	July 2008	€1.0
2009	Revenue	Budget 2009 (Oct 2008)	€2.0
	Expenditure	February 09	€2.1
	- Tax revenue	Supplementary Budget 2009 (Apr 2009)	€3.5
	- Current Expenditure	Supplementary Budget 2009: Apr 2009	€1.2
	- Capital Expenditure	Supplementary Budget 2009: Apr 2009	€0.6
2010	- Current Expenditure	Budget 2010: Dec 2009	€3.3
	- Capital Expenditure	Budget 2010: Dec 2009	€1.0
2011	- Current Expenditure	Budget 2011: Dec 2010	€2.1
	- Capital Expenditure	Budget 2011: Dec 2010	€1.9
	Tax revenue	Budget 2011: Dec 2010	€1.4
2012	- Current Expenditure	Budget 2012: Dec 2011	€1.5
	- Capital Expenditure	Budget 2012: Dec 2011	€0.8
	Tax revenue	Budget 2012: Dec 2011	€1.6
2008-2012	TOTAL		€23.9

Source: For 2008-2010 *Report of the Review Group on State Assets and Liabilities*. [Table 2.1: Budgetary Adjustments since mid-2008 – Planned Budgetary Impact.] For 2011 and 2012 *Budget 2011, Budget 2012, Medium Term Fiscal Statement,* November 2012 Table 2.1. The figures included show the full year effects, including carryover, and exclude once-off measures.

APPENDIX 3 Indexation Rules in Government Accounts in *HERMES*

Item	Indexation Rule
REVENUE	
EXPENDITURE TAXES:	
Excise Tax	Previous year's average tax rate, indexed to personal consumption deflator
VAT	Previous year's average tax rate
Carbon Taxes	Previous year's average tax rate
Stamp Duties, Fees, etc.	Previous year's average tax rate, indexed to personal consumption deflator
Motor Vehicle Duties-Companies	Previous year's average tax rate, indexed to personal consumption deflator
Customs Duties	Previous year's average tax rate
Rates	Previous year's tax take indexed to growth in nominal GNP
Agricultural Levies	Previous year's tax take indexed to growth in agricultural output prices
Contribution to EC Budget (-)	Previous year's contribution indexed to growth in OECD GDP
TAXES ON INCOME:	
Personal Income Tax	Previous year's average tax rate
Social Insurance Contributions	Previous year's average rate for both employee and employer
Company Taxes: Corporation Tax	Previous year's average tax rate
Motor Vehicle Duties-Personal	Previous year's average tax rate, indexed to Personal consumption deflator
Farmers' Income Tax	Previous year's tax take indexed to growth in agricultural incomes
DIRT	Previous year's tax take indexed to growth in average deposit interest from GNP
NON-TAX INCOME	
Trading & Investment Income	Previous year's level indexed to growth in nominal GNP
Transfers From Abroad	Previous year's level indexed to growth in nominal GNP
Other Taxes	Previous year's level indexed to growth in nominal GNP
CAPITAL REVENUE	Previous year's level indexed to growth in GDP deflator
CURRENT EXPENDITURE	
PUBLIC CONSUMPTION	
Wage bill - Public Admin.	Long-run volume growth rate* times actual change in wages
Wage bill - Other	Long-run volume growth rate* times actual change in wages
Non-Pay	Long-run volume growth rate* times actual change in wages
Subsidies	

APPENDIX 3 Indexation Rules in Government Accounts in *HERMES* (Continued)

Item	Indexation Rule
Consumer	Split in two: transport subsidies indexed to growth in output in transport and communications sector, other consumer subsidies indexed to growth in nominal consumption.
Other Subsidies	
Agricultural	Growth in gross output in agricultural sector
Non-agricultural subsidies	Growth in nominal GDP at factor cost
PERSONAL TRANSFERS	
Unemployment	Average rate indexed to either wages or prices (normally wages but in this paper prices)
Pensions etc.	Previous year indexed to change in dependent population (under 14 and over 65) and growth in either wages or prices (in practice wages)
Debt Interest	
Transfers to Rest of World	Contribution to EU budget indexed to growth in OECD GDP; other government transfers indexed to growth in nominal GNP
CAPITAL EXPENDITURE	
INVESTMENT	
Housing	Long-run volume growth rate* times actual change in price deflator
Public Admin.	Long-run volume growth rate* times actual change in price deflator
Health & Education	Long-run volume growth rate* times actual change in price deflator
Other	Long-run volume growth rate* times actual change in price deflator
CAPITAL TRANSFERS	
to Industry	Unchanged rate
to Households	Unchanged rate
Other Capital expenditure	Long-run volume growth rate* times actual change in price deflator (GDP deflator)

* The long-run volume growth rate in "normal times" is calculated as a nine-year centred moving average growth rate. This is intended to capture a measure of non-cyclical growth in each individual expenditure item, smoothing out cyclical changes.

