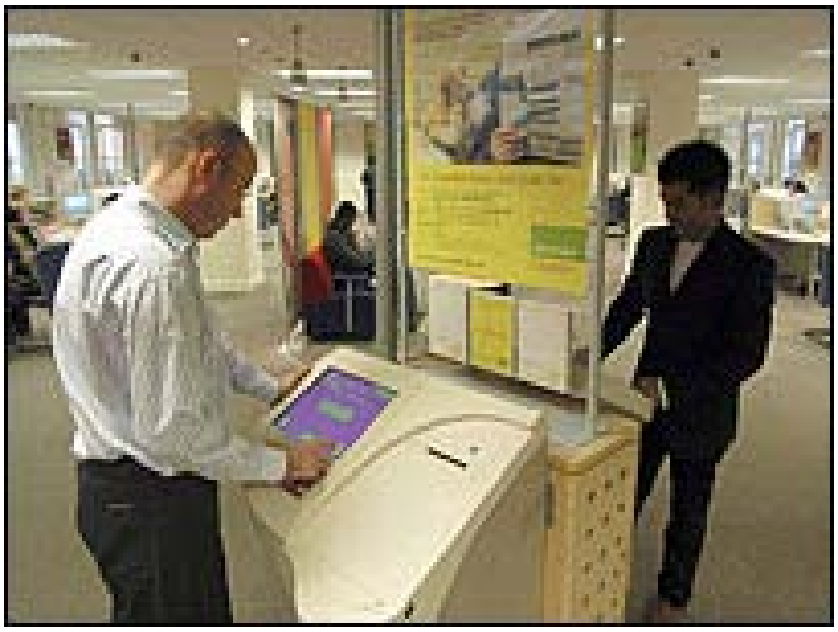
Lecture 5b RELOCE
Regional Unemployment Disparities



Aims

- Examine why unemployment disparities persist and why some regions and areas have had relatively high unemployment for decades.
- Look at types of unemployment, frictional, structural, neo-classical and demand deficient
- Discover who is likely to be unemployed, what are the characteristics of the unemployed and the question of why some people more likely to be unemployed than others?
- Examine the issue of hidden unemployment.

Outcomes

- To understand why unemployment and its' causes is important to regional economists.
- To be able to identify the main issues connected with unemployment, understand the reasons for continuing disparities and be able to appreciate the scale of the problem.

Link to policy

Regional policy in the UK exists to try and combat regional economic disparities but traditionally it is one measure above all others that has been responsible for deciding whether or not areas qualify for assistance – regional (and local) unemployment rates. It is regional unemployment rates that underpin the designation of assisted area status in the UK and combined with relative GDP per capita, high concentrations of industries in decline that are the basis for eligibility for structural funds from the EU.

Armstrong and Taylor also suggest that unemployment is closely linked to social exclusion, they use regression analysis of unemployment rates in local authorities in England and Wales against other socio-economic variables to demonstrate the link (see Table 10.1 below).

Table 10.1 - Correlation between unemployment rate and selected socio-economic variables

Variable	Correlation coefficient
% lone parent families	0.85
% of pupils eligible for free school meals	0.90
% of residents with higher qualifications	-0.67
% of pupils with five or more A* - C GCSEs	-0.69
% of pupils with zero GCSEs	0.53
Truancy rate (% half days unauthorised absence)	0.56

Source Armstrong and Taylor (2000) Table 7.1

Important questions for regional economist include:

1. Why regional unemployment disparities occur and persist?
2. Why some regions have consistently low unemployment?
3. Why do some towns and cities have higher rates than their suburbs and rural hinterland?
4. Are these disparities a result of inefficient factor markets?

It is argued that a better understanding of the causes of regional unemployment disparities should help policymaker to put in place the right policy instruments to reduce unemployment in depressed or less favoured regions. However, there seems to be some way to go in either unravelling the causes of unemployment and/or devising effective policies to deal with its effects, because these disparities have persisted for a long time both in the UK and elsewhere in Europe.

Table 10.2, below, shows regional unemployment rates in January 1933 and January 1999 both as the prevailing rate at the time and as an index based on the UK average (in each year). As can be seen although there have been significant shifts for some regions (London and Wales) in general the southern regions are below and the northern regions above the national average in both time periods.

