

## THE IMPACT OF IMMIGRATION ON THE LABOUR MARKET IN BRITAIN

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Immigrants have a profound impact on the labour market of the country to which they move. They tend to be concentrated in particular localities, and in particular occupations and branches of industry: this concentration makes their presence in the local labour market very noticeable to non-immigrant workers. There is a great deal of policy and public concern, often fanned by alarmist reporting in the media, that a large influx of immigrant labour into the labour market will depress the wage levels of non-immigrant workers, especially those with the same skill level as immigrants. Similarly, it is often anticipated that immigrants will push non-migrant workers out of some occupations and industries; indeed, may push them out of the labour market altogether.

Since the late 1990s, Britain has experienced a dramatic increase in the number of immigrants; with a further rise in immigration since 2004, when the accession countries of Eastern and Central Europe joined the EU. The education and skill levels of many recent Eastern and Central European migrants are very different from those of previous migrations to Britain, and so their impact on the British labour market may be different. This possibility required investigation through specific research designed to assess more accurately the impact of immigrants on the labour market outcomes of the native-born population.

This project investigated the impact of immigration on the labour market outcomes of British-born workers, with particular attention to the differences in the effect of immigrants who arrived in the UK before 2004 and since 2004. Immigrants who arrived in the UK in 2004 or thereafter were not divided by country of origin due to the small numbers overall; instead, immigrants were considered together as a group of 'new' immigrants in the UK. The project explored the relationship between the individual level characteristics of British-born workers, the overall opportunity structure of the local labour market, the ethnic composition of local labour market and the size and composition of the migrant population

on the one hand and the labour market outcomes of UK workers on the other.

### Key Findings

- The impact of immigration depends on the timing of the immigration (whether it is pre- or post-2004) and especially on the size of the post-2004 immigrant population in a locality relative to the size of the established or 'veteran' immigrant group there.
- British workers earn more in localities with a larger proportion of immigrants but their wages are depressed where 'new' immigrants make up a larger share of the immigrant population.
- The impact of immigrants on wages is less positive for those British-born workers who have higher levels of qualification than for those with lower qualifications. Similarly, highly educated British born experience a larger negative 'new' immigration impact than the rest of the British-born workers.
- In areas where the proportion of 'new' immigrants in the immigrant community is large, British-born workers are less likely to work in white-collar occupations.
- In areas of substantial immigration, the British-born population is more likely to be economically inactive than to be looking for work or working in unskilled occupations, suggesting that immigrants compete with non-immigrants for low skilled jobs.
- There are different impacts by and on British-born white populations, British ethnic minorities, and new immigrants depending on the level of education, ethnicity and concentration of immigrants in particular localities.



## Research questions

The main question addressed in this project was whether variations across local labour markets in the labour market outcomes of the non-migrant population could be systematically related to the variations in the spatial concentration of migrants, after accounting for variations in other characteristics of local labour markets that are responsible for the differences in the labour market outcomes, such as the opportunity structure of local labour markets.

In addition, we explored whether the immigration labour market effect net of the other factors responsible for the differences in the labour market outcomes, varied:

- according the period of migrant arrival in Britain;
- among different ethnic groups within the British-born population; and
- among groups of population with different levels of education.

The study investigated the issue of the labour market impact of immigrants, taking into account the nature of the local labour market. It did so since immigrants are not randomly distributed across local labour markets in the countries to which they move but are attracted to particular segments of the labour market that have particular characteristics; for example, the employment levels of the local population, the availability of particular types of jobs in particular industries, wages and overall prosperity levels, housing prices, and pre-existing concentrations of 'old' immigrant populations. These characteristics have an effect on both immigrant and non-immigrant populations. The research examined how such local labour market characteristics mediate the relationship between the size of immigrant population and labour market outcomes of individual workers.

## Data

The research used the 2006 Annual Population Survey (APS) which, due to its large and representative samples, enabled analysis to be carried out at the small local area level, in this case unitary authorities. The 2006 survey covered 600 individuals in each of the 201 unitary authority/local authority districts (UAs/LADs) in Britain. In the research, 21 localities were excluded due to the very small numbers of ethnic minorities, resulting in a total of 220,843 cases.

Dependent variables in this study included the following:

1. Dependent variable: natural logarithm of monthly wages of employed population (excluding self-employed).
2. Dependent variable: labour market destinations:
  - Odds to be in social classes I to III: managerial, professional and intermediate occupations
  - Odds to be in social classes V and VI: skilled manual and lower supervisory occupations

- Odds not having social class: never worked/out of the labour force/long-term unemployed.

