Recession and Unemployment in the OECD

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Introduction

The ILO estimated that world unemployment reached nearly 212 million in 2009, an increase of 34 million since 2007 (ILO 2010). The increase is a consequence of the worldwide recession that was triggered by failures in various interlinked credit markets, including the subprime mortgage bubble in the US housing market. The increase occurred even though many governments intervened to maintain demand, by loosening monetary policy, including quantitative easing, as well as through cutting taxes and/or increasing government spending. Consequent fiscal imbalances are resulting in funding difficulties for many of these governments. The cost of credit default swaps, which are used to insure against sovereign debt default, have risen very sharply for governments that have no credible plan for reducing their budget deficits. Thus there is a significant risk that recovery of world demand will be anaemic, with further increases in unemployment likely.

Nearly half of the increase in world unemployment has occurred in OECD countries. From March 2008 until the end of 2009, unemployment in the OECD increased by 16.5 million. The growth in OECD unemployment has been dominated by Europe and the United States, with increases of 7.5 and 7.0 million respectively. In 2009, the US unemployment rate reached 9.2 percent, exceeding that in the European Union for the first time since comparable figures were available.

This paper reviews the declines in employment and increases in unemployment across the OECD both by country and by groups within countries. The latter highlights the extent to which the costs of unemployment are distributed unevenly across populations. We also reflect on the effects of unemployment on individual well-being.

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Employment

Labour is a derived demand and the present recession has been driven by a collapse in demand for goods and services. In consequence the demand for labour has fallen. But there has been no consistent relationship between falls in output and increases in unemployment across OECD countries. This is shown in Table 1, where we date the beginning of the recession from the first quarter of 2008. Not all countries experienced the first reduction in output during this quarter, but this is the modal measure of the start of the recession in the OECD.

What is evident is that there has been huge variability in the labour market responses to downturns in demand. Some countries (e.g. Germany, Italy, Japan) have experienced large falls in output, but relatively modest decreases in employment. Other countries (e.g. the United States, Ireland) have experienced more rapid declines in employment than in output. A simple regression of the changes in employment on the change in output from Table 1 yields an estimated slope of 0.43 with a p-value of 0.001 and an R^2 of 0.32. Thus, for these OECD countries over approximately seven quarters of the current recession, the short-run elasticity of demand for labour has been relatively low. Clearly, changes in demand only explain a relatively small share of the inter-country differences in employment response.

One possible explanation is labour hoarding, reflecting the notion of labour as a quasi-fixed factor. Employers may seek to minimise short-run costs by reducing the demand for labour at the intensive margin. Thus, in Japan, though employment had only fallen by 2.7 percent from 2008 Q1

Table 1

Changes in output, employment and unemployment in OECD countries 2008 Q1 to 2009 Q3

	Percentage change		Number of change (in 1 000)	
	GDP	Employment	Employment	Unemployment
Australia	1.7	– 0.7	– 81	199
Austria	– 3.9	– 0.5	– 21	55
Belgium	– 3.1	– 1.1	– 50	59
Canada	– 3.0	– 2.0	– 337	502
Czech Republic	– 3.3	– 2.2	– 109	146
Denmark	– 5.5	– 2.9	– 81	84
Finland	– 7.8	– 3.8	– 98	64
France	– 2.9	– 0.9	– 241	592
Germany	– 5.6	– 1.9	– 726	36
Greece	– 1.0	– 1.1	– 50	101
Hungary	– 9.0	– 4.8	– 186	116
Iceland	– 12.0	– 7.8	– 14	10
Ireland	– 9.3	– 11.9	– 255	146
Italy	– 5.9	– 2.3	– 535	305
Japan	– 7.7	– 2.7	– 1 727	813
Korea	1.6	– 1.0	– 241	106
Mexico	– 6.6	0.0	0	1 137
Netherlands	– 4.7	– 1.2	– 89	82
New Zealand	– 1.1	– 2.4	– 54	17
Norway	– 1.2	– 1.5	– 37	65
Poland	2.5	– 0.5	– 77	106
Portugal	– 2.9	– 3.9	– 201	131
Slovak Republic	– 2.3	– 4.3	– 107	66
Spain	– 4.5	– 8.1	– 1 363	2 206
Sweden	– 5.9	– 2.9	– 136	147
Switzerland	– 1.7	0.0	– 2	52
Turkey	– 10.2	– 5.1	– 1 131	1 247
UK	– 5.9	– 2.1	– 609	842
USA	– 1.6	– 5.5	– 8 115	7 787
OECD total	– 4.9	– 2.4	– 12 983	16 614