Table 10.2 Unemployment rates in the UK Regions*, January 1933 and January 1999

Region	Rate 1933[1]	Index UK = 100	Region	Rate 1999[2]	Index UK = 100
London	14.2	60.7	SE	3.9	62.9
SE	17	72.6	SW	4.9	79.0
SW	19.6	83.8	East Midlands	5.1	82.3
Midlands	20.2	86.3	NW	6.9	111.3
NW	25.7	109.8	NI	7.2	116.1
NI	28.9	123.5	Wales	7.3	117.7
NE	29.8	127.4	Scotland	7.4	119.4
Scotland	30.2	129.1	London	7.8	125.8
Wales	37.8	161.5	NE	9.7	156.5
UK	23.4	100.0	UK	6.2	100.0

Source: Armstrong and Taylor (1993) Table 9.2 and Economic trends November 1999 Table 6; Index calculations by D Clark

Notes: * Regional definitions have changed over the intervening years, in 1999 the SE excludes London, the Midlands consists of both east and west and in addition Yorkshire & Humberside and East Anglia are separate regions.

[1] number of persons (insured and uninsured) registered as unemployed expressed as a percentage of all insured employees aged 16-64.

[2] Rates are based on Government Office Regions using ILO unemployment rates.

Regional Unemployment disparities why do they persist?

Armstrong and Taylor compare and contrast regional unemployment rates in EU countries in 1995. This shows that the variation between countries the highest and lowest regional unemployment rates, in the Netherlands the figure is 2.2 percentage points and in Italy 19.9 percentage points.

A similar situation arises in the UK the most recent unemployment figure for district areas across the UK (October 2002) show the wide variance in rates. These show a variance from 9.7% in Lewisham in London to 0.6% in Rutland and Mole Valley in the East Midlands and South East respectively.

	Highest	Rate %	Lowest	Rate %	Range	Median
South West	Penwith	4.3	North Dorset	0.7	3.6	1.7
Eastern	Great Yarmouth	4.9	South Cambridgeshire	1.0	3.9	2.0
East Midlands	Bolsover	5.0	Rutland	0.6	4.4	2.2
West Midlands	Birmingham	5.4	Stratford-on-Avon	1.1	4.3	2.1
South East	Thanet	6.2	Mole Valley	0.6	5.6	1.4
Yorkshire & Humberside	Kingston upon Hull	6.3	Craven	1.1	5.2	3.1
Wales	Blaenau Gwent	6.7	Powys	1.8	4.9	3.4
North West	Knowsley	8.1	Ribble Valley	0.8	7.3	2.6
North East	South Tyneside	8.2	Castle Morpeth	2.1	6.1	4.7
Scotland	West Dunbartonshire	8.3	Aberdeen City	1.5	6.8	3.8
Northern Ireland	Strabane	9.0	Ballymena	2.5	6.5	4.4
London	Lewisham	9.7	City of Westminster	0.8	8.9	3.9

However there is some evidence that the historical pattern of disparities began to break down in the recession of 1990-92. Armstrong and Taylor (1993) report that unemployment rates rose from 3.7% to 9.1% in the South East whilst those in Scotland increased from 8% to only 9.3%. Taylor and Bradley use county level unemployment data to show how the recession of the early 90s impacted harder on the South than the North (see Table 10.3). This shows that the change in percentage unemployed ranged from 6.6 in East Sussex to 0.9 in the Grampian region in Scotland and 2.2 in Tyne & Wear.

Table 10.3 Percentage change in unemployment rates in selected UK Counties between 1990 – 92

South	Change in % unemployed 1990-92	North	Change in % unemployed 1990-92
East Sussex	**6.6**	**Grampian**	**0.9**
Essex	**6.3**	**Strathclyde**	**1.3**
Dorset	**5.9**	**Fife**	**1.7**
Kent	**5.8**	**Tyne & Wear**	**2.2**
Greater London	**5.7**	**North Yorkshire**	**2.2**

Source: Taylor and Bradley (1994)

In a more recent article Martin (1997) compares and contrasts the effect of the two most recent recessions in the UK. Whilst he agrees with other commentators that the recession impacted more severely in the South than the North, he argues that this was not because more jobs were lost in the South than in previous recessions (the figure was about the same). He contends that in fact, less jobs were lost in the North than usual. He suggests a number of reasons for these phenomena:

1. The South suffered a shake-out from the unsustainable service sector boom of the second half of the 1980s.
2. The industrial base of the North had already been slimmed-down and reconfigured with significant foreign inward investment in "new industries".
3. The service-sector employment boom had been more subdued in the North than the South.

He also notes that the recovery after 1993 has centred on the Southern half of the UK as in previous recessions, suggesting that there has not been a shift in the long-run pattern of disparities. This is reinforced by the indication that part of the reason for the stabilisation off unemployment in the North are the result of people withdrawing from the labour market rather than the result of increased employment opportunities.

Why is the adjustment process so slow?

