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**A COMPARISON OF EARNINGS AND OCCUPATIONAL  
ATTAINMENT OF REFUGEES AND ASYLUM SEEKERS AND  
ECONOMIC IMMIGRANTS IN THE UK**

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## *Who Performs Better?*

### *A Comparison of Earnings and Occupational Attainment of Refugees and*

### *Asylum Seekers and Economic Immigrants in the UK*

**(Rukhsana Kausar, Stephen Drinkwater)**

#### **Introduction**

People move across borders seeking better employment opportunities, a new home or a safer place to live. Whatever the reason may be, or whether the initial intention is stay temporarily or permanently, many migrants have settled in receiving countries. Immigrants can be classified into economic and non-economic migrants including refugees and asylum seekers. Asylum is different from migration as it is the protection given by a country to someone on the basis of a well founded fear of persecution. This difference can also be seen in the economic performance of different groups. Distinguishing between economic migrants and refugees/asylum seekers has always been a complicated question in Britain, both for government officials as well as for the public as the process involves assumptions about authenticity of genuine political asylum seekers and individuals migrating for solely economic reasons (Adelson, 2004).

The focus on asylum has emerged in the UK in the last two decades but there are many gaps in economic research regarding the different impacts of immigrants especially in differentiating between types of immigrants. However, there has been a lack of research on examining the differences between the labour market performance of immigrants i.e. asylum seekers and economic migrants. When considering the performance of different migrant groups, then on

average, one would expect economic migrants to be more likely to be in work, earn more, to pay more in taxes and to be a lighter burden on the host economy than refugees and asylum seekers. However, this may be due to them possessing different characteristics.

Therefore, along with employment, earnings are another important indicator of labour market success so it is important to analyze the earnings differentials between different immigrant groups such as refugees/asylum seekers and economic migrants and also to investigate if any double disadvantage exists for female refugees and asylum seekers. Based on many research findings, earnings differentials are expected to be directly linked with differences in the education, skill, social, demographic and cultural background of immigrants. These factors may affect wages in one way or another resulting in advantages or disadvantages for the particular immigrant group as immigrants assimilate in host societies in terms of their earnings and occupational attainment.

Along with economic motives and socioeconomic background, ethnicity has a separate impact on labour market considerations. Research has also shown that different ethnic groups assimilate differently in the labour market as compared to whites, in terms of their earnings. Therefore this study will explore further the difference in earnings across different ethnic groups.

This paper will attempt to differentiate refugees and asylum seekers from economic migrants using Home Office data and UNHCR information in conjunction with Labour Force Survey (LFS) data for the UK. Refugees and asylum seekers will be the main focus of the study here and their performance in terms economic activity and employment will be explored in relation to other immigrants in the UK. The main objective is to make a comprehensive analysis including

the use of regression techniques to compare the employment differentials between asylum seekers/refugees and economic immigrants using Labour Force Survey data from 2001-2006.

This paper will also look at another measure of employment success i.e. occupational attainment. Occupation is broadly defined as the job or profession which a person adopts to earn a livelihood and whatever he earns is directly linked with the type of occupation adopted. The choice of occupation has a direct impact on an individual's earnings and earnings may vary with the occupation and in this regard, implying that occupational analysis can not be ignored in assessing labour market performance of a person. Nickell (1982) regards a man's occupation as a portrayal of his general well-being such as his health condition, language usage, food taste, clothes, cars, and his position in society and being in high level occupation means a chance to earn a high income.

Conversely, a low level occupation is related with poor rewards and less opportunities. Occupational analysis is also very important in the other disciplines. For example an extensive literature in sociology has investigated how educational achievements and other individual characteristics affect a person's achieved socio-economic status. For example, Blau and Duncan (1967) is one of the classic studies in sociology.

Finally, as not all the individuals interviewed in the LFS data answer the earnings questions, some may misrepresent their earnings or sometimes earnings proxies are used instead. So because of measurement error and missing observations in the earnings data it seems appropriate to examine occupational attainment as well as another measure of success at work.

## **Empirical Literature Review**

There has been extensive research on the earnings assimilation of immigrants from different perspectives. An immigrant's integration and assimilation is of great concern for governments in the US, Europe, Asia to Australia for policy reasons. The study of immigrants' earnings assimilation was pioneered by Chiswick (1978) following his examination of the US labour market using cross sectional regression analysis. His findings were that the initial earnings of newly arrived immigrants were 17% less than native workers because of a lack of specific skills e.g. language and education but over time they accumulated country-specific human capital and their earnings grew at a rate faster than native born workers, eventually overtaking natives after around 14 years in the US. Borjas (1985) re-examined the Chiswick conclusion using a cohort analysis for the US and finds a slower rate of assimilation for immigrants and this decline in the earnings of earlier cohorts as compared to more recent cohorts can be attributed to the consequence of being from different waves of immigration. In particular, there was a decline in the characteristics of immigrants admitted to the US in the later part of his period of analysis. Hatton (1997) also discussed differences in the assimilation of pre-1890 immigrants. His findings were that immigrants who arrived as children had similar earnings profiles to the native-born while those who arrived as adults suffered an initial earnings disadvantage but their earnings grew at a rate faster than the native-born.

McDonald and Worsnick (1998) looked at the earnings of immigrants in Canada and found that differences in job tenure were a significant factor in explaining the earnings gap relative to natives. Furthermore the rate of earnings convergence was also dependent upon the labour

market or macroeconomic conditions on arrival for each immigrant cohort. Schaeffer (1995) presented a theoretical framework for the analysis of work effort and consumption of US immigrants relative to native born citizens and found that immigrants perform differently because of externally imposed differences in incentives such as the monetary cost of moving, staying in touch with family and obligations left behind. In particular, immigrants outperform natives, and also that immigrants as well as the host society both invest in the assimilation process. Bratsberg and Ragan (2002) also support the fact that immigrants who acquire US schooling earn higher wages than other immigrants and this advantage is mainly due to greater educational attainment and higher returns to education for those who complete their schooling outside the US. Bleakley and Chin (2004) concluded that English language proficiency also significantly positively affected wages among adults who immigrated to the US as children although much of the English language skills are mediated by years of schooling.

Chiswick and Miller (2002) analyze the impact of language fluency on U.S. immigrant earnings and find a 14% wage differential between fluent and non-fluent immigrants from non-English speaking countries. They also find some evidence of a complementary relationship between language ability and other forms of human capital. Various other US studies also show a positive relationship between language skills and immigrants success e.g. Chiswick (1993); Carliner (1995); White and Kaufman, (1997). Friedberg (2000) considers the source of human capital as the most important determinant of the earnings gap between immigrants and natives and that education obtained before migration is an important explanation of the initial earnings disadvantage of different immigrants including refugees and asylum seekers. She also concludes

that experience and education obtained domestically is more valuable than human capital attained in the home country.

British research confirms many of these broad findings for immigrants to the UK. Chiswick (1980) was the first study on the adaptation of immigrants to the UK labour market. He used the 1972 General Household Survey (GHS) and found no significant earnings gap between white immigrants and non-white UK-born individuals, but a 25% gap between white UK-born and non-white immigrants. He also finds no wage gap between white and non-white UK-born individuals, though the sample size for the latter group was quite small. Bell (1997) used the GHS for 1973-1992 and found that immigrants in the UK have on average more years of schooling and that this gap increased across successive cohorts. He also found black immigrants were the most disadvantaged group in terms of earnings but that this gap significantly decreases with the increase in the duration of stay in the UK.

Shields and Wheatley-Price (1998) also report that UK labour market assimilation is dependent upon ethnicity and different socio-economic characteristics. Most immigrants received lower returns to schooling obtained in the UK than native born whites and education obtained abroad was less valuable for all immigrants than that obtained in the UK. Whereas Battu and Sloane (2004) found that over education is higher and under education is lower for nonwhites relative to whites and their earnings regression results also confirm that there exist differences for returns to over-education, required education and under-education. They also found that UK born nonwhites have lower returns to required education compared to non-white immigrants and whites and receive no premium for over-education.

Furthermore, potential UK experience was more valuable for non-whites than all other immigrants. A lack of language fluency is also a part of economic disadvantage and acts as an incentive in the acquisition of the host country's language. Leslie and Lindley (2001) established in their study that the higher earnings of white natives in Britain are heavily influenced by their comparative advantage in terms of language. Both from a social and economic point of view, language is a separating barrier between immigrants and natives and actually facilitates discrimination and so plays an important role in widening the earnings gap between immigrants and natives. The presence of fluency related earnings gaps between ethnic minority immigrants and natives is also confirmed by Dustmann and Fabbri (2003, 2005).

In terms of refugees and asylum seekers, the empirical work of Khan (1997) analyzing both refugees and economic migrants found that refugees have a higher probability of investing in schooling than other foreign born immigrants but she analyzed only Cuban and Vietnamese refugees in the US. Also, in this regard the distinctive work by Cortes (2004) analyzes the differences in time horizons between refugees and economic immigrants and its effect on subsequent human capital investments and wage assimilation. Using the 1980 and 1990 Integrated Public Use Samples of the US Census and comparing both groups, she finds that in 1980 refugees earned less but after their arrival they made substantial gains and in 1990 surpassed the earnings of economic immigrants and the greater accumulation of human capital actually contributed to the higher earnings of refugees. She concludes that refugees on average start at lower annual earnings but have faster earnings growth over time and have relatively higher country-specific human capital investment than economic migrants. A study of the Dutch labour market by Hartog and Zorlu (2005) found that during the first five years, higher education

achieved at home does not pay off for refugees. A number of factors account for this such as language barriers, the equivalency of certifications of professional qualifications in the host country, an element of discrimination, either physical or mental distress for refugees and asylum seekers or social integration problems for other immigrants.