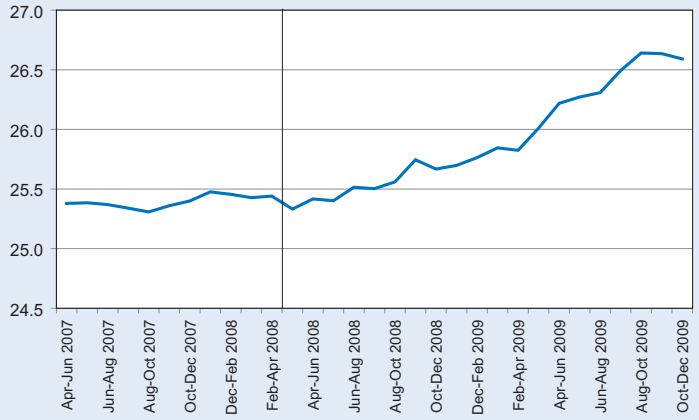
Source: OECD database.

to 2009 Q3, aggregate hours of work fell by 6 percent, almost matching the decline in output. The German government introduced a policy to subsidise short-term working arrangements. It pays half of employers social security contributions for the loss of earnings associated with reduced working hours. In 2008 Q4, 1.6 percent (626,000) of employees were registered with this scheme. Further examples of hours adjustment are shown in Figures 1 and 2. Figure 1 shows the share of part-timers in total UK employment from 2007 to 2009. There is a relatively sharp increase in the share of part-timers in total employment from 2008 Q1, when the recession started in Britain. Figure 2 shows average hours worked by all private sector employees in the United States from 2006 to 2010. A relatively sharp decline in average hours worked is apparent from early 2008. Productivity per worker may have declined as a result of labour hoarding, but productivity per hour may not have fallen as much, if at all. Nevertheless unit costs will tend to rise due to the fixed costs of labour.

Reductions in employment have not been uniformly distributed. In the United States, for example,

Figure 1

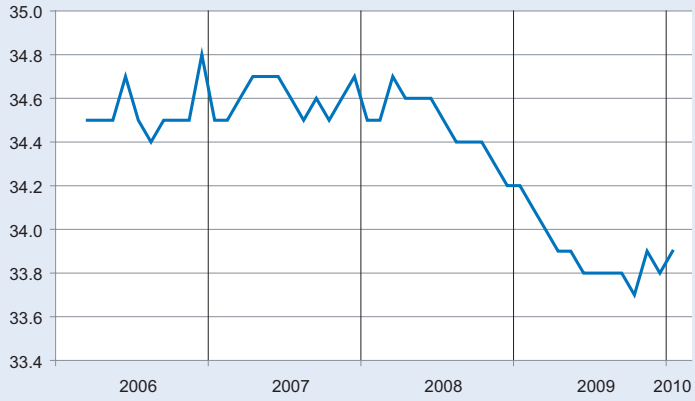
SHARE OF PART TIME EMPLOYMENT IN TOTAL EMPLOYMENT
UK 2007–2009



Sources: Office of National Statistics.

