## Special Article

### Interpreting Recent Developments in the Economy and Labour Market

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# INTERPRETING RECENT DEVELOPMENTS IN THE ECONOMY AND LABOUR MARKET

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#### 1. Introduction

L he growing evidence of a significant slowdown in the level of economic activity in the Irish economy has prompted considerable discussion about various aspects of this problem. Among the questions being asked are - (a) when did the deterioration actually commence? (b) what point have we reached now? and finally (c) what are the prospects for recovery (or otherwise) over the coming months? This short paper, which dwells mainly on labour market indicators, attempts to shed some light on these issues.

#### Table 1: Ireland. Annual Average Output and Employment Growth and Unemployment Rates, 1990-2000

Period	Real GDP	Employment Change	Unemployment Rate (end period)		
	%	(000)	%		
1990-1995	4.7	26.4	12.2		
1995-2000	9.5	76.4	4.3		

Sources: (a) CSO National Accounts Publications.

(b) Annual series of CSO Labour Force Surveys and Quarterly National Household.

To set the context in terms of recent historical trends, the 1990s (particularly the second half of the decade) has been unprecedented in terms of both output and employment growth. Table 1 shows that after an initial period of moderate growth, between 1995 and 2000 real GDP soared to over 9 per cent per year on average, while annual employment growth, at over 76,000 (5.3 per cent), represents a level of job creation never previously achieved. In aggregate terms nearly 400,000 net new jobs were created over this five-year period. From the mid-1990s onwards substantial job gains began to emerge across a wide spectrum of economic activities, but especially in building and construction and in private services. Employment in the latter (i.e. market services) sector accelerated to unprecedented levels, the annual increase reaching nearly 40,000 on average over this period. Manufacturing employment also began to increase after a long period of stagnation. Even the longstanding secular decline in agricultural employment slowed noticeably during this period.

As for unemployment, by Spring 2000 the unemployment rate had fallen to 4.2 per cent (compared with 12.2 per cent in 1995 and 13.2 per

cent in 1990) and decreased further to as low as 3.6 per cent at the beginning of 2001. While it remained static at this level throughout most of 2001, it has been increasing steadily since last Autumn, the most recent estimate for February 2002 being 4.2 per cent.

#### **GLOBAL INDICATORS**

#### 2. Identifying Turning Points

While the unemployment figures referred to above suggest that economic growth did not began to weaken until towards the end of 2001, it is necessary to look at a wider range of indicators in order to obtain a more precise picture. In this regard in this section of the Paper, in addition to unemployment, three other global indicators are examined – GDP, employment and notified redundancies. These indicators (including measures of unemployment) are global in the sense that they extend to all sectors of the economy, even though the last mentioned, notified redundancies, does not extend to agriculture, and does not necessarily cover all employees within each sector. In the next section, in order to shed more light on the issues, further relevant indicators are considered, even though these are more restricted in terms of coverage.

Turning first to the short-term changes in real GDP, Table 2 shows seasonally adjusted "quarter on quarter" percentage changes for the period since the beginning of 1999. While these figures are based on official National Accounts data compiled by the Central Statistics Office (CSO), the seasonally adjusted series has been estimated separately. This has been taken from a paper published in November 2001 entitled "Watch the Arithmetic at the Cyclical Turn" by Colm McCarthy of Davy Stockbrokers, Dublin. The official quarterly National Accounts series was initiated in 1997, but the CSO does not consider that at this stage the series is of sufficiently long duration to enable stable seasonal factors to be compiled.

Table 2: Seasonally Adjusted Quarterly Real G	DP 1999-2001 (at
Constant 1995 Prices)	

Period	GDP Euro (millions)	Quarter on Quarter Change %
Q199	18,246	5.2
Q299	18,359	0.6
Q399	19,362	5.5
Q499	19,807	2.3
Q100	20,107	1.5
Q200	20,823	3.6
Q300	21,317	2.4
Q400	22,196	4.1
Q101	22,666	2.1
Q201	22,784	0.5
Q301	21,993	-3.5

