Quarterly Economic Commentary

Joseph Durkan
Cormac O'Sullivan

Spring 2011

The forecasts in this Commentary are based on data available by early-May 2011. Draft completed 6th May 2011.

Research Bulletin

11/1
Editor: **Tim Callan**

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Authors

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

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Summary Table

	2009	2010	2011(f)	2012(f)
OUTPUT				
(Real Annual Growth %)				
Private Consumer Expenditure	-7.0	-1.2	0	2
Public Net Current Expenditure	-4.4	-2.2	-2	-4
Investment	-31.0	-27.9	-10¼	-2
Exports	-4.1	9.4	7½	7½
Imports	-9.7	6.6	6	6¼
Gross Domestic Product (GDP)	-7.6	-1.0	2	3
Gross National Product (GNP)	-10.7	-2.1	½	2
GNP per capita (constant prices)	-11.4	-2.3	¾	1¾
PRICES				
(Annual Growth %)				
Harmonised Index of Consumer Prices (HICP)	-1.7	-1.6	1½	1
Consumer Price Index (CPI)	-4.5	-1.0	2½	1½
Wage Growth	-0.8	-1.7	¾	¾
LABOUR MARKET				
Employment Levels (ILO basis (000s))	1,929	1,848	1,820	1,825
Unemployment Levels (ILO basis (000s))	259	292	304	295
Unemployment Rate (as % of Labour Force)	11.8	13.6	14¼	14
PUBLIC FINANCE				
Exchequer Balance (€m)	-24.6	-18.7	-18¼	-17
General Government Balance (€m)	-23.0	-49.9	-15¾	-14
General Government Balance (% of GDP)	-14.4	-32.5	-10	-8.5
Excluding once off bank bailout monies	-11.9	-11.8	-10	-8.5
General Government Debt (% of GDP)	65.6	96.5	111	116

Summary

The set of forecasts in this *Commentary* describe an economy in transition. This transition is from an economy where growth was led by domestic demand to one where export growth by both multinational and local firms will become the engine of growth. This transition is underway as domestic firms in the tradable goods sector have sought to replace falling domestic demand by sales in overseas markets. Output and exports from traditional firms increased in 2010, with exports from the food and drink sectors in particular rising by 11 per cent in value terms. This is very similar to the experience of the 1980s, when exports led growth, and the reverse of what happened in the 2000s when the strong growth in domestic demand led firms to shift their emphasis from exports to the domestic market.

While in 2010 the shift to exports was not sufficient to counteract the decline in domestic demand following a rise in the personal savings rate and the 2010 contractionary budget, we expect some very modest growth this year with GNP (GDP) rising by about ½ (2) per cent, and strengthening in 2012 to 2 (3) per cent. This year the stimulus is coming entirely from the external sector (both service and merchandise exports) as domestic demand will fall again, along with investment and government current expenditure. We expect household expenditure to rise very modestly during the year, following what looks like a slight rise in household spending in the first quarter. Households have been reducing their indebtedness very sharply since 2008 and some households may now be satisfied with their net debt position. Consequently, we expect a decline in the savings rate in 2012. Domestic demand will be very slightly positive in 2012, while we expect external demand to grow by 7½ per cent in both 2001 and 2012.

A feature of the forecast is that the balance of payments on the current account is expected to be in surplus both this year and next, amounting to 1.2 per cent and 2.8 per cent of GNP respectively. These surpluses represent net savings by society and are a big change in the position since the early 2000s when the balance of payments on the current account went into deficit.

The Consumer Price Index (CPI) is forecast to increase by 2½ per cent this year and the Harmonised Index of Consumer Prices (HICP) to rise by 1½ per cent. The pattern will be very uneven during the year as oil prices are rising in the first half of the year but could fall back in the second half. Of greater importance may be shifting by consumers to lower priced products and outlets as price variations across goods and services remain very large. The deflator for total household consumption is expected to remain at the 2010 average level in 2011, but to increase by about 1 per cent in 2012.

We expect total employment to fall again in 2011, but at a much slower pace than in recent years. Unemployment will be higher on average than in 2010, but the extent of it will be moderated by migration. The extent of the latter will become clearer when the first 2011 census results become available. Nevertheless, it is worth noting that there are emerging skill shortages in some of the fast growing services exports sector.

The Public Finance position remains challenging. It is still too early to form a definitive view about the likely outcome for this year, but the Budget figures, modified to take account of the increased interest costs associated with the recent bank restructuring, look achievable. We think that, given the need to return to financial markets within a very short period, attempts should be made to correct the budget deficit more rapidly than currently envisaged. In particular proposed capital expenditures should be examined more critically now, given the increased cost of funds and the lower level of income and output currently prevailing. Current expenditure also needs to be examined both to eliminate waste and to be consistent with the new lower level of output in the economy. The medium-term profile for the budgetary aggregates set out in *Ireland – Stability Programme Update* will lead to a sustainable debt position.

Attempts at EU and ECB level to contain the banking crisis within the countries most directly affected do not take account of the spillover effects of the initial problem and the solution currently in place. What is needed is an EU or Eurozone solution that does not place the whole of the burden of recapitalising banks onto national budgets already stretched by recession.

Finally, the existence of a balance of payments surplus suggests that government may be able to raise more of its borrowing needs domestically. This requires an imaginative approach to selling government bonds to households with substantial savings and those capable of generating future savings.

NATIONAL ACCOUNTS 2010 (Estimate)

A: Expenditure on Gross National Product

	2009 Estimate €bn	2010 Estimate €bn	Change in 2010 Value	% Price	Volume
.Private Consumer Expenditure	84.3	81.4	-3.4	-2.2	-1.2
.Public Net Current Expenditure	27.7	26.0	-6.2	-4.1	-2.2
.Gross Fixed Capital Formation	24.7	17.5	-29.5	-2.2	-27.9
.Exports of Goods and Services (X)	144.8	158.4	9.4	0	9.4
.Physical Changes in Stocks	-2.3	-0.8			
Final Demand	**279.3**	**282.5**	**1.1**	**-0.8**	**2.0**
.less:					
.Imports of Goods and Services (M)	120.4	129.3	7.4	0.8	6.6
.Statistical Discrepancy	0.7	0.7	-		-
GDP at Market Prices	**159.6**	**153.9**	**-3.6**	**-2.6**	**-1.0**
.less:					
.Net Factor Payments (F)	28.4	29.1	-	-	-
GNP at Market Prices	**131.2**	**124.9**	**-4.9**	**-2.9**	**-2.1**

B: Gross National Product by Origin

		2009 Estimate €bn	2010 Estimate €bn	Change in 2010 €bn	%
.Agriculture, Forestry, Fishing		2.2	2.7	0.5	22.7
.Non-Agricultural:	Wages, etc.	72.7	68.8	-3.9	-5.4
	Other:	53.9	51.8	-2.1	-3.9
.Adjustments:	Stock Appreciation	1.0	1.0	0.0	-
	Statistical Discrepancy	-0.7	-0.7	0.0	-
Net Domestic Product		**129.1**	**123.6**	**-5.5**	**-4.3**
.less:					
.Net Factor Payments		28.4	29.1	0.7	-
National Income		**100.7**	**94.5**	**-6.2**	**-6.2**
.Depreciation		14.8	15.0	0.2	-
GNP at Factor Cost		**115.5**	**109.5**	**-6.0**	**-5.2**
.Taxes less Subsidies		15.8	15.4	-0.4	-
GNP at Market Prices		**131.2**	**124.9**	**-6.3**	**-4.9**

C: Balance of Payments on Current Account

	2009 Estimate €m	2010 Estimate €m	Change in 2010 €m
.Exports (X) less Imports (M)	24.4	29.1	+4.7
.Net Factor Payments (F)	-28.4	-29.1	-0.7
.Net Transfers	-0.9	-1.1	-0.2
Balance on Current Account	**-4.9**	**-1.1**	**+3.8**
.as % of GNP	-3.7	-0.9	+2.8

FORECAST NATIONAL ACCOUNTS 2011

A: Expenditure on Gross National Product

	2010 Estimate €bn	2011 Estimate €bn	Change in 2011 % Value	Price	Volume
Private Consumer Expenditure	81.4	81.4	0	0	0
Public Net Current Expenditure	26.0	25.5	-2.0	0	-2.0
Gross Fixed Capital Formation	17.4	15.7	-10.2	0	-10.3
Exports of Goods and Services (X)	158.4	172.0	8.6	1	7.5
Physical Changes in Stocks	-0.8	0.5	-	-	-
Final Demand	**282.5**	**295.1**	**4.5**	**0.8**	**3.6**
less:					
Imports of Goods and Services (M)	129.3	137.7	6.5	0.6	6.0
Statistical Discrepancy	0.7	0.7	-	-	-
GDP at Market Prices	**153.9**	**158.1**	**2.7**	**0.6**	**2.0**
less:					
Net Factor Payments (F)	29.1	31.8	-	-	-
GNP at Market Prices	**124.9**	**126.3**	**1.2**	**0.6**	**0.5**

B: Gross National Product by Origin

	2010 Estimate €bn	2011 Forecast €bn	Change in 2011 €bn	%
Agriculture, Forestry, Fishing	2.7	3.0	0.3	11.1
Non-Agricultural: Wages, etc.	68.7	68.0	-0.7	-1.0
Other:	51.8	55.4	3.6	7.0
Adjustments: Stock Appreciation	1.0	1.0	0.0	-
Statistical Discrepancy	-0.7	-0.7	0.0	-
Net Domestic Product	**123.5**	**126.7**	**3.2**	**2.6**
less:				
Net Factor Payments	29.1	31.8	2.7	-
National Income	**94.4**	**94.8**	**0.4**	**0.5**
Depreciation	15.0	15.1	0.1	0.5
GNP at Factor Cost	**109.4**	**109.9**	**0.5**	**0.5**
Taxes less Subsidies	15.4	16.4	0.9	-
GNP at Market Prices	**124.9**	**126.3**	**1.5**	**1.2**

C: Balance of Payments on Current Account

	2010 Estimate €m	2011 Forecast €m	Change in 2011 €m
Exports (X) less Imports (M)	29.1	34.3	5.2
Net Factor Payments (F)	-29.1	-31.8	-2.7
Net Transfers	-1.2	-1.0	0.2
Balance on Current Account	**-1.1**	**1.5**	**2.6**
as % of GNP	-0.9	1.2	2.1

FORECAST NATIONAL ACCOUNTS 2012

A: Expenditure on Gross National Product

	2011 Estimate €bn	2012 Estimate €bn	Change in 2012 % Value	Price	Volume
Private Consumer Expenditure	81.4	83.8	2.9	0.9	2.0
Public Net Current Expenditure	25.5	24.5	-3.9	0	-3.9
Gross Fixed Capital Formation	15.7	15.6	-0.6	1.3	-1.9
Exports of Goods and Services (X)	172.0	186.7	8.5	1.0	7.4
Physical Changes in Stocks	0.5	0.5	-	-	-
Final Demand	**295.1**	**311.1**	**5.4**	**1.1**	**4.3**
less:					
Imports of Goods and Services (M)	137.7	147.7	7.2	1.0	6.2
Statistical Discrepancy	0.7	0.7	-	-	-
GDP at Market Prices	**158.1**	**164.1**	**3.8**	**0.7**	**3.0**
less:					
Net Factor Payments (F)	31.8	34.4	-	-	-
GNP at Market Prices	**126.3**	**129.7**	**2.7**	**0.8**	**1.9**

B: Gross National Product by Origin

	2011 Estimate €bn	2012 Forecast €bn	Change in 2012 €bn	%
Agriculture, Forestry, Fishing	3.0	3.1	0.1	3.3
Non-Agricultural: Wages, etc.	68.0	68.7	0.7	1.0
Other:	55.4	60.3	4.9	8.8
Adjustments: Stock Appreciation	1.0	1.0	-	-
Statistical Discrepancy	-0.7	-0.7	-	-
Net Domestic Product	**126.7**	**132.3**	**5.7**	**4.5**
less:				
Net Factor Payments	31.8	34.4	2.6	-
National Income	**94.8**	**98.0**	**3.1**	**3.3**
Depreciation	15.1	15.1	0.0	-
GNP at Factor Cost	**109.9**	**113.0**	**3.1**	**2.8**
Taxes less Subsidies	16.2	16.5	0.3	-
GNP at Market Prices	**126.3**	**129.7**	**3.4**	**2.7**

C: Balance of Payments on Current Account

	2011 Estimate €m	2012 Forecast €m	Change in 2012 €m
Exports (X) less Imports (M)	34.3	39.0	4.7
Net Factor Payments (F)	-31.8	-34.4	-2.6
Net Transfers	-1.0	-1.0	0.0
Balance on Current Account	**1.5**	**3.6**	**2.1**
as % of GNP	1.2	2.8	1.6

1. Introduction

The basic theme of this *Commentary* is that the Irish economy is in the process of transition. This transition is from an economy where domestic demand was the engine of growth back to one where export growth, from both multinational and indigenous firms, becomes the main driver of the economy. The growth in exports from indigenous firms in 2010 represents a shift in their focus in response to weak domestic demand. The situation is comparable to that of the 1980s where export demand led the recovery[1] and lay at the heart of the performance of the economy from the mid 1980s for more than a decade. The external environment was more favourable in the 1980s as the UK, which was the main market for Irish goods and services, was experiencing a rapid growth phase (the "Lawson Boom"), whereas now the main markets are still experiencing some effects of the Great Recession.

The Macro Picture

Figure 1 shows the path of the economy (GNP) since the middle of the last decade. It is apparent that the economy was fairly flat in 2007. This was followed by a catastrophic fall in output in 2008 which continued into 2009 and 2010. The decline in output from 2007 to the trough in the first quarter of 2010 was 16.6 per cent.

While the economy experienced a decline in output for 2010 as a whole, GNP increased in each of the final three quarters of 2010. This resulted in a positive carryover into 2011 at 2.4 per cent. This contrasts with a negative carryover of 2.4 per cent into 2010 which was associated with a decline in output of 2.1 per cent for the year. Figure 1 also shows average quarterly GNP for each year, which allows us to see this positive carryover from 2010 to 2011.[2]

1 Durkan, Joseph (1992). "Recovery, recession and recovery again: some aspects of Irish economic performance and prospects 1986-1993." University College Dublin, Centre for Economic Research Policy paper PP92/3.

2 As has been pointed out by the CSO in recent Quarterly National Accounts releases, the GNP data have been distorted by the activity of a subset of firms that have located their headquarters in Ireland, but where there is no real economic activity taking place here. This increases inward net factor flows and thus inflates GNP. This activity became apparent in the second half of 2010. We have made a rough allowance for this in the third and fourth quarters of 2010, which shows that the adjusted figure fell in the third quarter but rose again in the fourth. Consequently, the carryover remains positive, although it is reduced to 1.3 per cent.

The forecasts in this *Commentary* are that GNP will grow by about ½ per cent this year, with the positive carryover pulled back by the cuts in expenditure and tax increases in the December Budget. For 2012 the growth rate forecast is 2 per cent; it is also limited by the fiscal consolidation required by the EU/IMF bailout.

Figure 1: Quarterly GNP and Year Average, Constant Prices (€000's)

Source: CSO

The factors that lie behind the fall in output since 2007 have been widely discussed. First, there was a collapse in the construction sector following the bursting of the property bubble. Second, there was the consequent contractionary fiscal policy as government sought to reduce the fiscal deficit and to provide funding for bank restructuring. Third, there was the increase in the personal savings rate from 5.6 per cent in 2008 to an estimated 13 per cent and 14 per cent in 2009 and 2010 respectively as people have sought to repair damaged balance sheets and guard against negative income shocks.