Figure 2

AVERAGE WEEKLY HOURS OF ALL PRIVATE SECTOR EMPLOYEES: USA 2006–2010

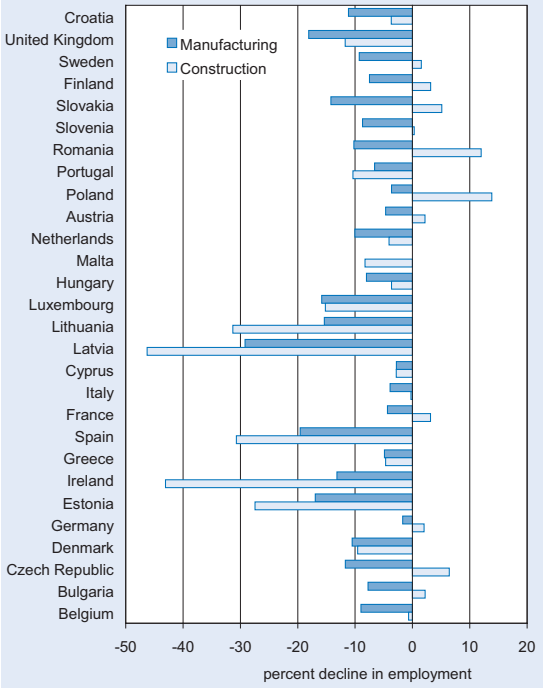


Sources: Bureau of Labor Statistics.

the construction and manufacturing sectors have experienced a very rapid declines in jobs. Between mid-2008 and January 2010, employment in construction in the United States fell by 21.5 percent, while employment in manufacturing fell by 13.9 percent. Similarly large declines in construction employment occurred in countries that had experienced asset bubbles in either domestic or commercial property, such as Estonia, Latvia, Spain and Ireland. Figure 3 shows the extent of the decline in manufacturing and construction employment across Europe from 2008 Q1 to 2009 Q3. It illustrates the great diversity of the demand shocks as well as differential labour market responses.

Figure 3

CHANGES IN MANUFACTURING AND CONSTRUCTION EMPLOYMENT
2008 Q1 TO 2009 Q3



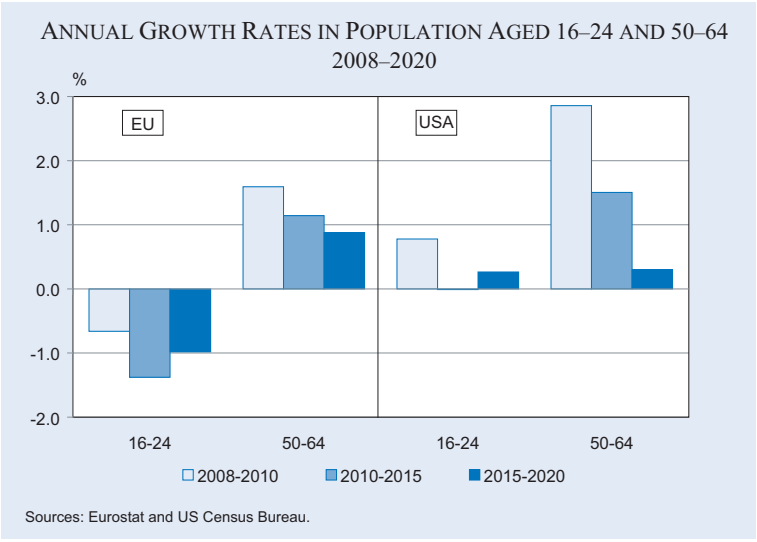
Source: Eurostat.

The specific nature of the shocks results in differential impacts on particular groups within the population. One of the most striking effects has been on the age structure of employment. In the EU employment fell by 5.1 percent for those aged 15–24 between 2008 Q1 and 2009 Q3. In the United States the equivalent decline was 15.4 percent. But for those aged 50+, EU employment increased by 4 percent, while in the United States there was a 2.5 percent increase in employment of those aged 55+ during the period when the US labour market lost over 7 million jobs.

There are a number of forces that likely underlie this development. First, older people may be staying in the labour market longer because falling asset values associated with the recession have reduced their expected retirement income. Second, because employment has increasingly concentrated away from manufacturing and construction towards the service sector, the costs of substituting older workers for the relatively young has likely decreased. Increased competition from older workers makes it more difficult for the young to find employment. Third, young people, anticipating that the labour market may be difficult, may be switching to attending college in the hope of improving their prospects. In Britain applications to attend university increased by 22 percent between 2009 and 2010, with increases for those aged 21 to 24 up by 44.8 percent and 63.4 percent for those aged over 25.