While there is clearly some volatility in the seasonally adjusted series as presented, the more recent figures exhibit a noticeably consistent trend. These suggest that real GDP growth began to decelerate in the first half of 2001 and had all but stalled by mid-year. The quarter on quarter growth in the final quarter of 2000 was 4.1 per cent, but this decreased to just over 2 per cent in the first quarter of 2001 and declined to as little as 0.5 per cent in the second quarter of that year. Of more significance, however, is the fact that the change in the third quarter of 2001 was negative, the figures indicating that, quarter on quarter, real GDP declined by more than 3 per cent.  $^{\rm 1}$ 

Turning to employment, Figure 1 shows unadjusted and seasonally adjusted series for total employment covering the period from the first quarter of 1999 to the final quarter of 2001. These figures are derived from estimates taken from the CSO Quarterly National Household Survey (QNHS).<sup>2</sup> The actual numerical data (and those related to the sectoral indicators in Figure 2) are given in Appendix Table A1.



In contrast to the trend pattern revealed by other indicators, these figures indicate that jobs growth held up reasonably well over the first three quarters of 2001. However, this expansion all but ceased in the final quarter of that year. This is not, perhaps, surprising as in an economic downturn any negative impact in the labour market generally tends to manifest itself with a lag relative to output change. There will, therefore, be considerable interest in the results from the forthcoming QNHS series, particularly those for the first quarter of 2002, when one would expect the accumulation of recessionary influences to have a greater impact.

Figure 2, which contains seasonally adjusted employment series for broad sectors of the economy, sheds further light on the overall employment trend. In this case the series are expressed in index form (to

<sup>&</sup>lt;sup>1</sup> The figures for the third quarter of 2001 were not included in the McCarthy Paper as the relevant CSO basic data have only recently been published. The relevant seasonally adjusted value has been calculated using the seasonal factor for Q3 as estimated in the McCarthy Paper.

<sup>&</sup>lt;sup>2</sup> This series, and the sectoral series in Figure 2, are based on the CSO Quarterly National Household Survey (QNHS). It should be noted that, as with the Quarterly National Accounts, the published data from this source (which extend back to the fourth quarter of 1997) are not yet published on a seasonally adjusted basis. In this paper the seasonal adjustment procedures have been carried out using the TRAMO/SEATS procedure developed by A. Maravell and V. Gomez of the Bank of Spain. This method, and the US Bureau of the Census X-12 ARIMA procedure, are described in a EUROSTAT website called DEMETRA. The application of TRAMO/SEATS in this Paper must be regarded as tentative, as some of the constraints contained therein, such as the rejection of outlying observations, have been removed.

base first quarter 1999=100) in order to facilitate comparisons between the trends for different sectors. Concentrating on the area outside of agriculture, broadly speaking, for all sectors except "other services" the trend lines indicate continuing increases in the numbers at work up to the third quarter of 2001. Employment in the services category in question remained virtually static throughout 2001 – a feature of some significance as this is a large sector (involving an employment total of close on 600,000) which covers distribution, hotels and catering and a range of personal services. While the emerging downturn in the economy would have contributed to the lack of employment growth in this sector, it is also likely that the Foot and Mouth crisis which occurred early in 2001 would also have been a factor, as this gave rise to significant restrictions on both internal and external travel.

As already indicated, there was a noticeable change in the final quarter of 2001. While the numbers at work in business and financial services and in non-market services continued to rise (albeit more slowly), manufacturing employment fell sharply (by some 8,000 seasonally adjusted) and employment expansion in building and construction ceased.

The trends indicated for manufacturing employment are borne out by other sources. Appendix Table A2 shows employment data for foreign owned enterprises supported by the Industrial Development Authority (IDA) for the period from 1995 to 2001. These indicate the total employment in these companies, which relate to manufacturing and international financial services, as of end-October 2001 was less than the corresponding total one year earlier by about 7,000. This was the first such decrease for many years. Of greater significance, however, are the figures on gross job creation and job losses. These data, which are available for



full-time jobs only, show that the number of such jobs created in the twelve months to end-October 2001 was 13,100, compared with 23,000 in the corresponding period one year earlier. Over the same two periods the number of job losses more than doubled from 8,100 to just over 17,000, a large increase when compared with the trends for earlier years. A notable

feature of the latter total is that nearly 10,800 of the job losses involved (i.e., almost two-thirds) related to the electronics and engineering manufacturing sub-sector.