For the UK, Lindley (2002a) undertook an analysis of the labour market performance of British refugees and economic migrants and finds that there are larger earnings penalties and higher unemployment propensities for immigrants from refugee sending countries as compared to non-refugee countries. This implies significant differences between the labour market performance of these two groups and refugee earnings patterns differ from those of non-refugee immigrants. Lindley (2002a) also finds that a lack of fluency has a negative impact on the earnings of ethnic minority men and women and there also exist significant unexplainable ethnic penalties for UK-born south Asians and non-whites, relative to native born whites with an underlying element of discrimination to this.

The earnings of economic migrants and refugees are greatly influenced by their choice of occupation as well. As with earnings, one's occupational success in the labour market depends on a number of factors such as education, experience, skills and other expertise. For immigrants it includes some other factors, as they have to compete with natives, such as country-specific skills which can also be enhanced over time implying assimilation. Chiswick and Miller (2007) examine the determinants of occupational attainment and the impact of occupation on earnings both for native born and foreign born individuals using a longitudinal survey of immigrants to Australia. Their comparison shows an association between earnings penalties and less-than-

perfect transferability of human capital skills internationally and estimates of occupational attainment show that years of schooling and English language proficiency mainly determine access to high paying occupations. Similarly Shields and Wheatley-Price (2001) consider English language fluency as an important determinant of occupational success amongst British immigrants and an increase in the provision of English language training would reduce the employment gap by 10% between white natives and ethnic minorities in the UK. The study by Elliott and Lindley (2008) on UK immigrants suggests that higher and lower pay occupations have an overrepresentation of immigrants and there is an ethnic pay penalty even after taking into account occupational segregation. Their occupational segregation model have used LFS data for 1993-2003 and shows that white immigrants are overrepresented in the professional category and non-white immigrants in low paid occupations possibly having an element of ethnic-based discrimination which prevents those individuals from obtaining higher paying occupations.

The study here will attempt to add to the literature by differentiating between refugees and asylum seekers, mainly economic migrants and economic migrants to explore the earnings differentials between them using LFS data from 2001 to 2006. The focus will remain on refugees and asylum seekers and their performance will be compared with other immigrants to the UK using regression techniques separately by gender. The influence of characteristics such as ethnicity and education on the earnings of these immigrant categories will also be investigated. The determinants of occupation will also be analysed as an alternative measure of labour market success to earnings, although the influence of occupation on earnings will not be investigated.

## **Data Sources**

Two different data sources are used to classify the different types of migrants. Given that the LFS contains information on the immigrant's country of origin, year of arrival in the UK, economic activity, education, earnings and other socio-economic characteristics then this is the main data source used in the analysis. However, there is no indicator in the LFS that can be used to identify different types of immigrants e.g. asylum seekers/refugees and economic migrants. Therefore in order to examine the labour market performance of asylum seekers/refugees it is necessary to combine the information on the migrant's country of origin and year of arrival from the LFS with other data sources. Thus an immigrant type variable ( $Immig_i$ ) is constructed using the information from the following sources along with the LFS.

### ***(i)- For labour market socio-economic variables:***

Micro data from the LFS for the period of 2001-2006 is used here as during this period the number of asylum applications filed in the UK reached its peak. The LFS is the largest social survey carried out across the UK. The LFS began in 1973 as a result of a requirement of the European Economic Community for the UK to submit employment and unemployment statistics. Up to 1983 the survey was carried out on a biannual basis, after 1983 the LFS was conducted annually. In 1991 the survey was redeveloped so that for the first time in spring 1992, data was made available on a quarterly basis. From 1998 the LFS has been providing headline employment and unemployment figures for each month of the preceding quarter.

The LFS contains information on the immigrant's country of origin, year of arrival in the UK, earnings, education and other socio-economic characteristics. It provides a wide range of data on labour market statistics including employment, wages and economic activities along with other social and demographic information. It is a panel of nearly 60,000 households and approximately 138,000 respondents interviewed each quarter for five consecutive quarters with basic core questions along with varying non-core questions asked in each quarter. The survey consists of two parts, first part is related to basic information on household family structure, basic housing information and other demographic details of the individuals while second part contains information on respondents economic activity, employment, hourly earnings, education and health etc. Apart from 2001, only wave 1 information has been used here to avoid double counting and due to the fact that information on earnings is available in waves 1 and 5.

Only the working age population (16 to 59/64) excluding those in full time education are included in the sample. Furthermore it just includes employees and so excludes the self-employed. LFS data is also used to construct an earnings variable. This has been widely used in the literature e.g. Dustmann and Fabbri (2005) and Clark and Lindley (2006) and has better information on low earners than other earnings data sources in the UK. Gross hourly earnings from the LFS are deflated using the Retail Price Index (RPI), a measure of inflation, so that real earnings are used in the comparisons.

In the LFS, individuals sometimes either refuse to report their earnings or proxy respondents are used. So there are missing values or they are assigned imputed earnings by choosing a respondent with similar characteristics as non-respondents. Thus, earnings data have the

drawback of measurement error due to missing observations and proxy earnings, so to complement earnings, an occupational analysis also becomes important, in order to compare the findings. The occupational classification is defined in the LFS using the NS-SEC measure. This is the National Statistics Socio-economic Classification (NS-SEC) which is an occupationally based classification and the grouped variable has eight classes.

However given the lack of a direct question in the LFS about an immigrant's status, additional data sources are used to identify asylum seekers/refugees from economic migrants and to create the different categories of immigrants. Information on country of origin along with the year of arrival is then matched with the other data sources to decide on whether the country is a refugee sending country or not in that period.

***(ii)- For the Definition of Immigrant Categories:***

Immigrants move for different reasons depending upon their own and their country's social, political and economic conditions. They adopt different methods for reaching the destination country, either directly as genuine refugees and asylum seekers, economic migrants or economic migrants in the guise of refugees and asylum seekers i.e. bogus asylum seekers. The people migrating via business or work permits have obvious economic objectives and are clearly defined under the economic migrant category but the problem lies in the differentiation of the true refugees and asylum seekers from bogus asylum seekers.

The definition of an asylum seeker may vary from country to country, depending on the laws of each country. However, in most countries, the terms asylum seeker/asylee and refugee differ only in the place where an individual asks for protection. An asylum seeker/asylee asks for protection after arriving in the host country, while a refugee asks for protection and is granted this protected status outside of the host country. In the UK, asylum seekers are individuals who claim to be refugees who are waiting for a decision from the Home Office on their case. The UK has a tradition of providing a safe haven for genuine refugees and is a signatory to the 1951 Geneva Convention and its protocol. Globally it is among the 17 countries accepting quota refugees on a regular basis.

Therefore the term asylum seeker will refer here to all those who claimed asylum in the UK during a specific period of persecution (for reasons of race, religion, nationality or membership of a particular social group), political violence, communal conflict, ecological disaster or poverty in their country of origin. They are protected by the principle of non-refoulement, which forbids states from returning people to countries where they might be at risk of persecution. Asylum seekers can make their application at their port of entry to the UK or after entry at the UK Border Agency (UKBA) formerly known as Immigration and Nationality Directorate (IND).

Therefore the information published by the following various sources have been used to define the different categories of immigrants. Only data from 1989 is included because of the difficulty of obtaining consistent information before then, as well as the fact that asylum applications to the UK only really started to grow in the 1990s.

- Asylum Statistics United Kingdom 1989-2006: Home Office Statistical Bulletin
- Home Office Control of Immigration Statistics United Kingdom: 2000, 2003 and 2006
- The State of the World's Refugees, UNHCR-1997-98 & 2000-A Humanitarian Agenda
- Global Refugee Trends-2006–UNHCR and Asylum Levels and Trends in Industrialized Countries- Second Quarter 2007, UNHCR.

***Construction of the Immigrant Category Variable( $Immig_i$ ):***

The immigrant category variable ( $Immig_i$ ) is constructed using the information from the above mentioned sources along with the LFS. To construct the  $Immig_i$  variable, information on the immigrant's country of origin and year of arrival is used from the LFS to place each immigrant into a particular category decided on the basis of the information provided by the Asylum Statistics, Home Office Statistical Bulletins and Control of Immigration statistics. The Asylum Statistics Bulletin provides detailed information on the number of asylum applications filled and accepted each year (from 1989-2006) for each country in the world in tabular form, while the Control of Immigration statistics (for 2000, 2003 and 2006) contains additional information on entry control at ports and after control, work permits, asylum and migration and grants of settlements by nationality and category.

The grants of settlement table provides information on number of applications accepted for settlement under criterion of work permits, businesses, recognized refugees, exceptional and discretionary leave under humanitarian protection, dependent categories and all other acceptances for each nationality.

The grant of settlement information for the years 2000, 2003 and 2006 is used as these are the years when the number of asylum seekers was high in the UK and also for availability reasons. All settlements recorded as recognized refugees, exceptional or discretionary leave and under humanitarian protections are aggregated as a total refugees figure and business and work permit settlements under a total Business figure. These two figures are then used to construct a Refugees-Business (Rb) Ratio for each nationality for 2000, 2003 and 2006.

The Rb-ratio is obviously high if the source country is a sending high numbers of refugees/asylum seekers and the ratio is lower for countries sending a higher number of business and economic migrants. For example, the Rb-ratio is very high for countries having internal conflicts or civil wars over a long period and is sending a high number of refugees and asylum seekers as compared to other business migrants. Such countries include Ethiopia, Somalia, Uganda, Algeria, Afghanistan, Sri Lanka, Iran and Iraq. For some countries it is high for a certain period and lower otherwise, depending upon the country's socio-political conditions. For example, for Ethiopia and Somalia the ratio has been greater than 5 since 1989 and for Ghana the ratio is between 1-5 in 2000 and 2006 and less than 1 in 2003 and some countries do not send any refugees or asylum seekers at all, having a Rb-ratio equal to 0. Because of the fact that immigrants from some countries consist of both asylum seekers and economic migrants, all immigrants are divided into the following four categories using the above information along with knowledge of the country's socio-political history.