A further part of the explanation of differential growth rates by age group is demographic. Annual growth rates of those aged 16-24 and 50-64 in the EU and the United States over the period 2008-2020 are shown in Figure 4. The number aged 16-24 in the EU will decline slowly between 2008 and 2010 before declining much more rapidly thereafter. Nevertheless the decline in employment is much more rapid than the decline in population over the 2008–2010 period. In contrast, numbers aged 16–24 in the United States are broadly constant. And for those aged 50+ in the workforce, there will be a rapid

Figure 4



Sources: Eurostat and US Census Bureau.

increase in both Europe and the United States. For this group, the growth in employment in Europe has been more rapid than the growth in population over the 2008–2010 period, though by a smaller margin than the disparity in the 16–24 age group. It appears that, for Europe, changes in demography explain a share of the change in employment.

There have also been marked changes in employment by educational status. These are shown in Table 2, which uses Eurostat data to track how changes in employment have been distributed across International Standard Classification of Education (ISCED) qualifications between 2008 Q1 and 2009 Q3. What is evident is that the recession has reduced employment among those with low qualifications than among those with intermediate or higher qualifications. In the EU as a whole, employment among those with qualifications up to ISCED Level 2 (lower secondary school) fell by 3.2 million (6.3 percent), while for those with tertiary education, employment levels actually increased by 4.7 percent. The recession appears to have moved Europe towards forms of production that are more human capital intensive. The most dramatic falls in low skilled employment have

Table 2

Change in employment in Europe classified into educational status 2008 Q1 to 2009 Q3

	Primary, lower secondary (%)	Upper secondary and post– secondary (%)	Tertiary (%)
EU27	– 6.30	– 0.98	4.71
Belgium	– 13.42	0.07	5.60
Bulgaria	7.78	– 2.54	1.15
Czech Republic	– 8.95	– 2.63	11.17
Denmark	2.92	– 3.33	– 5.72
Germany	– 8.13	– 0.13	8.28
Estonia	– 18.10	– 14.43	3.62
Ireland	– 24.17	– 12.10	2.01
Greece	1.15	0.28	0.81
Spain	– 14.00	– 5.08	– 0.86
France	– 5.85	– 0,01	6.46
Italy	– 3.02	1.68	– 1.03
Latvia	– 20.63	– 17.16	– 5.83
Lithuania	– 19.83	– 5.52	– 3.73
Hungary	– 5.62	– 3.14	4.60
Malta	3.76	0.86	0.00
Netherlands	– 1.75	– 0.19	4.23
Austria	– 6.32	2.38	10.19
Poland	– 1.55	0.06	14.59
Portugal	– 7.90	10.93	1.65
Romania	15.48	0.31	7.16
Slovenia	– 6.12	0.47	8.85
Slovakia	– 4.76	– 2.79	8.37
Finland	– 1.64	1.62	– 0.85
Sweden	– 1.60	– 1.68	2.91
UK	– 8.27	– 3.70	4.54
Croatia	– 0.04	– 1.00	6.80
Turkey	9.34	5.07	14.52
Iceland	– 10.13	0.18	7.27
Norway	– 6.06	– 0.38	3.68

Source: Eurostat.

been experienced in countries that experienced house price bubbles, notably including Ireland, the Baltic States and Spain. Employment declined for all levels of education in countries where there were very large falls in output. Uniquely, Denmark has experienced employment falling among the better educated, but rising among those with the lowest level of qualifications. Thus, while there is a general trend to relative worsening of employment prospects for those with low levels of qualifications, there are wide variations between countries that reflect patterns of demand and the organisation of the labour market in these countries.

Table 3

Annualised rate of increase in hourly earnings in selected developed countries

	2005 Q1 to 2008 Q1 (%)	2008 Q1 to 2009 Q3 (%)
France	3.7	1.2
Germany	1.6	3.5
Japan	0.6	– 3.8
UK	4.4	1.4
USA	3.9	3.2

Source: OECD Main Economic Indicators database.