In this *Commentary* we discuss the factors that lie behind the gradual turnabout in the economy since the first quarter of last year. This is due to export growth outweighing declines in other components of GNP. Our analysis suggests that 2010 has seen the return to export growth by indigenous firms, alongside the export growth by multinationals which has remained remarkably robust since the start of the recession. While published export data do not distinguish between exports by multinationals and indigenous firms, we can estimate the different sources of exports sales by looking in detail at export categories and ownership patterns. This involves categorising exports as being modern or traditional and identifying whether these categories are dominated by multinational or indigenous firms. We do this against a background where output is rising and domestic demand is falling.

2. Exports of Goods and Services

The overall volume of exports of goods and services increased by 9.4 per cent in 2010, following declines in 2008 and 2009, and was 4.2 per cent above the previous peak level in 2007. Merchandise exports increased by 7.7 per cent in volume terms. Table 1 below shows the level of exports of goods in 2009 and 2010 and the percentage change organised by SITC Section. The data indicate an increase of 6.1 per cent in total merchandise exports in 2010, with considerable variation on growth rates across categories.[3]

Table 1: Merchandise Exports by Category (Value)

SITC		2009 €m	2010 €m	% change
0	Food and Live Animals	6,270.6	6,973.0	11.2
1	Beverages and Tobacco	1,079.1	1,186.0	9.9
2	Crude materials	972.0	1,442.1	48.3
3	Mineral fuels	594.8	1,027.2	72.7
4	Animal and vegetable oils	20.0	26.8	34
5	Chemicals and related products	47,987.7	52,426.0	9.2
6	Manufactured goods (by Material)	1,243.4	1,443.3	16.1
7	Machinery and Transport Equipment	13,585.2	10,989.2	-19.1
8	Miscellaneous	2,464.0	2,711.3	10.0
9	Other	832.0	677.6	-18.6
	Total	84,238.9	89,391.8	6.1

Source: CSO.

Modern sector exports (corresponding to Chemicals, some part of Machinery and Transport equipment and Miscellaneous), which are primarily produced by multinationals, account for the bulk of merchandise exports, and these exports

[3] The increase in 2010 in merchandise exports took place despite the exit of Dell from manufacturing and exporting computers and other products, affecting merchandise exports. The full year trade data show that Office and Data Processing Equipment exports fell from €6.442 billion in 2009 to €4.506 billion in 2010. The decline in turnover in that sector matches the decline in export values very closely, and had the effect of pulling down the overall volume of exports by about 3 per cent in 2010. In spite of this the volume of merchandise exports rose in 2010 by 7.7 per cent.

are heavily concentrated in SITC 6 and 7. We estimate that the value of these exports increased by 4 per cent from 2009 to 2010, while all other exports increased in value by 12.5 per cent. In effect, the growth rate of non-modern exports exceeded that of modern sector exports. These other exports are produced in the main by indigenous and traditional firms, concentrated in SITC Sections 0-2, 4, and parts of 6, 7 and 8. Table 1 shows these growth rates; for example, food exports (the value of live animal exports is very small) increased by 11.2 per cent, while beverage exports rose by 9.9 per cent and similar increases were recorded by other traditional sectors.

Following the approach adopted with exports, we categorise production data from the CSO into modern and traditional sectors. These data show that output volumes in the modern sector increased by 10.7 per cent in 2010 following an increase of 2.6 per cent in 2009, while output in the traditional sector rose by 1.9 per cent following a fall of 14.1 per cent in 2009. If we exclude the production of construction related output then traditional sector output rose by around 3.1 per cent. There were quite divergent patterns in price changes between the modern and traditional sectors. In the pharmaceuticals sector for instance there were significant price falls while there were significant price increases in the dairy sector.

A combination of these two patterns, against a background where domestic demand is falling [See Table 4], suggests that traditional sector firms have increased output which has gone into export sales. This was facilitated by the improvement in competitiveness over the past three years and by an improvement in other costs relative to competitor countries. This is the classic 'expenditure shifting' that governments hope for when reducing domestic demand to correct a payments deficit or when correcting a budget deficit leads to a reduction in domestic demand.

This shifting to export markets by traditional firms is an important positive signal of Ireland returning to export led growth. This finding is not surprising as previous research (Durkan, 1992) shows similar patterns of behaviour. This is not to say that all firms are successfully exporting but rather that sufficient numbers are exporting to more than compensate for those firms that have reduced output and exports. This finding is also consistent with the findings of Gleeson and Ruane[4] which show that Irish firms have been able to enter and then re-enter

[4] Gleeson, A.M and Ruane, F., 2007 "Irish Manufacturing Export Dynamics: Evidence of Exporter Heterogeneity in Boom and Slump Periods" *Review of World Economics*, Vol. 143, No. 2, pp.375-388.

export markets even at a time when total export sales were contracting. A key issue for policy is to explore how this shift into exporting by Irish firms can be strengthened.

EXPORTS OF GOODS AND SERVICES IN 2011 AND 2012

The world economy continues to grow with the developed economies recovering well, albeit more slowly than in previous economic recoveries. The UK economy also seems set to maintain some growth in spite of the demand deflationary impact of budget measures by the new government and the short-term shock to that economy due to very adverse weather conditions in the final quarter of 2010 and the first quarter of 2011. World output in the first quarter of 2011 has been adversely affected by the earthquake in Japan and political changes in North Africa. The latter may be resolved by the second half of this year, while the effect of the former is uncertain – clearly the loss of life will affect output, and some part of the capital stock is now gone. The earthquake has also caused some disruption to the global supply chain, though it now seems, not as much as originally feared. Reconstruction will lead to increased economic activity to replace lost capital. While there are serious international difficulties, the world economy is performing reasonably well and is not facing the declines in trade experienced in 2008/2009.

The relationship between merchandise trade data and merchandise trade data adjusted for balance of payments purposes for Ireland is no longer as clear-cut as previously thought. The multinational sector adopts a variety of approaches to the recorded relationship between the company operating in Ireland, the parent and its subsidiaries and third parties which affect exports and imports of goods, exports and imports of services and factor income flows. Ideally, we would like a complete analysis of these relationships to separate out the balance of payments impact and the domestic value added impact, but the published data do not permit this. Merchandise exports adjusted for balance of payments purposes were fairly flat during 2010, though running at much higher levels than in 2009.

We expect increases in export volumes for 2011 and 2012. The effect of the Dell withdrawal will wash out of the data throughout the year and new firms and the expansion of some existing firms will increase capacity. Monthly data are very volatile, even when seasonally corrected, but CSO data indicate that exports in the first two months of 2011 have increased reasonably well.

The structure of exports from Ireland, with a heavy emphasis on pharmaceuticals, reduces the sensitivity of Irish exports to world income changes. In terms of supply capacity, in addition to the factors mentioned earlier, the critical issue in this sector is the effect of restructuring arising from mergers. This has led to some reduction in output and employment, but has resulted in a more efficient set of firms. We would expect an increase in modern sector output and exports of some 5 per cent this year and about the same in 2012. Output prices for the modern sector may continue to decline.

Traditional sector exports are also likely to grow very well. We expect domestic firms to continue to increase sales in overseas markets, building on their performance in 2010. The key sectors are food, drink and other non-construction related manufacturing. Since these exports are still relatively small in relation to the markets in which these firms are operating, volume increases of 7.5 per cent both this year and next are not unrealistic, given that the supply capacity is available. There may be some constraint in milk as the milk quota was reached in the 2010/2011 milk quota year, though there could easily be further shifting to higher value dairy products. Prices particularly for food and food related products are likely to continue to increase perhaps by as much as 4 per cent in both 2011 and 2012. Overall prices for merchandise exports are not expected to change by much though, as noted above, there will be differences between the traditional and modern sectors.

Exports of services recovered well in 2010, increasing by 11.5 per cent in volume terms on 2009[5] and running well above the previous peak in 2007, in spite of a continued decline in tourism receipts. As noted above, exports of services reflect the diversity of arrangements within the multinational sector as well as straightforward services. These latter lie behind the growth of the recent past and will generate continued growth in the future. Within exports of services, computer services account for almost 40 per cent of the total and these increased by a sixth in 2010 in nominal terms, while business services account for about one-third of the total and increased by about 10 per cent in 2010. The services sector has seen new overseas firms being established here and the expansion of existing firms so that the capacity is there for further increases in exports.[6] In addition, Irish service sector firms have turned more to overseas markets given the weakness here, much like the manufacturing sector. Thus, exports of services could easily see a growth of 9-10 per cent in value and volume in both 2011 and 2012.

[5] CSO, *Quarterly National Accounts,* Quarter 4 2010 and year 2010.

[6] IDA Ireland – *Announcement List of Investments in Ireland* (April 2011).

Tourism receipts are more difficult to anticipate. The number of trips to Ireland in 2010 was 25 per cent below the peak level reached in 2007 and has declined now for three years in a row, with the associated expenditure falling by slightly more. The greater part of the decline has been in visits from Britain and this has been among those holidaying here rather than visiting friends and relatives. There are obvious reasons why Ireland would be a natural destination for British tourists – language and proximity, among others. Against this the price level in Ireland and poor growth in disposable incomes in Britain have acted to reduce numbers, and there may also have been a change in preferences once the "growth miracle" collapsed. As part of the adjustment underway in the economy there has been a very large decline in hotel prices and in the costs of eating out, and a reduction in the overall price level. Both now seem to have stabilised. Together these have improved the cost competitiveness of Ireland vis-à-vis other countries. The critical issue for UK visitors is whether their increasing awareness of the change in the competitiveness of the tourist sector in Ireland is sufficient to outweigh the other negative factors, particularly the uncertainty surrounding the development of the UK economy. Awareness is likely to improve given the forthcoming visits of President Obama and Queen Elizabeth, though how and when this might translate into increased tourism is uncertain.

There was a slight change in the trend in the total number of visitors to Ireland in the final quarter of 2010 with an increase in numbers following the declines that had been there since 2007. Given these factors, we expect an increase in visitor numbers, with expenditure growing by 7¾ in volume terms in both years.

Overall, exports of goods and services are forecast to rise by 7.5 per cent in both 2011 and in 2012 in volume terms (see Table 2).

Table 2 : Exports of Goods and Services

	2009	% Change in 2010		2010	% Change in 2011		2011	% Change in 2012		2012
	€m	Volume	Value	€m	Volume	Value	€m	Volume	Value	€m
Merchandise	77	7.2	8.9	84	5¾	6½	89	5½	6½	95
Tourism	4	-10.3	-12.3	3	7¾	10	3	7¾	10	4
Other Services	63	12.7	11.3	70	10	11	78	9½	10¾	86
Exports of Goods and Services	144	9.4	9.4	157	7½	8½	171	7½	8½	185
FISIM Adjustment	1.1			1.2			1.4			1.5
Adjusted Exports	145	9.4	9.4	158	7½	8½	172	7½	8½	187

3. Investment

Total Investment fell by 27.8 per cent in volume terms in 2010.[7] In volume terms, the building and construction component declined by over 30 per cent while machinery and equipment and other elements of investment fell by over 15 per cent. Within the building and construction sector,[8] housing fell by 40.3 per cent in volume terms, civil engineering works by 21 per cent and the remainder by 30.6 per cent. There is less detailed information on other investment expenditure, but there were declines in expenditure on transport equipment, and in other machinery and equipment.

Investment has declined for every quarter since mid-2007 and this is set to continue – albeit at a moderated pace – as the overall investment outlook is unlikely to improve in the next 2-3 years. Housing output may decline further, both because of the number of unsold houses (new and second-hand) available for sale and because of the difficulties of raising finance. Civil engineering works are heavily influenced by the Public Capital Programme, and this has been cut back in nominal terms this year and next. The fall in the Public Capital Programme between 2010 and 2011 is 27.7 per cent.[9] Even allowing for declines in contract prices there are clearly some big volume declines implicit in these figures. Actual public expenditure this year may also turn out to be less than budgeted as the need for fiscal consolidation may pressurise government to delay or abandon the start of any new capital projects.

For new service sector firms or the expansion of existing ones, there is an abundance of empty office space, so that additional investment expenditure is unlikely to be needed for some time. As international services increase there is likely to be continued take-up of existing empty spaces, but this can run for some years yet before additional investment is required.

Investment in the manufacturing sector may improve as expansion of existing facilities is undertaken, as new manufacturing firms begin their operations, and

7 CSO, *Quarterly National Accounts* Quarter 4 2010 and year 2010.

8 CSO, *Production in Building and Construction Index* Quarter 4 2010.

9 *Budget 2011*.

as firms continue process development. Overall investment is expected to fall by just over 10 per cent this year and a further 2 per cent in 2012 (see Table 3).

Table 3 : Gross Fixed Capital Formation

	2009	% Change in 2010		2010	% Change in 2011		2011	% Change in 2012		2012
	€m	Volume	Value	€m	Volume	Value	€m	Volume	Value	€m
Housing	7.4	-40.3	-43.8	4.0	-15¾	-18½	3.4	3	5½	3.6
Other Building	8.6	-21.0	-23.4	6.5	-20	-22½	5.1	-15	-17½	4.2
Transfer Costs	0.6	-29.0	-37.2	0.4	-12	-15	0.3	0	0	0.3
Building and Construction	16.6	-33.1	-36.1	10.9	-17½	-19¼	8.8	-7	-8¼	8.1
Machinery and Equipment	8.1	-19	-19¾	6.5	4	5¾	6.9	4	8½	7.5
Total	**24.7**	**-27.8**	**-29.5**	**17.4**	**-10¼**	**-10¼**	**15.7**	**-2**	**- ½**	**15.6**

4. Household Consumption

Household spending fell by 3.4 per cent in nominal terms in 2010, well down on the fall in 2009 of 11.1 per cent. In volume terms the declines were 7.0 per cent in 2009 and 1.2 per cent in 2010, which represented the third year in a row that household spending fell in volume terms. Since the end of 2007 there have been declines in spending in nine of the twelve quarters to end-2010, at which point the level was back at about end-2005/early 2006 levels.

There are two main sources of data on household spending: the retail sales index, which looks at sales type of business and is available monthly, and the household expenditure by types of goods and services which is available on an annual basis. The data are not ideal for measuring household consumption as expenditure under both these headings includes spending by tourists to Ireland, which has fallen in recent years by more than the decline in domestic consumption, as indicated above. Nevertheless, from the retail sales data we can see that expenditure has fallen since the peak in 2007 and has declined by vastly different amounts by type of retail outlet (see Table 4).

Expenditure on consumer durables has fallen most rapidly, with cars and furniture experiencing the biggest declines. The fall in electrical goods expenditure is considerably less, but this may be explained by the very large decline of 33.3 per cent in prices of electrical goods, while price declines in other consumer durables were less. The fall in bar sales reflects not just the decline in real incomes but also includes some longer term factors such as the impact of the smoking ban, greater awareness of the risks associated with drinking and driving, and a decline in the numbers in the 15-24 age group.

Table 4: Retail Sales in 2007 and 2010 (2005=100)

Type of business	2007	2010	% change
Motor trades	113.6	63.0	-44.5
Furniture and Lighting	123.0	77.4	-37.1
Books, Newspapers, Stationery	102.3	72.2	-29.4
Hardware, Paints and Glass	116.5	84.9	-27.1
Bars	98.9	74.1	-25.1
Automotive fuel	107.0	85.1	-20.5
Food, Beverages and Tobacco	101.9	89.2	-12.5
Electrical goods	136.4	124.8	-8.5
Textiles, Clothing and Footwear	120.9	117.6	-2.8
Department stores	116.1	113.0	-2.7
Pharmaceuticals, medicines and cosmetics	119	117.5	-1.2
Other retail sales	122.0	101.6	-16.7
All retail business	114.7	93.3	-18.7

Source: CSO.