Quarterly unemployment trends on a seasonally adjusted basis are given in Table 3 which shows unemployment rates (defined according to ILO concepts) and Live Register data. These provide a more up to date picture than the indicators quoted above as the figures extend to the beginning of 2002.<sup>3</sup> These data reveal that the decline in Irish unemployment, which had continued for several years, ceased at the beginning of 2001, by which time the unemployment rate had fallen to 3.6 per cent. It then remained more or less static at this level for a period of about nine months, but began to increase towards the end of 2001, rising to 4.0 per cent in the final quarter. The most recent estimate is 4.2 per cent for the first quarter of 2002. This trend is,

Period	Unemployment Rate (ILO) (%)	Live Register (No.)
Q199	6.1	205,700
Q299	5.6	199,300
Q399	5.3	193,300
Q499	4.9	182,700
Q100	4.5	170,400
Q200	4.2	164,600
Q300	3.9	152,400
Q400	3.8	144,000
Q101	3.6	137,900
Q201	3.7	139,300
Q301	3.7	139,500
Q401	4.0	146,700
Q102	4.2	160,800

#### Table 3: Seasonally Adjusted Quarterly Trends in the Unemployment Rate and the Live Register, 1999-2002

Note: The Live Register figures relate to the middle month in each quarter. The unemployment rates are averages of the monthly figures in each quarter.

perhaps, seen to be more significant when it is viewed in terms of the change in the unemployment register total. The table shows that the Live Register reached its lowest level (137,900) in the first quarter (i.e. February) of 2001, but had increased by nearly 23,000 to 160,800 at the same point one year later.

The final global indicator considered relates to redundancies notified under the Statutory Redundancy Payments Scheme.<sup>4</sup> These data can be of particular relevance in signalling a downturn in economic conditions as the events in question, the redundancy notifications, are likely to occur contemporaneously with (or even before) other more general economic changes. Actual job loss may not take place for a number of weeks (sometimes even months) after notification, so that any impact on the

<sup>&</sup>lt;sup>3</sup> These figures are, of course, available monthly but are shown on a quarterly basis here in order to have consistency with the employment and GDP data.

<sup>&</sup>lt;sup>4</sup> Under the terms of this scheme employers notify the Department of Enterprise Trade and Employment of impending redundancies (on an individual employee basis). Some of these notifications, on examination by the Department, may be found not to relate to qualified persons, e.g. they may refer to employees who have less than two years eligible service with their employer. However, one can reasonably assume that if an employer signals an intention to declare a worker redundant, then it is virtually certain that that worker will loose his or her job, irrespective of whether the worker qualifies for inclusion in the scheme. Thus the initial notification figures can be taken as reflecting a valid measure of the trend in job losses.

employment and unemployment data tends to occur with a significant time lag. In this sense, therefore, the redundancy figures provide a useful "early warning" indicator of economic difficulties. It should be noted, however, that while these figures can be taken to reasonably reflect job



loss trends, the levels understate the absolute numbers of dismissals, as not all workers necessarily qualify for the payments in question (see Footnote 4).

Figure 3 shows the monthly numbers of such redundancies for 2000 and 2001. When viewed on a year to year basis these figures indicate that the position in the early months of 2001 was in fact "positive" – i.e. the numbers of redundancies notified in January and February were actually less than those in the corresponding months of 2000. However, the situation changed dramatically from April 2001 onwards. Thereafter, all of the monthly redundancy totals in 2001 were more than 60 per cent higher than the corresponding figures indicated for 2000, and in some cases (e.g. in August and November) the 2001 totals were almost double those for the same months in the preceding year. Over the full year nearly 20,000 redundancies were notified in 2001, compared with less than 13,500 in 2000, a rise of nearly 50 per cent.

Figure 4 shows annual sectoral totals for notified redundancies in Ireland in 2000 and 2001. The largest increases (in numerical terms) were in metals and engineering manufacturing (nearly 2,300) and in business and financial services (almost 1,700). If these two sectors are combined they account for some 60 per cent of the total net rise in notified redundancies over 2000/2001. The former category includes the high-tech computer and electronics sector. It is also likely that there is a high-tech aspect associated with the job losses in business and financial services, as this sector would include "dotcom" companies and enterprises specialising in software applications. These businesses encountered severe trading difficulties in 2001, especially during the second half of the year.