In particular these categories are defined using information from the UNHCR, Home Office publications for the asylum seekers in the UK and the Rb-ratio based on grants of settlement (an

indication of categories is shown below). This information is then matched to the LFS data by country of origin and year of arrival to classify the immigrants into one of the four categories.

<b>Category I: Refugees and asylum seekers</b>	<b>Rb-ratio &gt;5</b>
<b>Category II: Mixed Refugees and Economic Migrants</b>	<b>Rb-ratio 1 – 5</b>
<b>Category III: Mainly Economic Migrants</b>	<b>Rb-ratio <math>0 &lt; &amp; &lt; 1</math></b>
<b>Category IV: Economic Migrants</b>	<b>Rb-ratio = 0</b>

For all above four categories those who arrived as other family members such as spouses, children and other dependants under family reunification are classified on the same basis and are included in the same category as would be the main applicant.

**Category I: Refugees and asylum seekers**

This category refers to all those who have almost certainly claimed asylum in the UK during a specific period of high risk of persecution (for reasons of race, religion, nationality or membership of a particular social group), political violence, communal conflict, ecological disaster or poverty in their country of origin and are protected by the principle of non-refoulement. This category is intended to include only true refugees and asylum seekers as the Rb-ratio is very high (>5) for this group, numbers seeking asylum are high and the country's circumstances are also such that they verify them as pure refugees and asylum seekers for that particular time period, rather than economic migrants.

### **Category II: Mixed Refugees and Economic Migrants**

The category of Mixed Refugees and Economic Migrants includes immigrants from countries which have sent relatively high numbers of asylum seekers and refugees along with some economic migrants to the UK in certain time periods. So a mixed category is created to include the migrants from those countries and times when it is difficult to distinguish between them. The Rb-ratio for this category is generally between 1 and 5.

### **Category III: Mainly Economic Migrants**

This category contains immigrants who have mainly moved to the UK to work or look for work. The Rb-ratio is generally between 0 and 1 for this category and includes all those countries sending some refugees and asylum seekers to the UK but also a high percentage of other immigrants using information from the publications noted above. This category includes migrants from countries such as China, India and Pakistan.

### **Category IV: Economic Migrants**

This category is intended to include only economic migrants and consists of countries sending migrants with the sole purpose of economic preferences and so the Rb- ratio is 0 for this category. This includes countries such as Australia, USA, New Zealand and Malaysia.

An example of the division of immigrants from different countries into each category is presented here in tabular form to show how an immigrant from a certain country and time period is placed into that category on the information used from the previously mentioned sources.

### Countries in each Category

<b>LFS Code</b>	<b>County</b>	<b>No. of Asylum Applications</b>	<b>Refugee-Business Ratio</b>	<b>Category I, II, III, IV</b>
<b>11</b>	<b>Australia</b>	<b>-----</b>	<b>0</b>	<b>IV</b>
<b>14</b>	<b>Kenya</b>	<b>High in Mid 1990s</b>	<b>1-5</b>	<b>II</b>
<b>16</b>	<b>Tanzania</b>	<b>High 1993-96</b>	<b>1-5</b>	<b>I: 1989-96 II: &gt;=1997</b>
<b>26</b>	<b>Jamaica</b>	<b>Nothing until 1996, High in early 2000</b>	<b>&gt;5: 2000 &lt;1:2003 &amp; 2006</b>	<b>IV: 1989-95 III: &gt;=1996</b>
<b>108</b>	<b>Iraq</b>	<b>High in late 1990s &amp; early 2000s</b>	<b>&gt;5</b>	<b>I: &gt;=1989</b>

Note: Please see Appendix A.1 for details of which countries are in each category.

Appendix A.2 contains the percentage accounted by each country in each category.

Key socio-economic variables will be used as explanatory variables, as well as employment related variables. However, as discussed in the literature review, an important determinant of earnings assimilation is language proficiency, which unfortunately could not be used here as it is not available in the LFS on a consistent basis.

## **Descriptive Statistics**

Given that socio-economic characteristics were analysed in the previous chapters, just the labour market characteristics of different immigrant categories are discussed below.

### **Job Related Characteristics by Immigrant Category**

#### *Males*

Table 1(a) displays descriptive statistics for job related characteristics including job tenure, firm size, sector and industry for different categories of male immigrants. The results are discussed separately for each gender excluding those who are self-employed and so the focus is just on those in the paid employment.

In terms of industry, a similar percentage of all categories of immigrants work in production and manufacturing industries. Refugees/asylum seekers and the mixed category of male migrants are relatively highly concentrated in the retail sector, hospitality and transport/communications as compared to other industries, all of which tend to be low paying sectors. While a higher proportion of both mainly economic and economic male migrants are found in finance/real estate, public and social services such as education and other services, including IT related office jobs. The percentage of economic migrants involved in health and social work is lowest among all migrants.

**Table 1 (a) Job Related Characteristics by Immigrant Category; Males**

<i>Category</i>	<i>Refugees &amp; Asylum Seekers</i>	<i>Mixed Refugees &amp; Eco Migrants</i>	<i>Mainly Economic Migrants</i>	<i>Economic Migrants</i>	<i>Total</i>
<b>1-Grouped Industries</b>					
Production	0.00%	1.06%	1.02%	1.53%	1.22%
Manufacturing/Supply	16.65%	19.45%	17.01%	17.23%	17.48%
Construction	4.79%	2.34%	5.18%	4.77%	4.44%
Retail Industry	18.99 %	25.47 %	14.48 %	10.39 %	15.46 %
Hospitality	15.26%	13.28%	8.13%	12.56%	12.21%
Transport/Communications	10.34%	10.31%	7.67%	8.19%	8.76%
Finance/ Real estate	3.15%	4.36%	6.28%	8.05%	6.38%
Public Admin/ Education	6.94%	6.06%	6.28%	9.29%	7.82%
Health / Social Work	8.45%	11.26%	15.43%	7.90%	10.01%
Other Services	13.11%	17.32%	20.33%	20.36%	18.81%
<b>2-Part Time</b>	15.52%	17.97%	7.10%	6.29%	9.75%
<b>3-Firm Size</b>					
Less than 25 Employees	37.86%	40.54%	27.92%	30.26%	32.63%
25-50 Employees	47.13%	45.69%	48.74%	50.90%	49.06%
More than 50 Employees	15.01%	13.77%	23.35%	18.84%	18.31%
<b>4-Tenure</b>					
Under 1 Year	33.04%	32.59%	35.34%	33.17%	33.48%
2-5 Years	47.58%	52.03%	47.22%	45.14%	47.06%
5-10 Years	15.43%	10.90%	13.73%	12.07%	12.67%
10+ Years	3.95%	4.49%	3.71%	9.61%	6.79%
<b>5-Sector</b>					
Private	84.74%	84.91%	79.76%	82.91%	82.90%
Public	15.26%	15.09%	20.24%	17.06%	17.10%
<b>No. of Observations</b>	793	941	1082	2746	5562

A relatively high percentage of refugees/asylum seekers are part time (more than 15%), compared with well under 10% of economic migrants. Approximately a half of all immigrant males work in average size firms, having 25-50 employees, and have 2-5 years of job tenure, which is even more than 50% for mixed refugees and economic migrants. But a relatively large proportion of refugees/asylum seekers and mixed refugees are present in smaller firms, at around 40%, whereas a higher proportion of economic migrant males are employed in larger firms, those which have more than 50 workers.

Economic migrants have the highest proportion with tenure of over 10 years, while over 80% of refugees/asylum seekers have less than 5 years tenure. Again consistent with firm size, more than three quarters of immigrants work in the private sector, with the highest percentage amongst refugees and asylum seekers.

### ***Females***

Job-related characteristics for female immigrants are shown in Table 1 (b). These descriptive statistics show that health and social services is the most preferred industry for each of the female immigrant categories i.e. particularly for mixed refugees/economic migrants, in which more than a third work in this sector. Production and construction are the least preferred industries as less than 1% of each category work in these industries. Female immigrants are also under-represented in the transport/communication industry, with around half the proportion seen here as compared to male immigrants. The proportion of economic migrant women in finance and real estate is higher than refugees/asylum seekers, as was seen for males. For all other industries their distribution is more or less the same. A quarter of all immigrant females work part time, but again this is higher among refugees and asylum seekers, where more than one-third are in part time work. As with males nearly a half of females are employed in medium sized firms, with 25-50 employees. Less than three-quarters work in the private sector but this is still the highest of all groups. The percentage in smaller firms with less than 25 employees is highest for refugees and lowest in large firms for this category, whilst again this position is reversed for economic migrants.

