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Worklessness in the West Midlands

The impact of demographics and multiple risk factors

Executive summary
June 2010

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1 Executive Summary

1.1 Key findings

Previous Observatory research has shown that various demographic characteristics are linked to higher than average levels of worklessness¹; we refer to these as ‘risk factors’. This research has looked in more depth at the impact of certain of these risk factors - alone and in combination with each other - on the probability of worklessness in the West Midlands and in England. The risk factors analysed are:

- Being a young person (aged 16-24)²
- Being an older person (aged over 55 to retirement age)
- Being from a Black, Indian or Pakistani/Bangladeshi ethnic group
- Having a long-term health problem or disability
- Being a lone parent
- Having no qualifications

The analysis has allowed us for the first time to look at the effects of risk factors in isolation, that is, when other factors are low risk, and also to isolate the effects of specific combinations of two risk factors.

We found that people with **none of these risk factors** have a low chance of being out of work - only 6% for men and 14% for women³. These people are no more likely to be workless in the West Midlands than in the rest of England.

Having any **single risk factor** raises the probability of being out of work substantially, to 18% for men and 34% for women on average and sometimes much higher. The highest chance of worklessness is seen amongst Pakistani/Bangladeshi women who (with no other risk factors) have a 70% probability of being workless. Having a long-term health problem/disability or being aged under 25 also raises the probability of being workless substantially, to over 30% for both men and women.

¹ The Economic Inclusion Panel defines the level of worklessness as ***the proportion of the region’s working age population who are not in employment***. This includes people who are unemployed and people who are economically inactive e.g. people who are sick/disabled, students, people looking after the family and home, and retired people. This definition can be understood as the inverse of the employment rate.

² Part (but not all) of the increased risk for young people will be due to students being included.

³ Women consistently have higher rates of worklessness than men because a proportion of them are looking after their home or family.

Amongst people with **two risk factors**, the chance of being workless increases still further. In most cases, people with two risk factors are more likely to be workless than in work. The starkest example of this effect is amongst Pakistani/Bangladeshi females who have no formal qualifications, who have a 91% probability of not working (even when they have no other risk factors). Other groups with high chances of being workless are: young women with no qualifications (72%), young lone parents (75%), young men with no qualifications (61%) and people with long-term health problems/disabilities and no qualifications (74% for women, 63% for men).

Among those people with two risk factors, some specific combinations of risk factors can be seen to increase the chances of being workless to *above* the level that might have been expected simply by combining the level of risk associated with either risk factor alone. This is particularly true for:

- Young people aged 16-24 who also have a second risk factor, and
- All individuals who do not have a formal qualification and who also have a second risk factor.

This suggests that future policy responses need to focus on the effect of the particular combination of risk factors, not just on the impact of each risk factor in isolation. It also highlights that those with none of the risk factors are not in need of intervention.

Our previous research⁴ showed that rates of worklessness are higher in the West Midlands than in the rest of the country, around 2 percentage points higher than the England average, and third highest of the English regions . Worklessness is even higher than the regional average in the main urban areas of the West Midlands. This latest research on the impact of demographics reinforces that picture and shows that, amongst people who have one or more risk factors, the chance of being workless is higher in the West Midlands metropolitan area, and higher still in Birmingham, than elsewhere in the West Midlands and in the rest of England. The gaps with England are higher for people with two or more risk factors than for those with only one risk factor.

The research has not attempted to explore in depth the causal reasons behind this or to compare the position in Birmingham with major cities elsewhere in the UK.

⁴ [Economic Inclusion Baseline Report for the West Midlands](#), March 2009, West Midlands Regional Observatory

1.2 Background

In 2009, the West Midlands Regional Observatory produced the Economic Inclusion Baseline Report for the West Midlands. This provided a comprehensive analysis of the key issues relating to worklessness, unemployment and economic inclusion.