If labour markets were perfectly competitive then spatial unemployment disparities would not occur. A fall in demand for a region's output (and a corresponding rise in another) would lead to respective decreases and increases in the real wage which, in turn, would trigger migration towards the booming region and capital flows in the opposite direction. The problem is that factor markets adjust slowly (particularly the labour market) and in the meantime unemployment disparities increase. Armstrong and Taylor suggest that the UK and most European countries have less flexible and responsive labour markets than those in the US.

They offer a number of possible reasons for the sluggish behaviour of European labour markets:

1. Wages are unresponsive to excess supply.
    - Trade unions resist wage cuts since they represent those with jobs not the unemployed.
    - Employers are often reluctant to impose wage cuts because these effect moral and thus productivity
    - Employers are also tied down to wage contracts (e.g. Fords struck a three-year wage deal in 1999)
    - Thus there are significant obstacles to a quick response to changed demand conditions.

2. Wages are negotiated nationally in many industries and accepted by workers and employers this is particularly the case in countries such as Germany which use social compacts.
    - In the UK this can apply in both the public and private sectors although it is much more prevalent in the public sector.
    - Actual wages may divert from nationally set rates by virtue of incentive payments and bonuses but the acceptance of national structures does impose significant rigidity.

3. Larger companies may have decentralised many of their management functions including their wage negotiating to profit centres.
    - Wage rates in a local plant may be tied to its' profitability, this can result in higher wages being paid than the regional norm which may be an area with relatively high unemployment.
    - Thus, there is no link between regional unemployment and wages in the particular industry/plant and this also effectively raises the average wage level in the region.

4. The ability of people to move from one labour market to another or from one occupation to another can be restricted by the costs involved. Armstrong and Taylor suggest that when a negative demand shock hits, workers in the US are more likely to migrate to new jobs in the EU they are more likely to leave the labour market.
    - The absence of financial help towards the cost of training or relocation acts as a significant deterrent to labour force mobility and slows down the process of adjustment.

5. Employers take care over filling positions (particularly during a recession) partly because of the costs associated with selection and training but also because they may take the opportunity to restructure their organisation.
    - It is suggested that hiring and firing cost are particularly high in the EU as a consequence of the Social Chapter which aims to improve worker security and conditions but is seen as an excessive burden by employers.

- Employers are selective in the recruitment and this can lead to some groups amongst the unemployed being regarded as unemployable, this was one of the reasons for the introduction of the governments "New Deal" programme.

Regional disparities in flexible labour markets

Explanations about disparities in labour market flexibility are rooted in studies of the determinants of wage inflation. Excess labour demand causes wages to rise and excess labour supply causes them to fall. This suggests a negative relationship between wage change and the unemployment rate. See the Phillips Curve for the effect of unemployment on wages. Whilst many studies have been conducted at the national level, few have concentrated on regional economies possibly because it is assumed that inflation is the same in all regions, but what about regions where the economy overheats in every boom period?

Regional economists are more interested in the effect of wages on unemployment this is known as the Fisher curve. The question they seek to answer is whether or not regions with wages that are responsive to increases in unemployment have lower rates of unemployment than other regions where the labour market is less flexible. In a UK study Hyclak and Jones show that the change in the unemployment rate is positively related to wage increases and negatively related to output growth. They found that regions with the highest unemployment rates are likely to be adversely affected by any given increase in the wage rate. In other words, high unemployment regions are usually less competitive (larger negative impact on employment). A further study in the USA which estimated the relationship between the rate of change in wages and the unemployment rate in each state separately found that despite the expected high flexibility of wages in the US, there was considerable variation between the east coast states and those further west.

They suggest a number of reasons why there was greater wage flexible in some areas than others.

- The efficiency wage: employers use the wage to induce employees to be more efficient. Reducing wages in times of slack demand affects worker moral and productivity. In areas where employers were more "sensitive" the degree of wage flexibility was lower.
- The proportion of small firms: greater wage flexibility in small firms <20 employees: it is easier to monitor workers in small firms; as small firms are more subject to competition they are more likely to monitor costs more closely.
- Union activity: strong unions resist wage cuts in recession thus reducing wage flexibility: states that were most unionised had lowest levels of wage flexibility.
- Involuntary layoffs: if there is a high probability of being laid off workers will be more prepared to take wage cuts rather than loose their jobs.
- Minimum wages: imposition of a minimum wage reduces wage flexibility since there is a legal floor below which wages are not allowed to fall despite high levels of unemployment; it also reinforces wage rigidity as workers seek to maintain differentials - jacking up wages above the floor rate.