**Table 5.1(b) Job Related Characteristics by Immigrant category; Females**

<i>Category</i>	<i>Refugees &amp; Asylum Seekers</i>	<i>Mixed Refugees &amp; Eco Migrants</i>	<i>Mainly Economic Migrants</i>	<i>Economic Migrants</i>	<i>Total</i>
<b>1-Grouped Industries</b>					
Production	0.68%	0.18%	0.54%	0.52%	0.51%
Manufacturing/Supply	10.09%	7.38%	9.74%	9.28%	9.26%
Construction	1.54%	0.37%	1.62%	0.77%	0.98%
Retail Industry	16.07%	12.36 %	11.80%	9.74%	11.17%
Hospitality	9.06%	6.64%	5.30%	8.76%	7.91%
Transport/Communications	5.98%	3.51%	4.65%	4.96%	4.86%
Finance/ Real estate	4.96%	4.98%	8.23%	7.23%	6.90%
Public Admin/ Education	12.99%	14.76%	13.64%	16.06%	15.09%
Health / Social Work	20.21%	34.69%	30.09%	20.73%	24.08%
Other Services	17.44 %	15.13%	14.39%	21.95%	19.24%
<b>2-Part Time</b>	33.22%	34.56%	23.30%	22.96%	25.53%
<b>3-Firm Size</b>					
Less than 25 Employees	40.18%	39.03%	29.98%	32.87%	33.87%
25-50 Employees	44.29%	42.14%	49.43%	49.43%	48.02%
More than 50 Employees	15.54%	18.83%	20.59%	17.70%	18.11%
<b>4-Tenure</b>					
Under 1 Year	30.48%	36.60%	38.19%	36.57%	36.15%
2-5 Years	49.32%	51.39%	53.07%	47.78%	49.36%
5-10 Years	15.75%	9.43%	6.69%	11.35%	10.78%
10+ Years	4.45%	2.59%	2.05%	4.31%	3.71%
<b>5-Sector</b>					
Private	75.51%	69.06%	70.23%	71.37%	71.39%
Public	24.49%	30.94%	29.77%	28.63%	28.61%
<b>No. of Observations</b>	585	542	924	2865	4916

## Hourly Earnings

It is important to have a look at raw statistics for the hourly earnings of both males and females immigrants before proceeding to any regression analysis to have a general idea of these differentials. The earnings data relates to gross hourly pay prior to any tax deductions and has been deflated using the RPI. Also, the number of observations is much lower than in the previous

analyses because not all those in employment answer the earnings questions. The pattern of gross hourly earnings for both males and females is discussed below.

### *Males*

Table 2(a) shows gross hourly earnings for male immigrant categories. The hourly earnings are on average pretty similar for both categories I and II i.e. the refugee categories, but much higher, in relative terms, for categories III and IV i.e. the economic migrants.

**Table 2(a)**

**Gross Hourly Earnings in £ by Immigrant Category; Males**

<i>Variable =Hourearn</i>	<i>No .of Obs.</i>	<i>Mean</i>	<i>Std .Dev</i>	<i>Min</i>	<i>Max</i>	<i>% with Earnings &gt;£15</i>
<b>Refugees &amp; Asylum seekers</b>	536	8.46	5.39	1.97	65.15	10.26%
<b>Mixed refugees &amp; Eco. Migrants</b>	610	8.67	6.83	0.71	86.63	12.46%
<b>Mainly Economic Migrants</b>	743	12.81	8.94	1.31	75.43	30.01%
<b>Economic Migrants</b>	1845	12.86	12.03	0.13	228.80	26.83%
<b>All Immigrants</b>	3757	11.53	10.13	0.13	228.80	22.74%

Average earnings of the economic migrant groups are over £4 an hour higher. As discussed previously, this may be because of the fact that they are self selecting in their objective to maximize their economic welfare and are more likely to be highly skilled and educated, in turn maximizing their chances of getting higher returns for their skills and education. This will be explored more fully in the regression analysis.

Category III and IV immigrants also have far more dispersed earnings, especially for economic migrants due to the higher levels in professional and managerial jobs, also to be discussed later. The percentage of those with hourly earnings of more than £15 an hour is more than double for mainly economic and economic migrants as compared to asylum seekers and refugees. Almost one-third of mainly economic migrant males earn more than £15 an hour, while over a quarter of economic migrants earn over this amount, while this fraction is around one-tenth for both categories I and II of refugees/asylum seekers. Their lower hourly wages indicate that they are more likely to do routine and semi routine jobs as shown by their high percentage in retail and hospitality industries, which will again be explored later in the occupational analysis.

### *Females*

Female hourly earnings are presented in Table 2(b) and again the dispersion is quite high for economic migrants.

**Table 2 (b)**

**Gross Hourly Earnings in £ by Immigrant Category; Females**

<i>Variable =Houearn</i>	<i>No .of Obs.</i>	<i>Mean</i>	<i>Std .Dev</i>	<i>Min</i>	<i>Max</i>	<i>% with Earnings &gt;£15</i>
<b>Refugees &amp; Asylum seekers</b>	421	8.76	7.38	1.42	98.09	9.03%
<b>Mixed refugees &amp; Eco. Migrants</b>	371	8.36	4.54	0.68	32.29	7.01%
<b>Mainly Economic Migrants</b>	675	9.69	5.85	0.27	47.81	14.37%
<b>Economic Migrants</b>	2086	10.50	8.56	0.19	189.74	16.68%
<b>All Immigrants</b>	3587	9.92	7.65	0.19	189.74	14.33%

Hourly earnings for categories I and II of refugees/asylum seekers and mixed immigrants are very similar to males but average earnings for females are much lower for mainly economic and economic migrants compared to their male counterparts. Thus the gap between the groups is narrower than seen for males. Also percentage of females earning more than £15 an hour is lower than males for all four categories, but the differential is not great for refugees and asylum seekers between males and females. In contrast, this difference is quite high for mainly economic and economic migrant females as the percentage of females earning more than £15 an hour is around half that seen for their male counterparts.

## **Occupational Attainment**

### *Males*

Descriptive statistics for the occupational distribution of jobs is reported here in Table 3(a) for males for different immigrant categories. The statistics show that professional and elementary occupations have the highest percentages of immigrants in them. There are some differences between the groups, with refugees/asylum seekers concentrated in the latter occupation and economic migrants in the former.

While personal services and administrative and secretarial jobs are the least preferred occupations for males, with the smallest fraction of refugees/asylum seekers in these categories as both require language fluency along with other skills. The percentage in professional occupations is the highest for mainly economic and economic migrants and around one-third of mainly economic and one-fifth of economic migrant males are in such jobs.

**Table 3(a)**

**Occupational Attainment by Immigrant category; Males**

<i>Category</i>	<i>Refugees &amp; Asylum Seekers</i>	<i>Mixed Refugees &amp; Eco .Migrants</i>	<i>Mainly Economic Migrants</i>	<i>Economic Migrants</i>	<i>Total</i>
<b>Managers and Senior Officials</b>	7.83%	8.29%	13.14%	18.87%	14.39%
<b>Professional Occupations</b>	11.74%	12.96%	31.54%	19.82%	19.79%
<b>Associate Professional and Technical</b>	7.59%	9.46%	10.08%	14.21%	11.71%
<b>Administrative and Secretarial</b>	4.80%	5.95%	5.37%	4.52%	4.96%
<b>Skilled Trade Occupations</b>	14.52%	10.84%	8.88%	11.99%	11.55%
<b>Personal Service Occupations</b>	2.40%	4.68%	2.59%	3.53%	3.38%
<b>Sales and Customer Service Occupations</b>	9.72%	7.12%	5.92%	3.57%	5.50%
<b>Process, Plant and machine Operatives</b>	14.77%	14.88%	9.25%	7.50%	10.13%
<b>Elementary Occupations</b>	26.26%	25.82%	13.23%	15.99%	18.58%
<b>No. of Observations</b>	792	941	1081	2745	5559

This is not that surprising as economic migrants who have a strong educational and professional background can easily fit into these jobs. Chiswick and Miller (2007) also found similar results for Australia, and agree that years of schooling and the proficiency in English are the key influential factors for the access to high paying occupations.

Over 10% of immigrants from categories III and IV are in associate professional and technical jobs and a much higher percentage from categories I and II are in skilled trade or manual jobs such as process, plant and machine operative jobs. Refugees and asylum seekers are therefore

much more concentrated in lower skilled occupations. For example, around 40% are in operatives or in elementary occupations, compared with less than a quarter of economic or mainly economic migrants.

### *Females*

The occupational distribution of females by immigrant category is shown in Table 3(b). The table shows that the highest percentage of women is employed in professional and associate professional and technical jobs and personal services. The latter category was the least preferred type of job for males. Again there are large differences by immigrant category. Mainly economic and economic female migrants are more inclined towards associated professional or technical jobs and the highest proportion of mixed refugees and economic migrants (Category II) are in personal service occupations, as more than 20% of each category are in these occupations. On the other hand, similar to their male counterparts and consistent with other results, the highest percentage of female refugees and asylum seekers is seen in low level elementary jobs. The lowest percentage of each category is in operative manual jobs, which is just a mere fraction, of less than 2%.

At least 15% of each category, with the highest percentage seen for mainly economic migrants, is in administrative or secretarial jobs as women generally find office and secretarial work relatively easier, not normally requiring many specific skills. While personal service occupations are dominated by both refugee categories, with about 22% mixed refugees and economic migrant females in this occupation.

**Table 3(b)**

**Occupational Attainment by Immigrant Category; Females**

<i>Category</i>	<i>Refugees &amp; Asylum Seekers</i>	<i>Mixed Refugees &amp; Eco. Migrants</i>	<i>Mainly Economic Migrants</i>	<i>Economic Migrants</i>	<i>Total</i>
<b>Managers and Senior Officials</b>	7.34%	4.05%	6.69%	10.51%	8.70%
<b>Professional Occupations</b>	10.58%	10.31%	17.80%	18.19%	16.34%
<b>Associate Professional and Technical</b>	12.12%	17.50%	21.47%	19.87%	18.98%
<b>Administrative and Secretarial</b>	15.19%	16.94%	18.12%	14.70%	15.65%
<b>Skilled Trade Occupations</b>	1.71%	1.47%	1.19%	1.43%	1.42 %
<b>Personal Service Occupations</b>	16.72%	21.55%	11.76%	12.88%	14.09%
<b>Sales and Customer Service Occupations</b>	10.75%	10.87%	8.20%	6.88%	8.03%
<b>Process, Plant and machine Operatives</b>	3.07%	3.31%	3.13%	2.93%	3.03%
<b>Elementary Occupations</b>	22.53%	14.00%	11.65%	12.60%	13.76%
<b>No. of Observations</b>	543	543	927	2864	4920

Overall the results show that differentials exist for both males and females, though with similar findings for economic migrants and refugees and asylum seekers across the genders. Economic migrants are more likely to have professional jobs, while refugees and asylum seekers are more involved in elementary level jobs. Personal services and administrative and secretarial jobs are more dominated by females, with relatively few male immigrants in these occupations. These differentials will be further examined using regression analysis in the following sections.