The Baseline report found that over a quarter of the working age population in the West Midlands are workless. The worklessness rate in the West Midlands is 28%, higher than for England as a whole where the rate is 26%⁵. For particular groups of people in the West Midlands the rate of worklessness is even higher. The report identified several factors (described below) which were seen to raise the rate of worklessness, in many cases to over 50%.

However, less was known about how these risk factors interact and about whether someone who experiences multiple risk factors is *much more likely* to become workless. Therefore, we couldn't say whether the higher rates of worklessness experienced in the West Midlands were simply because the area is home to more people from groups at high risk of worklessness or because of other associated factors such as changes in the makeup of the West Midlands' economy.

This research project looks at the relationship between different factors which are linked to worklessness and how they increase an individual's chance of being workless. It also looks at whether concentrations of worklessness are driven primarily by the mix of people living in the West Midlands or whether there are other local factors which play a part.

1.3 How the analysis works

There are many factors that can be associated with a higher chance of worklessness. This report focuses on some of the most important, for which data is available⁶. These factors were identified through previous research. As well as being linked to worklessness, each factor can be seen to have affected a large number of people (see section 6). The factors we have concentrated on are as follows:

- Being a young person (aged 16-24)
- Being an older person (aged over 55 to retirement age)
- Being from a Black, Indian or Pakistani/Bangladeshi ethnic group
- Having a long-term health problem or disability
- Being a lone parent
- Having no qualifications

⁵ Figures from the baseline report which used data from 2007.

⁶ Data on other important equality groups such as LGBT people are not currently collected.

The data processing and modelling was undertaken for the Observatory by the Office for National Statistics' Regional Statistician. The analysis uses a complex statistical technique to isolate the probable impact that each individual risk factor identified has on an individual's chance of being workless when the effects of all of the other risk factors are accounted for.

This approach allows us to calculate the effect that changing one risk factor has on the chance that someone will be workless. This means we are able - for the first time - to see the effect of each risk factor in isolation, that is, when all other factors are 'low risk'. We have also been able to then explore the effect of changing a second risk factor while still leaving the others low risk.

The data used in the analysis covers the four years from July 2004 to June 2008. We deliberately chose this time period because it immediately preceded the start of the recession. It is therefore more likely to reflect the economic and social conditions that are likely to apply in the longer term, whereas the recession will have had a specific and significant economic and social effect in the short-term.

The analysis provides us with a 'probability' of worklessness for a person with the specified combination of characteristics. It is important to note that this is different to looking at 'rates' of worklessness, which capture the proportion of a certain population that is workless, regardless of what their other characteristics are, and will therefore usually be higher.

The images overleaf illustrate how this works in two typical examples, one for females and one for males. In each case, the person on the left has none of the risk factors, the person in the middle has one risk factor and the person on the right has two.

Effects of risk factors - example (female)



No risk factors



- Aged 25-54
- Not Black, Indian or Pakistani/Bangladeshi
- No health problem/disability
- Not a lone parent
- Has a qualification

Risk of worklessness
= 14%

1 risk factor



- Aged 25-54
- *Black ethnic group*
- No health problem/disability
- Not a lone parent
- Has a qualification

Risk of worklessness
= 23%

2 risk factors



- Aged 25-54
- *Black ethnic group*
- No health problem/disability
- Not a lone parent
- *Has no qualifications*

Risk of worklessness
= 61%

Effects of risk factors - example (male)



No risk factors



- Aged 25-54
- Not Black, Indian or Pakistani/Bangladeshi
- No health problem/disability
- Not a lone parent
- Has a qualification

Risk of worklessness
= 6%

1 risk factor



- Aged 25-54
- Not Black, Indian or Pakistani/Bangladeshi
- *Has a health problem/disability*
- Not a lone parent
- Has a qualification

Risk of worklessness
= 31%

2 risk factors



- Aged 25-54
- Not Black, Indian or Pakistani/Bangladeshi
- *Has a health problem/disability*
- Not a lone parent
- *Has no qualifications*

Risk of worklessness
= 63%

1.4 The Findings

1.4.1 No risk factors

The analysis shows that people who do not have any of the risk factors which this report considers have a low chance of being workless. Males with no risk factors only have a 6% (less than one in fifteen) of chance of being workless. The probability is higher for females, at 14% (one in seven), but still low.