Types of unemployment

There are many causes of unemployment, it may be a general recession, or it may be due to the local industry mix. Taylor and Bradley also suggest that it may be that some regions are just "high unemployment" regions, whereby unemployment is high even amongst people who have worked in low unemployment industries. They suggest that the unemployed are more likely to move between industries within the travel to work area (TTWA) than to move within the same industry outside the TTWA. So if the industry mix is not the reason what is? A & T divide unemployment into a number of categories.

Frictional unemployment, occurs when there are jobs for the unemployed (who possess the right skills) and want jobs that are available in a locality. But it takes time to match workers to jobs, they may not accept the first offer that comes along (particularly if it does not match their expectations) and employers are often seeking the “right” worker. The level of frictional unemployment is likely to be higher in times of economic boom because the number of people quitting their jobs is higher as well as the number of new-entrants and re-entrants to the labour force (mainly because more vacancies are available). The opposite is the case in a slump when workers are reluctant to quit jobs and potential re-entrants may delay a return until the job situation improves. Industry mix is also a factor with some sectors experiencing high levels of workforce turnover (tourism is a classic case). A recent study of the sea fish industry Clark and Farmer (1999) concluded that in the fish frying and processing sectors average labour turnover rates in the previous 12 months were 32% and 35% respectively whilst in the mongering and catching sectors they were 15% and 17% respectively. This turnover effect is sometimes referred

to a labour force churning and thus areas with a high proportion of industry sectors prone to churning will exhibit high levels of frictional unemployment.

Structural unemployment, is similar to frictional in that unemployment and vacancies co-exist, however it differs in one important aspect, there is a mismatch between the types of jobs on offer and skills that the unemployed possess or the location of the jobs. The mismatch can occur because of changes in both the supply and demand side of the product market. In the former technological changes in the production process may lead to different commodities being produced and/or different skills being required. Thus, if capital deepening occurs less labour may be required and if the human capital composition increases more highly skilled labour may be required. On the demand side consumers may switch out of one commodity to another with the result that plants may close or switch to producing alternative products that may require significantly different inputs. Another diver of structural unemployment may be the transfer of production to another region (even another country). Structural unemployment tends to continue for a long period of time usually because the unemployed find it difficult to acquire new skills or move to an area that does require their skills. The situation is often chronic during periods of major structural change with slow growth and slack labour markets (e.g. economic turndown or recession) in periods of growth and tight labour markets the scarcity of labour will assist in re-training and higher real wages are more likely to induce migration. A study by Tomaney, Pike and Cornford (1999) into the effect of the closure of Swan Hunter on Tyneside suggests that structural unemployment increased dramatically following the closure. Younger (under 40) and more skilled workers were often able to relocate or re-train whilst older workers either remained unemployed or dropped out of the labour market (either through long-term sickness or retirement).

The Neo-classical explanation, argues that unemployment exists because the real wage is too high, over time migration will erode unemployment (see the classical model of migration Lecture 8). Under this paradigm significant regional unemployment disparities exist in areas such as Merseyside because real wages are not allowed to fall to their market clearing level under the influence of high benefit levels, minimum wages and over powerful trade unions. If distortions in the labour market were removed, (i.e. trade unions neutered, benefits cut and the minimum wages abolished) the resultant lower real wage would induce employers to take on more staff and invest or increase their capacity in the region (on the expectation of higher returns to factors).

Demand-deficient (Keynesian) explanation, suggests that unemployment is a direct result of a decline in the national level of demand which is transmitted to all regions. Empirical evidence suggests that regional unemployment rates are highly correlated and that unemployment increases in all regions in slumps and declines in boom periods (although not always at the same rate). Using a simple labour market demand supply diagram it can be shown that an inward shift of the demand curve and a sticky real wage will decrease the number actually employed but maintain the number of people who wish to work. Keynesian economists therefore argue that the best way to combat unemployment is to raise the level of aggregate demand. To ensure that areas with the highest levels of unemployment benefit most from the upswing, they argue that regionally discriminating taxation and expenditure should be used (the former is not used in the UK but the latter has been used to a limited degree).

Armstrong and Taylor conclude that unemployment occurs for four main reasons;

1. The time taken for workers and employers to match the unemployed with the vacancies that are available
2. The mismatch between labour demand and supply, because of a skills shortages and/or locational imbalances.
3. The failure of the labour market to clear, because institutional restrictions keep wage rates artificially high.
4. Low level of aggregate demand.

Estimating the importance of the types of unemployment

Two approaches have been used to try and evaluate the various theoretical reasons for unemployment, the cross-sectional and time-series approaches. The former takes a snapshot view of the structure of unemployment and vacancies the latter a longer-run view of the relationship between the two variables over a period of time.