## Empirical Methodology

Labour market outcomes for asylum seekers/refugees and economic immigrants in terms of their earnings and occupational success will now be compared using regression analysis. This study differentiates between asylum seekers/refugees and economic immigrants and investigates ethnic variations and other differences within immigrant groups by focusing on differences in earnings and occupational achievements. Thus regression techniques are used to compare earnings and occupational attainment between the different categories of immigrants, with separate analysis for male and female immigrants.

### *Earnings Equation*

Formal regression analysis is used to explore the determinants of earnings for immigrants and to compare the earnings of refugees/asylum seekers relative to other immigrants, as shown by the equation below:

$$\ln(Y_i) = a_0 + \beta X_i + \gamma Immig_i + \varepsilon_i \quad (1)$$

where:

$\ln(Y_i)$  = Log hourly earnings

$X_i$  = A Set of control variables (e.g. age, education, region, marital status)

$\beta$  = Associated vector of coefficients for  $X_i$

$Immig_i$  = Set of dummies for Immigrant Category

$\gamma_i$  = Associated vector of coefficients for  $Immig_i$

$a_0$  = Constant      and       $\varepsilon_i$  = Error Term

Therefore, the coefficients in the vector  $\gamma$  give the difference in log earnings of other immigrants relative to asylum seekers/refugees, after controlling for other factors. Multiplying this coefficient by 100 gives approximately the percentage differential in earnings for a particular category. Earnings are estimated using a basic specification, including just socio-economic characteristics and an augmented specification which adds job related factors. Earnings differentials for different categories of immigrants will be estimated using Equation (1). The empirical specification is based on some of the key papers in the literature including Wheatley-Price (2001), Lindley (2002a), Dustmann and Fabbri (2005) and Clark and Lindley (2006).

### ***Occupational Attainment Equation***

Given the categories of occupations used to classify occupational attainment, the observed dependent variable is of an ordered and categorical nature. The NS-SEC categorizes occupations into eight classes, as discussed previously in the descriptive statistics for occupational success. For the simplicity, these eight classes have been grouped in to four job types i.e. routine, semi-routine, intermediate and professional/managerial jobs. This occupational distribution is thus described on a 1-4 scale with 1 being lowest and 4 the highest. Therefore, an ordered response model is used for the occupational analysis.

The observed categorical dependent variable is related to occupational attainment as follows:

$$O_i^* = \beta X_i + \gamma Immig_i + \varepsilon_i \quad (2)$$

where  $O_i^*$  is an unobserved variable indicating the individual's occupational attainment. Individual characteristics are included as the explanatory variables and are represented by  $X$  and its associated coefficient vector by  $\beta$ .<sup>1</sup> The latent dependent variable ( $O_i^*$ ) is related to the variable ( $O_i$ ) as follows:

$$O_i = 1 \text{ if } O_i^* \leq \delta_1$$

$$O_i = 2 \text{ if } O_i^* \leq \delta_2$$

$$O_i = 3 \text{ if } O_i^* \leq \delta_3$$

$$O_i = 4 \text{ if } O_i^* \leq \delta_4$$

where the  $\delta$ 's are the unknown parameters to be estimated jointly with  $\beta$ .

The logical order of alternative choices implies that ordered probit models which are estimated as an ordered response model, which is more parsimonious than an unordered model. The explanatory variables are the same as in the basic specification. The occupational attainment of different immigrant categories is estimated along with the effect of other variables. Marginal effects of being in professional/managerial occupations are also reported. The specification comprises of age in quadratic form and educational dummies. Education is again measured on the basis of age left full time education and is divided into three levels i.e. high, medium and low levels of education. Equation (1) will be estimated using two sets of control variables for both males and females. Firstly, controls for ethnic origin, region dummies, marital status, year of interview and years since migration, as an indicator of assimilation, are included. Secondly, controls are also added for labour market variables such as industry, job tenure, firm size and sector to see their impact on earnings variations between different categories of immigrants.

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<sup>1</sup> For a useful discussion of the application of an ordered probit model see Verbeek (2000) pp 190-194.

Separate estimates for each immigrant group and gender are also reported using the basic specification. Earnings estimates for all immigrant males and females with the workplace control variables are then presented. Robust standard errors are used and also the number of observations and adjusted R-squared statistics are reported at the end of each table.

## **Regression Results for Earnings**

### **Earnings Estimates for Immigrant Males and Females**

#### ***Males***

Table 4 reports log hourly earnings estimates for an earnings regression for all immigrants and include the migrant group dummies. The results are typical from those of standard wage equations, with more educated and experienced workers earning significantly higher wages and there being an earnings premium for those living in London. The estimates for males show that age, education, ethnicity and years since migration are quite important determinants of earnings. Age has a very significant positive but overtime decreasing impact on earnings and initially increases an individual's earnings by around 7%. Marital status is not significant for male immigrants, although the impact of being married is positive on earnings. Region of residence also affects earnings, since as well as in London, earnings are significantly higher in the East and the South compared to the North. The earnings advantage is over 20% higher for those living in London as compared to the North. Being in the East and the South has an earnings premium of just less than that seen in London. Clark and Drinkwater (2007) find that living in London and the South East increases the probability of getting a professional/managerial position for an individual and this impact is greater for men than women which can be another obvious reason for locating in London, even if the cost of living is much higher there.

**Table 4: Log Hourly Earnings Estimates for Earnings; Males and Females**

	<i>Males</i>	<i>Females</i>
<b>Age</b>	0.069*** (0.008)	0.105*** (0.007)
<b>Age Squared</b>	-0.070*** (0.000)	-0.010*** (0.000)
<b>Married</b>	0.024 (0.022)	-0.034* (0.019)
<b>Medium Education</b>	0.159*** (0.024)	0.154*** (0.023)
<b>High Education</b>	0.492*** (0.023)	0.413*** (0.022)
<b>Midlands</b>	-0.007 (0.033)	0.028 (0.036)
<b>East</b>	0.190*** (0.039)	0.131*** (0.038)
<b>London</b>	0.208*** (0.028)	0.245*** (0.030)
<b>South</b>	0.170*** (0.032)	0.099*** (0.031)
<b>Wales</b>	0.008 (0.069)	0.115* (0.067)
<b>Scotland</b>	0.004 (0.047)	0.041 (0.046)
<b>N. Ireland</b>	0.029 (0.118)	-0.019 (0.111)
<b>South Asians</b>	-0.382*** (0.025)	-0.212*** (0.026)
<b>Black</b>	-0.326*** (0.031)	-0.151*** (0.027)
<b>Mixed &amp; Others</b>	-0.273*** (0.029)	-0.141*** (0.026)
<b>Year 2001</b>	0.046 (0.030)	-0.073** (0.029)
<b>2002</b>	0.046 (0.032)	-0.033 (0.031)
<b>2003</b>	0.045 (0.031)	-0.021 (0.031)
<b>2004</b>	0.083** (0.031)	-0.017 (0.029)
<b>2005</b>	0.022 (0.028)	-0.010 (0.028)
<b>Mixed Refugees &amp; Economic Migrants</b>	0.062* (0.032)	0.158*** (0.035)
<b>Mainly Economic Migrants</b>	0.314*** (0.029)	0.249*** (0.032)
<b>Economic Migrants</b>	0.132*** (0.027)	0.195*** (0.028)
<b>Years since Migration</b>	0.011*** (0.002)	0.015*** (0.002)
<b>No. of Observations</b>	3671	3508
<b>Adjusted R-squared</b>	0.296	0.236

Note: Robust standard errors are in parentheses and default categories are single, low educated, living in the North, white, year 2006 and refugees and asylum seekers (Category 1). \*p<0.1; \*\* p <0.05; \*\*\* p<0.01 (two-tailed tests)

Education plays a very important role in improving earnings as is obvious from the large positive returns to education for earnings. For example the hourly earnings of male workers are more than 16% higher for the medium education group and more than 50% higher compared to the low education reference group. Years since migration are also positively associated with earnings, which is consistent with the Chiswick (1978) findings that immigrant earnings are initially lower and then over time grow as they assimilate into the host labour market. An extra year in the UK increases earnings by more than 1%. Year dummies are not very significant for males and only year 2004 is significant at the 5% level reflecting real earnings premium for males in year 2004 as compared to reference year of 2006. This could be because of influx of Eastern Europeans to low wage jobs after 2004.

All ethnic minority males have a significant earnings gap and earn less than comparable whites. Asians, Blacks, other and mixed groups earn significantly less and the difference in earnings is more than a quarter for all ethnic groups, especially for Asians male migrants who have the highest earnings disadvantage as they earn more than 35% less than the comparable category of whites.

The estimates of the earnings of the immigrant categories are also what we might expect. All immigrant categories for males have significantly higher earnings compared to asylum seekers/refugees, apart from the mixed refugees and economic migrant category, which is significant only at the 10% level. This confirms that refugees earn significantly less than economic immigrants in accordance with the results for raw hourly wages, even after controlling for characteristics.