Reference category for the labour market destinations:

- Social class VII: semi-skilled and unskilled manual occupations and short-term unemployed.

## Methodology

The method used in this study is linear (for prediction of wages) and multinomial (for prediction of the labour market destinations) multilevel regression modelling. The individual level analysis is focused on individuals aged between 16 and 65. The macro-level units of the analyses are UAs/LADs which are proxies of local labour markets.

The multilevel regression method allows modelling of random intercept and slopes in regression and hence enables estimates of how particular characteristics at the macro-level affect the average values of the dependent variable in each of the macro-level units. It also enables testing of whether all groups in the particular macro-level unit are affected by the macro-level variable in a similar or different fashion.

In all multilevel regressions, at the level of individuals, the random intercept as well as the slopes of variables 'immigrant status', 'ethnicity' and 'level of education' were modelled as functions of the following macro-level variables which describe local labour markets and its populations: the percentage of British born ethnic minorities, of percentage pre-2004 immigrants, the proportion of new immigrants among the whole population of immigrants, the percentage of employed population, the industrial and occupational composition of local labour markets and the overall level of socio-economic wellbeing of their populations. The groups of comparison in the population were White British (reference group), British-born ethnic minorities, immigrants and people with different levels of educational qualifications.

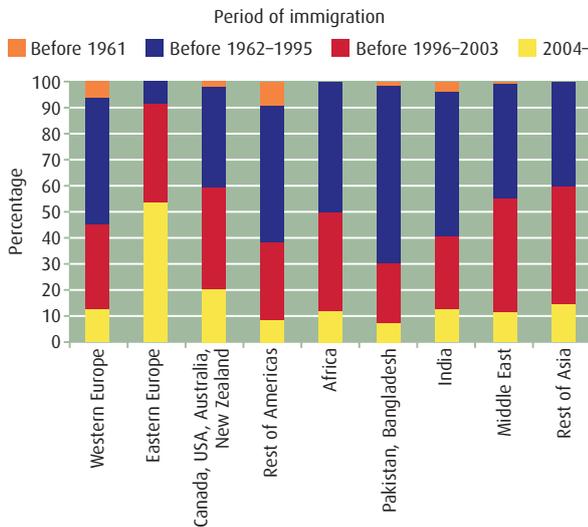
## Findings

In Figure 1 we present the composition of the immigrant population in Britain by their period of arrival in the UK and by their national/ethnic origin. Figure 1 shows that with a few exceptions, the largest proportion of immigrants of any origin arrived in Britain between 1961-1995. However, among immigrants of Eastern/Central European origin, the vast majority, that is more than 90%, arrived after 1995, and 54% arrived in 2004 or thereafter.

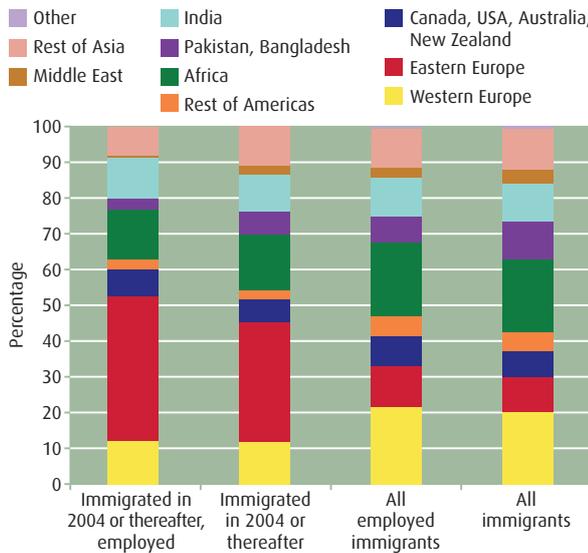
In Figure 2, we present differences in national/ethnic composition between all populations of immigrants and those migrants who arrived in Britain in 2004 or thereafter. In the population of new immigrants, only immigrants from the Asian continent are represented in the same proportion as within the whole population of immigrants. The proportions of immigrants from Western Europe, the American continents, Australia, New Zealand and Africa in the population of new immigrants are twice as small as corresponding proportions in the whole population of immigrants. At the same time, among new immigrants the



proportion of immigrants from Eastern and Central Europe is very large, about 30%, while among the employed new immigrants, the proportion of Eastern and Central European immigrants reaches 40%.