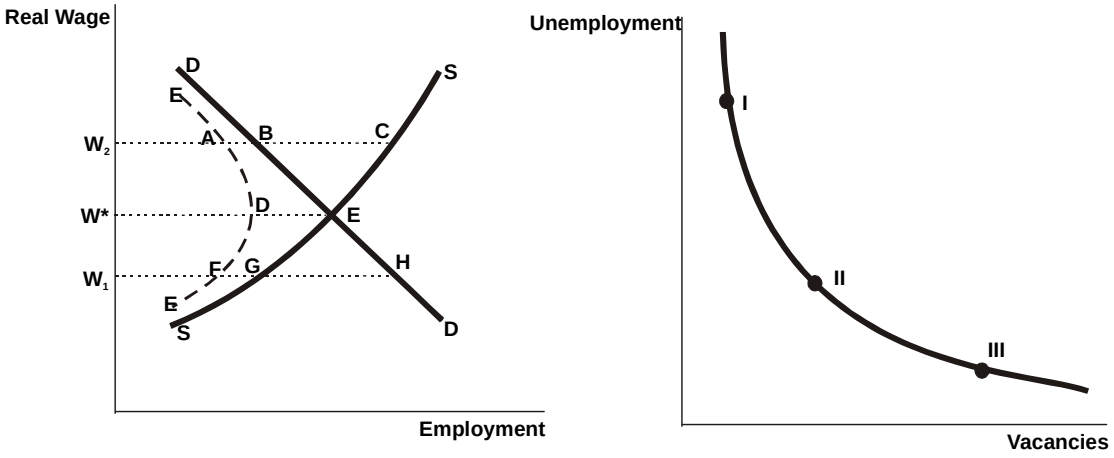
Cross-sectional analysis uses available data to examine unemployment from three standpoints: Demand-deficient Frictional and Structural. The latter includes occupational and locational mismatch both separately and combined. Demand-deficient unemployment is said to be present when the number unemployed exceeds the number of vacancies. Armstrong and Taylor suggest that this has been the case in the UK for more than three decades. This is partly because the number notified to job centres (on which the official figures are based) is significantly lower than the true number of vacancies (more recently the CSO have estimated that the number of vacancies advertised at job centres is about 30% of the total).

A measure of frictional unemployment can be found by matching existing vacancies to the unemployed in a particular occupational category within the same labour market, structural unemployment is measured by matching the unemployed (by occupational category) and vacancies across labour markets. There are however serious problems with this approach in that to give meaningful results more disaggregated vacancy data is required than currently exists.

The relationship between the number unemployed and vacancies can also be traced for each level of excess demand or supply. As the demand for workers increases (relative to their supply) the vacancy rate increases and the unemployment rate falls, on the other hand as supply increases (relative to demand) unemployment rises while vacancies fall. Further it is clear that the relationship is non-linear because there will always be some workers searching for jobs and some employers looking for labour.

Armstrong and Taylor use a formal model to demonstrate the relationship, but this simplistic demand supply relationship (although showing excess unemployment above the real wage and excess vacancies below it) does not match empirical data where vacancies and unemployment coexist. They extend the model to demonstrate how this can be incorporated into the model to reflect the fact that vacancies and unemployment exist at the same time. By defining a realistic employment curve (EE) they are able to develop an unemployment:vacancy relationship which tracks the effect on both of an increase in demand for output at given wage levels or a fall in real wages at a given level of demand for output. In both cases it is predicted that there will be a decrease in unemployment and an increase in vacancies (see Armstrong and Taylor (2000) Figure 10.1 tracks the U - V relationship). For example, at real wage W_2 vacancies = AB and unemployment = AC. Shifts in the employment curve (EE) will lead to corresponding movements in the unemployment - vacancy relationship, a leftward shift increases both vacancies and unemployment for each level of the real wage (assuming stable demand and supply functions). A rightward shift has the opposite effect. Research has suggested that the unemployment - vacancy relationship has been moving upwards and to the right (i.e. more vacancies and unemployment). Armstrong and Taylor give three reasons for this:

Figure 10.1 Deriving the Unemployment/vacancy relationship



1. Structural shocks resulting in a mismatch between labour supply and demand ensure that there is more unemployment at each level of vacancy.
2. Reductions in the opportunity costs of being unemployed (benefit levels are too high and counter the incentive to search for work).
3. An increase in long-term unemployment, (the residual unemployed are less attractive to employers, they lack self-confidence and their skills gap, relative to the employed, widens with time.)

Who are most likely to be unemployed?

