



Unemployment and Labour Force Participation during the Recession

Thomas Conefrey¹

Vol 2011, No. 4

Abstract

The slowdown in Irish economic activity since 2008 has been accompanied by a rise in unemployment and a sharp fall in the labour force participation rate. This note uses data from the Quarterly National Household Survey to examine the fall in participation among the younger age groups and finds that the majority of those who have exited the labour force but remain in Ireland have returned to education. The note draws attention to the substantial rise in broader measures of unemployment during the recession due to increases in the number of discouraged and marginally attached workers.

1 Introduction

Irish GDP is estimated to have contracted by a cumulative 11.8 per cent in volume terms since the onset of the recession in 2008. While exports performed solidly during the downturn, other components of final demand have experienced sharp declines. Consumption declined by a cumulative 9.3 per cent over the period 2008-2010 while investment declined by a massive 70 per cent in real terms. Since these areas of economic activity tend to be more employment intensive than exports, the consequences for employment and the labour market of the contraction in investment (in particular housing investment) and consumption have been drastic. Total employment reduced between 2008 and 2010 by 14 per cent to just over 1.8 million, the unemployment rate has risen to 14.7 per cent while net migration has resumed.

The increase in the unemployment rate which has taken place since mid 2008 would have been much more severe but for the significant fall in the labour force participation rate which has occurred over the same period. This note uses data from the *Quarterly National Household Survey*² to examine the status of those individuals who have exited the labour force since late 2008. In order to bring about a reduction in the unemployment rate within a reasonable timeframe, a critical factor will be to ensure that individuals who have exited the labour force entirely (as well as those currently classified as unemployed) are equipped with the necessary skills to enable them to take up employment when economic activity recovers. Using the QNHS data, we can examine in detail the status of those who have exited the labour force to determine the proportion in each age group who have returned to education. A tendency among those who have ex-

¹The views expressed in this paper are those of the author and do not necessarily reflect those of the Central Bank of Ireland or the ESCB. I would like to thank Maurice McGuire, Kieran McQuinn and Suzanne Linehan (Central Bank of Ireland) and John Fitz Gerald and Ide Kearney (ESRI) for comments on an earlier draft - any remaining errors are my responsibility.

²I would like to thank Brian Ring from the Central Statistics Office for access to the QNHS data.

ited the labour force to return to education clearly increases the prospects that these individuals will be able to re-enter the labour market and avoid long-term unemployment. We examine this issue in Section 2 and Section 3 while Section 4 looks at recent trends in different measures of potential labour supply.

2 Unemployment and Participation

The labour force consists of the total number of employed plus unemployed persons in the subgroup of the population aged 15 years or over. The Participation Rate is the number of persons in the labour force expressed as a percentage of the total population aged 15 or over. A sharp fall in labour force participation has contributed to a moderation in the pace of increase in the unemployment rate during 2009 and 2010 as shown in Figure 1. Had the labour force participation rate remained unchanged at its 2008Q3 level until 2010Q3 then the unemployment rate would have stood at 18.3 per cent in the third quarter of 2010. A period of rising unemployment is often associated with a decline in participation as some individuals become disillusioned about their work prospects while others choose to return to education.

As shown in Table 1, the fall in labour force participation over the period 2009Q3 to 2010Q3 has not been uniform across the working age population. The overall participation rate fell by 3 percentage points between Q3 2009 and Q3 2010 with a higher fall of 4.2 percentage points for males. As shown in Table 2, the fall in participation has been concentrated among the youngest and oldest cohorts of the working age population and in particular among males aged 15-19 and among individuals in the 25-34 group. Overall there were 116,000 fewer people in the labour force in Q3 2010 compared to the same quarter in 2008. The fall in participation among those in the 15-24 year cohort accounts for 90 per cent of the overall decline in participation.

3 What Explains the Fall in Labour Force Participation?

Since the decline in participation is concentrated among individuals aged between 15 and 24, Ta-

ble 2 examines in detail the change in status of those aged 15-19 years and 20-24 years between Q3 2008 and Q3 2010. The data indicate that there was a fall of over 104,000 in the total number of males and females aged 15-24 in the labour force between the third quarter of 2008 and the corresponding quarter of 2010. A significant proportion of this overall decline in the labour force is accounted for by demographic effects as shown by the fall in the total population aged 15-24 of 71,000 between Q3 2008 and Q3 2010. This could be indicative of a high rate of net emigration among this group. However, approximately 33,000 of this cohort (around one third of the overall fall in the labour force) are now classified as not in the labour force. Of this 33,000 who are not in the labour force, over 90 per cent are classified as students.