In particular, asylum seekers/refugees earn approximately 6% less than the mixed category, more than 30% less than mainly economic migrants and around 13% less than economic migrants. Mainly economic migrant males are the highest earning group among all immigrant categories, performing better than economic migrants after controlling for observed characteristics.

### *Females*

The estimates for females show that age is relatively more important for females, with young females earning approximately 3% more than their male counterparts of the same age. Married females have a comparative disadvantage and their earnings are lower by around 3% as compared to singles, although this is only significant at the 10% level. As far as regions are concerned, immigrant females in the East, South and London and to some extent Wales have significantly higher earnings. For example, female immigrant workers in London earn around a quarter more than female workers in the north.

All year dummies are not significant except for year 2001 which is significant at 5% level of significance and shows that females' real earnings are around 7% less for those interviewed in year 2001 as compared to the reference year of 2006. Similar to males, years since migration are also very significant for females, with a slightly greater impact seen compared to males.

Like for males, education is very important for females and returns to education are far higher for both the medium and high education groups as compared to the low education group. In particular, they earn respectively around 15% and 40% more than the reference group of low

education. Ethnic penalties also exist for females and they earn less than white females but this earnings differential is less for ethnic females than compared to males. The earnings disadvantage is nearly half as high for the Black and Other and mixed groups for females as compared to males. Earnings penalties are around 6% higher for Asian women as compared to Blacks and Other and mixed ethnic groups.

Females from all other immigrant categories earn more than refugees and asylum seekers. Mainly economic migrant females have the highest earnings advantage, which is approximately 10% more than the mixed refugees/economic migrants' category and 5% more than economic migrants and 25% more than the default refugee/asylum seeker category. Thus mainly economic migrants have a large advantage relative to refugees, and the mixed category a smaller disadvantage for females compared to males.

A comparison between the results for males and females reveals that generally the signs and significance levels are similar for both genders but some differences are present. For example female refugees seem to do relatively worse in terms of earnings compared to the other categories of immigrants, although mainly economic migrant males have the largest advantage.

Age, education, ethnicity and years since migration are roughly equally important for both genders. Returns to education are similar for both males and females for medium levels of education but slightly greater for highly educated males. Both genders suffer ethnic penalties but the differentials are about half as high for Black and Other and mixed ethnic females. South Asians are the most disadvantaged group both for males and females. Furthermore, mainly

economic migrants are the most advantaged group among all immigrants for both males and females.

### **Estimates for Earnings by Immigrant Category; Males**

Earnings estimates for all four categories of male immigrants are reported in Table 5. The estimates show that earnings differentials are present among males of different migrant categories, some of which are due to differences in education, ethnicity, regions and years since migration along with other factors. As expected education, ethnicity and years since migration has a typical and similar influence on earnings for all categories of immigrants. Though somewhat surprisingly age has no significant effect on refugees/asylum seekers and mixed refugees and economic migrants but a highly significant effect for mainly economic and economic migrants, for whom age also increases earnings by a significant 8% initially.

Marital status is also not important for the earnings of any of the immigrant groups. The highest returns to education are seen for economic migrants. For example for the medium education group, earnings adds around 5% more for economic migrants compared to the other categories of immigrants relative to those with no qualifications. While highly educated mainly economic migrants earn relatively more than all other immigrant groups and their earnings are more than 60% higher than those with low education, nearly double the advantage compared to refugees and asylum seekers. Economic migrants in the high education group also have a similar, although slightly smaller earnings advantage.

**Table 5: Log Hourly Earnings Estimates by Immigrant Category; Males**

	<i>Refugees &amp; Asylum Seekers</i>	<i>Mixed Refugees &amp; Economic Migrants</i>	<i>Mainly Economic Migrants</i>	<i>Economic Migrants</i>
<b>Age</b>	0.014 (0.015)	0.029 (0.018)	0.076*** (0.018)	0.081*** (0.014)
<b>Age Squared</b>	-0.080 (0.000)	-0.020 (0.000)	-0.080*** (0.000)	-0.080*** (0.000)
<b>Married</b>	0.028 (0.046)	-0.047 (0.057)	0.059 (0.047)	0.038 (0.032)
<b>Medium Education</b>	0.145*** (0.044)	0.172** (0.049)	0.140** (0.055)	0.203*** (0.041)
<b>High Education</b>	0.365*** (0.049)	0.321*** (0.051)	0.595*** (0.049)	0.549*** (0.039)
<b>Midlands</b>	-0.098 (0.072)	0.104 (0.071)	-0.137* (0.073)	0.015 (0.052)
<b>East</b>	0.106 (0.111)	0.108 (0.076)	0.188** (0.088)	0.237*** (0.060)
<b>London</b>	-0.007 (0.061)	0.083 (0.057)	0.112* (0.062)	0.336*** (0.045)
<b>South</b>	0.040 (0.072)	0.162** (0.081)	0.134** (0.065)	0.198*** (0.048)
<b>Wales<sup>1</sup></b>	-0.141 (0.147)	0.064 (0.198)	0.095 (0.116)	-0.015 (0.105)
<b>Scotland</b>	-0.152 (0.152)	0.121 (0.121)	0.045 (0.114)	0.033 (0.064)
<b>N. Ireland</b>		0.407*** (0.131)	-0.016 (0.124)	-0.147 (0.359)
<b>South Asians</b>	-0.113** (0.052)	-0.536*** (0.082)	-0.337*** (0.045)	-0.525*** (0.048)
<b>Black</b>	-0.149*** (0.055)	-0.296*** (0.084)	-0.416*** (0.068)	-0.445*** (0.054)
<b>Mixed &amp; Others</b>	-0.046 (0.058)	-0.298*** (0.097)	-0.436*** (0.064)	-0.274*** (0.045)
<b>Year 2001</b>	-0.052 (0.068)	-0.149* (0.081)	-0.007 (0.067)	0.154*** (0.042)
<b>2002</b>	-0.122* (0.067)	-0.097 (0.082)	-0.107 (0.067)	0.175*** (0.047)
<b>2003</b>	-0.099 (0.069)	-0.011 (0.073)	-0.182*** (0.064)	0.157** (0.045)
<b>2004</b>	-0.043 (0.066)	-0.082 (0.075)	-0.046 (0.062)	0.183*** (0.046)
<b>2005</b>	-0.056 (0.071)	-0.082 (0.067)	-0.103* (0.056)	0.109** (0.043)
<b>Years since Migration</b>	0.023*** (0.006)	0.012** (0.006)	0.013** (0.005)	0.012*** (0.003)
<b>No. of Observations</b>	534	607	738	1792
<b>Adjusted R-squared</b>	0.164	0.198	0.334	0.317

Note: Robust standard errors are in parenthesis. Default categories are single, low educated, living in the North, white and year 2006. \*p<0.1; \*\* p<0.05; \*\*\* p<0.01 (two-tailed tests)

1 Wales and N. Ireland is a combined region for category I due to a small number of observations.

Regional differences vary across the four immigrant categories. Earnings are significantly higher in the East, London and the South than in other regions both for mainly economic and economic migrants but for mixed refugees and economic migrants only for those living in the South and Northern Ireland region there is a significantly positive effect on earnings, where they earn approximately 16% more in the South as compared to the North. For economic migrants the earnings advantage is around 10% higher in London than in the East and South while mainly economic migrants in the East have the highest earnings.

Years since migration has a stronger effect on the earnings of refugees and asylum seekers since their earnings increase by more than a 2% for an extra year in the UK. For the other categories of male immigrants, earnings increase by only around 1% for each additional year. All ethnic groups earn less than whites but earnings differentials are smaller for ethnic minority refugees and asylum seekers and higher for other categories of economic migrants from all ethnic backgrounds.

Asians males from the mixed migrant category and economic migrants have the largest earnings penalties and their earnings are around 50% lower than comparable white immigrants. Black economic migrants and mainly economic Mixed and other migrants are also very disadvantaged groups in terms of their earnings. Finally, the fit of the earnings equations is much better for categories III and IV compared to categories I and II.

## **Estimates for Earnings by Immigrant Category; Females**

Estimates for log hourly earnings for female immigrant groups are presented in Table 6. From the table it can be seen that age, education and years since migration are also important determinants of female earnings in the different migrant groups. Age effects are highest for economic migrants and although being in a married relationship depresses earnings for all female immigrant groups but this is not significant for any of them. Similar to men, regional earnings differentials for refugees and asylum seekers and mixed refugees and economic migrant female categories are not significant for any area. While for mainly economic and economic migrants earnings are significantly higher in the East and South but the highest in London, as their earnings gains are around 30% higher compared to the North. The estimates for ethnicity and education in Table 6 show many significant differences.

Again, returns are large for highly educated females. Highly educated female refugees/asylum seekers and mainly economic migrants have similar returns to education and their earnings are around 40% higher than those with low education, which is around 10% more than mixed refugees and economic migrants but about 10% less than for highly educated economic migrants. Relative returns to medium levels of education are similar for refugees/asylum seekers and economic migrants but highest for the mixed refugees and economic migrant group who earn more than 20% more than comparable workers with low levels of education. The ethnicity results show differences between both refugees and economic migrants. Earnings of Asian females in categories II-IV are reduced roughly by a quarter as compared to white female immigrants. For female Asian refugees and asylum seekers there is a smaller earnings penalty (just below 5%).