It is clear from these data, however, that the problem of rising job losses (even if less severe) extended to many other sectors, such as the more traditional areas of manufacturing, building and construction and transport and communications. For building and construction it should be observed that, while the actual number of redundancies in 2001 was much smaller than in some other sectors of the economy, the relative increase in redundancy notifications, at over 120 per cent, was one of the highest recorded. It is also relevant to note that in the case of more traditional manufacturing enterprises, even though the rise in notified redundancies between 2000 and 2001 was not large, the level of job losses in each year was substantial (of the order of 5,000). In terms of media coverage, more attention centres on the high-tech area of manufacturing as individual layoffs in this sector tend to involve large numbers of workers, and are sometimes associated with the total closure of a facility. However, the aggregate job losses in other sectors are also significant, but do not tend to attract as much attention as, at individual enterprise level, they are usually smaller in scale.

The economic picture painted by the redundancy figures is much bleaker than that given by other labour market indicators, even though it is similar to that reflected in the output (GDP) trends. It shows that the current economic downturn started earlier, in Spring 2001, and that its impact is more severe (or at least potentially more severe) than indicated by other currently available employment and unemployment data.



#### 3. Other Indicators

L here are other relevant economic indicators which, even if not as comprehensive in terms of coverage as those discussed above, tend to reaffirm the trends already identified.

Figure 5, for example, shows a monthly index of employment in private sector construction over the period from January 1999 to December 2001. The index shows that, when seasonal factors are taken into account, employment in the sector peaked in May/June 2001 and declined continuously thereafter. While these figures are, in general terms, broadly consistent with the trends indicated by the GDP and redundancy data discussed above, they suggest a decline in employment in building and construction at an earlier point in time than that shown by the by the QNHS-based trend indicators in Figure 2. This suggests that the job losses in this sector commenced at an earlier stage in larger enterprises. <sup>5</sup>



It is also of interest in the context of this analysis to consider recent

movements in different forms of "confidence" indicators. Figure 6 shows

an index of monthly expectations of production by employers in the manufacturing sector. This index is derived from a monthly survey based on a statistically representative sample of manufacturing enterprises, carried out jointly by the Irish Business and Employers' Confederation



(IBEC) and the ESRI. The responses by employers to the questions in the survey are given in the form of expressions of "higher", "the same" or "lower" levels of confidence that are subsequently weighted across different industries. A useful device in interpreting the data is to use the balance of positive over negative responses in order to express the "trend for the month" in numerical form. The expectations of future production levels represented in Figure 6 are based on a trend computation involving three-month moving averages.

This graph indicates that business expectations as measured in this way reached a relatively high level towards the end of 1999 but have since exhibited a downward tendency. The decrease in confidence was fairly modest throughout the year 2000, but declined very rapidly throughout 2001, crossing from a "positive" to a "negative" representation about the middle of that year. This survey is also used to produce a similar index of employment expectations in the manufacturing sector, the results of which indicate a trend very similar to that just discussed.

Figure 7 shows monthly indexes of a consumer confidence for both Ireland and the EU as a whole. These data are taken from household surveys carried out simultaneously in all member States, the results of which are issued in the EU DG ECFIN publication on European and National Short-Term Indicators. As for the Irish data, the trends are very similar to those related to employer's production expectations. Consumer confidence had reached a relatively high level at the beginning of the year 2000, but began to decline thereafter, the decrease accelerating noticeably from mid-2001 onwards.

While these sources reveal similar trends to those exhibited by the output and employment indicators, one noticeable difference is that, rather surprisingly, the Irish indicators appear to indicate a weakening in confidence, or manifestations of general unease, at a much earlier point in time. They suggest that confidence levels began to decline in Ireland in mid-2000, while the evidence from the output and employment indicators would suggest that at that point the economy was still experiencing significant expansion. This may relate to the fact that at that time there were definitive signs of a downturn in the global economy (especially in the US) and this may have influenced the responses in the surveys in question. Interestingly the global trend in European consumer confidence mirrors the trend exhibited by the Irish economic and labour market data. It remained constant throughout 2000, but began to decline markedly from Spring 2001 onwards.