Temporary contracts have become an increasing feature of employment arrangements in recent years. In the EU15 the number of workers on temporary contracts increased from 18 million to 21 million between 2000 Q2 and 2008 Q1, a rise of 16.6 percent. But between 2008 Q1 and 2009 Q3, numbers employed on temporary contracts fell by 3.3 percent, while total employment fell by around 2 percent. Consistent with the insider-outsider version of labour market behaviour, being on a temporary contract increased the probability of job loss. But this is not a general finding across the EU: it is concentrated specifically in Spain, where more than a million workers on temporary contracts lost their jobs between 2008 Q1 and 2009 Q2, almost 2/3rds of the total job loss. This is generally ascribed to the rigidity of permanent employment contracts in Spain. In the rest of the EU15, temporary employment has actually risen since the onset of the recession. This may reflect employers changing the nature of employment contracts to limit their contingent liabilities. It is certainly not consistent with the insider-outsider version of labour market.

Downward wage flexibility may be another response to weakness in labour demand. Data on annualised changes in hourly earnings for some countries where data is available is shown in Table 3. Growth rates of earnings have slowed markedly in France, Japan and Britain, but have increased in Germany. Interestingly, although both are classed as having very flexible labour markets, wage growth slowed more in Britain than in the United States. One possible explanation of this is the British tax credit system, which means that relatively low paid workers willing to accept wage cuts face less than the equivalent reduction in net income. Thus, tax credits play a perhaps unexpected role as automatic stabilisers within the British economy.

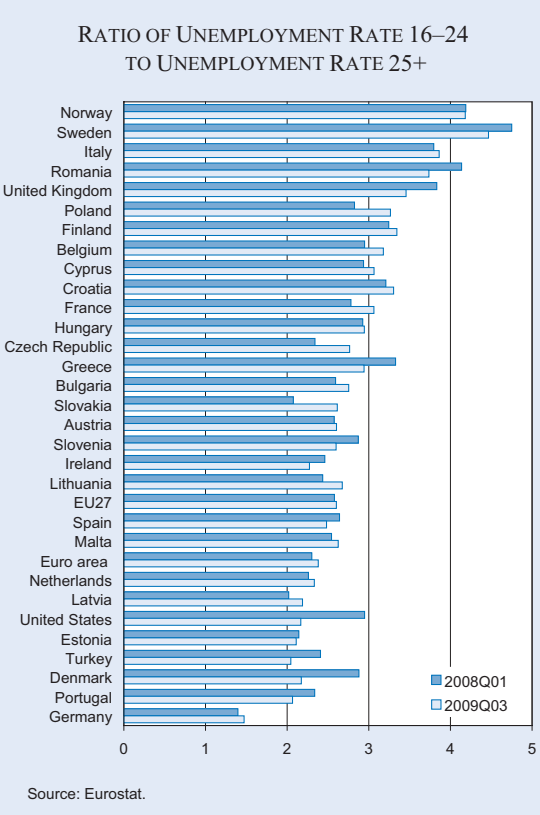
Unemployment

The change in unemployment by OECD countries is shown alongside the absolute change in employment in column 4 of Table 1. Since the beginning of the recession, the increase in unemployment in the OECD as a whole has exceeded the decline in employment by more than 3 million. But a simple regression of the change in unemployment on the change in employment for the 28 countries included in Table 1 gives a coefficient of – 0.94, which has a p-value close to zero but is not significantly different from one. The discrepancy between the overall change and the regression result is likely due to differences in the implicit weights in the two calculations.

The rise in unemployment has been substantial, especially for the young. Youth unemployment rates for the under 25s averaged 20.9 percent in January 2010 in the EU as a whole compared with an EU overall average of 9.9 percent. Youth unemployment rates are 39.6 percent in Spain and 32.4 percent in Ireland, compared with 33.1 and 18.5 percent, respectively a year earlier. Figure 5 shows the ratio between under-25 and over-25 unemployment rates by country in 2008 and 2009 which average around 2.5:1. Male unemployment rates are higher than female rates in most countries but in several the reverse is the case (Austria, Czech Republic, Spain, France, Italy, Cyprus, Luxembourg, Malta, Poland and Slovakia).