Detailed household expenditure data by type of good are only available up to 2009.[10] These data are much broader in coverage than retail sales but the picture by expenditure head is similar. They show that expenditure on public transport and communications fell. Housing, which includes imputed rent, private and public rents and repairs, increased. Some services, including education, also increased in volume terms.

The decline in household expenditure was particularly marked in 2009 and was associated with a rise in the savings rate from 5.2 per cent of disposable income in 2008 to about 13 per cent in 2009[11] and about 14 per cent in 2010. The increase in the savings rate has been ascribed to increased uncertainty about post-tax incomes and employment maintenance as the necessary fiscal correction gets underway. There could be other factors at work, in particular the need by borrowers to reduce the level of their indebtedness to sustainable levels and the need by those on tracker mortgages to provide for inevitable increases in mortgage interest rates. A rise in the savings rate in these circumstances is not unusual. What is unusual is that it had fallen to 3.6 per cent of disposable income in 2007. This 2007 figure is an average across all households. Those who normally

10 CSO, National Income and Expenditure 2009.

11 Note that these are national accounts based estimates. Estimates based on Institutional Sector Accounts (CSO) are for a savings rate of 3.9 per cent in 2008 and 12.3 per cent in 2009. The 2009 figure from the Institutional Sector Accounts is used to derive the broad order of magnitude of the National Accounts based number used here.

save may have changed their behaviour very little. Others had borrowed to finance expenditure, other than on housing, and as this borrowing ceased, given the changed circumstances of the banking system, household spending collapsed.

While there is more clarity now about the scale of public indebtedness and the associated fiscal challenges, and the direction of interest rates, the environment is not one where any major reduction in planned savings rates, back to mid-2000s levels of 6-7 per cent of disposable income, is likely in the short run, though actual savings may turn out to be less than planned. Disposable income this year looks set to fall by about 2-3 per cent (see Table 5). Households may maintain consumption levels, with some highly income elastic expenditure heads, such as holidays abroad, experiencing further declines. Although car demand is also highly income elastic, there are stock issues as cars age and some part of new registrations are used to replace older vehicles. The exceptional levels of sales in 2000, associated with the new millennium, may result in greater replacement as vehicles pass the 10 year mark. Company car sales may also recover. The transformation of the system of annual motor taxation and the Vehicle Registration Tax in 2008 from an engine size to a CO_2 based system reduced the residual value of cars and reduced the level of company car purchases, as replacement would have forced loses on firms.

The early indications for 2011 are that the declines in retail sales have levelled off in volume terms. This is despite the tax changes and expenditure cuts introduced in the December Budget. The tax changes came into effect and were known at the start of the year, so that declines in consumer expenditure could have been affected immediately. The retail sales index (excluding cars) for the first quarter of 2011 is running 0.4 per cent above the fourth quarter level of 2010. This series has exhibited false dawns previously so that more than a few months' data are required to confirm either a levelling off or recovery. Even so the level is still 1.5 per cent below the average level in 2010 but should increase as the year progresses, especially if tourism recovers. While an increase in tourism numbers and expenditure does not directly affect domestic household consumption, an increase in retail sales will help to stabilise employment levels across the retail sector. We expect an increase in non-car retail sales of 1.5 per cent this year and about 3 per cent in 2012.

New car sales increased by 14 per cent in the first quarter of 2011 compared to the first quarter of 2010, after a somewhat slow start in January. As noted above some of this is by business and hence treated as investment but households are also buying new cars.

Motor fuel and other household fuel expenditure are likely to fall again in 2011 in real terms but power expenditure may stabilise as the price reductions by the ESB materialise. Household expenditure on direct medical and dental services may continue to decline because of the fall in incomes. Practitioners can maintain volumes by cutting prices and competition within these sectors could lead to price falls. There has been a very small fall in doctors' fees, while dentists' fees fell by 4 per cent in the last year. Neither decline is likely to offset the impact of the fall in income on those who must pay themselves for care. Health insurance premia have increased very significantly in recent months (by a seventh alone in February) and the numbers with health insurance have fallen.

The recent increase in interest rates will have some negative impact on economic activity not least because so much has been borrowed by banks from the ECB and the Irish Central Bank. The rate increases to date are small so that the overall effect will be slight and it may very well be that prudent tracker mortgage holders have prepared for this. Savers will benefit marginally, but then returns for savings have been very marginal. The critical issue is whether this is seen as a pointer to future increases. The danger is that higher inflation currently experienced in the Eurozone becomes embedded in expectations and leads to higher wage inflation. With the exception of Germany it is difficult to see this, as the higher inflation experienced in many countries reflects a spike in energy prices associated with the situation in Libya and in Japan following the devastation caused by the earthquake. This is likely to reverse in the short run. The situation in Germany is different as the rapid growth in the economy is leading to greater pressure in the labour market and this could lead to higher wage inflation and greater price inflation in Germany. This is a not unwelcome outcome from the point of view of other Eurozone countries given the excess competitiveness of the German economy, as evidenced by the continuing balance of payments surplus and the fast growth in exports. An increase in German wage and price inflation is almost the only mechanism for reducing the balance of payments imbalances in the Eurozone. This will be much harder to achieve if interest rates depress economies. Nevertheless interest rate increases seem likely so that by end 2012 they may be 1 percentage point higher than now.

The picture for household spending this year is that retail expenditure may hold up but there will be reductions in expenditure in other components of consumption. There is negative carryover from 2010 of about 0.5 per cent into 2011 so that overall consumption may remain at the 2010 level, but increasing very modestly during the year leaving a positive carryover for 2012. If this happens, consumption could increase by 2 per cent in volume in 2012.

Real disposable income is likely to fall by about 1 per cent next year. We are assuming that government will keep broadly to the agreed programme for reducing the budget deficit, but that the savings rate will fall, giving an increase in household spending of about 2 per cent. While this might seem optimistic the critical difference for households is that they now know the parameters of the adjustment that the economy faces and can plan accordingly. Furthermore, households have been reducing their financial liabilities and increasing their financial assets with the net position positive since 2008. Recent data on household loans and deposits indicate that this deleveraging by households is continuing into 2011. There were very large reductions in bank loans to the private sector of some €27 billion from end-September 2010 to end March 2011, while deposits fell by €12 billion. At some point the household sector and the private corporate sector will decide that the net asset position has reached the desired level, and will then reduce additions to the stock of savings and increase expenditure. This could happen quite quickly in the household sector, as not all households have mortgages and big bank debt. Even with the assumption we have made with regard to increased household expenditure, the savings rate will be 9 per cent – still well above the rates in the period 1990-1995 before house prices began to rise.

The impact of the wealth reduction associated with falling house prices on consumption is not clear. When house prices were rising some clearly borrowed on foot of house values to increase consumption. In addition some new mortgage lending financed current consumption. Once house prices began to fall and credit conditions for new mortgages were tightened then the funds necessary to maintain consumption were reduced and consumption was adversely affected. The distressed mortgage situation creates additional problems (see Box 1). However any effect on consumption may already be in the data in that household borrowing has fallen very sharply as households have sought to repair household balances to more sustainable levels.

Table 5 : Personal Disposable Income

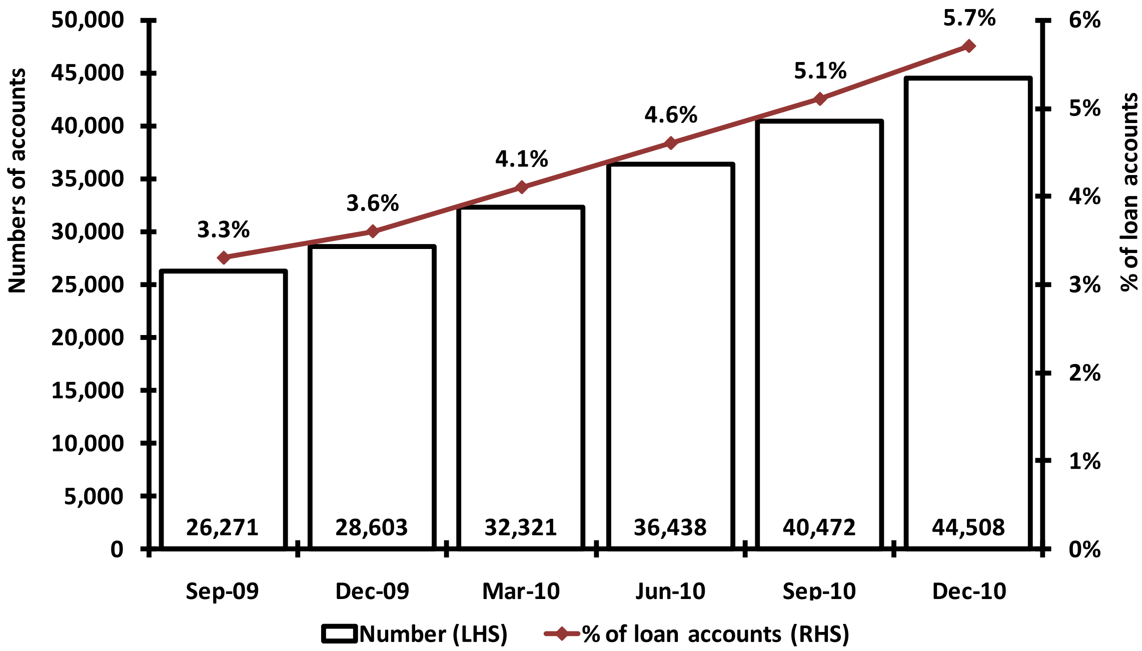
	2009	% Change in 2010		2010	% Change in 2011		2011	% Change in 2012		2012
	€m	%	€m	€m	%	€m	€m	%	€m	€m
Agriculture, etc.	2.2	22¾	0.5	2.7	11	0.3	3.0	3¼	0.1	3.1
Non-Agricultural Wages	72.7	-5½	-3.9	68.7	-1	-0.7	68.0	1	0.6	68.6
Other Non-Agricultural Income	16.6	2¼	0.4	16.9	-2¼	-0.4	16.6	9½	1.6	18.2
Total Income Received	91.4	-3¼	-3.1	88.3	-1	-0.8	87.5	3	2.5	90.0
Current Transfers	27.0	- ¼	-0.1	26.9	-2½	-0.7	26.2	-2½	-0.7	25.5
Gross Personal Income	118.4	-2¾	-3.2	115.2	-1¼	-1.5	113.7	1½	1.8	115.5
Direct Personal Taxes	21.6	-3½	-0.8	20.8	4	0.8	21.6	8¾	1.9	23.5
Personal Disposable Income	96.8	-2½	-2.4	94.5	-2½	-2.3	92.1	0	-0.1	92.0
Consumption	84.3	-3½	-2.9	81.4	0	0.0	81.4	3	2.4	83.8
Personal Savings	12.5			13.0			10.7			8.2
Savings Ratio	12.9			13.8			11½			9
Average Personal Tax Rate	18.2			18.0			19			20

BOX 1: MORTGAGE ARREARS

by David Duffy

Statistics on mortgage arrears from the Central Bank shows a steady rise in the number and proportion of mortgages in arrears. Of the 786,164 private residential mortgage accounts in Ireland, 44,508 or 5.7 per cent were in arrears for more than 90 days at the end of December 2010 (Figure 1A). This represents an increase of 15,905 from the end of 2009, and continues earlier trend increases in the number of mortgages in arrears. In December 2006 it was estimated that 11,252, mortgage accounts were in arrears for more than 90 days (1.2 per cent).[12]

Figure 1A: Mortgage Arrears



Source: Central Bank of Ireland, press release, February 28, 2011

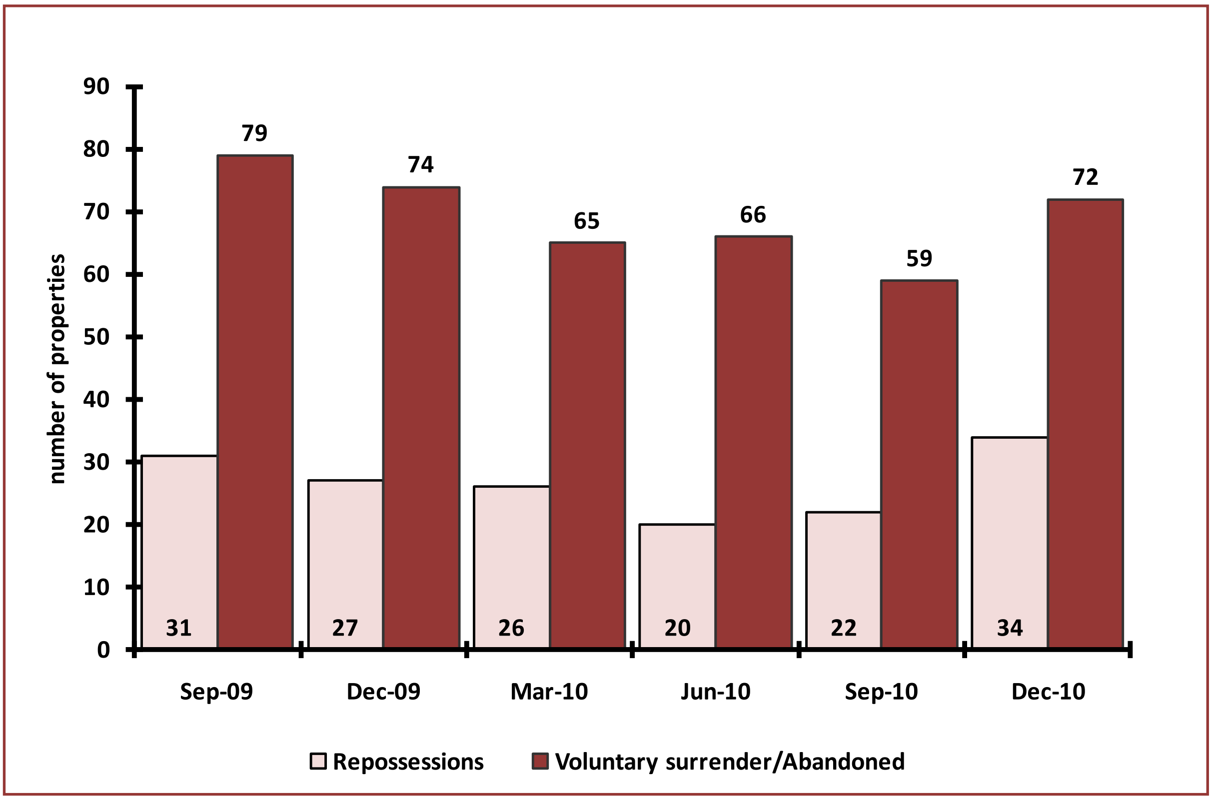
The latest release also includes data showing that 59,229 mortgages have been restructured by lenders as part of forbearance measures to assist borrowers facing difficulty. A move to an "interest only" mortgage accounts for the largest proportion of restructures (38.3 per cent), while reduced payments (paying greater and less than interest only) account for 28.3 per cent of restructures. Other types of restructuring include term extension (12.2 per cent) and arrears capitalisation (11.9 per cent). A payment moratorium accounts for just 4.3 per cent of restructures to date, while other forms of restructuring account for another 4.9 per cent. Taking account of an overlap between restructured

[12] Financial Regulator, "Findings of Arrears and Repossessions Handling Procedures Examination", Press Release, 16 December 2008.

mortgages and mortgages in arrears shows that 79,713 mortgage accounts are either in arrears greater than 90 days or have been restructured, amounting to 10.1 per cent of mortgage accounts.