#### 4. Concluding Comments

L aking stock and summarising the short-term indicators as presented, the message which emerges indicates that growth in the Irish economy began to weaken significantly in the Spring of 2001. This is certainly how one would interpret the trends in GDP, in redundancies and also the confidence indicators (which signalled warnings at a much earlier stage). The trend in seasonally adjusted real GDP suggests that overall growth in the economy had all but stalled by mid-2001 and an actual decline in output materialised in the third quarter of the year. The labour market situation, when viewed in terms of aggregate employment or unemployment, did not appear to be significantly affected until towards the end of the year when jobs growth ceased and unemployment began to rise. However, there had been ominous signals emerging earlier in the form of greatly increased redundancy notifications, which can be taken as a good "early warning" indicator. When compared with the numbers in the corresponding months of 2000, these began to rise sharply in the Spring of 2001, a pattern which continued throughout the remainder of the year.

Apart from specific instances (the trading position of Aer Lingus being the most notable example) the trends identified cannot be attributed to the outcomes arising from the events of the 11 September in New York, even though this occurrence must have had an additional negative impact, at least temporarily. While the indicators presented may not be entirely consistent in what they show, a summary view clearly indicates that the current downturn was well in train by September 2001, indicating that its origins derived primarily from the global slowdown which had been underway for some time.

What are the short-term prospects for the labour market, taking into account both current forecasts and the foregoing analysis? In the final analysis further job gains will depend primarily on output performance, in relation to which current expectations are not particularly optimistic. In the main section of this Report real annual GDP growth for 2002 is forecast to be somewhat in excess of 3 per cent. This figure occupies the middle ground among the range of current forecasts currently available from different institutions, some of which extend down as far as 1.5 per cent. On the basis of past relationships between output and employment change, this type of scenario does not give much cause for optimism in regard to further job gains. On this basis the most likely outcome would be a static or slightly declining employment level throughout 2002.

Turning to the foregoing analyses of labour market trends, one has first to take note of the high level of redundancies in the latter half of 2001, which are probably only now having an impact on the employment and unemployment totals. Furthermore, recently available data reveal that redundancy notifications continued at a very high level into the early months of 2002, which will result in further actual job losses over the coming months. The number of such notifications in February 2002, at nearly 2,100, was more than double the number in the corresponding month of 2001. A worrying aspect of the more recent redundancy notifications is that they have extended to indigenous traditional industries which thus far appear to have escaped the rigours of the current downturn. This would suggest that issues of competitiveness, and the inevitable link to costs, have become more important.

Reviewing recent employment trends, while an expansion was achieved in virtually all sectors in recent years, the most spectacular increases in the numbers at work occurred in areas such as building and construction and in business and financial services. However, few would now expect any increase in building related employment in the short term. While the more buoyant business services sector may continue to generate jobs growth, continuing evidence of reduced levels of global activity in this area suggests that this is likely to be at a significantly reduced rate. When these trends are viewed in parallel with the likelihood of a continuing fall in the numbers at work in manufacturing, it is again difficult to see how any significant overall jobs growth can be achieved in 2002. The remaining sectors of the economy, non-market and personal services, may as in the past generate solid but moderate employment growth, but it will hardly be sufficient to offset other losses.

It will be recalled, of course, in view of the global downturn, and the phenomenal growth-rates achieved in the Irish economy in recent years, that analysts had been predicting that a deceleration in growth was inevitable. The forecasts associated with the various economic scenarios set out in the recent ESRI Medium-Term Review<sup>6</sup> published in September 2001 indicated that 2002 was going to be a difficult year. However, these forecasts also predict that recovery should be in train by 2003, by which time employment should be rising again, and unemployment falling. This outcome is, of course crucially dependent on a number of factors. The most important of these relates to developments in the global economy, particularly on the pace of recovery in the US (about which current views among US analysts are becoming increasingly upbeat). However, in a domestic context, it is also necessary to exercise discipline in regard to costs (especially wage costs) and (in a somewhat longer-term context) to intensify efforts to deal with a growing backlog of infrastructural deficiencies.

<sup>&</sup>lt;sup>6</sup> Duffy D., J. Fitz Gerald, J. Hore, I. Kearney, C. McCoille (2001). *Medium-Term Review 2001-2007*, Dublin: The Economic and Social Research Institute, September.