People with no risk factors living in the West Midlands, or any of the smaller geographical areas we looked at⁷, are no more likely to be workless than similar people living elsewhere in England. In fact, in some cases they are slightly less likely to be workless.

1.4.2 Single risk factors

Having just one of risk factor increases a person's chance of being workless, in some cases quite dramatically.

On average⁸, the chance of being workless rises to 18% for men (three times the rate for those with no risk factors) and 34% for women (more than twice the rate for those with no risk factors). In some cases, the increase is even greater. For example, Pakistani/Bangladeshi women with no other risk factors have a 70% chance of being workless (so less than one in three will be working). For males, the single risk factors that have the greatest impact on their chances of being workless are a) being between the ages of 16-24 and b) having a disability or long-term health problem. Each of these risk factors multiplies the chance of being workless by more than five.

The chance of being workless for people who have a single risk factor (and no others) is shown in Table 1.

⁷ We looked at four localities– Warwickshire, Worcestershire & Herefordshire; Shropshire & Staffordshire; the West Midlands metropolitan area; and Birmingham. The dataset was not large enough to carry out analysis for smaller geographical areas.

⁸ This is the average of the calculated probabilities.

Table 1: Probability of worklessness for males and females in the West Midlands who have a single risk factor

	Females	Males		Females	Males
Young person	38%	35%	Health problem/disability	40%	31%
Older person	19%	13%	Lone parent	25%	11%
Black	23%	17%	No qualifications	31%	13%
Indian	23%	9%			
Pakistani/Bangladeshi	70%	12%	Average of these probabilities	34%	18%

For people with a single risk factor the chance of being workless also varies according to where they live. This is not the case for people who have no risk factors.

In many cases, people with a single risk factor have an increased chance of being workless due to that risk factor, but their chance of being workless is further increased if they live in the West Midlands, when compared with similar people living in the rest of England. The most dramatic difference is for Pakistani/Bangladeshi women. Pakistani/Bangladeshi women with no other risk factors have a 58% chance of being workless if they live outside the West Midlands, but a 70% chance if they are resident in the West Midlands.

Other groups whose chances of being workless are raised by at least 2 percentage points if they live in the West Midlands (compared to those living elsewhere in England) include:

- Males and females with a long-term health problem or disability
- Young women aged 16-24
- Black women
- Indian men

Some other groups who have a single risk factor are less likely to be workless if they live in the West Midlands rather than elsewhere in England. These include, most notably, lone parents of both sexes. Older people, particularly males, living in the West Midlands also have a slightly reduced chance of worklessness.

The importance of where people live is even more pronounced when we look at smaller geographical areas. In most cases, people living in the more rural parts of the West Midlands, particularly Warwickshire, Worcestershire and Herefordshire, who have one risk factor are less likely to be workless than similar people in the rest of England: Although they are more likely to be workless than people with no risk factors, living in the West Midlands doesn't increase this likelihood any further. In contrast, the chances of people with one risk factor being workless are higher for those living in the West Midlands metropolitan area, and higher still for those living in Birmingham.

For example, a male who has no formal qualifications (but has no other risk factors) and lives outside the West Midlands has an 11% chance of being workless. The chance rises slightly to 13% for a similar male living in the West Midlands and for a male living in Birmingham it rises further to 20%.

1.4.3 Multiple risk factors

As we have seen, the research shows that having a single risk factor increases a person's chance of worklessness. Having more than one risk factor further increases the chance of being workless.