Young males have been particularly badly affected by the economic downturn due to their exposure to job losses in the construction sector. The total number of 15-24 year olds in employment declined by almost 119,000 between Q3 2008 and Q3 2010. While 14,500 males in this category became classified as unemployed during this period, an additional 21,000 became classified as not in the labour force. Looking at the statistics on male students, the number aged 15-24 increased by over 18,000 thereby accounting for the bulk of the increase in the number in this age cohort categorised as not in the labour force. Looking solely at the cohort of males aged 15-19, a group often highlighted as being at particular risk of long-term unemployment, a similar trend emerges. While there was an increase of 10,300 between Q3 2008 and Q3 2010 among those in this age group classified as not in the labour force, there was an increase of over 8,000 in the number of students in this cohort over the same period. These figures suggest that the majority of those who have exited the labour force but remain in Ireland have returned to education.

Figure 2 shows the number of students by single year of age from 15-24 as a proportion of the total population by single year of age. The graph indicates that there has been a significant increase in the proportion of students across most age groups. The increase in the proportion of students aged between 18 and 24 has been particularly pronounced. Of the total population aged 19, 55 per cent were classified as students in Q3 2008. By 2010 Q3 this had risen to almost 67 per cent and this trend is repeated for individuals in other age cohorts as

shown in Figure 2. The graph indicates that a significant proportion of those aged 15-24 who have exited the labour force are now engaged in education.

According to data from the Higher Education Authority (HEA), there were almost 41,000 full-time undergraduate new entrants at educational institutions in 2009/10, an increase of 5.1 per cent on the previous year. The HEA data provide information on the fields of study pursued by new entrants into education. Over one quarter of total new entrants in 2009/10 enrolled on courses in social science, business and law while one fifth enrolled on courses in humanities and arts. Engineering, manufacturing and construction was one of only two disciplines to record a reduction in new entrants compared to 2008/2009.

4 Measures of Potential Labour Supply

The fall in labour force participation indicates that there may be a significant cohort of individuals who are currently not classified as unemployed but are not in employment and are available for work. Section 3 shows that, among the younger age groups, increased participation in education accounts for the bulk of the reduction in labour force participation. Another explanation for the fall in participation in recent years is the increase in the number of discouraged and underemployed workers who are no longer in the labour force and are not engaged in education. Using data from the QNHS, we can examine potential labour supply by extending our analysis beyond the standard measure of unemployment and including other jobless individuals who consider themselves available for work. The QNHS contains three broader measures of potential labour supply in addition to the standard measure of unemployment. These measures are:

1. S1: Unemployed plus discouraged workers as a percentage of the Labour Force plus discouraged workers.
2. S2: Unemployed plus marginally attached

plus others not in education who want work as a percentage of the Labour Force plus marginally attached plus others not in education who want work.

3. S3: Unemployed plus marginally attached plus others not in education who want work plus underemployed part-time workers as a percentage of the Labour Force plus marginally attached plus others not in education who want work.

Figure 3 plots the standard measure of unemployment as well as three wider measures of unemployment reported by the CSO. Individuals who are outside the labour force but who are available for work include passive job seekers, unemployed workers disillusioned with job search and others not engaged in education. Among those within the labour force, part-time underemployed workers are also available for additional work. Underemployed workers are classified in the QNHS as those who are looking and available for another job and who have explicitly stated that the hours worked currently are "too few". By including these groups, along with individuals classified as unemployed, different measures of potential labour supply can be calculated. Using the widest definition of unemployment or potential labour supply (S3) which includes marginally attached and underemployed workers yields a rate of unemployment of 18.6 per cent in Q3 2010.³The equivalent measure in Q3 2008 was 10.5 per cent as shown in Figure 3. With the majority of those in the younger age groups who have exited the labour force now engaged in education, the increase in the number of discouraged and marginally attached workers is likely to be concentrated among those in the older age groups.