The Central Bank also publishes data on the number of properties repossessed in a quarter and the number of properties that have been abandoned or voluntarily surrendered by the occupant. The number of properties being repossessed had declined between September 2009 and September 2010 but the most recent data show an increase in repossession levels (Figure 1B). Repossessions represent a very difficult outcome for the individual or family involved but it is worth noting that with the number of mortgage accounts at over 780,000 the number of repossessions represents a very small proportion of outstanding mortgages. The data also show a number of residential mortgage holders in each quarter are deciding to abandon their properties or to voluntarily surrender the property to the lender, suggesting some borrowers consider their situation to be too difficult to resolve. Analysis by the Irish Banking Federation shows that the repossession rate in Ireland is low when compared to the UK; for example, there were 13 repossessions per 100,000 mortgages here compared to 69 per 100,000 mortgages in the UK in Quarter 4, 2010.

Figure 1B: Number of Properties Abandoned or Voluntarily Surrendered



Aron and Muellbauer (2010)[13] identify the three main economic drivers of arrears and repossessions in the UK to be the unemployment rate, the incidence of negative equity and mortgage affordability (the ratio of mortgage service cost to disposable income). Based on the forecasts in this *Commentary,* the unemployment rate is expected to remain above average at 14 per cent over the short term. Duffy (2010)[14] estimates that a high proportion of borrowers are in negative equity, numbering approximately 300,000. US research by Foote, Gerardi and Willen (2008)[15] finds negative equity is a necessary but not a sufficient condition for default. It is the interaction of housing equity, a household's cash flow[16] and house price depreciation or appreciation that determines the decision to default. Furthermore, Ghent and Kudlyak, (2010)[17] examine mortgage defaults across US states with both recourse and non-recourse borrowing and find that the decision to default where borrowing is on a recourse basis is substantially less sensitive to negative equity.

Mortgage affordability in Ireland has shown an improvement in recent years, reflecting low official interest rates and house price falls that have been greater than cuts in income. However, the ECB recently raised official interest rates and the expectation is that further increases are to come. Furthermore, domestic mortgage rates have risen independently of official ECB rates, as banks, given the cost of funds, raise mortgage rates. Figure 1C shows mortgage affordability over the long run (1970-2012), measured by the level of mortgage debt, interest rate and personal disposable income. Affordability improved significantly between 2006 and 2010, reflecting falling house prices and low interest rates. The forecasts in this *Commentary* suggest that a combination of rising interest rates and stable house prices may result in deteriorating affordability in 2012. Thus, the economic outlook suggests that high levels of arrears will persist from some time.

[13] Aron, J., and J. Muellbauer, 2010. "Modelling and Forecasting UK Mortgage Arrears and Possessions", Centre for Economic Policy Research, Discussion Paper Series No. 7986, September.

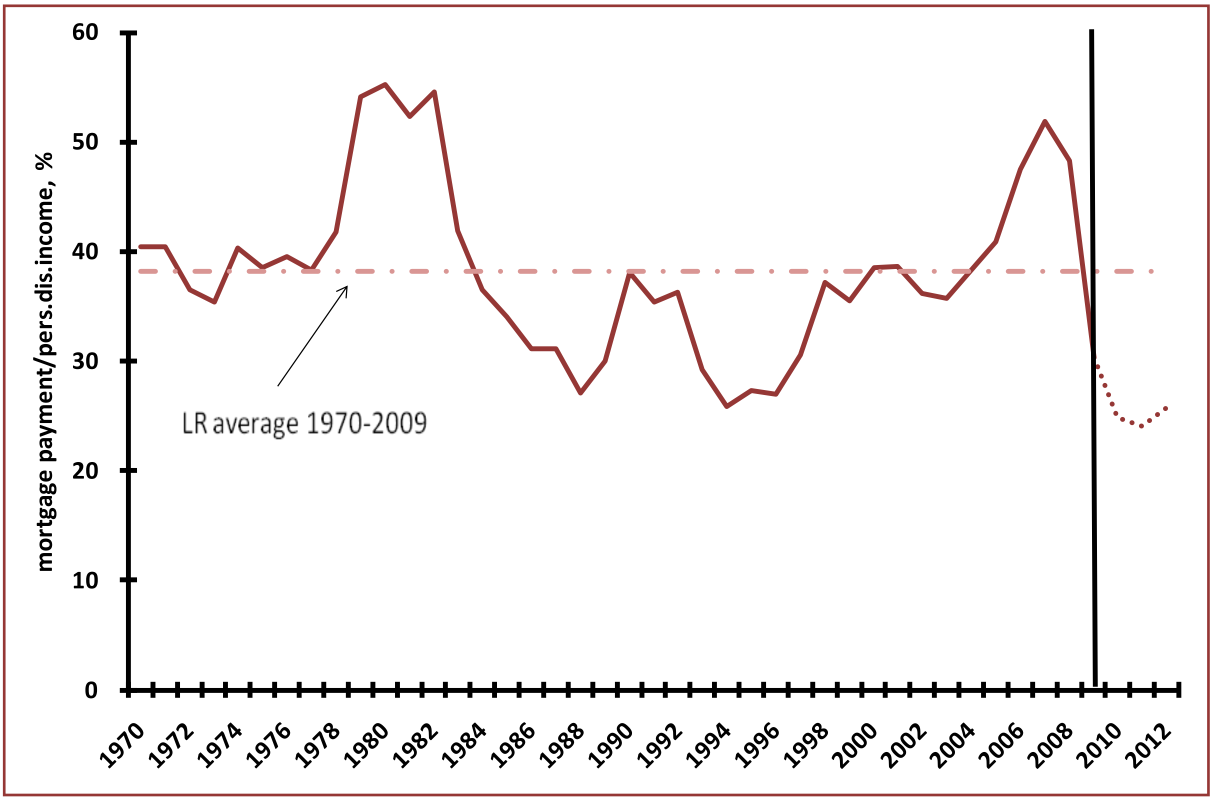
[14] Duffy, D., 2010. Negative Equity in the Irish Housing Market, *The Economic and Social Review*, Spring, Vol. 41. No.1.

[15] Foote, C. L., K. Gerardi and P. S. Willen, 2008. "Negative Equity and Fore-closure: Theory and Evidence", *Journal of Urban Economics*, Vol. 64, No. 2, pp.234-245.

[16] For example, a household's cashflow can be adversely affected by unemployment, divorce and illness.

[17] Ghent, A. and M. Kudlyak, 2010, "Recourse and residential mortgage default: Theory and evidence from US states", Federal Reserve Bank of Richmond Working Paper WP09-10R, June.

Figure 2C: Mortgage Affordability



5. Public Finances

While the exchequer framework is not ideal for the purposes of analysis, it has been in use for decades and is readily understood particularly now that details of the main expenditures by department are available on a monthly basis. This allows analysis of monthly data under main department heads throughout the year.

Table 6 sets out the budget figures for 2011, amended slightly by later figures with the end year returns, the figures taken from the *Revised Estimates of Public Expenditure* and *Ireland – Stability Programme Update,* April 2011 (Department of Finance)

Table 6: Exchequer Finances €billion

	2009	2010	2011	2012
Net current expenditure	45.2	47.0	48.9	49.4
Net voted expenditure	*40.2*	*40.5*	*41.7*	*39.7*
Non-voted expenditure	*5.0*	*6.5*	*7.2*	*9.8*
Current revenue	33.9	34.4	36.9	38.6
Tax revenue	*33.0*	*31.8*	*34.9*	*37.5*
Non-tax revenue	*0.8*	*2.7*	*2.0*	*1.1*
Current budget deficit (1)	**11.4**	**12.6**	**12.0**	**10.8**
Capital expenditure	14.7	8.0	8.2	7.9
Net voted expenditure	*6.9*	*5.9*	*4.3*	*4.0*
Non-voted	*7.8*	*2.1*	*3.9*	*3.9*
Capital receipts	1.5	1.8	2.1	1.6
Capital deficit (2)	**13.3**	**6.2**	**6.1**	**6.3**
Exchequer deficit (1+2)	**24.6**	**18.7**	**18.2**	**17.0**
General Government Balance (deficit)	**23.0**	**49.9**	**15.7**	**13.9**

Source: *Budget 2011, Ireland – Stability Programme Update* April 2011 (Department of Finance), rounding may affect figures.

The underlying budgetary position is set to improve at a much better rate than these figures indicate, as once-off expenditures in relation to Anglo-Irish Bank and the Irish Nationwide Building Society are included in the capital expenditure in 2010. The underlying position may also be distorted during the year by the cost of the recently announced additional bank restructuring, depending on how the capital cost is treated in the accounts. The estimate for Central Fund Services includes the estimated interest cost of the restructuring, but the capital cost is not included in the General Government Balance.

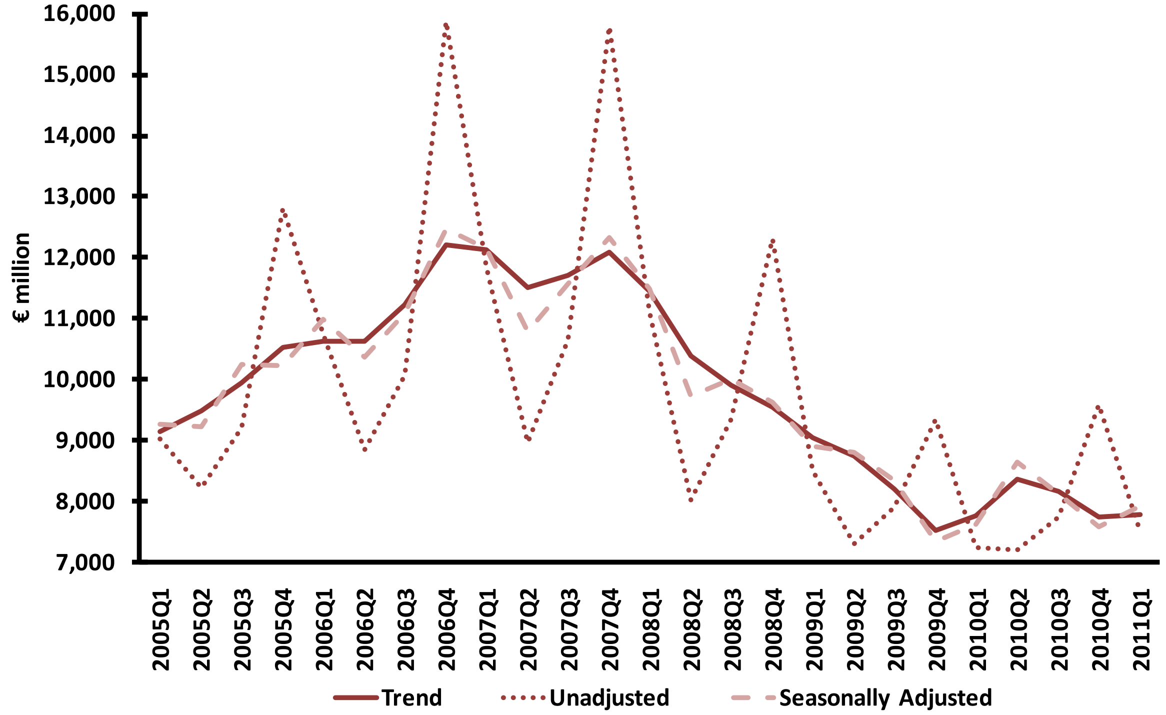
The first quarter exchequer returns provide some indication of how the budgetary situation is developing. Voted expenditure is running 2.3 per cent below the expected total for the period. A precise year-on -year comparison with 2010 is not straightforward as the treatment of the Health Levy has changed. The Health Levy is now part of the new Universal Social Charge. The revenue from the Universal Social Charge is included within the heading "income tax". Ideally, this should be separated out so that like-for-like comparisons can be made.[18] In 2010 the quarterly revenue from the Health Levy was approximately €0.5 billion, and if allowance is made for this, underlying voted current expenditure rose by just over 1 per cent.

The tax revenue figures provide mixed messages. Overall they increased by 3.7 per cent on the first quarter of 2010. Figure 2 charts the basic data, these data seasonally corrected and a trend curve that eliminates random movements from the seasonally corrected data. Seasonally corrected[19] quarterly tax revenue shows a slight upturn, but the trend looks quite flat for the first quarter of the year despite the reclassification of the health levy as tax revenue as part of the Universal Social Charge. The data were thus somewhat disappointing. However, it is very early in the year and quarterly revenue data are very volatile and there could easily be an improvement in the second quarter. The April Exchequer Returns point to such an improvement.

[18] Previously the Health Levy was accounted for as revenue to the Health Services Executive. This had the effect of reducing the net expenditure, but not, of course, gross expenditure.

[19] Seasonally corrected using X-11 multiplicative adjustment.

Figure 2: Tax Revenue, Seasonally Corrected and Trend Component



Source: Department of Finance and own calculations

The budget target, adjusted for the extra interest costs associated with bank restructuring, still looks as if it can just about be realised. On the expenditure side there may be some slippage as the Live Register is running above the levels assumed at budget time. However, the new programmes for retraining may not have kicked in yet, there is also still some work to be done on restructuring the welfare code by shifting payments to those in need and reducing emerging disincentives to seek work. In total, transfer payments could be higher than budgeted. While the Budget has allowed for a decline of 2.2 per cent in the pay and pensions bill, with a slightly faster fall in numbers at 3.1 per cent, the *Revised Estimates of Public Expenditure* show a fall of 0.2 per cent in the pay and pensions bill and a fall of only 1.2 per cent in numbers.

Experience suggests that when funds are tight, non-pay expenditure by departments tends to tighten up so that there could be savings already in the system but not yet appreciated. It would be important for government departments not to spend savings towards the end of the year as is traditional under the "use it or lose it" practice, since these savings would ease the budgetary situation. This involves departments taking a very active stance on cost-cutting within their own operations, and not just the programmes they administer. In practice, given that government has instituted a review of public expenditure, we expect that expenditure cuts will be geared more towards the second half of the year and into 2012. It is also likely that some capital projects will be delayed during this period of adjustment and this would reduce the borrowing requirement. On the revenue side, while the first quarter returns were less than we had expected, they could easily improve as the economy develops during the year. Taken together, and given the risks on the revenue side, a reduction in capital expenditure could guarantee that the borrowing targets are met. There is a benefit in this over the period of the programme and not just in 2011 and 2012. The figures for 2012 include an adjustment of €3.6 billion by way of expenditure cuts and tax increases designed to maintain the broad pattern necessary under the bailout programme. The overall figures for 2012 seem achievable at this stage.

Net current expenditure on goods and services could decline by about 2 per cent this year and 4 per cent in 2012. This is a slightly different time profile to that set out in the budget, but occurs mostly because of delays in effecting the necessary changes.

The increase in the level of debt in recent years has been very rapid. The fiscal consolidation to date has been very large but the scale of the budget deficits and the need to provide funding for the banking system has led to continued increases both to the level of debt and the debt/GDP (or debt/GNP) ratio. The *Stability Programme Update2011* [20] sets out the time profile of the evolution of the overall budget deficit and the debt to 2015. This envisages the ratio of debt to GDP peaking at 1.18 in 2013 and then declining. In order that the debt to GDP ratio be stabilised it is necessary to run a primary budget balance (i.e., the budget deficit/surplus excluding debt interest payments) equal to the difference between the growth in the economy and the interest rate times the previous year's debt/GDP ratio. To reduce the ratio of debt to GDP the primary balance must be greater than this. The assumptions for GDP growth in nominal terms of about 4 per cent in 2014 and 2015, and nominal interest rates of 5.6 per cent, together with debt/GDP at 1.18 and a primary budget surplus of 1.7 per cent and 3.4 per cent of GDP in 2014 and 2015 respectively mean that the condition for debt sustainability is satisfied. This is very important, but can only be realised if the fiscal consolidation is pursued. Furthermore, sustainability is not optimality so that we must continue efforts to have pro-growth micro policies, to reduce the interest rate, and if possible to have some burden sharing in relation to the level of debt at EU level because of the potential spillover effects to other EU countries of the banking crisis here.