The rise has also been unevenly distributed across countries. Active labour market policies (ALMPs)

Figure 5



have been unable to offset the negative labour market consequences of a massive drop in product demand. We discussed the evidence on ALMPs in a previous paper (Bell and Blanchflower 2000a), arguing that there is no clear evidence in their favour. However, in Germany, for example, direct intervention in the labour market through the use of subsidies for short-term working has contained the fall in employment and rise in unemployment to a greater extent than some countries with 'flexible' labour markets, such as the United States. Subsidies to short-time working have been introduced in France, Spain, the Netherlands and Italy. Clearly these raise competition issues as well as questions over whether their effects can be anything but temporary if national governments have to restore their fiscal balances.

Countries with a more rapid rise in unemployment than fall in employment are experiencing rises in labour supply. This may come from a number of sources. More young people may be joining the labour market. Fewer older people may be leaving the labour market. Fewer people of working age may be taking a break from the labour market. And finally economically active immigrants may exceed the number of economically active emigrants. And these effects need not necessarily be working in the same direction, since they reflect the incentives that individuals are confronted with in different parts of the labour market.

There is evidence that young people in some countries are seeking to prolong their stay in education as a way of postponing labour market entry. In Britain there has been a 23-percent rise in college applications for 2010–2011. The increase has been particularly marked among those aged 25 and over. There has also been a slight decline in the number of adult overseas nationals seeking national insurance numbers in Britain since late 2007. The UK government claimed that there has been a 33-percent rise in the number of non-British citizens emigrating from this country in the year since March 2008, reducing net immigration to Britain to 147,000. As we have seen, there has also been an increase in the number of older workers continuing to seek employment.

So what are the factors that have influenced the probability of being unemployed, at a European level before and during the recession? We have already investigated this in the UK context in a previous paper (Bell and Blanchflower 2009a). Using Labour Force Survey data, we showed that the probability of unemployment increased with age, was typically higher for non-whites, and was particularly high for black youths. As implied by our earlier argument unemployment rates declined with higher levels of education, conditional on other characteristics. And finally, regional variations in unemployment within the country, which played a significant political role in past recessions, have become much less significant.

In this paper we extend the analysis to Europe. Columns 1 and 2 in Table 4 show the results of a dprobit model where the dummy dependent variable takes the value 1 if the person is unemployed and 0 if employed. Data are drawn from two Eurobarometer surveys for the years 2006 and 2009. The results are broadly consistent with those from Britain. Unemployment probability declines with age, is higher from males and for those who left school early. The change in country coefficients in the individual regression broadly corresponds with the aggregate unemployment data. Thus, Spain, Lithuania and Latvia have experienced the largest increase in their country coefficients between 2006 and 2009, while the country coefficients in Germany, Italy, the

Netherlands and Austria declined relative to Belgium. All of these countries have short-time working arrangements in place.

The individual regressions suggest what individual characteristics have made the greatest difference to the probability that individuals in Europe have