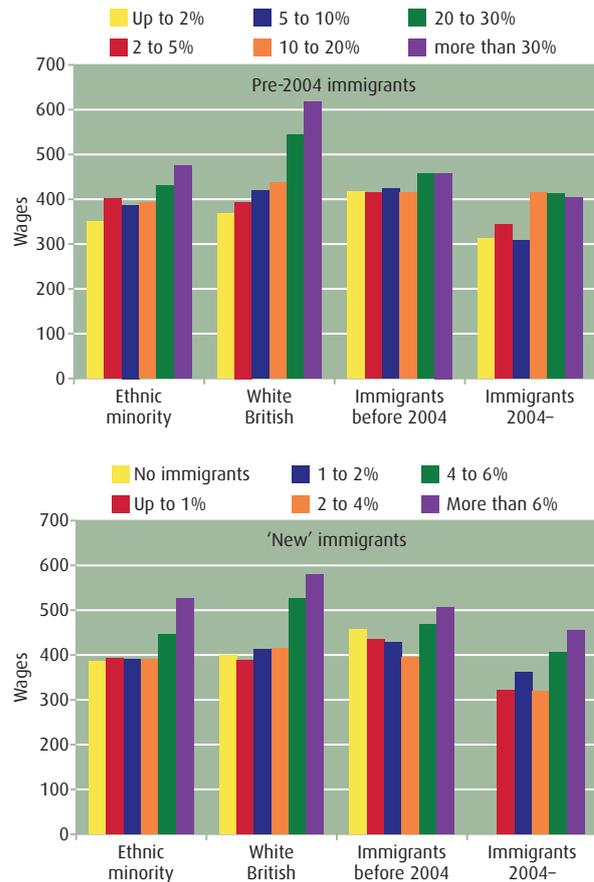


**FIGURE 1. IMMIGRANTS COMPOSITION IN BRITAIN BY NATIONAL/ETHNIC ORIGIN AND PERIOD OF IMMIGRATION**  
 Source: Annual Population Survey, 2006.



**FIGURE 2. IMMIGRANTS IN BRITAIN BY COUNTRY OF BIRTH, PERIOD OF IMMIGRATION AND EMPLOYMENT STATUS**  
 Source: Annual Population Survey, 2006.

The graphs in Figure 3 show differences in the weekly wages of different groups of British workers (excluding the self-employed) according to the size of the populations of the pre-2004 immigrants (top graph) and new immigrants (bottom graph) in the local labour market. One can see that for all groups of the British population, higher wages are clearly associated with large concentrations of immigrants, both pre-2004 and new immigrants, and these associations are particularly strong for British-born populations.