[20] *Ireland – Stability Programme Update* April 2011, Department of Finance.

6. Employment and Unemployment, Earnings and Prices

The *Quarterly National Household Survey* from the CSO is the major source of data on trends in employment and unemployment. Total employment continued to fall during 2010. By year end it was 3.4 per cent lower than a year earlier and 14.7 per cent below the peak level in 2008. The participation rate has also fallen, standing now at 60.7 per cent of the population aged 15 and over, compared with 63.5 per cent in the first quarter of 2008. The corresponding figures for unemployment in 2008 and 2010 are 14.7 per cent and 4.9 per cent.

There are also big differences between male and female unemployment rates: male unemployment now stands at 17.9 per cent while female unemployment stands at 10.6 per cent. The gap of 7.3 percentage points between the two rates contrasts significantly from the situation that prevailed in early 2008 when the gap was just 1.9 percentage points. The rise in male unemployment from Q1 2008 to Q4 2010 at 139.7 thousand is very similar to the fall in male employment in the construction sector at 139.3 thousand. These are net figures for unemployment changes. There are large gross flows on and off the Live Register so that not all the increase in male unemployment is among those who worked in construction. The fall in female employment, as evidenced from the *QNHS*, is much more dispersed across sectors.

There has also been a continuous decline in the numbers self-employed, both sole operators and those who have employees. There appears to have been some migration among skilled workers (electricians, carpenters, plumbers) to the faster growing economies of Canada, Australia and to a lesser extent the US and Germany following attempts by some countries to recruit skilled workers, and well publicised job opportunities in these countries. There may also have been a greater incidence of self-employment in construction and the collapse in that sector would then have resulted in a fall in the numbers of those self-employed.

While employment at an aggregate level has continued to decline, the latest *QNHS* does show some sectors experiencing increases in employment. There was a rise in employment in industry in the final quarter of 2010 from a very low base in the third quarter. There was also an increase in the numbers employed in the wholesale and retail trade and in some administrative and support service activities. The increases are all small and outweighed by declines in other sectors, but these are tentative signs of a change in direction following several years of decline across all sectors. The increase in employment in industry is not surprising given the rise in industrial output that took place in 2010 and further increases are forecast during 2011 and 2012. In the same way some service sector employment will increase as services exports rise, though there are emerging shortages in some areas.

The Expert Group on Future Skill Needs reported in March that in spite of the recession and the level of unemployment there are still vacancies and these have increased, with shortages of labour in ICT, engineering, healthcare and finance. We expect some very modest increases in wholesale and retail employment over the coming years. Non-market service sector employment is likely to decline – in healthcare, education and public administration and defence. There may be some increase in private healthcare employment as constraints in the public hospital system lead to a shift to private hospital care. Overall, employment may change very little from the level at end-2010 implying a fall of about 1 per cent in total. Unemployment however will remain high at 14¼ per cent this year and 14 per cent in 2012. Both of these forecasts depend crucially on emigration and may be lower if emigration is greater than in 2010. Table 7 sets out our forecasts for employment and unemployment.

Table 7: Employment and Unemployment

	Annual Averages 000s			
	2009	2010	2011	2012
Agriculture	96	85	88	90
Industry	411	360	345	345
Services	1,422	1,403	1,386	1,390
Total at Work	1,929	1,848	1,820	1,825
Unemployed	259	292	304	295
Labour Force	2,187	2,140	2,124	2,120
Unemployment Rate %	11.8	13.6	14¼	14
Net Migration	-7.8	-34.5	-60.0	-40.0
of which: Inward Migration	57.3	30.8	15.0	20.0
Change in Participation Rate*	-1.2	-1	¼	½

Average private sector hourly earnings stabilised at end 2009 levels during 2010. There are differences in hourly rates across sectors but relative stability is a common feature of the recent data. Given the state of the labour market there is unlikely to be pressure for any major upward changes in wage rates at an aggregate level, though in areas where shortages exist there could easily be increases in basic wage rates. Average earnings for existing workers could also rise as firms increase exports if hours worked increase. We do not expect any further declines in hourly rates of pay in the private sector. There may even be increases in those areas where skill shortages are emerging.

Pay and pensions in the public sector are protected by the Croke Park Agreement, but government has indicated that there could be further declines in pay if productivity gains do not result in significant savings. Given the increase in output in industry, unit labour costs have decreased sharply again in 2010 and they should fall further in 2011 and 2012.

The outlook for price inflation is more uncertain. As is well recognised there are major differences between the different measures of inflation, especially in the context of housing cost adjustments. Tracker mortgages may be under-represented in the CPI as they were less common when the base for the CPI was selected. There may also be problems of bias in the methodology used to determine the mortgage interest component as set out by Colm McCarthy in a previous edition of the *Commentary.*[21]

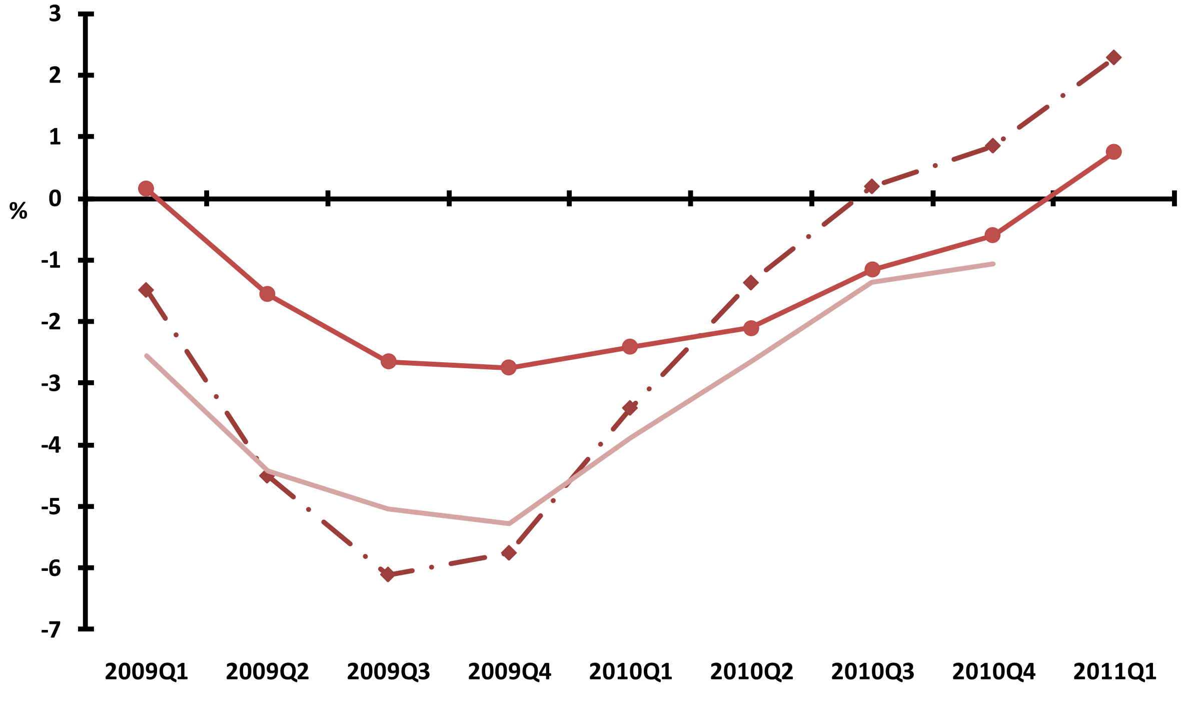
In addition to these concerns it should be noted that the Consumer Price Index (CPI) and the Harmonised Index of Consumer Prices (HICP) are fixed base indices and thus take little account of shifting patterns of expenditure. That these patterns have changed is amply demonstrated in Table 4 which examined the extent to which expenditure by retail outlet has varied during this crisis. The implied deflator for household consumption is better at picking up these changes and it declined in 2010 by 2.4 per cent while the CPI and the HICP fell by just 1.0 per cent and 1.6 per cent respectively.

The divergent patterns of the CPI, the HICP and the personal consumption deflator are represented below in Figure 3. While we expect the CPI to increase by 2½ per cent this year and HICP to rise by 1½ per cent, the household consumption deflator may remain unchanged. Furthermore, the quarterly

[21] McCarthy, C. "Owner-Occupied Housing Costs And Bias In The Consumer Price Index", special article in ESRI *Quarterly Economic Commentary*, Autumn 2007.

pattern during the year may be very uneven and affect the different measures differentially. The increase in interest rates will impact on the CPI but not on the HICP. The increase in fuel prices may be short-lived and could reverse from mid-year, and the fall in electricity prices for ESB customers will pull down the index. However, there are risks of further inflation should fuel and energy-related prices prove not to be transitory, and these will have to be monitored closely.

Figure 3: Year-On-Year % Change in Measures of the Price Level



Source: CSO

7. Imports and the Balance of Payments

Imports of Goods and Services increased by 6.6 per cent in volume terms and by 7.4 per cent in value terms in 2010. Imports of goods rose by 1.3 per cent in volume while imports of services increased by 9.9 per cent. Much of imports of services, with the obvious exception of expenditure abroad by residents, are now related to exports, which is why a set of inter-related accounts for the multinational sector is important. As multinational exports increase, royalty payments and other services are charged directly to the activity. Consequently, the large increase in exports of goods in 2010 is associated with a corresponding increase in imports of services. The same applies to 2011 and 2012. Thus, we expect imports of goods and services to increase by 6 per cent this year and about the same in 2012 both in volume terms. Within these numbers, expenditure abroad by tourists from Ireland is expected to fall in 2011, but to increase in 2012 (see Table 9 opposite).

Reflecting the pattern of trade the balance of payments is forecast to go into surplus this year at €1.65 billion (1.2 per cent of GNP) increasing to €3.6 billion (2.9 per cent of GNP) in 2012. The Balance of Payments are set out below in Table 8.

Table 8: Balance of Payments 2010-2012, €billion

	2010	2011	2012
Exports of goods and services	158.4	172.0	186.7
Imports of goods and services	-129.3	-137.7	-147.7
Net Factor Payments	-29.1	-31.8	-34.4
Net Transfer	-1.1	-1.0	-1.0
Balance on current account	-1.1	1.5	3.6

Table 9: Imports of Goods and Services

	2009	% Change in 2010		2010	% Change in 2011		2011	% Change in 2012		2012
	€m	Volume	Value	€m	Volume	Value	€m	Volume	Value	€m
Merchandise	**45**	**0.2**	**4.6**	**47**	**3½**	**4**	**49**	**2½**	**4**	**51**
Tourism	6	-6.9	-7.3	6	-1	0	6	3	5	6
Other Services	69	11.4	10.5	76	8¾	8½	83	8½	9¼	90
Imports of Goods and Services	120	6.6	7.4	129	6	6½	137	6¼	7¼	147
FISIM Adjustment	0.7			0.7			0.8			0.8
Adjusted Imports	120	6.6	7.4	129	6	6½	138	6¼	7¼	148

8. Overall Output

GNP is forecast to increase by ½ per cent in real terms this year and close to 2 per cent in 2012. In both years GDP will grow faster, but the data for GDP must be treated with caution (see Box 2 below). The rapid growth in exports by multinationals increases the share of multinational profits in output and hence widens the gap between GDP and GNP. Total domestic demand, which gives a better flavour of what is happening in the economy, declined in each of the years from 2007 on, but the rate of decline dropped from 13.9 per cent in 2009 to 5.6 per cent in 2010. In 2011 we expect domestic demand to decline further but at a very much lesser rate of ¾ per cent and it is forecast to increase by ¼ per cent in 2012. The very big decline in 2009 was not due solely to the deflationary measures introduced by government as the increase in the savings rate also acted to contract the economy.

BOX 2: MEASURES OF OUTPUT

The terms GDP and GNP are used interchangeably to capture the concept of overall output. The concept for a closed economy is very straightforward as all output arises within the economy, all income is generated by that output and all expenditure accounts for that output. It is this characteristic of a closed economy that gives rise to the equality between income, expenditure and output. When the economy is open this equality is preserved, but when the ownership of the factors of production is held abroad some part of the income that is generated in an economy does not accrue to its residents. GDP attempts to measure total output produced in an economy but GNP measures that part that accrues to residents. For most economies the difference between GDP and GNP is trivial but in the case of Ireland it is very significant. In 2010 GNP was 81.1 per cent of GDP down from 85.1 per cent in 2005. The counterpart of this is that GDP fell less, by 5.2 per cent, than GNP, which declined by 9.4 per cent between 2005 and 2010.

There is a perception that GDP refers to multinationals while GNP refers to the local economy. This is not the case. GDP measures the value of output that is produced in the economy, while GNP subtracts the profits of multinationals operating out of Ireland from GDP as these profits obviously do not accrue to residents. However, the overseas profits of Irish multinationals must be added in as these do accrue to residents, and national debt interest paid abroad is subtracted. The net effect in 2010 was an adjustment of €29 billion to GDP to arrive at the GNP estimate. This net figure is the result of gross flows which are very large, with a gross outflow of €85 billion and gross inflow of €56 billion.

Most of the focus is on the profits of multinationals and the extent to which these are overstated by transfer pricing, influenced by differences in corporate tax rates between Ireland and the home country of overseas firms. In practice, and in particular in relation to US companies, the US Internal Revenue Service agrees with companies the pricing of within-company transactions. In many cases there are no arms-length prices that can be used for comparison. The important point is that companies are limited in how far they can locate profits in Ireland.

During 2010 the situation was complicated by some UK companies locating their world-wide head office here and their paper profits here, in order to avoid the threat of the taxation of these profits in the UK. These companies were not liable for any company taxation here because of double tax agreements with other countries. However, the transactions had the effect of increasing the size of Irish GNP. The bulk of this took place in the third quarter of 2010 so that both the third quarter and fourth quarter data are affected. Consequently, GNP changes are not a reliable indicator of what was happening in the second half of 2010. Thus both GDP and GNP figures are problematic for these quarters.

GNP is still a more realistic measure of the concept of output than GDP, but there are other measures. Gross National Income (GNI) is measured by adding EU taxes less subsidies to GNP, while Gross National Disposable Income (GNDI) is GNI plus current net transfers from the rest of the world (this includes emigrants' remittances). GNDI is the broadest and most inclusive measure of income available but is rarely used in practice.

GDP is sometimes measured at market prices and sometimes at factor cost, the difference being the inclusion of indirect taxes in a market price measure. Comparisons between countries are usually in terms of GDP for growth purposes, and for income per head differences (though income per head measures are also adjusted for relative purchasing power between countries). Within an EU context the Maastricht Treaty conditions for fiscal aggregates were expressed in terms of GDP (the Debt/GDP ratio at 60 per cent, the budget deficit at 3 per cent), and these were carried into the original and revised Stability and Growth Pact. Confusingly, countries' contributions to the EU budget are determined by GNI.

When differences between these aggregates are large and variable between countries, comparisons and the determination of the most appropriate measure of output/income is not obvious. There can also be serious differences because of the distinction between factor cost and market prices, where a heavy reliance on indirect taxes can widen the gap between these, so that differences in GDP per head or in debt and budget deficit ratios can be distorted. The simplest measure and one that eliminates most of these issues is National Income (NI) which measures income arising in a country and accruing to residents as well as income arising from abroad.