Armstrong and Taylor suggest a number of explanations of why unemployment rates vary between cities, districts and regions. They argue that the industry mix should provide a partial explanation because some industries are more prone to unemployment than others (or more correctly the unemployed are more likely to have previously worked in some industry sectors than others). If an area has a high proportion of these types of industries then it is likely that its level of unemployment will be higher. Armstrong and Taylor examine a number of studies, which look at regional unemployment disparities in Nordic countries, the EU, USA and UK

Work by Fieldhouse (1996) is particularly useful. This study used a sample of anonymized records from the 1991 Population Census to show the individual, occupational and industrial propensities to unemployment against control variables (see Table 10.4). Those with a figure above 1 are more likely (than the control group) to be unemployed and those with figures below 1 are less likely. The industry analysis charts the last industry in which people worked prior to unemployment and the control sector is Banking/finance/insurance. The results show that there was a significant greater likelihood of males being unemployed if they worked in construction or did not know which industry they last worked in (a euphemism for no fixed job), for females the high risk industries were manufacturing, construction, distribution and no fixed job. Less risky sectors were Agriculture, extraction, metal manufacturing and transport for males and energy and water for females. Whilst this suggests that unemployment is more prevalent in some sectors than others there is clearly even greater risk for those at the margin of the jobs market.

Other factors that effect the probability of being unemployed including age, occupation, sex, race, educational qualifications and skills, family size, marital status and housing tenure. Table 10.4 shows that significant factors effecting being unemployed are; being young (16-24), non-white, not having higher qualifications, being single, living in rented accommodation (private or public), being a skilled or semi-skilled blue-collar worker and being unskilled (males). See also Brown and Sessions 1997 (quoted in Armstrong and Taylor).

Table 10.4 Logistic regression: unemployment 1991 – individual and occupational characteristics

Variable	Males Exp (B)	Females Exp (B)	Variable	Males Exp (B)	Females Exp (B)
Age 16-24	1.38	2.05	Married	0.50	0.52
Age 25-34	1.10	1.43	Dependant children	1.14	1.06
Age over 45	1.21	*	Tenure-rented	2.63	2.05
Ethnicity-not white	1.66	1.50	Born outside the UK	*	1.13
Has higher qualifications	0.68	0.84	Energy and water	*	0.65
Managerial	1.41	1.31	Other extraction	0.88	*
Skilled non-manual	1.86	1.52	Metals manufacturing	0.90	1.39
Skilled manual	2.34	2.33	Other manufacturing	*	1.35
Partly Skilled	2.93	2.33	Construction	1.50	1.60
Unskilled	4.12	1.71	Distribution etc.	*	1.25
Armed forces	1.20	*	Transport	0.70	*
Don't know class	1.97	*	Other services	*	*
Agriculture	0.59	*	Don't know industry	3.93	7.14

Source: 2% individual SAR for Great Britain (Population Census (1991) Fieldhouse (1996)
Note: *Insignificant at 0.95
Control groups: Age 35-44; White; No high qualification; Not married; No dependant children; Owner occupier; Born in the UK; Banking/finance/insurance; Professional.

Both Fieldhouse and Armstrong and Taylor show that employment disparities are even more pronounced in major cities where the likelihood of significant numbers from the aforementioned disadvantaged groups is greater.

Table 10.5 Unemployment rates in regions and some of the worst inner city districts (1991)