Table 2: Probability of worklessness for males and females in the West Midlands who have different numbers of risk factors

	Females	Males
No risk factors	14%	6%
Average of the probabilities for a single risk factor	34%	18%
Average of the probabilities for two risk factors	61%	46%

On average, having two risk factors (but no more than two) increases an individual's chance of being workless to 61% for females and 46% for males. In most cases, people with two risk factors are more likely to be workless than in work.

In nearly all cases, people with two risk factors have a higher likelihood of worklessness than those with either of these risks factors alone.

In some cases the increased chance of being workless for people with two risk factors is greater than might have been expected by simply combining the level of risk associated with each of the risk factors individually.

There are two risk factors, in particular, which tend to amplify the chance of worklessness when one of those two risk factors is combined with a second risk factor. These are:

- Being a young person (aged 16-24)
- Having no formal qualifications.

In contrast there are two risk factors, in particular, that tend to reduce the overall chance of being workless when either risk factor is combined with another risk factor (although the individual still has a greater chance of being workless than if they had only one risk factor). These are:

- Having a disability or long-term health problem
- Being a lone parent.

There are some exceptions to these general patterns. For example, young Pakistani/Bangladeshi women have only a slightly increased risk of worklessness when compared with their older counterparts.

The differences in an individual's chance of being workless between different geographical areas, which we have noted for people with a single risk factor, tend to be magnified for people with two risk factors. In most cases, people with two risk factors are significantly more likely to be workless in the West Midlands than if they lived elsewhere in England. In only a few cases⁹ is the reverse true.

The variations in likelihood of worklessness between different parts of the West Midlands also increase when the number of risk factors rises from one to two. For people living in the more rural parts of the West Midlands, the chance of being workless is usually below the national average, as with single risk factors. But for people living in the West Midlands metropolitan area, the chances of being workless are generally higher than for the rest of the country. For example:

- An Indian woman with no formal qualifications, living in Warwickshire, Worcestershire or Herefordshire has a 39% chance of being workless.
- An Indian woman with no formal qualifications, living elsewhere in England has a 47% chance of being workless, whereas
- A similar woman living in Birmingham has a 55% chance of being workless (nearly 1.5 times as high as her rural counterpart).

⁹ Black female lone parents and Indian females with no qualifications

1.5 Conclusions and Implications

The analysis presented in this report shows that the gap between the West Midlands' worklessness rate and the national rate is concentrated amongst people with one or more of the risk factors we have identified. People who have none of these risk factors have a low chance of worklessness and that chance is no greater in the West Midlands than for people living in other parts of the country.

Part of the worklessness gap is due to the higher proportion of people living in the West Midlands who have one or more risk factors. However, our analysis shows that this is not the whole story. People with risk factors, and particularly those who have more than one risk factor, tend to have a greater chance of being workless if they live in the West Midlands rather than in the rest of the country. These increased chances are particularly concentrated in the metropolitan area, whereas in other parts of the West Midlands people experience lower chances of worklessness than the rest of the country. Our research has not attempted to explore in detail the reasons behind this or to compare our metropolitan areas with similar major cities in other parts of the country.

Our analysis shows that some groups are more likely to be workless here than in the rest of the country and may require particular support. There may be lessons to be learnt from those groups who are less likely to be workless here than in the rest of the country, such as lone parents and older people.

Having more than one risk factor always increases an individual's likelihood of being workless, and some risk factor combinations amplify the increase. Young people or those with no formal qualifications who also have other risk factors seem to be at a particular disadvantage in the labour market.

This research suggests that future welfare to work policy development, implementation and delivery need to focus on addressing 'in the round' the specific combination of risk factors faced by individuals and specific groups, rather than being based on the premise that each risk factor can be tackled in isolation.

This research has been sponsored by the West Midlands Economic Inclusion Panel, which has endorsed the messages arising. The Panel believes that this research provides a model for segmentation and risk-profiling of workless people that can be used to underpin targeted and cost-effective welfare to work provision.

2 Full document information

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