When the issue is debt sustainability it is less clear what the focus should be. The analysis can be carried out in terms of GDP, GNP, GNDI or GNI but the critical question to help determine whether the debt is sustainable, is which measure captures taxable capacity. There is no consensus on this. Some have argued that in principle all income generated in Ireland is taxable so that GDP is the appropriate measure, while others have argued that the taxable capacity of the profits of multinationals is low, given that the current corporate tax rate is 12.5 per cent and the fact that the declared profits themselves may be a function of the tax rate, as the tax rate influences the scale of transfer pricing. The best way to consider this problem is to see that output produced in the economy is different to income available and it is income that government can tax in a realistic manner. The taxable capacity of GNP is very different to the taxable capacity of the one part of net factor income that represents the profits of multinationals operating here. This suggests that GNP is the appropriate measure of income to use in sustainability analysis and that one should also be aware that there is other tax revenue from the profits of multinationals.

9. Banking Crisis and the Real Economy

While the main focus of attention in relation to the banks has been about the costs of restructuring, we are also concerned with the impact the continuing crisis has on commercial banks' ability to lend in the domestic economy. Before the crisis was recognised, the commercial banking sector had become increasingly dependent on overseas borrowing through the interbank/wholesale money markets and debt issues, to fund their operations in Ireland. Prior to the creation of the Eurozone, commercial banks' ability to lend was constrained by domestic resource growth as there were limits on banks' ability to borrow abroad on their own account. This changed in 1999 and banks were free to borrow without any exchange risk in the Eurozone interbank market. The scale of the overseas borrowing and the domestic lending associated with it were very large. With the emergence of the financial crisis worldwide and the freezing of the interbank markets, potential lenders became concerned about the solvency of borrowers. Consequently, banks hoarded cash to meet future interbank borrowings and Central Banks effectively provided the liquidity that previously had been provided by the interbank market. This transformed interbank lending into lending by Central Banks. In addition to the difficulties associated with interbank borrowing, domestic banks were also suffering a loss of deposits as institutions, corporates and to a lesser extent, the household sector shifted accounts overseas or to other banks. Finally, domestic banks had realised losses on National Asset Management Agency (NAMA) associated business, with the written down value of the NAMA associated assets converted to promissory notes, which were used as collateral in ECB borrowing. In Table 10 the balance sheet position of covered commercial banking institutions can be seen at end-2010.

Table 10: Balance Sheet, Covered Institutions €billion 31/12/2010

Total Assets	**455.6**
Loans to Customers	294.0
Available for Sale Assets	57.3
Loans to Central Bank/Cash	11.4
Interbank Lending	14.3
Other Assets	78.6
Total Liabilities and Reserves	**455.6**
Customer Deposits	169.4
Debt Securities	60.5
Subordinated Debt	9.8
Interbank Borrowing (mainly ECB and CBI)	167.8
Other Liabilities	27.1
Equity and Reserves	20.9

Source: Central Bank of Ireland.

The data show clearly the unbalanced nature of the covered commercial banking institutions operations with a loan to deposit ratio of 1.74, with loans additionally financed by interbank borrowing. The figure for this at €167.8 consists primarily of borrowing from both the ECB and the Central Bank of Ireland. The total outstanding borrowings from the ECB and the Irish Central Bank have remained at these levels, totalling some €170 billion at end-February. This must be seen as emergency borrowing, initially because of the failure of the interbank market but more recently because of the inability of the banks to borrow on that market because of their perceived inadequate capital. As a consequence, the covered commercial banking institutions operating in the Irish market face a funding crisis which makes it difficult for them to engage in normal commercial lending. There is a stock of credit outstanding but new credit was hard to come by though not wholly unavailable. The resource base of banks is constrained and they have become more risk averse. This has directly affected business seeking working capital and households seeking credit. As a consequence, many new start-ups are affected, the housing market has seized up and households are unable to borrow for consumer durable purchases, though alternatives to the domestic banking system are emerging, with retail outlets providing credit. In effect, the banking system ceased to function except as a payments mechanism. Household consumption expenditure is unlikely to revive in these circumstances.

To break out of this, banks need to be restructured to have adequate resources to deal with future debts and to allow the re-emergence of new lending. In the absence of a central government authority in the EU the restructuring must take place at national rather than EU level The stress tests have revealed an additional funding requirement for the banks of some €24 billion. Government actions will provide funding directly, with additional funding coming from raised additional capital and sales of non-core business. While the use of National Pension Reserve Fund resources reduces the need for additional borrowing, it is the net debt position that matters from a debt sustainability point of view. Nevertheless, the funding provided by the EU/IMF loans over the period of the fiscal adjustment provides ample time to test the extent to which the additional capital is adequate.

From the point of view of the economy, assuming the capital restructuring is sufficient, the most important part of the restructuring was the associated provisioning of €30 billion over 3 years for credit to the domestic economy. This €30 billion is equivalent to the amount that would normally be repaid by borrowers over the three years and it is the government's intention that this be financed by selling off or winding down €57 billion of assets. This will permit both the provision of credit (€30 billion) and a reduction in the balance sheet of the banks (€27 billion). In itself this €30 billion is not additional credit but is a rollover of credit with the added feature that it is unlikely to be directed to property development at home or abroad, so that the household, small and medium sized enterprise, and corporate sectors should get better access to credit. This credit may not be readily available immediately, though in principle it could be. The competition aspects of public ownership of such a large part of the banking system must be always considered, as a well functioning competitive banking system is necessary to increase the competitiveness of the economy. The existence of overseas banks provides some element of competition.

It is clear that the deleveraging of the Irish banks as a policy objective is based on a view that domestic deposits are the natural base for domestic lending. If Irish banks did not have ready access to an interbank market with no foreign exchange risk then the property bubble would have been less and the losses of Irish banks less, though their market share would have fallen. Reducing the balance sheets of the covered banks effectively means that the scale of ECB and Central Bank borrowing must be reduced. Without a restructuring at EU level this could have the effect of resulting in a decade of poor performance for the economy as any growth in resources would be used to reduce ECB and CBI loans. With the breathing space created by the IMF/EU funds and the latest bank restructuring, government should seek alternative approaches to the banking crisis.

The approach adopted at EU and Eurozone level at present, and now built into the “Euro Plus Pact” has been to attempt to contain the banking crisis within national borders. However, there are potential spillover effects on other economies within the Eurozone if the debt becomes unsustainable in that losses would then be incurred by other Eurozone banks and financial institutions on foot of their lending to Irish banks. There would also be implications for the ECB, given the amount lent to the banking system here. These spillover effects are not just banking and other financial institutions effects, as there are trade and migration effects as well.

If the debt becomes unsustainable then Irish GNP will fall further and this would have knock-on effects for our trading partners – a fact recognised explicitly in the UK support for the bailout. The most sensible approach, given the spillover effects, would be a restructuring at central Eurozone level. A central government approach is in effect what happened in the US and in the UK with the respective Treasuries taking a central role and the Central Banks providing liquidity, but the EU and the Eurozone lack the central government authority to do this – a serious externality in governance that was not anticipated when the Maastricht Treaty was signed and when the ECB began. This requires an innovative and imaginative approach if the constraints at individual country level are to be eased.

There are several possible approaches to EU centred restructuring. The simplest would be an interest free loan from the ECB to the Irish Government, guaranteed by the Irish Government, sufficient to overcapitalise the banks. The two aspects, i.e. external funding and overcapitalising, would give the exercise credibility, would allow the banks to return to the interbank market, to reduce their indebtedness to the ECB and the Irish Central Bank and to begin providing additional credit to the economy. An alternative would be for the ECB to undertake the recapitalisation directly and to convert the funds used for recapitalisation into equity with a view to future sale of the assets. There are obvious difficulties with the implementation of either of these as they involve the ECB "moving outside the box" laid down in Maastricht. A third approach envisages the European Financial Stability Facility (after June 2013 the European Stability Mechanism) issuing bonds and using the funds raised to lend to banks who could then repay the ECB and the Central Bank of Ireland with the EFSF funding converted to equity. This approach releases the banks from the constraint they face on the interbank market, allowing them back into that market. Once banks can get back to the interbank market they will be able to repay the ECB for interbank support. None of these approaches is without difficulty, but then the actions of the Federal Reserve, the Bank of England and the ECB itself when the financial crisis struck, were also problematic.

Any of the above approaches will allow banks to return to the interbank market. Otherwise any potential resource growth will be used to repay the ECB and Central Bank of Ireland, business and the household sector will be short of credit and this will reduce growth, result in more company failure and further bad debts at banks. With credible external restructuring there would be a return to growth in the economy and this would ease the extent of the deficit reduction by cuts in expenditure and tax increases that otherwise are necessary. This requires that there is an acceptance that this is an EU problem and requires EU solutions. Whether or not measures such as those outlined above are adopted, serious consideration needs to be given to the "Euro Plus Pact" as it has not addressed the governance issue and appears to copper-fasten the present approach.

10. General Assessment

The general picture for Ireland outlined in this *Commentary*, while still very poor, is more favourable than has been the experience of recent years. The fundamental difference is the continued strong performance of multinational exports together with an increase in exports of goods and services from domestic firms. This latter can be likened to an expenditure shifting process whereby a contractionary domestic demand policy by government as part of a fiscal consolidation sees firms shifting output to export markets. In practice, this may not happen if firms are not already in overseas markets or if their cost structure is out of line with that in other countries, and even if firms can shift it may take some time before this happens. The collapse in output in 2008 was very dramatic and sudden but, as indicated earlier in the *Commentary*, firms in the tradeable goods sector seem to have looked to export markets in order to be able to survive, and this is now bearing fruit.

The policy issue is the extent to which this shift can be strengthened and the transition to an export led growth be speeded up within the constraints imposed by fiscal consolidation. This can best be achieved by reducing the overall cost burden on firms.

Strengthening the Process of Transition

There have already been wage and salary adjustments at firm level, but it would be important not to increase the cost of labour by tax changes which might translate back into wage demands. This suggests that further tax increases need to be broadly based.

Comprehensive property taxes have regularly been recommended in an Irish context, but after the experience of local rates, abolished in the 1970s, and the later residential property tax, abolished in the 1990s, there is some reluctance to proceed with a new property tax. The problems with local rates were associated with expenditures over which local authorities had little control, and there were serious inequities in the operation of the residential property tax. A comprehensive property tax, applying to all property and introduced at a relatively low rate with a declared time profile so households could adjust, would provide additional funds without many of the disincentive effects associated with other taxes. Research by Callan et al. (2010) shows that a property tax can still raise substantial revenue, even when combined with an income exemption limit for those with a lower ability to pay.[22]

The shift in taxation of motor vehicles from an engine size basis to CO_2 emissions was a move in the right direction, but while intended to be revenue neutral it led to static motor tax receipts even though the number of vehicles increased. There was very significant shifting to relatively low CO_2 emissions vehicles in new cars bought since the measure was introduced in the summer of 2008.[23] The incentive could still be maintained at higher rates of motor vehicle taxes and this could also avoid reducing the value of the existing stock of older cars. In the present circumstances facing the economy there is very little benefit in reducing the value of assets by administrative changes at a time when households' real incomes are squeezed.

The introduction of water charges for households would provide additional sources of revenue perhaps to local authorities or to some central authority which assumes the role of providing water. Charging for water would have the effect of reducing usage and providing funds to finance much needed investment. In addition, it would also permit a rebalancing of local authority revenues and permit reductions in local authority rates on business. This would improve the competitive position of firms. Even where firms are in the non-tradeable sector, lower costs will translate into lower prices as long as there is competition and this will impact favourably on the costs of firms in the tradeable goods sector. There have also been proposals to limit the number of local authorities in order to improve efficiency and to lower costs directly. These proposals should be actively pursued.

Not only will these measures help increase government revenues, they will also provide an opportunity to reduce local commercial rates, which are a significant burden on firms. Local authorities have increased their charges significantly as revenue from levies and contributions associated with housing have fallen, which has negatively impacted on the competitiveness of businesses.

22 Callan, T., Keane, C., and Walsh, J. R., 2010 "What Role for Property Taxes in Ireland?" *The Economic and Social Review,* Vol. 41, No.1, Spring, pp. 87-107

23 Hennessy, H. and Richard Tol, 2010. "The Impact of Tax Reform on New Car Purchases in Ireland", ESRI Working Paper No.298.

Fiscal Consolidation

EU/IMF funding provides a breathing space for a limited number of years. Then the government must go back to financial markets and raise funds, both to rollover debt and finance any small level of additional borrowing. This argues for reducing the budget deficit early and ensuring that the outcomes are well within the targets set at the various break points. In an era of easier finance a slower pace of fiscal adjustment might be desirable, but as recent events have indicated, funding is extremely difficult. Thus, there is an absolute need to establish credibility in financial markets and this can best be achieved by reducing the budget deficit. While this is a change in the position adopted in previous editions of the *Commentary*, it reflects the more difficult funding environment internationally.

The fiscal consolidation programme envisages cuts in public expenditure and these need to be implemented soon. The Minister responsible for Public Expenditure and Reform has announced a review of public services in order to see where rationalisation, among other objectives, can take place. The process, however, is unlikely to be significantly different to that which took place in 2009. This involved outside consultants but the bulk of the knowledge and the input came from the officers in the Department of Finance responsible for individual departments and from the departments themselves. It is difficult to see how another exercise will give very different results, unless the information available to the consultants was not sufficiently detailed or accurate. The question now is one of implementation, which will be very challenging to achieve. Nevertheless, we would expect that current expenditure programmes will be critically examined with a view to making significant cost savings.

In an idealised world the marginal benefit of €1 across all headings is the same so that uniform cuts would suffice as a means to reduce expenditure. However, we are not in an idealised world and consequently there may be considerable benefits to be obtained from a detailed analysis of expenditure and selective reductions across different budget lines. Cutting across the board as a first pass could very soon highlight critical areas where marginal benefits are either small or large, but it could be a very risky strategy. The Croke Park Agreement is seen by some as preserving pay for existing public sector workers but there is also an expectation that improved practices would lead to greater productivity so that services will be maintained with lesser numbers. There needs to be some positive movement on this, setting out in detail the requisite savings. There may also be some possibilities for reform in the welfare code as there may be some incentives that limit the willingness of some to get back to work by creating high replacement rates while people in serious need have had benefits cut, so that a reorganisation of expenditure may be beneficial.

As with current expenditure, public capital expenditure needs to be looked at much more critically than in the past, particularly now that the cost of funding has increased. One way to achieve the reduction in the level of new borrowings is to delay or cancel new projects. When there appeared to be no public finance constraints, many projects were conceived, designed and accepted as if there was no cost – the M9 motorway rather than a high-quality dual carriageway and some of the proposals for integrated public transport in the Dublin region are the most obvious examples. There is also a need to reconsider the scale of new projects to the lower level of income now prevailing, the lower level of population and lower growth in the medium to long-term than seemed plausible just a few years ago.

Government should persist with attempts to reduce borrowing costs under the EU/IMF deal. It is difficult to justify the scale of the differences between market rates and the rates charged unless some risk of default is built in. The moral hazard argument does not apply as we are already in this situation and it is difficult to see why any country would deliberately get into this position, even if interest rates were lower. Nor is it obvious why other governments should be seeking a trade-off for lower interest rates with a higher corporate tax rate. The trade-off is already there as the potential spillover effects of the banking collapse are contained within Ireland.