5 Conclusion

The contraction in economic activity in Ireland which has taken place since 2008 has been reflected in a significant deterioration in labour market conditions with a sharp rise in unemployment and a decline in labour force participation. The decline in the overall participation rate has been

³As of Q3 2010, the CSO has applied a new methodology to the estimation of part-time underemployment. Under the new methodology, a respondent is not required to be actively looking for work or additional hours to be considered underemployed. The exclusion of looking for work has a substantial effect on the S3 measure of potential labour supply. Using the new method of calculation, the broadest measure of unemployment is estimated at 22.6 per cent in Q3 2010 compared to 18.6 per cent using the old methodology.

driven by a fall in participation among the youngest and oldest age groups in the working age population. In particular, there has been a sharp fall in participation among all persons aged 15-24 years. The analysis here indicates that a significant proportion of those who have exited the labour force, but who remain in Ireland, are now engaged in education. Research on the labour market (O'Connell et al. 2009) shows that individuals with the lowest levels of education are among those most at risk of remaining long-term unemployed. The data presented here indicates a tendency among those who have lost their jobs as a result of the recession to return to education. In the short run this will

be important in ensuring that Ireland can avoid a problem of long-term structural unemployment. Nevertheless the targeting of labour market activation measures at those unemployed and with low levels of education will be critical in ensuring this outcome is avoided. Bergin and Kearney (2007) highlight the important role of human capital accumulation in driving the increase in employment and incomes in Ireland during the 1990s. Over the medium-term, assuming that those who have returned to education since the onset of the recession use this time to enhance their level's of human capital, this could help boost the productive potential of the Irish economy.

References

- [1] Bergin A., and Kearney, I. (2007), "Human capital accumulation in an open labour market: Ireland in the 1990s", *Economic Modelling*, 24, 839-858.
- [2] O'Connell, P.J., S. McGuinness, S., E. Kelly and J. Walsh, (2009). "National Profiling of the Unemployed in Ireland", ESRI Research Series No. 10, Dublin: Economic and Social Research Institute.

Table 1: Change in Participation Rate by Selected Age Category, Q3 2008 versus Q3 2010

	All	Male	Female
Working Age Population	-3.0	-4.2	-1.7
15-19 years	-10.6	-9.9	-11.4
15-34 years	-9.3	-12.6	-6.0
55-59 years	0.9	-3.1	5.0
60-64 years	-2.0	-3.3	-0.6

Table 2: Changes in Labour Force Participation, Selected Age Groups, Q3 2008 versus Q3 2010

		Q32008 ('000)		Q32010 ('000)		Change ('000)		Change, %	
		15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24
Males	Total	144.2	164.2	139.1	131.2	-5.1	-33	-3.5	-20.1
	In Labour Force	43.9	136.5	28.6	92.6	-15.3	-43.9	-34.9	-32.2
	Not in Labour Force	100.3	27.7	110.5	38.7	10.3	10.9	10.2	39.4
	Of which Students	97	19.8	105.2	29.8	8.2	10	8.4	50.7
	Others	3.3	8	5.4	8.9	2.1	0.9	64.2	11.4
Females	Total	139.6	167	134.2	139.4	-5.4	-27.6	-3.9	-16.5
	In Labour Force	43.5	119.8	26.6	91.7	-16.9	-28.1	-38.9	-23.5
	Not in Labour Force	96.1	47.1	107.6	47.7	11.5	0.6	12	1.2
	Of which Students	91.4	27.6	103.3	27.5	11.9	-0.2	13	-0.7
	Others	4.7	19.5	4.3	20.3	-0.4	0.8	-8	3.9
Total	Total	283.9	331.2	273.4	270.6	-10.5	-60.6	-3.7	-18.3
	In Labour Force	87.4	256.3	55.2	184.2	-32.2	-72.1	-36.9	-28.1
	Not in Labour Force	196.4	74.9	218.2	86.4	21.8	11.5	11.1	15.4
	Of which Students	188.4	47.4	208.5	57.2	20	9.8	10.6	20.7
	Non-Students not in LF	8	27.5	9.7	29.2	1.7	1.7	21.5	6.1