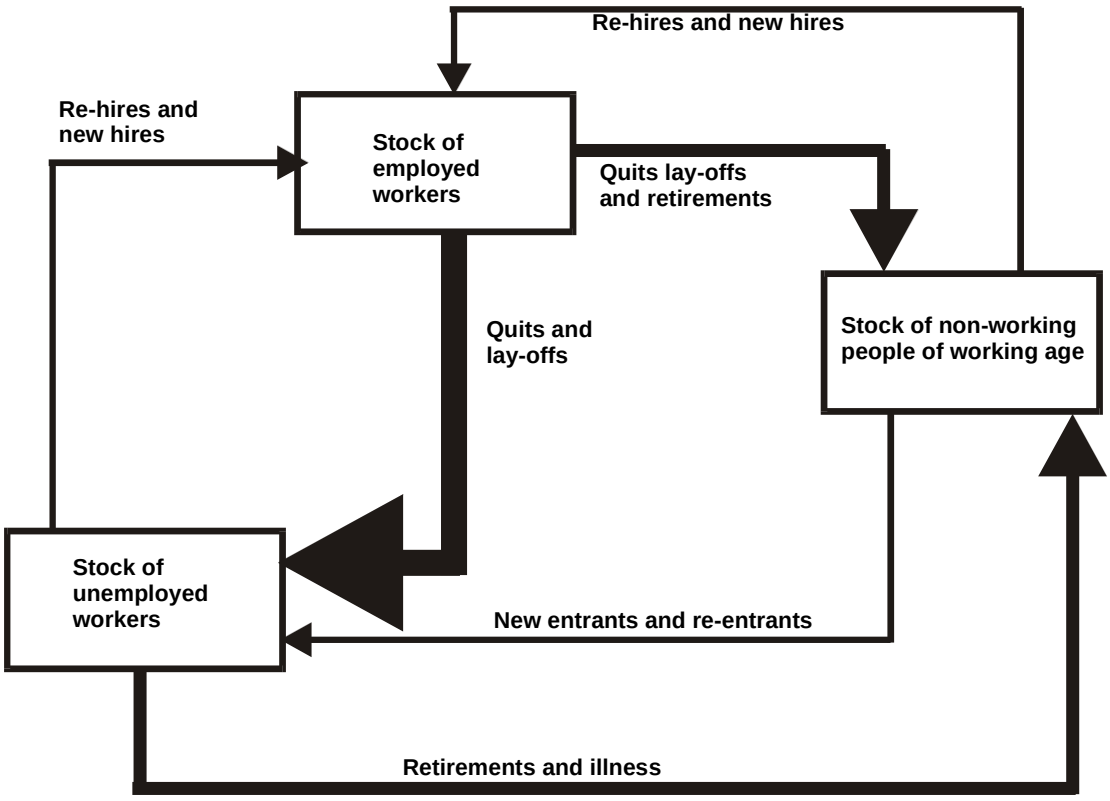
Region	All males aged 16-64	Districts	All males aged 16-64
North	17.2	Tower Hamlets*	31.7
Yorkshire & Humberside	14.7	Hackney*	30.3
East Midlands	11.4	Knowsley	30.0
East Anglia	9.4	Liverpool	29.1
Inner London	21.5	Glasgow City	26.8
Outer London	11.8	Manchester	25.6
Rest of South East	9.2	Middlesborough	24.5
South West	10.6	Islington*	24.0
West Midlands	13.4	Cynon Valley & Rhonda	23.7
North West	14.9	Newham*	23.6
Wales	14.7	South Tyneside	23.6
Scotland	14.5	Southwark*	23.6

Source: 2% individual SAR for Great Britain (Population Census (1991) Fieldhouse (1996)
Note: * London Boroughs

Table 10.5 shows comparisons between regions and some of the worst unemployment blackspots in the UK in 1991. Note that the most severely effected areas are in London and that five out of the twelve worse areas are in London. Armstrong and Taylor suggest that the problem in trying to explain spatial disparities is that cause and effect are inter-mingled, with a fall in demand the most able and mobile workers will leave an area so that the residual is even less attractive to potential investors and employers. Countering this supply side dynamic may be more costly than paying unemployment benefits.

Stock Flow

Analysis thus far has been concerned with the stock of unemployed workers but of equal importance in the rate at which people flow into and out of the unemployment stock. The labour market is made up of three stocks; the unemployed, the employed and those who are not working but are of working age. All three stocks are interconnected. As the labour force expands it will take in new entrants, those who have temporarily withdrawn from the labour market and the unemployed, as it contracts some will become unemployed and some will withdraw. A proportion of those reaching working age may go straight from non-employment into unemployment, similarly workers returning to the labour market after a period of absence may become unemployed as they start searching for jobs. Figure 10.2 shows stocks and flows in the labour market in a time of increasing unemployment where the stock of unemployed is being strengthened by a large influx of people who have been laid off. Note that a relatively large proportion may be channelled into the stock of non-working as the number on alternative benefits (sickness) to unemployment rises and the flow from employment to non-working as the number of early retirees rises.



Armstrong and Taylor suggest that the stock of unemployment depends on two factors:

1. The number of persons flowing into the unemployment stock in each period.
2. The average length of time that the unemployed persons remain in the unemployment stock.

The unemployment rate will thus increase if either the flow into the stock increases or the mean duration increases (caused by a slow outflow from the unemployment stock). The unemployment stock is the product of the inflow rate expresses as a percentage of the labour force and the mean duration of unemployment. Therefore the same level of unemployment can have two different causes. On the one hand an inflow rate of 2% and a mean duration of 6 months will give an unemployment rate of 12% on the other hand an inflow rate of 1% coupled with a mean duration of 12 months will also give a rate of 12%. Armstrong and Taylor suggest that the policy response to each region in the example above should be different. For instance, in the former if regional

demand can be increased then this should alleviate unemployment because on average workers have been out of work for a comparatively short time and are likely to have the necessary skills to return to work quickly. In the latter there may be a need for substantial skills re-training as workers have been out of work longer.