Finally, the emergence of a balance of payments surplus has its counterpart in an increase in a private sector surplus and a reduction in the public sector deficit. Whatever about the precautionary reasons for saving it is clear that the household and corporate sectors have been restoring their balance sheets. At some time they will reach levels that participants are happy with and then household spending and investment will begin to increase again. This will be copper fastened if the public finances are corrected as otherwise the uncertainty about future taxes could keep domestic savings high. The balance of payments surplus indicates that domestic savings are more than sufficient to finance government, so that different debt instruments more suitable for domestic savers could reduce the need for external funding. A significant amount has been raised from State savings Schemes but perhaps more could be done. The shortening of the time frame for realising National Solidarity Bonds was a good move, but these bonds still need to be sold. The conditions set for subscribing to the National Solidarity Bonds could be more purchaser-friendly. They could be more readily available and efforts be made to improve their liquidity without undue penalty. This would improve their attractiveness. The government should also consider actively extending the sale of these or similar bonds to overseas Irish and those of Irish descent.

Research Bulletin 11/1

Equality and Discrimination: Lessons from a Research Programme and a Conference

Frances McGinnity and Helen Russell

Creating a Health Promoting Environment: The Role of Food Access

Richard Layte

The Changing Workplace

Dorothy Watson, Helen Russell, Philip J. O'Connell

Support from Grandparents to Families with Infants

Amanda Quail, Aisling Murray, James Williams

Equality and Discrimination: Lessons from a Research Programme and a Conference

*Frances McGinnity and Helen Russell

INTRODUCTION

Despite legislation outlawing discrimination across the EU, inequalities between groups appear to be an enduring feature of Irish and European societies. The extent to which inequality is due to discrimination is a matter of continuing debate and controversy. Accurately measuring discrimination is therefore a crucial yet challenging task. This has been a central focus of a research programme on equality and discrimination carried out by the Economic and Social Research Institute and the Equality Authority since 2006, and was the theme of the conference 'Making Equality Count' held in Dublin in June 2010. Drawing on economics, sociology and social psychology, the book from the conference, *Making Equality Count*, highlights advances that have been made in the measurement of discrimination, as well as the range of evidence that has been accumulated on this topic in recent decades.[†] Here we give a flavour of the measurement issues and the salient findings from the book.[††]

MEASURING EQUALITY AND DISCRIMINATION

Inequality and discrimination can be investigated using a range of different methods, each with different strengths and weaknesses. In self-reports of discrimination, survey respondents are asked directly about their experience. The analysis of self-reports can consider experiences of discrimination across the whole population - not just a specific minority group - and can compare self-reported discrimination across a variety of situations. This method has played an important role in tracking change (and stability) in the experience of discrimination. However self-reports are subjective, depending on respondents' perception of their treatment by others.

[*] frances.mcginnity@esri.ie; helen.russell@esri.ie

A second technique to investigate discrimination compares outcomes (like unemployment rates, pay) across groups and statistically adjusts for non-discriminatory sources of difference like education, skills and experience. Remaining differences are commonly attributed to discrimination. While there have been important developments in statistical methods over recent years that have improved our understanding of inequality, it remains difficult to assess how much of this remaining difference in outcomes is due to discrimination.

The third approach commonly used to measure discrimination is based on attitude surveys of the general population. These investigate attitudes and beliefs about the "out-group", and more favourable attitudes towards the majority group. While these studies can be informative, especially if well-designed, respondents may be reluctant to express attitudes or opinions that are not socially desirable, such as being prejudiced. Furthermore discriminatory behaviour cannot simply be deduced from attitudes, though these may be strongly related. Other techniques have been developed to bypass attitudes and measure discriminatory behaviour directly through field experiments.

Field experiments can provide direct evidence of discrimination. Instead of measuring attitudes, these studies measure the actual response of employers or service providers to carefully matched candidates who differ only in respect to the characteristic on which discrimination is thought to occur – gender, race, nationality, age etc. These experiments occur in real life situations, for example applications are sent in response to actual job vacancies, and the responses are observed. While these studies can provide powerful evidence on discrimination, they can only be carried out within certain situations (e.g. applications for housing, job applications, accessing services/products, grading) at the initial point of contact, and cannot be used to detect discrimination in other processes like promotions.

Research Findings

Making Equality Count presents selected findings from the Irish research programme and adds international perspectives on equality and discrimination.

People's Experience of Discrimination in Ireland

In the first paper in the book, Russell and her colleagues present self-reported discrimination in Ireland in a range of social contexts including work and accessing services, using high-quality survey data from the CSO for 2004 representing the whole population. The highest reported discrimination was in recruitment (just under 6 per cent of those who had been seeking work) and discrimination in the workplace (5 per cent). In services, the highest reported discrimination was in accessing accommodation (4 per cent) and financial services (almost 4 per cent). The authors note that people with disabilities and non-Irish nationals experienced discrimination in a wide variety of contexts. For other groups, discrimination was more context-specific. These results provide an important benchmark for examining changes in the nature of discrimination experience in the future. The survey was repeated in late 2010, and results from this will facilitate the monitoring of reported discrimination patterns in Ireland.

What do experiments tell us about discrimination?

Two papers show how field experiments may overcome some of the difficulties with measuring discrimination by comparing outcomes. Judith Rich presents an interesting overview of the field experiment method and what experiments in the last 50 years have to tell us about discriminatory behaviour in markets. Rich reports that access to jobs was restricted for racial minorities, women, older and obese individuals; access to housing was restricted for racial minorities and homosexuals, and that racial minorities, women and older individuals paid more for products. Rich concludes that it is of concern that the more recent tests (since 2000) report similar findings to earlier studies (starting in the late 1960s), given public concern about discrimination and legislative developments in the area.

In the first experiment of its kind in Ireland, McGinnity and her colleagues tested for discrimination in recruitment against minority groups. The researchers sent out almost 500 equivalent CVs in response to advertised vacancies for jobs in administration, finance and retail sales in the greater Dublin area. They found that candidates with Irish names are over twice as likely to be asked to attend an interview as are candidates with an African, Asian or German name. The discrimination rate was relatively high by international standards, and did not vary across occupation. Interestingly they found no difference in the degree of discrimination between different minority groups, and argue that this may be linked to the recent nature of immigration in Ireland and the lack of established minority groups.

Insights from Social Psychology

The paper by Al Ramiah and colleagues adds insights from social psychology to our understanding of discrimination. Social psychologists are careful to distinguish prejudice (an attitude) from stereotype (a belief) and discrimination (a behaviour). Influential explanations of discrimination discussed include the social identity perspective (the drive for positive social identity can result in discrimination against the out-group) and aversive racism (a group upholds egalitarian norms while maintaining subtle prejudice). The paper discusses ways in which these and other ideas have been tested. Implicit measures of prejudice have been developed to capture the prejudice that people are unwilling or are unable to express. The Implicit Association Test (IAT) is based on the idea that people make connections more quickly between pairs of ideas that are already in their mind. Yet studies have found that not all individuals who hold negative attitudes go on to discriminate. What is clear is that discrimination may have serious consequences in terms of mental and physical health, self-esteem and underperformance for the minority group.

Race and Discrimination: A US Perspective

In his paper on racial inequality, William Darity describes the widespread perception that the US is a 'post-racial' society, and illustrates this cogently for the general population using survey data. He argues that this perception also permeates much of conventional economics. It does so in two major ways. First, the individual is at the centre of economic thinking - not a racial or ethnic group, or a social class. Second, conventional economic theory argues that market competition drives out discriminatory practice: profits and prejudice are mutually exclusive. Darity's 'stratification economics' research programme was developed in response to deficiencies identified in conventional approaches to discrimination. Evidence from this body of research strongly contradicts the idea that the US has become a post-racial society. In fact Darity argues that a post-racial society is not the ideal, and he calls instead for a 'race fair', not a 'race blind' society.

Evidence on Inequality: Gender and Disability

The final three papers in this book present empirical evidence on differential outcomes across groups, focusing on gender inequality (Gregory); disability (Gannon and Nolan) and the combination of gender and disability (Watson and Lunn). In her review of research on the gender pay gap, Gregory considers recent evidence from OECD countries. Where is the pay gap greatest and what are the mechanisms underlying it? Recent research across the EU which looks at pay gaps for low, middle and high earners has clearly shown that the difference between men and women's pay is greatest for higher earners, supporting the idea of a 'glass ceiling' on women's earnings. The family pay penalty is an important component of the gender pay gap: research in Germany found a significant wage drop following maternity leave; this diminishes with time back in work, although a penalty for work experience foregone remains. In Denmark, on the other hand, the only effect of children on mother's earnings was through lost work experience. Gregory concludes that in a social climate supportive of working mothers, as in the Scandinavian countries, the pay penalty to maternity leave can be minimal.

Gannon and Nolan summarise a number of research studies in Ireland concerned with how the experience of people with a long-term disability or illness differs from that of other people. The paper considers evidence from a range of areas, including education, earnings and poverty. Using econometric models, the authors found that, after accounting for age and gender, those with a chronic illness or disability that hampered everyday activities were much more likely to have low educational qualifications than those with no illness or disability. They were much less likely to be in employment and also more likely to be in poverty than those with no disability, after accounting for a range of other factors. In conclusion, the authors reflect that designing policies to combat this disadvantage is also challenging, particularly in the current economic climate. Yet the experience in other countries has shown that, given adequate social investment and attitudinal changes, the disadvantage associated with disability can be greatly reduced.

In policy debates on discrimination and disadvantage, the notion of multiple disadvantage has gained considerable appeal, though is rarely tested using data. In their paper using 2006 Irish Census data, Watson and Lunn ask: does membership of two disadvantaged groups increase the risk of a negative outcome? They tested this, examining differences by gender and disability status for four outcomes: risk of low education, labour market participation, unemployment and being in low-skilled employment. They found that the most common pattern was that membership of both groups is associated with less disadvantage than the sum of risks associated with membership of each group separately. There were also some cases where membership of both groups is associated with a level of disadvantage approximately equal to the sum of the two risks. Watson and Lunn conclude that it is difficult to generalise about multiple disadvantage, as results vary substantially across outcomes. Indeed an interesting lesson from their paper is that the notion of multiple disadvantage may be simple but its application to real life data is complex, and may result in unexpected outcomes.

Conclusion

Making Equality Count contributes to the literature on equality and discrimination in a number of ways. Firstly, it demonstrates the different approaches to measurement and highlights their strengths and weaknesses. Secondly, it reviews a wide body of research on equality and discrimination, including recent evidence on Ireland gathered from the Research Programme on

Equality and Discrimination. Thirdly, it demonstrates how important the collection of adequate data collection is for the whole project. Fourthly, it draws out some policy implications of the findings. Policy on equality and discrimination needs to be informed by convincing evidence, and innovative research can provide that evidence.

[†]Bond, L., McGinnity, F. and Russell, H. (2010) (eds) Making Equality Count: Irish and International Research Measuring Equality and Discrimination. Dublin: Liffey Press.
Both the conference and the conference publication were co-funded by the Equality Authority and by the European Union Programme for Employment and Social Solidarity - PROGRESS (2007-2013).

[††]All reports published under the research programme on equality and discrimination are available at:
www.esri.ie/research/research_areas/equality/research_programme_on_equ/

Creating a Health Promoting Environment: The Role of Food Access

*Richard Layte

An analysis of international data on overweight and obesity shows Ireland in a very unflattering light. Along with the UK, Finland, Greece and the US, Ireland has some of the highest rates of adult and child obesity among developed countries and trends suggest that the situation is going to get worse. If so, today's children will probably have higher levels of diabetes and cardiovascular disease and live shorter lives than their parents, bringing to a halt three decades or more of increases in Irish life expectancy.

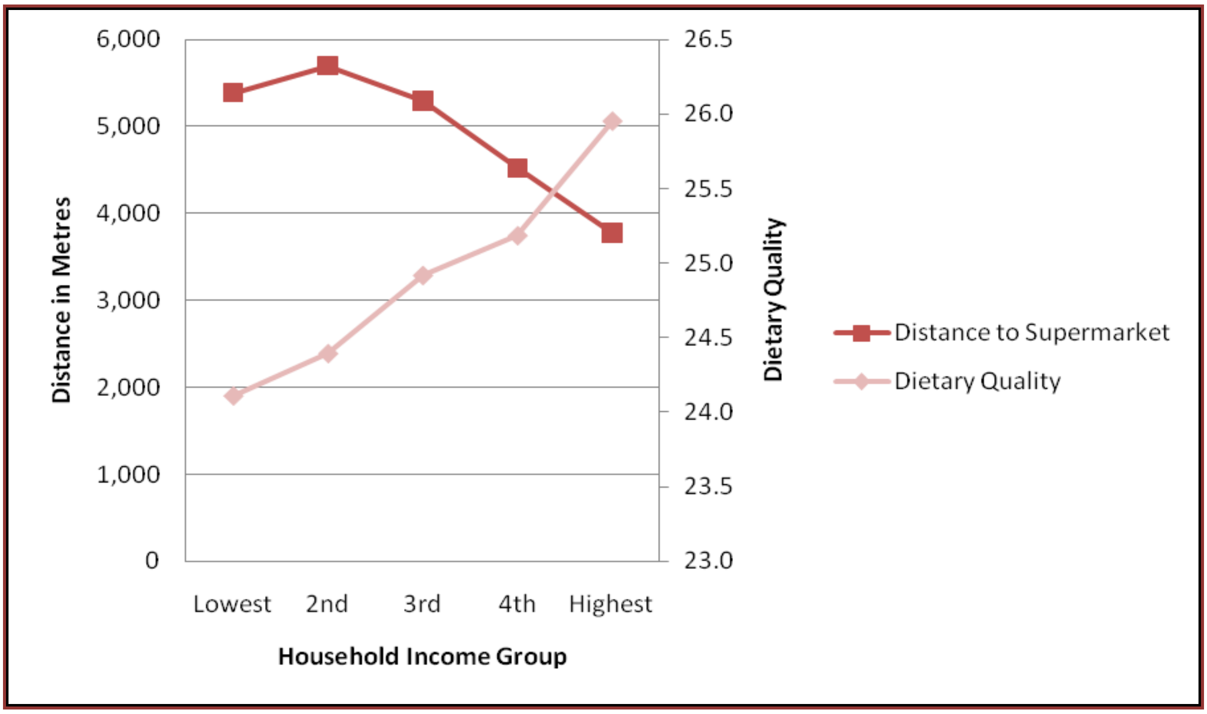
What's causing the rise in obesity? What polices should we adopt in response? Evidence suggests that individual diet and not enough physical activity are the principal causes of obesity and it could be argued that primary responsibility for staying healthy in this regard lies with individuals and families. That is probably true, but since human nature is pretty stable over time, it is likely that the principal causes of the increase in overweight and obesity in Ireland are to be found in our environment and society. If so, current problems may stem from a wide range of public policy choices in recent decades that have had unintended consequences for health and well-being. For example:

- Investing in roads and cars instead of public transport encourages people to drive directly to their destinations rather than walking. Allowing development of housing estates without considering the amenities that people will need to live healthy, productive lives such as local schools and shops.

* richard.layte@esri.ie

Some recent ESRI research[†] sought to examine whether the environment in which people live influences their behaviour and specifically, whether the food people eat is influenced by where they live. Previous research in Ireland has shown conclusively that individuals and families with less income or from a lower social class tend to have less healthy diets. This could be because they have less income to buy food or perhaps, because they like eating food with more fat, salt and sugar, but poorer people also tend to live in poorer neighbourhoods which have fewer food shops, particularly larger supermarkets. Supermarkets stock a wider range of fresh food than the more numerous but smaller convenience stores, so it is possible that at least part of the worse diet of poorer individuals may be due to the greater distance they need to travel to buy healthier food (see Figure 1).