Figure 1: Participation and Unemployment Rates, ILO

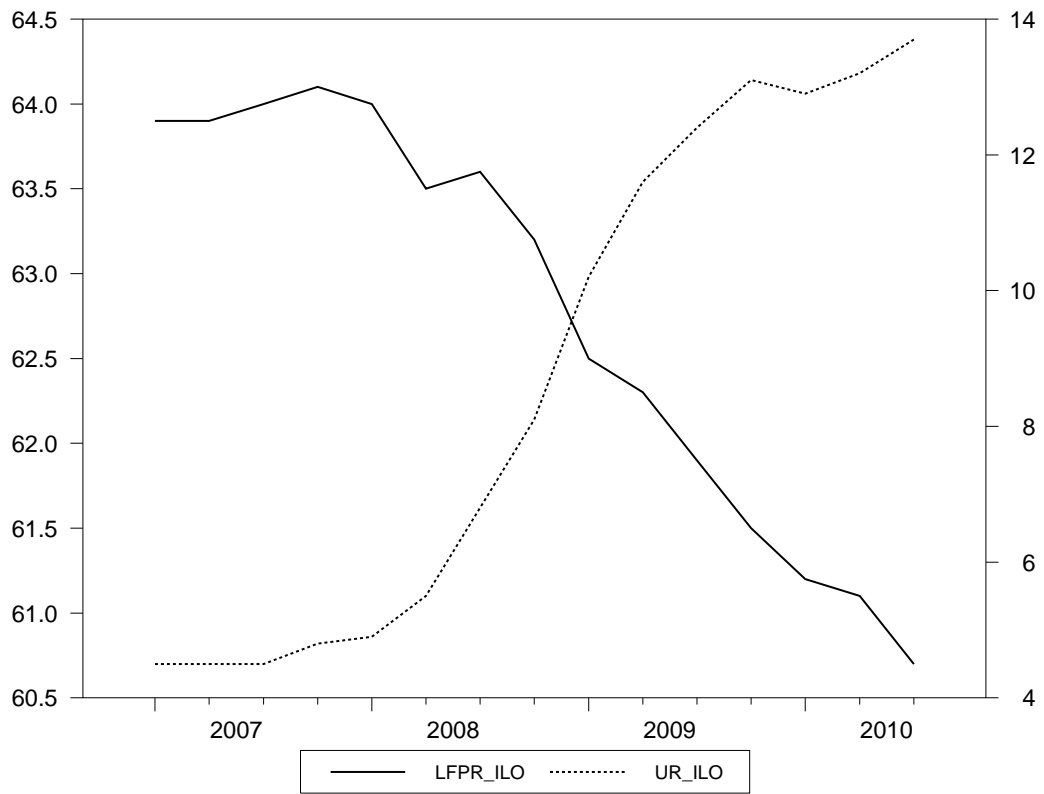


Figure 2: *Students by Single Year of Age as a Proportion of the Total Population by Single Year of Age*

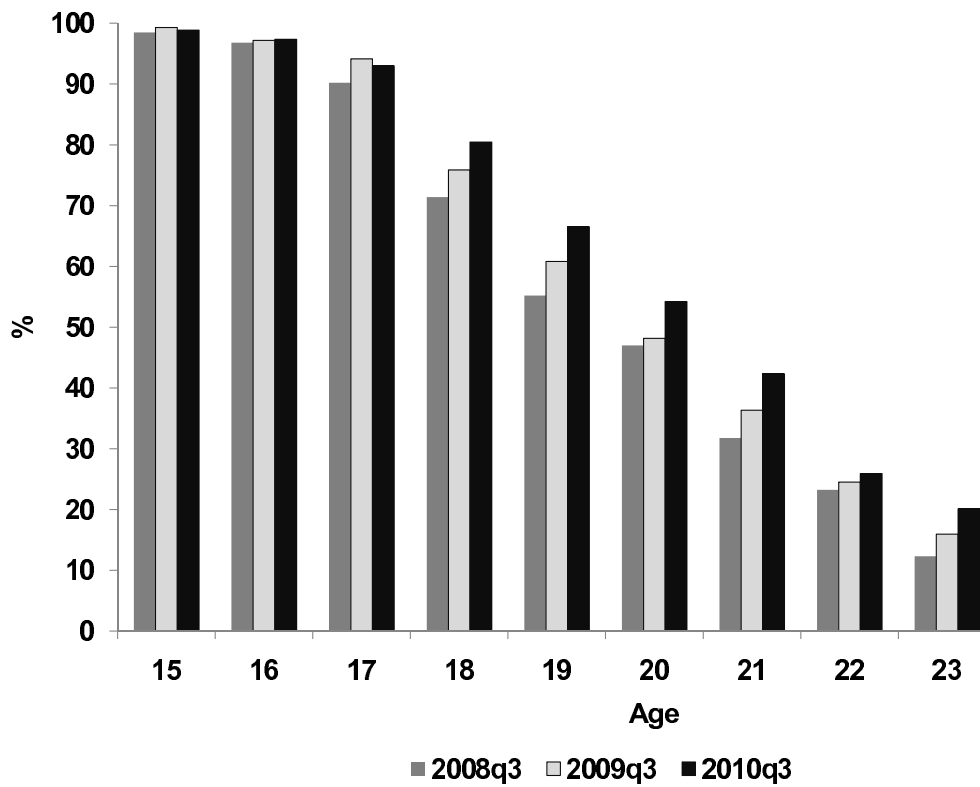


Figure 3: *Measures of Potential Labour Supply*