Hidden unemployment

There is a growing body of evidence to suggest that the official unemployment statistics are only the tip of the iceberg. Thus it is likely that regional unemployment is in fact greater than it appears and there is the possibility that the propensity to register (as unemployed) may differ between regions. Not all persons searching for work are registered as unemployed (some will not be entitled to register others may be on government schemes) in addition some people will have temporarily withdrawn from the labour market but would take a job if one was offered (the discouraged worker). A study by Beatty and Fothergill (1996) of UK coalfield areas suggests that there are a number of reasons why the real rate of unemployment might be greater than the official rate:

1. Most of the changes in the administrative procedures (30+ since 1979) for registering as unemployed had the net effect of reducing the total number registered as unemployed.
2. Many of those who had been unemployed were switched to other benefits such as sickness and invalidity benefit (it is suggested that as many as 66% of males leaving "the resister", who did not go to jobs, switched benefits in 1989).
3. A significant number of people made redundant in staple industries (coal, steel etc.) have received lump-sum pay-outs and/or have taking early retirement, others whose spouse is working may not qualify for benefits.
4. Those on the margins of the labour market who alternate between employment, unemployment and inactivity are often "underemployed" when in work (despite their desire to work full-time) and this is not accounted for in the official figures.

Beatty and Fothergill calculate that between 1981 and 1991 economic inactivity rates in coalfield areas rose by 60% against a trend of declining inactivity rates in the economy generally. The major cause of this rise was the increase in the proportion of males aged between 16-64 classified as permanently sick or retired, these increased by 85% and 140% respectively. The proportion of males (aged 16-64) classified as sick or retired in coalfield areas was 70% above the UK average (it was even higher in pit villages), conversely levels of sickness and early retirement were significantly below the national average in the South East Region (see Table 10.6 below). This, in turn, suggests that hidden unemployment may also be a significant contributor to regional economic disparities.

Table 10.6 Index of "Sick" and "Retired" discouraged workers 1991

	Coalfields	Pit villages	South East
Permanently Sick	1.71	1.94	0.65
Retired	1.44	1.92	0.88

Source: Population Census 1991 Beatty and Fothergill (1996)

By including hidden unemployment with the numbers claiming to be unemployed in the 1991 Population Census (as distinct to those registered) Beatty and Fothergill were able to estimate the "real" rate of unemployment in coalfield areas. Overall they suggest that the "real" rate may be as much as twice the "official" rate (see Table 10.7 below), in some individual coalfields they suggest that the "real" rate was as high as 30%.

Table 10.7 Registered and hidden male unemployment 1991

	No	% Economically active
DoE Registered Unemployment	161,300	12.4
Census Unemployment	178,300	12.6*
Government Schemes	30,400	2.1*
Sick	87,700	6.2*
Retired	22,200	1.6*
Real Unemployment	318,500	22.5*

Source: Population Census 1991 and Beatty and Fothergill (1996)
Note: * Hidden unemployment added to the number economically active to calculate the base rate denominator.

Beatty and Fothergill conclude that; "the shortage of employment opportunities is much greater than the official unemployment figures". This suggests that local labour markets in areas facing chronic decline are even more severely affected than the official figures suggest and that regional and local unemployment disparities may be worse than suspected.

Conclusion

It is clear regional unemployment disparities are an important issue for regional economists, there are competing theories as to why regional disparities exist and have remained so intransigent for such a long time. Supply side economists argue that disparities could be significantly reduced if labour markets were more flexible, on the other hand Keynesian economists argue that it is difficult or impossible to reduce labour market frictions to any meaningful extent and the only option is to manage demand spatially. The truth, as always, probably lies somewhere between these two extreme positions. It is therefore of little surprise that policymakers have had so much difficulty in targeting their response and so little success in reducing regional unemployment disparities.

Additional reading

Spatial Disparities in the Impact of the 1990-92 Recession: An Analysis of UK Counties, Taylor J & Bradley S, Oxford Bulletin of Economics and Statistics Vol. 56 No.4, 1994.

Regional Unemployment Disparities and their Dynamics, Martin R, Regional Studies Vol 31 Number 3, 1997 p237

Plant Closure and the local economy: The case of Swan Hunter on Tyneside, Tomaney J, Pike A and Cornford J, Regional Studies, Vol 33 Number 5, July 1999, p401.

Putting Unemployment in its Place: Using the Samples of Anonymized Records to Explore the Risk of Unemployment in Great Britain in 1991, Fieldhouse EA, Regional Studies Vol 30 Number 2, 1996, p119.

A profile of UK Unemployment: Regional verses demographic influences, Brown s & Sessions JG, Regional Studies, Vol 31, Number 4 p351