Period	Agriculture	Manufacturing	Building	Non Market Services	Business & Financial	Other Market	Total		
					Services	Services			
				(000)					
	Original Series								
Q497	134.5	298.9	122.4	277.5	166.6	472.4	1472.3		
Q198	134.4	300.3	124.3	277.3	167.8	479.0	1483.1		
Q298	135.0	302.9	124.0	277.6	171.8	481.1	1494.6		
Q398	135.5	314.1	132.9	281.4	181.9	514.0	1559.8		
Q498	136.3	305.6	136.7	281.7	184.4	500.0	1544.7		
Q199	137.3	305.4	139.3	284.3	187.0	501.6	1554.9		
Q299	135.9	308.9	142.1	294.8	195.8	513.7	1591.2		
Q399	142.3	321.3	150.9	296.8	208.0	550.0	1669.3		
Q499	140.0	314.0	154.8	304.1	205.3	529.4	1647.6		
Q100	133.8	313.5	159.7	303.5	206.8	533.3	1650.6		
Q200	130.9	309.9	166.3	312.5	212.1	539.0	1670.7		
Q300	130.7	326.4	175.5	311.3	218.8	575.2	1737.9		
Q400	122.7	321.0	178.1	320.3	216.3	551.9	1710.3		
Q101	121.7	318.3	179.9	321.0	218.1	551.0	1710.0		
Q201	120.1	317.1	180.2	325.6	218.3	555.3	1716.6		
Q301	127.3	330.8	186.4	332.3	230.7	579.2	1786.7		
Q401	124.4	318.0	184.8	337.1	228.2	560.5	1753.0		
Seasonally Adjusted Series									
Q497	134.5	301.7	121.9	276.0	167.0	478.1	1479.2		
Q198	135.5	303.1	124.9	279.1	170.6	485.2	1498.4		
Q298	136.6	304.9	127.8	276.9	173.3	487.8	1507.2		
Q398	132.8	306.1	131.2	281.8	177.2	494.6	1523.8		
Q498 Q199	136.3 138.4	308.1	136.1 140.0	280.2 286.1	184.8 189.8	504.9	1550.5 1574.1		
Q199 Q299	136.4	309.2 311.8	140.0	200.1	189.8	510.5 521.1	1605.6		
Q299 Q399	139.6	312.9	143.9	294.1	203.3	527.6	1629.6		
Q399 Q499	140.0	314.2	154.1	302.6	205.7	534.8	1651.5		
Q100	134.9	316.3	160.5	305.3	209.6	542.5	1669.2		
Q200	132.5	316.1	168.3	311.7	213.6	545.6	1687.9		
Q300	128.0	318.7	173.3	311.7	214.1	554.7	1700.5		
Q400	122.7	319.7	177.3	318.9	216.7	555.4	1710.8		
Q101	122.8	321.0	180.8	322.8	220.9	559.2	1727.5		
Q201	121.7	322.9	182.4	324.8	219.8	563.6	1735.2		
Q301	124.6	323.8	184.0	332.7	226.0	560.4	1751.5		
Q401	124.4	316.8	184.0	335.7	228.6	563.0	1752.5		
Source CSC	) Quarterly Nati	onal Household Surv	ev						

#### Table A1: Employment by Broad Sector, Q4 1997 to Q4 2001

Source: CSO Quarterly National Household Survey.

#### Table A2: Employment in IDA Supported Industries, 1992-2001

	1995	1996	1997	1998	1999	2000	2001
Number of Companies	963	1,042	11,08	1,169	1,284	1,278	1,225
New Jobs Filled	11,878	13,163	14,632	16,109	17,829	23,063	13,145
Job Losses	5,130	6,079	5,034	7,222	9,272	8,081	17,010
Net Employment Change	6,748	7,084	9,598	8,887	8,557	14,982	-3,865
Full Time Employment	92,029	99,113	10,8711	117,598	126,155	141,137	137,272
Temporary Employment	11,572	9,460	13,473	15,094	15,587	14,818	11,591
,	103,601	108,573	122,184	132,692	141,742	155,955	148,863

Source: IDA (the Industrial Development Authority). End of Year Statement, 2001.