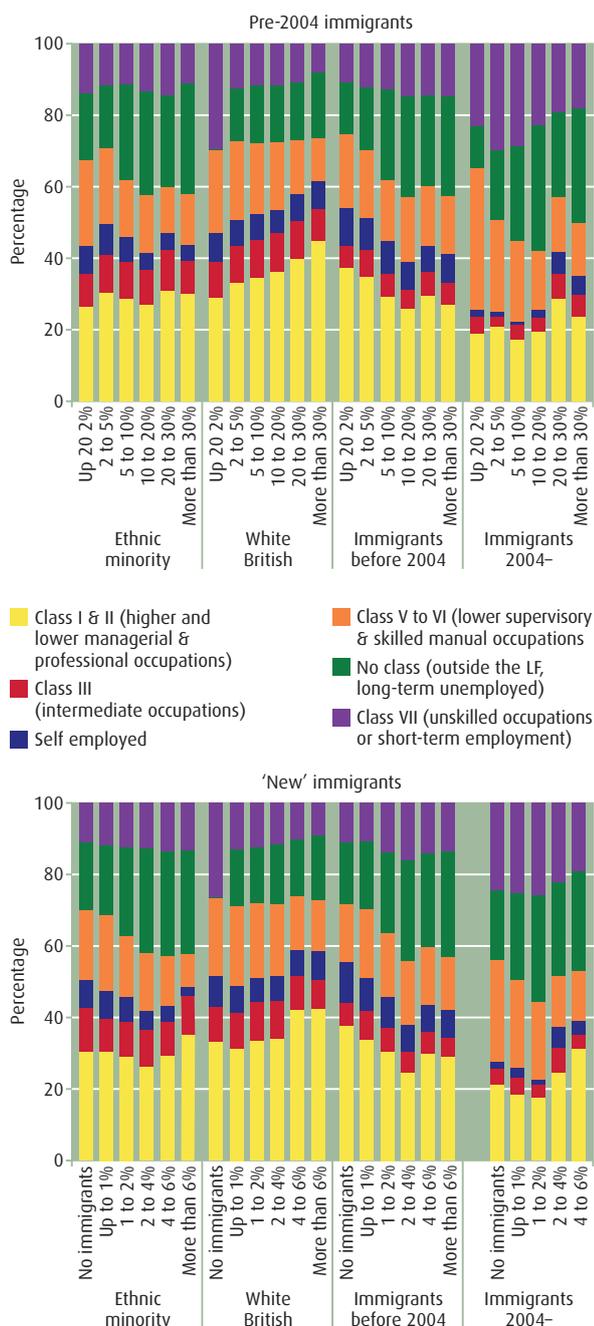


**FIGURE 3. WAGES OF DIFFERENT GROUPS OF POPULATION ACCORDING TO THE SPATIAL CONCENTRATIONS OF PRE-2004 AND 'NEW' IMMIGRANTS**  
 Source: Annual Population Survey, 2006.

Further, in Figure 4 we present distributions of the labour market (LM) destinations of different groups of the population in areas with different densities of population of immigrants in Britain.

For the White British population, a more advantageous distribution of LM destinations coincides with larger populations of pre-2004 immigrants. For ethnic minorities, an increase in the size of the population of pre-2004 immigrants is accompanied by an increase in the size of the economically inactive population. The pre-2004 immigrants have the highest share of white collar jobs and the lowest share of economic inactivity in the areas with the smallest populations of the immigrants. Finally, among new immigrants, the share of higher-status white collar jobs increases in areas with the highest concentrations of pre-2004 immigrants. However, economic inactivity among new immigrants is lowest in areas with the smallest populations of pre-2004 immigrants.

For the White British population, an increase in the size of the 'new' immigrant population corresponds to an increase in the share of higher status white collar occupations and coincides with a simultaneous decrease in the share of unskilled occupations. British-born ethnic minorities who live in areas with larger populations of new immigrants tend to make up a larger proportion of the economically inactive population and a smaller share of higher status blue collar



**FIGURE 4. LABOUR MARKET DESTINATION OF POPULATION IN BRITAIN ACCORDING TO SPATIAL CONCENTRATIONS OF PRE-2004 AND 'NEW' IMMIGRANTS**

Source: Annual Population Survey, 2006.

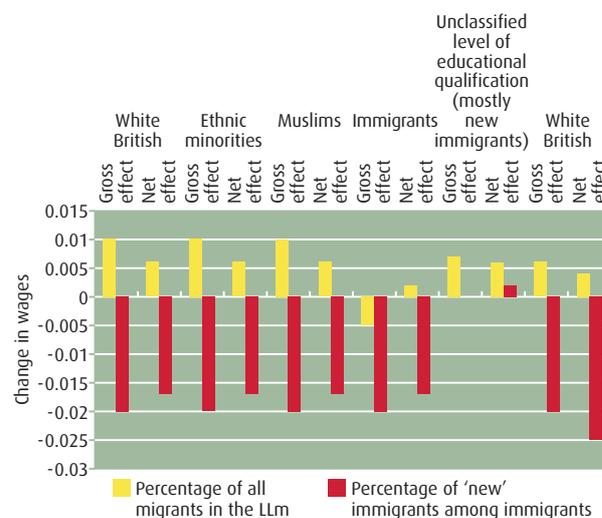
occupations as well as a smaller share of the self-employed population. Among pre-2004 immigrants, the proportion of higher status white collar occupations decreases while the proportion of the economically inactive population increases in areas with larger populations of new immigrants. For new immigrants themselves, living in the areas of their concentration is associated with an increase in their share of higher status white collar occupations, but also with a decrease in their share of blue collar occupations.

However, these associations do not account either for the characteristics of individual workers, or for the conditions

of the local labour markets and differences in these conditions across Britain. Nor do they account for the associations between the spatial concentrations of immigrants and conditions of the local labour markets. To control for these factors while considering the impact of the spatial concentrations of immigrants on the labour market outcomes of British workers, we present the results of the multilevel multivariate regression analyses of labour market outcomes of British workers.