**Table 6: Log Hourly Earnings Estimates by Immigrant Category; Females**

	<i>Refugees &amp; Asylum Seekers</i>	<i>Mixed Refugees &amp; Economic Migrants</i>	<i>Mainly Economic Migrants</i>	<i>Economic Migrants</i>
<b>Age</b>	0.072*** (0.018)	0.085*** (0.021)	0.077*** (0.014)	0.124*** (0.011)
<b>Age Squared</b>	-0.090*** (0.0002)	-0.010*** (0.000)	-0.010*** (0.000)	-0.010*** (0.000)
<b>Married</b>	-0.001 (0.056)	-0.073 (0.055)	-0.050 (0.046)	-0.028 (0.025)
<b>Medium Education</b>	0.160*** (0.059)	0.209*** (0.055)	0.094* (0.049)	0.170*** (0.034)
<b>High Education</b>	0.373*** (0.061)	0.274*** (0.057)	0.374*** (0.045)	0.464*** (0.032)
<b>Midlands</b>	0.015 (0.128)	-0.025 (0.099)	0.090 (0.086)	0.008 (0.046)
<b>East</b>	-0.068 (0.106)	0.112 (0.109)	0.272** (0.095)	0.122** (0.051)
<b>London</b>	0.086 (0.097)	0.079 (0.082)	0.277** (0.081)	0.281*** (0.038)
<b>South</b>	-0.081 (0.107)	0.014 (0.082)	0.183** (0.081)	0.104** (0.038)
<b>Wales</b>	0.114 (0.140)	0.181 (0.207)	0.279 (0.172)	0.037 (0.087)
<b>Scotland</b>	0.140 (0.143)	-0.248 (0.192)	0.078 (0.121)	0.054 (0.054)
<b>N. Ireland</b>		-0.012 (0.224)	0.074 (0.104)	-0.073 (0.176)
<b>Asians</b>	-0.047 (0.072)	-0.252** (0.083)	-0.239*** (0.051)	-0.238*** (0.044)
<b>Black</b>	-0.145** (0.065)	-0.108 (0.071)	-0.291*** (0.066)	-0.110** (0.047)
<b>Chinese &amp; Others</b>	-0.110* (0.064)	-0.069 (0.084)	-0.231*** (0.058)	-0.122*** (0.035)
<b>Year 2001</b>	0.000 (0.083)	-0.135 (0.087)	-0.176*** (0.068)	-0.039 (0.039)
<b>2002</b>	0.073 (0.098)	-0.058 (0.071)	-0.155** (0.069)	-0.005 (0.044)
<b>2003</b>	0.095 (0.099)	-0.098 (0.085)	-0.131** (0.063)	0.018 (0.044)
<b>2004</b>	-0.002 (0.077)	-0.107 (0.086)	-0.052 (0.062)	0.009 (0.043)
<b>2005</b>	-0.037 (0.079)	-0.079 (0.068)	-0.035 (0.061)	0.014 (0.042)
<b>Years since Migration</b>	0.031*** (0.007)	0.005 (0.006)	0.012** (0.005)	0.014*** (0.003)
<b>No. of Obs</b>	418	370	673	2047
<b>Adj R-squared</b>	0.176	0.178	0.188	0.264

Note: Robust standard errors are in parenthesis. Default categories are single, low educated, living in the North, white and year 2006. \*p<0.1; \*\* p <0.05; \*\*\* p<0.01 (two-tailed tests)

1 Wales and N. Ireland is a combined region for category I due to a smaller number of observations.

The table clearly shows that the relative penalties are less for Asian females as compared to their male counterparts. Mainly economic Black migrants also suffer a large disadvantage. Earnings assimilate fastest for refugees/asylum seekers over time since an extra year in the UK increases earnings by 3%, the highest of all immigrant categories. Years since migration are not significant for the mixed refugees and economic migrant category, and just over 1% for the two economic migrant categories. The year dummies are not significant apart from the mainly economic migrant category.

To summarise, the main findings from the separate earnings estimates by immigrant group and gender indicate that returns to education are similar for both male and female immigrants and are greater for the highly educated as compared to those with lower levels of education. For both males and females, economic migrants have the highest rewards. Also there are large earnings ethnic penalties for some of the Asian and Black migrant groups. However, amongst Asian females, ethnic penalties are lowest for refugees and asylum seekers. Furthermore, years since migration have a more influential impact on refugees and asylum seekers than economic migrants both for males and females, suggesting more rapid earnings assimilation for this group.

## **Earnings Estimates for Males and Females with additional Workplace**

### **Controls**

Table 7 contains separate estimates for males and females for earnings including the additional workplace controls. These relate to grouped industry, tenure, firm size, sector and part time dummies which are added to the existing specification to see the influence of these controls compared to the earlier results.

A comparison of the results for males and females reveals that generally the signs and significance levels for most of the variables are similar to before, as reported in Table 5.4. However the impact and significance of some variables is reduced after additional controls are added e.g. for age, education and years since migration. In particular the advantage of highly qualified immigrants falls to just over 30% from over 40% when job-related characteristics are included. The patterns of regional and ethnic effects are very similar to before. The fit of the model also increases quite considerably as compared to the basic model, especially for males.

For males, employees in finance and real estate earn the most, while those in manufacturing, energy supply, retail industry, hospitality, transport and telecommunications earn less than the reference group of other services. Manufacturing, supply, Transport and communications workers earn around 20% less while Finance workers earn about 20% more than those in other services and those in hospitality have the highest earnings deficit of over 30%. Workers in the retail sector also earn around a quarter less than those in other services. Health and social care service workers enjoy a slight but not significant earnings premium.

Earnings increase as the firm size increases as is clear from Table 7, which is a standard finding in the literature possibly because of the union effect on wages, deferred compensation or possibly efficiency wages. Those working in smaller firms, of less than 25 employees, earn around a quarter less and those in firms with 25-50 employees earn around 15% less than comparable workers with over 50 colleagues. Earnings rise significantly as tenure increases and all immigrants earn more with larger tenure as compared to the reference category of less than one year.

**Table 7: Earnings Estimates with Additional Controls; Males and Females**

	<i>Males</i>	<i>Females</i>
Age	0.046*** (0.008)	0.081*** (0.007)
Age Squared	-0.010*** (0.000)	-0.010*** (0.000)
Married	0.027 (0.021)	-0.021 (0.018)
Medium Education	0.106*** (0.023)	0.108*** (0.022)
High Education	0.331*** (0.023)	0.323*** (0.022)
Midlands	-0.017 (0.031)	0.031 (0.035)
East	0.156*** (0.037)	0.113** (0.037)
London	0.180*** (0.027)	0.238*** (0.030)
South	0.152*** (0.031)	0.113*** (0.031)
Wales	-0.023 (0.063)	0.122* (0.069)
Scotland	0.022 (0.043)	0.088* (0.046)
N. Ireland	0.042 (0.109)	-0.006 (0.110)
South Asians	-0.317*** (0.025)	-0.174*** (0.027)
Black	-0.299*** (0.028)	-0.156*** (0.028)
Mixed & Others	-0.238*** (0.029)	-0.128*** (0.024)
Year 2001	0.050* (0.028)	-0.064** (0.027)
2002	0.023 (0.031)	-0.024 (0.032)
2003	0.036 (0.028)	-0.024 (0.029)
2004	0.076* (0.028)	-0.020 (0.028)
2005	0.025 (0.026)	-0.009 (0.027)
Production	-0.112 (0.096)	-0.109 (0.134)
Manufacturing/Supply	-0.195*** (0.032)	-0.082** (0.034)
Construction	-0.114** (0.041)	0.119* (0.069)
Retail Industry	-0.263*** (0.033)	-0.204*** (0.032)
Hospitality	-0.358*** (0.032)	-0.279*** (0.036)

**Table 7: Continued**

	<i>Males</i>	<i>Females</i>
Transport/Communications	-0.208*** (0.037)	-0.056 (0.040)
Finance/ Real estate	0.207*** (0.049)	0.165*** (0.040)
Public Admin/ Education	-0.060 (0.046)	-0.049 (0.040)
Health / Social Work	0.025 (0.043)	-0.053* (0.031)
Part Time	-0.209*** (0.031)	-0.131*** (0.022)
Less than 25 Employee	-0.261*** (0.028)	-0.224*** (0.028)
25-50 Employee	-0.152*** (0.024)	-0.099*** (0.024)
2-5 Years of Tenure	0.101*** (0.019)	0.128*** (0.019)
5-10 Years of Tenure	0.198*** (0.031)	0.253*** (0.034)
10+ Years of Tenure	0.441*** (0.051)	0.179*** (0.062)
Public Sector	-0.016 (0.037)	0.072** (0.028)
Mixed Refugees & Economic Migrants	0.049* (0.029)	0.136*** (0.034)
Mainly Economic Migrants	0.224*** (0.027)	0.189*** (0.031)
Economic Migrants	0.073*** (0.025)	0.150*** (0.028)
Years since Migration	0.006** (0.002)	0.009*** (0.002)
<b>No. of Observations</b>	3505	3366
<b>Adj. R-squared</b>	0.413	0.331

Note: Robust standard errors are in parenthesis. Default categories are single, low educated, living in the North,, white, year 2006, in other services, working full time, firm size of more than 50 employees, less than one year of tenure, in private sector and refugees and asylum seekers (Category 1). \*p<0.1; \*\* p <0.05; \*\*\* p<0.01 (two-tailed tests)

Earnings increase by around 10% for each tenure period of 2-5 years and 5-10 years whilst individuals with more than 10 years have the highest returns, as earnings are over 40% higher for this category compared to those with less than 1 year of tenure. There are no significant differences between the earnings of male immigrants in the public and private sectors but full-time employees earn 20% more.

Finally, earnings gains remain significant for all three categories of immigrants as compared to the reference group of refugees and asylum seekers. Again this differential is highest for mainly economic migrant males with an earnings premium of over 20%. While the earnings premium for mixed refugees and economic migrant category and economic migrant category is around 5% and 7% respectively. All of these relative earnings advantages are smaller than before, especially for economic migrants, which has more or less halved.