Table 4

Life satisfaction and unemployment probability equations

	Unemployment probability		Life satisfaction (OLS)	
	2006	2009	2006	2009
15–24 years	.0925 (8.65)	.1150 (10.52)	.2434 (11.66)	.1961 (9.27)
25–34 years	.0120 (1.71)	.0188 (2.51)	.1472 (10.05)	.1080 (7.11)
45–54 years	-.0159 (2.39)	-.0150 (2.15)	.0465 (3.39)	.0499 (3.60)
55–64 years	.0026 (0.33)	-.0106 (1.27)	.0455 (3.06)	.0588 (3.97)
65+ years	-.0459 (2.76)	-.0821 (5.06)	.1311 (7.24)	.1531 (8.50)
Male	-.0320 (6.56)	-.0172 (3.39)	-.0375 (4.14)	-.0293 (3.39)
ALS < 16	.0371 (1.93)	.0772 (3.82)	.0303 (1.17)	.7545 (2.95)
ALS 16-19	-.0147 (0.87)	-.0111 (0.67)	.1265 (4.85)	.1839 (7.36)
ALS 20+	-.0681 (4.25)	-.0720 (4.54)	.2425 (9.07)	.3192 (12.47)
Austria	-.0712 (5.64)	-.0899 (6.87)	-.0838 (2.77)	-.1430 (4.63)
Bulgaria	.0515 (2.91)	.0023 (0.14)	-1.1688 (38.25)	-.9295 (29.43)
Croatia	.0482 (2.65)	.0432 (2.23)	-.3886 (12.78)	-.2040 (6.61)
Cyprus	-.0795 (4.83)	-.0869 (4.92)	-.0615 (1.65)	-.0236 (0.62)
Czech Republic	-.0542 (4.02)	-.0580 (3.96)	-.3040 (10.13)	-.2558 (8.36)
Denmark	-.0527 (3.52)	-.0337 (1.92)	.3573 (11.74)	.4705 (15.26)
Estonia	-.0738 (5.31)	-.0366 (2.21)	-.4608 (15.08)	-.3772 (12.19)
Finland	-.0364 (2.34)	-.0516 (3.07)	.0211 (0.70)	.1050 (3.42)
France	-.0326 (2.18)	-.0127 (0.73)	-.1678 (5.57)	-.2285 (7.49)
Germany	-.0113 (0.80)	-.0393 (2.69)	-.2698 (9.79)	-.1422 (5.09)
Greece	-.0557 (3.84)	-.0593 (3.87)	-.5149 (16.90)	-.6967 (22.49)
Hungary	.0023 (0.13)	.0203 (1.08)	-.6492 (21.40)	-.7343 (23.79)
Ireland	-.0784 (6.11)	-.0545 (3.61)	.0840 (2.74)	.1695 (5.45)
Italy	-.0712 (5.56)	-.0921 (6.98)	-.3027 (9.87)	-.5343 (17.36)
Latvia	-.0140 (0.93)	.0356 (1.96)	-.5997 (19.72)	-.6516 (21.01)
Lithuania	-.0315 (2.04)	.0297 (1.60)	-.5813 (19.05)	-.6891 (22.25)
Luxembourg	-.0796 (4.50)	-.0936 (5.09)	.1854 (4.99)	.2376 (6.32)
Malta	-.0624 (2.89)	-.0836 (3.95)	-.1458 (3.84)	-.0396 (1.03)
Netherlands	-.0477 (3.23)	-.0777 (5.02)	.1540 (5.10)	.3101 (10.20)
Poland	.0538 (2.88)	.0152 (0.82)	-.4006 (13.13)	-.3375 (10.84)
Portugal	-.0229 (1.45)	-.0486 (3.16)	-.6477 (21.04)	-.6984 (22.23)
Romania	-.0517 (3.54)	-.0379 (2.35)	-.8634 (27.85)	-.6631 (21.44)
Slovakia	-.0369 (2.63)	-.0642 (4.51)	-.5243 (17.57)	-.3740 (12.18)
Slovenia	-.0378 (2.50)	-.0143 (0.81)	-.0924 (3.06)	-.0707 (2.29)
Spain	-.0367 (2.41)	.0128 (0.70)	-.0527 (1.72)	-.1379 (4.44)
Sweden	-.0442 (3.05)	-.0685 (4.46)	.1698 (5.61)	.2926 (9.51)
Turkey	-.0292 (1.79)	-.0137 (0.77)	-.1843 (4.93)	-.5234 (16.52)
Turkish Cyprus	-.0719 (4.37)	-.0595 (3.19)	-.3000 (9.50)	-.4944 (13.02)
UK	-.0392 (2.80)	-.0330 (2.13)	.0540 (1.89)	.1583 (5.48)
Married			.1348 (8.72)	.0767 (4.95)
Remarried			.0774 (2.35)	.0587 (1.79)
Living together			.0594 (3.16)	.0126 (0.66)
Previous living			-.0736 (2.98)	-.1891 (7.73)
Divorced			-.1384 (6.37)	-.1639 (7.59)
Separated			-.1927 (5.21)	-.1879 (5.08)
Widowed			-.0484 (2.32)	-.0870 (4.13)
Home worker			-.0733 (4.68)	-.0492 (2.94)
Unemployed			-.3099 (17.89)	-.3417 (20.92)
Retired			-.0901 (6.10)	-.0939 (6.35)
Student			.2821 (8.72)	-.0939 (6.35)
Left (2–3)			.0441 (2.47)	-.0069 (0.41)
Centre (5–6)			.0809 (4.89)	.0402 (2.59)
Right (7–8)			.1304 (7.11)	.0597 (3.44)
Right wing			.1277 (5.88)	.1375 (7.00)
Constant			2.8804	2.8364
No. of observations	15,692	16,297	29,027	29,012
Pseudo R^2	.0768	.0790	.2591	.2752