### Multilevel linear regression analyses: the impact of immigration on wage levels of British-born populations

The findings (Figure 5) demonstrate that in localities with larger immigrant populations, British-born workers have higher wage levels (net of the other differences in the characteristics of localities) than in localities where there are no large concentrations of immigrants. However, if the size of the new immigrant population relative to the pre-2004 immigrant population is taken into account, then the results are somewhat different. We find that in the localities where new immigrants make up a relatively larger share of the whole immigrant population, the wages of the non-immigrant population are lower. Taking account of differences in job opportunities across localities makes only a slight difference to this finding.



**FIGURE 5. GROSS AND NET EFFECTS OF A 1% INCREASE IN THE RELATIVE SIZE OF MIGRANT POPULATION IN THE LOCAL LABOUR MARKET ON WAGES OF EMPLOYED POPULATION IN THE LOCAL LABOUR MARKET** Source: Annual Population Survey, 2006.

The key factor determining the effect of the new immigration on the wage levels of British workers is the size of the immigrant population in the area before 2004. Although, in general, the new immigrants are more likely to be highly concentrated in localities where the British-born population earns less than the British average, the new immigrants only had a negative effect on wage levels in the localities where labour market competition between



immigrants and non-immigrants did not exist before 2004. In other words, in areas which had experienced high levels of immigration before 2004, the arrival of new immigrants did not have any effect on the wages of the British-born population.

While 'veteran' immigrants tended to be concentrated in local labour markets with better job opportunities and hence higher wages, when these factors were taken into account, the concentration of immigrants is still positively related to the wages. Therefore, it is possible that the higher percentage of immigrants contributes to the higher level of wages of the British-born population.

In addition, the findings show that the impact of the size of immigrant population on the wages of the British-born population is similar for both its White British members and its British-born ethnic minority members.

In summary, then, concentrations of immigrants have a beneficial impact on the wage levels of British-born populations, but in localities where 'new' immigrants make up a large proportion of the immigrant population, then the wages of British-born workers are depressed.

A common perception is that it is the poorly qualified British-born workforce and British ethnic minorities who are most adversely affected by competition with immigrants. The findings do not support this perception. The research shows that the impact of the size of immigrant population on the wages of unskilled workers is no different from its impact on workers with average levels of skills or education.

However, the positive relationship between the wages of all British-born workers and the size of the immigrant population in their locality is weaker for those with the highest levels of educational qualifications. At the same time, the highly qualified are also the group whose wages are most adversely affected by a relatively high proportion of new immigrants (relative to veteran immigrants) in a locality.

### Multilevel multinomial regression analyses: the impact on labour market participation and access to higher status occupations

In localities with large immigrant populations, it appears that immigrants do compete with non-immigrants for low skilled jobs and displace the non-immigrant population from such jobs, pushing them out of employment. Thus, the research shows that the British-born population in areas of substantial immigration is more likely to be economically inactive rather than looking for work or working in unskilled occupations (Figure 6, top graph). Taking account of differences in job opportunities between localities makes these relationships only slightly weaker.

However, the impact in respect of blue-collar occupations (Figure 4 bottom graph) is different: the concentration of immigrants in particular localities does not seem to adversely affect the chances of the British-born population working in higher-status blue-collar occupations, for

example in semi-skilled or lower supervisory occupations, rather than becoming unskilled workers. British-born workers are less likely to work in white-collar occupations in localities with a relatively large population of 'new' immigrants even after taking into account differences between localities in terms of job opportunities. These are also localities where the size of the immigrant population before 2004 was rather small.