APPENDIX 4 Detailed *HERMES* Code Used for this Paper

	Mnemonic	Base	Rate and Indexation Rule
General Government Balance	**GBR=GTTOT+GR-GC-GK**		
Total Current Revenue	**GTTOT**	**GTTOT=GTE+GTY+GTTI+GTTABR+GTW**	
Excise Tax	GTEXT	Personal Consumption volume (C), Tourism Exports volume (XTO) and the personal consumption deflator (PC)	Rate Indexed to PC
VAT	GTEVAT	C, PC, Private Housing Investment (IHPV), Tourism Exports (XTOV) and Government Consumption of Goods and Services Non-Pay (GCGNPV)	Rate Unchanged
Carbon Taxes	GTECA	Carbon Emissions (CO2)	Rate Unchanged
Stamp Duties, Fees, etc.	GTEO	C, PC, and Building Investment (IBV)	Rate Indexed to PC
Motor Vehicle Duties-Companies	GTEMVDC	Stock of Cars (SCARS)	Indexed to PC
Customs Duties	GTECUSO	Imports of Goods and Services (MGSV)	Rate Unchanged
Rates	GTERATE	GNP in current prices (GNPV)	Indexed to GNPV
Agricultural Levies	GTAGLEV	Indexed to PQGA (Price deflator of Gross Agricultural Output)	
Contribution to EC Budget (-)	EECTG	GNP Price deflator and OECD GDP (PGNP*GDP_OECD)	Indexed to PGNP*GDP_OECD
Total Taxes on Expenditure	GTE	GTE=GTEXT +GTEVAT + GTECA+GTEO+GTEMVDC+GTECUSO+GTERATE+GTAGLEV -EECTG	
Personal Income Tax	GTYPER	Personal Disposable Income (YRPERT)	Rate Unchanged
Social Insurance Contributions	GTYSL	Wage Income (YWI + YWSM)	Rate Unchanged
Corporation Tax	GTYC	Non-Wage Income (YC)	Rate Unchanged
Motor Vehicle Duties-Personal	GTYMVDP	Stock of Cars (SCARS)	Indexed to PC
Farmers' Income Tax	GTYA	Agricutlural Income (YAG)	Indexed to YAG
DIRT	GTYDIRT	Indexed to RD*GNPV (RD=deposit interest rate)	
Total Taxes on Income	GTY	GTY=GTYPER+GTYSL+GTYC+GTYMVDP+GTYA+GTYDIRT	
Trading & Investment Income	GTTI	Indexed to GNPV	
Transfers From Abroad	GTTABR	Indexed to GNPV	
Other Taxes	GTW	Indexed to GNPV	
Capital Revenue	**GR**	**Indexed to GDP price deflator (PGDP)**	
Current Expenditure:	**GC**	**GC=GCGV+SUB-EECS+GCTPER+GCTNT+GCTABR**	
Public Consumption	GCGV	GCGV=OSNPV+GCGOWV+GCGNPV	
Wages - Public Admin.	OSNPV	Value added (OSNPV) equals wage bill (YWSNP) Wage bill (YWSNP) = Employment (LSNP) times Wage (WSNP)P	Index WSNP to average wages WNA; LSNP unchanged

APPENDIX 4 Detailed *HERMES* Code Used for this Paper (Continued)

	Mnemonic	Base	Rate and Indexation Rule
Wages – Other	GCGOWV	GCGOWV=YWSNHE	
Wages – Health and Education	YWSNHE	YWSNHE=LSNHE*WSNHE	Index WSNHE to average wages WNA; LSNHE unchanged
Non-Pay	GCGNPV	Index to PGCGNP (price deflator)	
Subsidies	GCS	GCS=GCSC+GCSO	
Consumer Subsidies	GCSC	GCSC=GCSCO+GCSCT	
Transport	GCSCT	OSMTCV (Value added in Transport and Communications)	Index to OSMTCV
Other	GCSCO	Index to Personal Consumption (CV)	
Other Subsidies	GCSO	GCSO=GCSA+GCSONA	
Agricultural	GCSA	GCSA=GCSANS+GCSAS	
Sales	GCSAS	Gross Output in Agriculture (QGAV)	Index to QGAV
Non-Sales	GCSANS	Gross Output in Agriculture (QGAV)	Index to QGAV
Other Non-agricultural subsidies	GCSONA	GDP at factor cost in current prices (GDPFCV)	Index to GDPFCV
Personal Transfers	GCTPER	GCTPER=GCTU+GCTREST	
Unemployment	GCTU	Unemployment (U)	Index to weighted average of WNA and PC[1]
Pensions etc.	GCTREST	Index population aged under 14 and over 65 to weighted average of WNA and PC	
Debt Interest	GCTNT		
Transfers to Rest of World	GCTABR	GCTABR=GCTAEO+GCTAO	
Non-tax contribution to EU budget	GCTAEO	GCTAEO = EECBUD-EECTG	
Contribution to EU budget	EECBUD	PGNP*GDP_OECD	Indexed to PGNP*GDP_OECD
Other govt transfers abroad	GCTAO	Indexed to GNPV	
Capital Expenditure	**GK**	**GK=IHGV+ISNPV+ISNHEV+ISMGV+GKTI+GKTH+GKREST**	
Housing	IHGV	Index to PIH	
Public Admin.	ISNPV	Index to PISNP	
Health & Education	ISNHEV	Index to PISNHE	
Other	ISMGV	Index to PISMG	
Capital Transfers to Industry	GKTI	Total Industrial Investment (IIV)	Rate Unchanged
Capital Transfers to Households	GKTH	Private Housing Investment (IHPV)	Rate Unchanged
Other Capital expenditure	GKREST	No Indexation, this is assumed unchanged	