Figure 1: Distance to Nearest Supermarket and Dietary Quality



Layte and colleagues tested this by calculating the distance from each respondent's house to all of the food outlets in the country and deriving measures of the distance to the nearest supermarket and the density of supermarkets in the local area. They then estimated the impact which increasing distance and number of supermarkets had on the diet of the person in the last year controlling for the person's own and their household's characteristics (income, age, car ownership etc). Their results showed that as the distance to the nearest supermarket increased it was accompanied by a small but significant decrease in the healthiness of the individual's diet.

This is the first time such an effect has been found in Ireland but more importantly, the first time such an effect has been found outside of the US. There, poor food access tends to be associated with the 'food deserts' found in some of the larger cities with pronounced racial segregation and concentrated social deprivation. Low levels of inward migration until comparatively recently mean that Ireland has nothing like the racial or ethnic segregation of the US. However, there has been a tendency since the 1960s for lower income and local authority housing in Ireland to be built in large estates on the periphery of the larger cities, with little or no infrastructure, including retail opportunities. The recent building boom, particularly in areas around major Irish cities, may have added to this, with housing built in formerly rural areas with little regard for the local infrastructure. It may be that the increased distances required to buy food and social segregation of Irish housing development has had a negative impact on the diets of Irish citizens and poorer Irish citizens in particular, and may therefore contribute to inequalities in health in Ireland.

[†] Layte, R., Harrington, J., Sexton, E., Cullinan, J., Perry, I.J. and Lyons, S. (2011). Irish Exceptionalism? Local Food Environments and Dietary Quality, *Journal of Epidemiology and Community Health*. Available pre-publication online as 10.1136/jech.2010.116749.

The Changing Workplace

*Dorothy Watson, Helen Russell, Philip J.O'Connell

Introduction

How are Irish workplaces changing? Recent reports[†] give a detailed picture, based on two nationally representative surveys – one of employers and another of employees – carried out in 2009. These surveys replicate many aspects of the first national workplace surveys, carried out in 2003 in the midst of an economic boom. The new surveys took place in dramatically changed economic circumstances. In the private sector, the economic crisis threatened the very survival of many firms. In the public sector, budget cuts and recruitment constraints created severe challenges in delivering public services.

The results of the employer and employee surveys are published in two separate reports but address a number of common themes, including:

- What is the impact of recession on the workplace and employees?
- Has the way work is organised changed? Have workplaces adopted 'high performance' workplace practices (HPWP)? Key aspects of HPWP are the devolution of decision making to employees (*employee involvement*), training and skill development in the workplace (*human capital development*) and working co-operatively in new ways.
- What are the workplace practices and employee characteristics that are associated with an openness to innovation and actual innovation in products and services?

Employee Perspective

The National Workplace Survey of employees was based on a telephone survey of 5,110 public and private sector employees conducted in 2009.

* Dorothy.Watson@esri.ie; Helen.Russell@esri.ie; Philip O'Connell@esri.ie

Impact of Recession

While unemployment and job loss are the most obvious labour market measures of recession, the impact can also extend to those who remain in employment. Our results show strong evidence of change in organisations and in job conditions. Over half of employees reported that there had been a reduction in staff numbers in their workplace in the two years preceding the 2009 survey, with public and private sector employees equally affected. Employees were also more likely to have experienced organisational restructuring in 2009 than in 2003.

In terms of job conditions, one employee in three felt that their job security had decreased (compared to less than 1 in 20 in the 2003 survey). Overall, 30 per cent of employees felt that their job was not secure. Feelings of insecurity were more common among private sector employees than public sector and, unsurprisingly, were highest in construction. One fifth of employees reported a decline in hourly pay. Furthermore, over half reported that their work pressure had increased in the preceding two years (up from one third in the 2003 survey).

These organisational changes are found to have decreased workers' job satisfaction and their organisational commitment, factors which are linked to motivation and productivity. Furthermore, reductions in staff numbers and organisation re-structuring were associated with increased work pressure (intensity) and work-family conflict. (Many other factors affecting job satisfaction are taken into account in this analysis, but the impact of staff cuts and re-organisation is statistically significant).

Employee Involvement and Consultation

Employee involvement can take a variety of forms and the survey was designed to capture this diversity. *Direct participation of employees* includes practices such as work teams; problem-solving groups; project groups; quality circles; and continuous improvement programmes. Overall, 45 per cent of employees indicated that such participation practices were present in their workplaces, and 36 per cent said that they are personally involved in such practices (up by about 10 percentage points on the 2003 levels in both cases).

Employee engagement can also be more formal and indirect, involving partnership institutions – formal committees in which unions work with management to promote co-operation and improve organisational performance. Just over 1 in 5 of employees indicated that such arrangements existed at their workplaces.

The extent of active consultation regarding work is another element of employee involvement. For instance, almost half of employees indicated that they were consulted before decisions were taken that affected their work and over half also believed that if they were consulted, attention was paid to their views. This pattern of responses had changed little since 2003.

Skills and Learning

Despite the strong policy focus on skills, the proportion of employees who had recently participated in employer-provided training remained virtually unchanged between 2003 and 2009, standing at just under 50 per cent. Employees in the hotels and restaurant sector, those in small firms, those with low initial qualifications and older workers were least likely to have received training. Training is widely regarded as prerequisite for devolving more responsibility and decision-making to employees. We do indeed find that levels of training were higher among employees involved in direct participation and those who were actively consulted. As the data is cross-sectional we cannot establish if there is a causal relationship, however.

Workplace Innovation

Employee involvement (as described above) is positively related to the innovation climate – the strength of support for innovation and new ways of doing things in an organisation. Those who work in organisations characterised by the presence of participatory practices show higher scores on the innovation climate scale, and those who participate personally in such arrangements score higher still. The strength of consultation and the frequency of communication of business information were both also positively associated with innovation climate.

Output innovation (i.e. the introduction of new products and services), was associated with employee involvement either in the form of direct participation or via partnership arrangements. Such innovation was also associated with other "high performance work practices" such as incentivised rewards and training.

National Workplace Survey – Employer Perspective

The National Workplace Survey of employers was based on a postal and web survey of 2,668 private sector and 359 public sector employers also conducted in 2009.

The *external challenges* faced by both private and public sector employers in 2009 were dominated by the recession. For instance, almost two-thirds of private sector employment was in firms that view their current business position as bad and almost half was in firms that expected a further deterioration in the coming six months. The public sector was not immune from pressures resulting from the recession: coping with the economic downturn and budget constraints were causing intense pressure throughout the public sector while, at the same time, making it more difficult to implement changes.

We focused on the *employment practices* present in the organisations and then examined the association between these practices and business outcomes and innovation. We distinguished three groups of practices:

- *Human Capital Development* (i.e. training, performance review; formal dispute-resolution procedures; policy on equality/diversity)
- *Employee Involvement* (i.e. information/consultation; direct employee-involvement in decision-making & problem-solving; employee discretion in carrying out work)
- '*Co-working*' or new ways of working co-operatively together (i.e. experimenting with new ways of working; networking and working across divisions; new work practices such as team-working; reducing hierarchy)

Previous research suggests that firms and organisations benefit most from adopting *complementary bundles of employment practices*. We conducted a cluster analysis to see how Irish employers combined the above three groups of practices and identified five clusters of organisations, as shown in Table 1. Adopting all three practices was the norm in the public sector (60 per cent of employers), but was much less common in the private sector (28 per cent). One in six private sector firms has a low adoption rate for all three of the employment practices.

The third column of Table 1 shows the percentage of firms in each cluster who introduced new, or significantly improved, products or services in the previous two years. There is a clear association between innovation and employment practices: 82 per cent of employers who combine all three practices introduced new products or services compared to 45 per cent of employers who had a low adoption rate for all three.

Table 1: Adoption of Employment Practices in the Public and Private Sectors and Association with Innovation and Business Outcomes

Combination of Employment Practices:	Public Sector % of Employers	Private Sector % of Firms	Percent Introducing New Product or Services	Business Outcome (Average) – Private Sector Only*
Low adoption of all three practices	1%	17%	45%	2.5
Human Capital Development	6%	19%	60%	2.7
Employee Involvement	4%	15%	58%	2.8
Human Capital Development and Employee Involvement	29%	21%	72%	3.2
Human Capital Development, Employee Involvement & Co-working	60%	28%	82%	3.1
Total	100%	100%	65%	2.9

* Business outcomes scale measures profitability, employment growth and volume of business in the last two years and self-assessed present business position. The scale ranges from 0 to 10, with high scores indicating favourable outcome.

In the fourth column, we examine the association between business outcomes and employment practices for private sector firms. The 'business outcomes' scale is based on self-reported profitability, employment growth, change in volume of business and present business position. It ranges from 0 (unfavourable) to 10 (favourable outcomes). Firms that combined all three practices or who combined employee involvement and human capital development tended to have better business outcomes (3.1 to 3.2) than firms who adopted none of these employment practices (2.5).

These patterns for innovation and business outcomes remain when we control for size and sector. We cannot infer causation from these results – better business outcomes and an emphasis on innovation may cause rather than result from employment practices – but they do suggest the importance of paying attention to how workplace practices are combined.

Overall, the results of the study suggested that, although severely challenged by the recession, Irish employers increasingly recognise the importance of employment practices – as well as outputs and markets – to the success of the organisation. This is more developed in the public sector than in the private sector. There is scope for convincing the private sector, particularly small firms, of the importance of workplace innovation to the future success of their businesses. In the public sector, the strong strategic commitment of public sector managers to workplace innovation is an important resource in the process of managing change in the provision of public services. To develop further, the structural barriers to change – in particular the centralisation of human resources and industrial relations, organisational hierarchies and bureaucracy – need to be addressed and the commitment to workplace innovation needs to be diffused to all levels in public sector organisations.

†The two reports are:

Watson, D., Galway, J., O'Connell, P.J. and Russell, H. (2010), *The Changing Workplace: A Survey of Employers' Views and Experiences*, Dublin: National Centre for Partnership and Performance. Available for download at http://www.esri.ie/UserFiles/publications/jacb201045/BKMNEXT169.pdf.

O'Connell, P.J., Russell, H., Watson, D. & Byrne, D. (2010) The Changing Workplace: A Survey of Employees' Views and Experiences, Dublin: National Centre for Partnership and Performance. Available for download at http://www.esri.ie/UserFiles/publications/jacb201045/BKMNEXT168.pdf

The 2003 and 2009 National Workplace Surveys were funded by the National Centre for Partnership and Performance (now NESC). Fieldwork was carried out by the ESRI Survey Unit in 2003 and by Amárach Research in 2009. The 2003 questionnaire was developed with colleagues from the UCD Business School.

Support from Grandparents to Families with Infants

*Amanda Quail, Aisling Murray, James Williams

Parent-child interactions are influenced by factors outside the immediate family. A recent paper[†] based on data from the ***Growing Up in Ireland*** study (GUI) focuses in particular on the support provided by grandparents in caring for very young children. Such support can have important direct and indirect influences on child development. For example, a grandparent who babysits a young child while parents have a night out has a *direct* interaction with the child in the context of providing care. However, there is also an *indirect* influence in the context of supporting the mother-father relationship which, in turn, could be expected to affect (positively) parental interactions with the child.

The transition to parenthood and early infancy have been identified in the literature as the critical periods requiring most support. Infancy is a particularly intensive parenting period. Children at this stage remain highly dependent on caregivers for their basic needs but, by 9 months (the age of infants at the time of data collection in the GUI study), they are also starting to become more mobile and interaction-seeking. In the Irish context, 9 months may also be the stage when mothers may be contemplating a return to work or education following maternity leave (paid and unpaid) – and those who have been breastfeeding will likely have finished at least exclusive breastfeeding.

Here we report some key results from the paper; further detail, and a full set of references to the literature can be found in the paper itself.

Perceived Availability of Support

The effectiveness of the social support system available to the parent may be best assessed by a subjective measurement of the parent's satisfaction with the support they receive rather than through an objective assessment of the number or types of supports available. An important source of this support is from grandparents. Contact with grandparents seems to be relatively high in Ireland, perhaps because of the small size of the country and low levels of mobility, but

*amanda.quail@esri.ie; aisling.murray@esri.ie; james.williams@esri.ie

perhaps also because of the value placed on the extended family. The role of grandparents in children's lives is an area which needs further research. They are likely to have an important role in the lives of infants, many of them providing informal childcare and babysitting while parents return to work.

Growing Up in Ireland interviewed 11,100 primary caregivers (almost all of whom were biological mothers) when their infants were 9-months-old. In the context of the wider interview, mothers were asked a number of questions directly on the amount of support which they felt they were receiving and also on the level of contact they had with the infant's grandparents. A majority (72 per cent) felt that they got *enough help/support* from family and friends and 6 per cent said they *did not need any help*. However 10 per cent of mothers felt that they *did not get enough help* and 5 per cent said they *got no help at all*. An additional 8 per cent said that their family were not living in the country (and therefore were unavailable to provide support).

Mothers in larger families were less likely to report that they get enough support than those with only one child. This was the case for both lone parents and mothers in two-parent families. In families with one child (both lone-parent and two-parent families) 87 per cent reported that they *got enough* support. This figure dropped to about 80 per cent for mothers with two or more children, with similar figures for both lone parents and two-parent families.

Types of Support Provided by Grandparents

High levels of contact with grandparents were reported in the ***Growing Up in Ireland*** study, with almost 9 out of 10 of mothers reporting that they were in regular contact with the infant's grandparents. In most other cases the grandparents were abroad, or deceased. A wide range of important supports were provided by grandparents to the families of ***Growing Up in Ireland*** infants. (Table 1) For example, one in three families often benefited from grandparents providing babysitting, while direct financial support was much less common ("*never*" being the most frequent response).

Table 1: Frequency and Types of Support Provided by Grandparents

How often do infant's grandparents…	Never	Sometimes	Often
	%	%	%
Babysit	19	48	33
Have baby to stay over night	62	32	6
Take baby out	46	30	24
Buy toys or clothes for baby	4	81	15
Help you around the house	56	26	18
Help you out financially	71	26	3

Grandparent Support Particularly Important for Lone Parents

Support from grandparents was particularly important for families comprising a lone parent with one child. They had the highest reported usage for each support type and differed significantly from every other family type in three of the five categories (they did not differ significantly from other lone parents in terms of 'help around the house' and 'financial help'). For example, almost 2 out of 3 lone parents with one child reported that the infant's grandparents had the infant to stay overnight. This compares with 47 per cent among lone parents with two or more children, 45 per cent for two-parent families with one child and 31% for two-parent families with two or more children. The largest differential between lone-parent families and two-parent families was for 'financial help'. This varied between 50-56 per cent for lone-parents to approximately 25 per cent for two-parent families.

Policy Implications

The ***Growing Up in Ireland*** findings confirm that many families receive substantial amounts of support from grandparents, and this applies particularly to lone parents. While a majority of parents felt that were getting enough support from family and friends, there remains concerns for those who perceive they are receiving inadequate support – and for families who have a drop in support following the incapacity or death of a grandparent. Some of the supports provided by grandparents, such as babysitting or taking the infant out, are likely to be mutually enjoyable for the infant and grandparents. Direct financial support is less common for two-parent families, however it is also clear that many lone parents are receiving some financial support from their own parents.

† Williams, J., S. Greene, S. McNally, A. Murray and A. Quail (2010). *Growing Up in Ireland – The National Longitudinal Study of Children: The Infants and their Families*. Dublin: The Stationery Office. Available for download at http://www.esri.ie/UserFiles/publications/BKMNEXT179.pdf