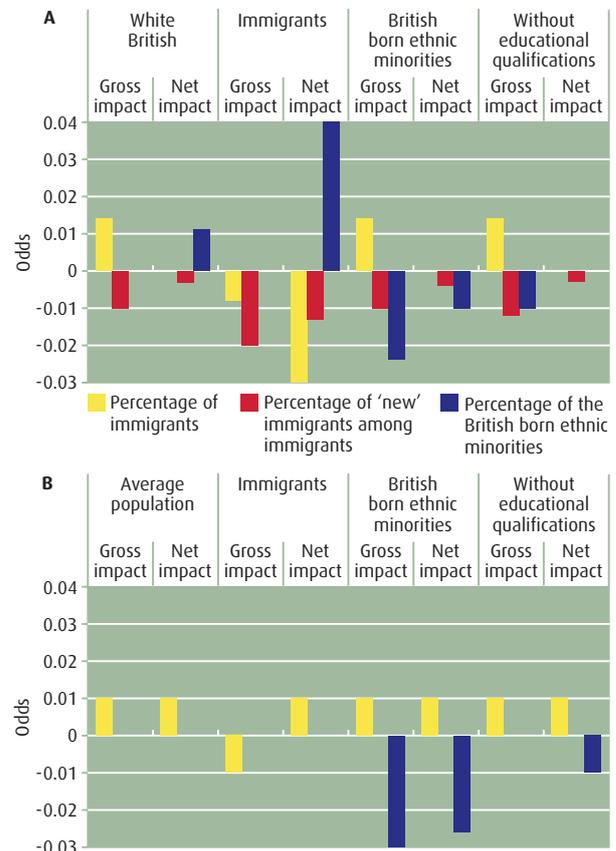


FIGURE 6. IMPACT OF THE 1% INCREASE IN THE SIZE OF IMMIGRANT POPULATION ON THE ODDS OF (A) WHITE COLLAR OCCUPATIONS OR (B) ECONOMIC INACTIVITY VERSUS THE ODDS OF UNSKILLED JOBS OR SHORT-TERM UNEMPLOYMENT FOR DIFFERENT GROUPS OF BRITISH POPULATION Source: Annual Population Survey, 2006.

In localities with a high concentration of British ethnic minorities both the White British population and especially immigrants are more likely to work in white-collar occupations. Members of ethnic minorities are themselves less likely to work in white-collar occupations in localities with a large presence of British-born ethnic minorities. For the immigrants themselves, living in a locality with a large immigrant population means that they are less likely to be employed in white collar occupations.

In summary, then, there is a complex relationship between high levels of immigration in a locality on participation in the labour market and on the level of job attained. The effect varies across immigrant and British-born groups and for sub-groups within British born groups. Overall, there is no adverse effect on British-born populations in terms of

competition for higher-status work with established immigrant populations, but where there are concentrations of new immigrants, British-born populations in that locality may be less able to compete.

## Conclusions

It is apparent from the research that the effects of immigrants on labour market outcomes should be considered in the context of other characteristics of local labour markets which are responsible for labour market outcomes of the population in Britain.

This study shows that net of other characteristics of local labour markets, the size of the immigrant population in different localities can be related systematically to the labour market outcomes of the British population, in terms of their chances of being in employment and of achieving higher-status occupations and wages.

It is also apparent from the research that any consideration of the impact of immigrants on the labour market needs to take account of when the immigration occurred, that is pre- or post-2004, and of the size of the post-2004 immigrant population in a given locality relative to the size of the veteran immigrant population.

The research demonstrates that concentrations of new immigrants do have a negative labour market impact in those localities where they make up a larger share of the whole population of immigrants, i.e. localities where the size of the immigrant population was quite small before 2004. Indeed, in such localities, the arrival of new immigrants since 2004 has had a negative labour market effect in respect of wages and opportunities for working in white-collar occupations for non-immigrant workers. This finding suggests that in those local labour markets with relatively large immigrant populations before 2004, immigrants and non-immigrant workers had established a balance, with each group occupying particular occupational niches in these localities. The arrival of new immigrants after 2004 did not disturb this established balance as they entered existing labour market niches for immigrant workers. However, the situation may be quite different in those local labour markets with no significant immigrant population before 2004 and where such a balance had not been established — in these areas, the new arrivals may be competing for the same jobs with non-immigrants whose outcomes are negatively affected.

## Relevant publications:

- Shapira, M. (2009) Spatial concentration of immigrants and their impact on employment opportunities in the UK labour market, In Edmonston, B. Raymes, J. and Salzmann T. (eds.) *Demographic Aspects of Migration*, VS-Verlag (Forthcoming)
- Shapira, M. (2008) Understanding of the Labour Market Impact of Immigration in the UK, *CES Briefing N46*, Centre for Educational Sociology, University of Edinburgh, Edinburgh.
- Shapira, M. (2008) Immigrants and British labour market — Do British workers gain or lose in competition with pre-2004 and new immigrants and British born ethnic minorities?, Presentation at the workshop on 'Recent Research and its Policy Implications: Understanding of the Labour Market Impact of Immigration in the UK', Centre for Educational Sociology, University of Edinburgh, Edinburgh, December.
- Shapira, M. (2008) Spatial concentration of immigrants and their impact on employment opportunities in the UK labour market, Invited talk at the Autumn Meeting on Demographic Aspects of Migration, Nuremberg, October.
- Shapira, M. (2008) Understanding of the labour market impact of immigration in the UK, Presentation at the Joint BURISA/UPTAP Workshop, London, September
- Shapira, M. (2008) Immigrant impact on wages of British workers, European Population Congress, Barcelona, July.

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