1 In the *HERMES* model there is an option to index unemployment transfer payments and other transfer payments (GCTREST) to either wages or prices or a weighted average of both. The default option is full indexation to wages.

Research Bulletin

What Do We Know About Special Educational Needs? Evidence from *Growing Up in Ireland*

Joanne Banks and Selina McCoy*

Despite the recent policy emphasis on educational inclusion little is known about children with special educational needs in Ireland. The *Education for Persons with Special Educational Needs* (2004) Act highlighted a commitment to inclusive education and in particular to increasing the number of students with special educational needs attending mainstream schools. While significant changes have taken place, crucial information has been lacking – including the numbers of children with special educational needs (SEN), their profile and how they fare in school. Based on *Growing Up in Ireland* data on nine year old children, this bulletin draws together three journal papers and a research report[1] to provide valuable insights into special educational needs in Irish primary schools. This research provides much needed evidence for policy decisions by focusing on the scale and prevalence of SEN, the characteristics of students identified with SEN and the social and academic experiences of these students in school.

Prevalence

The term special educational needs can mean different things, depending on the context. The definition has changed considerably over time and as a consequence so too has our understanding of which students are likely to have such needs. Increasingly, the policy trend is to broaden the definition of SEN and create more inclusive education systems, but wide variations in prevalence estimates persist across countries. In Ireland, the EPSEN Act (2004) introduced a broader definition of SEN than heretofore, which includes a broad range of difficulties ranging from physical disabilities to learning disabilities and emotional-behavioural difficulties. For the first time, information collected about 8,578 nine-year-old children in the *Growing Up in Ireland* survey has provided a unique opportunity to combine data from two sets of key informants (parents and teachers) to identify the cohort experiencing SEN. Overall one-in-four children were found to have some form of SEN – a rate consistent with recent studies internationally – with boys showing higher levels than girls.

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Identifying Students with SEN

Analysing the *Growing Up in Ireland* data allows us to move beyond measuring the scale of special educational needs in Ireland and explore the composition of children with SEN as identified by their teachers and whether SEN levels vary across different social groups. This new research shows that children from working class backgrounds are far more likely to be identified with SEN. This is particularly the case for working class boys who display high levels of SEN (of a non-normative type such as emotional/behavioural difficulties – EBD). Moreover, children attending schools designated as socio-economically disadvantaged are significantly more likely than their peers to be identified as having EBD. We further examined whether EBD as identified by teachers, or within certain schools, is matched by the child's own performance on an internationally validated emotional and mental health self-concept measure. When we take account of children's performance on this self-concept measure, we find that certain groups of children are disproportionately likely to be identified with EBD. This includes boys, children from economically inactive households and children attending designated disadvantaged schools.

School Experiences for Students with SEN

These issues in SEN identification highlight the importance of understanding the everyday school experiences for this group of students: in essence, how do they get on in school? Importantly, school experiences and overall attitudes towards school vary among children with SEN according to the type of disability or need they have. It is clear that children with SEN, particularly those identified with learning disabilities, face considerable barriers to fully engage in school life. In line with previous research on boys in school more generally, findings show that boys with SEN are more likely than girls with SEN to dislike school. Moreover, children with SEN from semi- and unskilled social class backgrounds are also more likely to be disengaged from school. For students with such additional needs, low levels of academic engagement and poor relations with their peers and teachers play a central role in explaining their low levels of school engagement and overall enjoyment of school.

Policy Implications

These research findings highlight the need for discussion by policymakers and practitioners around the definition of SEN as per the EPSEN Act. In reaching a new prevalence estimate of 25 per cent this is an opportune time to have a meaningful debate around our understanding of special education and our commitment to inclusion in our schools. These findings raise questions around the processes of SEN identification in schools and, in particular, whether being identified with a SEN is influenced by the social background characteristics of the child or the social

mix of students in the school. From a policy perspective the over-representation of boys, children from disadvantaged backgrounds and children attending disadvantaged schools within the SEN group, highlights the need to review the ways in which children with SEN, and in particular children with EBD, are identified. This research highlights the practical implications of placing children with SEN in mainstream schools. By simultaneously examining the role of academic and social relations in shaping the engagement of children with SEN, the analysis provides a unique opportunity to fundamentally assess the barriers to true inclusion for children with special needs.

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