Notes: Excluded categories: employed, no full-time schooling, Belgium, single, left wing, 35–44 years. Samples in columns 1 and 2 are the workforce (= employed plus unemployed), while samples for columns 3 and 4 are the total population. ALS = age left school; left, centre and right stand for political affiliation. The *t*-statistics are in parentheses.

Source: Eurobarometer 65.2 (February-March 2006) and 71.1 (January–February 2009).

become unemployed since the recession began. While the country effects are consistent with our understanding of the differential national downturns in demand, the groups of coefficients that have changed most over the course of the last three years are those associated with age. Increase in the probability of unemployment for those aged 15 to 24 has been much greater than the impact on living in a particular country, having particular level of education, or being male or female.

Well-being

Finally we examine the question of whether the recession has affected well-being. One obvious channel through which this might take place is unemployment, given that we know that the unemployed are generally less satisfied with their circumstances than are those in employment. Thus we ask whether the substantial deterioration in labour market conditions in different parts of Europe since the onset of recession affected individual well-being.

We know that unemployment, as well as having a range of social costs, also tends to reduce well-being. Social costs are discussed in Bell and Blanchflower (2009a). These include educational underachievement, inactivity, crime and health. We also discuss individual costs such as the scarring effect of unemployment on younger workers. Thus, using the National Child Development Study (NCDS), which follows a group of people born in Britain during a specific week in March 1958, we showed that if these individuals experienced unemployment at age 23, then conditional on their other characteristics, they were unlikely to experience lower life and job satisfaction, poorer health, earn lower wages and be more likely to be unemployed at age 46 than those who did not experience early unemployment.

We approached this question using recent data from Eurobarometer. We used these to estimate OLS regressions for well-being in European countries in 2006 and 2009 – ordered logits gave similar results. Columns 3 and 4 in Table 4 show our results. Consistent with almost all studies of individual well-being, we find that unemployment has a negative effect on happiness, and that this has increased somewhat since the beginning of the recession. Most other coefficients take their expected signs, such as gender, marital status etc. Also those of a right wing political persuasion have higher well-being than those politically in the centre or left.

Another interesting feature of these results is the changes that have taken place in country coefficients between 2006 and 2009. Conditional on unemployment and other regressors, the largest declines in well-being are associated with countries that have experienced significant difficulties in their goods, and/or their labour markets as a result of the recession. Those experiencing the most dramatic decline in well-being were France, Greece, Hungary, Italy, Lithuania, Turkey and Spain. Many possible explanations could be consistent with these findings. Issues of fiscal stability at the national level may have reduced individual feelings of confidence and self-worth. In countries where there have been asset bubbles, individuals may have suffered drops in average wealth, a factor not captured by the regressions. One exception is Ireland, which interestingly is the European country that has taken the most decisive action in response to its fiscal crisis.

Conclusions

This paper has examined recent changes in OECD labour markets. It has established that there have been a wide variety of responses of employment to changes in demand and also a wide variety of responses of unemployment to changes in employment. Thus some countries have experienced large falls in output without necessarily much change in the number of workers employed at the extensive margin of the labour market. Some countries have subsidised employment; others have sought to incentivise adjustment on the extensive margin, through measures such as subsidies to short-time work, while others have relied on automatic stabilisers, such as tax credits, to facilitate labour market adjustment. Complex adjustments on the supply side through changes in participation, and in levels of migration, may explain differences by country in the response of unemployment to changes in employment.

We have also investigated the effect of the recession on individual well-being. Our results confirm the usual finding that the unemployed feel less satisfied with their lives than the employed. Thus the overall increase in unemployment is likely to have resulted in a reduction in aggregate well-being across OECD countries. But, conditional on unemployment, we

also find that countries which have experienced large increases in unemployment, or have suffered fiscal crises, show additional negative impacts on well-being. Unemployment hurts.

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