For female workers employed in production, manufacturing and supply, retail, transport and communications and health and education all have lower earnings as compared to those in other services. While females in finance and real estate as well as in construction have earnings advantages over workers in other services. The relative earnings advantage for those in finance/real estate is similar to males, but female construction workers enjoy an earnings advantage, which is opposite to what was seen for males.

Earnings are lower for part time women who earn around 13% less than full-timers. Similar to men, earnings differentials for women also increase with firm size. Those working in larger firms, with more than 50 employees, are the largest earners while those females working in smaller firms of less than 25 and 25-50 employees have earnings gaps of around 20% and 10% respectively as compared to workers in firms with more than 50 employees. Tenure also significantly increases earnings since females with 5-10 years of tenure have an earnings gain of more than a quarter compared to workers with less than 1 year of tenure. However, the return to more than 10 years of tenure is smaller than for the previous category. Females working in the public sector, earn a significant 7% more than those in the private sector.

Earnings differences are again significant for all three categories of female immigrants as compared to reference group of refugees and asylum seekers. This differential is highest for mainly economic migrants, with an earnings premium of around 20%. While for mixed refugees and economic migrants the earnings are very similar at around 15%. As with males, the differentials have been lowered compared to the previous specification but the earnings gap between refugees/asylum seekers and other immigrant categories remain larger for females than males, even after controlling for workplace factors.

## **Estimates for Occupational Attainment**

The main objective of the occupational analysis is to compare the determinants of occupational success with those for earnings. The dependent variable is coded such that higher (positive) values of coefficients indicate greater chances of success in high level jobs and lower values indicate a higher probability of having lower level jobs. Separate estimates for males and females for occupational attainment are presented in Table 8. The results show that age and education are very significant for both males and females as mentioned earlier in relation to earnings, with education and experience increasing occupational attainment. Age equally affects the occupational level of males and females while marital status matters for both but differently. For males, occupational success increases with marriage while for women it decreases. This is not an unexpected finding as family responsibilities often force men to find better jobs and earn more while for women family and child care responsibilities are often an obstacle to success in the labour market.

**Table 8: Ordered Probit Estimates and Marginal Effects for Occupational Attainment**

	<u>Males</u>		<u>Females</u>	
	Coef.	Marginal Effects (Prof/man)	Coef.	Marginal Effects (Prof/man)
<b>Age</b>	0.133*** (0.013)	0.047*** (0.005)	0.124*** (0.014)	0.036*** (0.004)
<b>Age Squared</b>	-0.010*** (0.000)	-0.010*** (0.000)	-0.010*** (0.000)	-0.000*** (0.000)
<b>Married</b>	0.103** (0.039)	0.036** (0.013)	-0.079** (0.036)	-0.023** (0.010)
<b>Medium Education</b>	0.246*** (0.043)	0.089*** (0.016)	0.357*** (0.045)	0.109*** (0.014)
<b>High Education</b>	1.021*** (0.040)	0.351*** (0.013)	1.032*** (0.044)	0.302*** (0.012)
<b>Midlands</b>	-0.227*** (0.066)	-0.076*** (0.021)	-0.097 (0.073)	-0.027 (0.020)
<b>East</b>	0.038 (0.065)	0.014 (0.023)	0.108 (0.069)	0.033 (0.021)
<b>London</b>	0.016 (0.049)	0.006 (0.017)	0.094* (0.055)	0.028 (0.016)
<b>South</b>	0.095 (0.056)	0.034 (0.203)	0.041 (0.057)	0.012 (0.017)
<b>Wales</b>	0.276** (0.109)	0.103** (0.042)	0.060 (0.109)	0.018 (0.033)
<b>Scotland</b>	0.048 (0.088)	0.017 (0.032)	0.001 (0.092)	0.000 (0.027)
<b>N. Ireland</b>	0.475** (0.206)	0.181** (0.082)	0.451** (0.153)	0.153** (0.057)
<b>South Asians</b>	-0.573*** (0.046)	-0.185*** (0.013)	-0.496*** (0.049)	-0.126*** (0.011)
<b>Black</b>	-0.574*** (0.058)	-0.176*** (0.015)	-0.432*** (0.053)	-0.110*** (0.012)
<b>Mixed &amp; Others</b>	-0.307*** (0.047)	-0.102*** (0.015)	-0.366*** (0.048)	-0.096*** (0.011)
<b>Year 2001</b>	0.293*** (0.051)	0.107*** (0.019)	0.195*** (0.053)	0.059*** (0.017)
<b>2002</b>	0.277*** (0.057)	0.102*** (0.022)	0.169*** (0.058)	0.052** (0.018)
<b>2003</b>	0.196*** (0.057)	0.071** (0.022)	0.188*** (0.056)	0.058** (0.018)
<b>2004</b>	0.198*** (0.055)	0.072*** (0.020)	0.150** (0.057)	0.046** (0.018)
<b>2005</b>	0.100* (0.053)	0.036 (0.019)	0.028 (0.055)	0.008 (0.016)
<b>Mixed Refugees &amp; Economic Migrants</b>	0.203** (0.062)	0.074** (0.023)	0.400*** (0.069)	0.130*** (0.025)
<b>Mainly Economic Migrants</b>	0.691*** (0.060)	0.259*** (0.023)	0.594*** (0.063)	0.196*** (0.022)
<b>Economic Migrants</b>	0.420*** (0.052)	0.147*** (0.018)	0.440*** (0.055)	0.124*** (0.015)
<b>Years since Migration</b>	0.024*** (0.004)	0.008*** (0.001)	0.034*** (0.004)	0.010*** (0.001)
<b>No. of Observations</b>	5465		4831	
<b>Pseudo R-squared</b>	0.131		0.094	

Notes: Robust standard errors are in parentheses. p<0.1; \*\* p <0.005; \*\*\* p<0.01 (two-tailed test).

Default categories are single, living in the North, white, year 2006 and refugees and asylum seekers (Category 1).

The marginal effects imply that males and females with high levels of education are 30 percentage points more likely to have a professional/managerial job and those with medium education around 10 percentage points more likely compared to migrant workers with low levels of education. Apart from Wales and N. Ireland, regions do not play a significant role in migrant males' occupational success. Male immigrants in N. Ireland and Wales are more likely to obtain high level professional and managerial jobs. Female immigrants in London and N. Ireland have better chances of being successful in terms of occupation. Ethnic penalties are present for all ethnic groups including the Mixed and other ethnic group compared to whites. These differentials are largest for Asians and Blacks for both males and females. For Asians and Black males the chances of getting a professional or managerial job are around 18% points lower than for whites. Instead, they are more likely to do routine and semi-routine jobs. While males and females from the Mixed and other ethnic group have a lower disadvantage compared to whites.

Years since migration provides better opportunities for success and females are relatively more likely to do well than males with more years spent in the UK. For them an extra year in the UK increases the probability of having a high level job by 1 percentage point compared to slightly less than this for males. Immigrants from other categories are more successful in the labour market in terms of occupational success compared to refugees and asylum seekers. Mainly economic migrant males and females are the most likely to have professional and managerial jobs, which is quite consistent with the earnings estimates. The probability of an immigrant from this group having a high level job is 26 percentage points higher for males and 20 percentage points higher for females compared with refugees/asylum seekers.

Economic migrant males and females are also more successful relative to refugees and asylum seekers but are less likely to get professional and managerial jobs compared to mainly economic migrants. In fact female economic migrants have a lower probability of having a top job than the mixed category.

## **Conclusion**

The labour market outcomes for earnings and occupation are similar to these for employment in that they reveal that for both males and females, refugees/asylum seekers do far worse than other immigrants after controlling for personal, as well as workplace, characteristics. It is also found that education, location, ethnicity and years since migration are important in determining the earnings and occupational achievements of immigrants.

Refugees' earnings patterns differ from non-refugee migrants and they assimilate differently from economic migrants. In addition to this ethnicity also plays an important role in determining economic performance and assimilation. Ethnicity can not be ignored while analyzing the labour market performance of immigrants as it is an important factor affecting their assimilation and there also exists large element of disadvantage, possibly due to discrimination for all ethnic groups as compared to whites. The influence of education on immigrant labour market success shows that returns to education in terms of earnings is positive but returns to education are lower for refugees/asylum seekers, especially for males.

Asylum seekers/refugees earn significantly less than other migrants after controlling for other variables, with larger differentials for females. The significantly lower earnings of refugees and asylum seekers are consistent with the results for occupation, where it is found that this group is concentrated in low level jobs. However, once again assimilation is found to be highest for asylum seekers/refugees, implying those who stay in the UK for long periods often perform well.

Assimilation over time is a consistent finding with Cortes (2004) that due to implicit difference in the time horizon of economic and refugee immigrant categories, higher rates of human capital accumulation leads to substantial gains over time for refugee immigrants. As most of the immigrants arrived in the UK during 1990s, they are expected to perform better in the labour market with the accumulation of country-specific skills over time even though they may have started from a very low position on average.

Nevertheless, the poorer performance of refugees and asylum seekers compared to other immigrant categories both in terms of earnings and occupational achievement is likely to be attributed to a number of factors including a lack of country specific human capital, non-recognition of their education and as well as discrimination. As they earn significantly less their tax contributions are lower as well, especially as they are less likely to have top level jobs. For this reason they are often viewed as a greater burden on the government and people become more and more hostile in their attitudes towards them.

## References:

Adelson, W. (2004), “Economic Migrants and Political Asylum Seekers in the United Kingdom: Crafting the Difference”, *The Michigan Journal of Public Affairs*, Vol. 1, pp 1-26.

Battu, H. and Sloane P. J. (2004), “Over-Education and Ethnic Minorities in Britain”, *The Manchester School*, Vol. 72, No. 4, pp 535–559.

Bell, B. (1997), “The Performance of immigrants in the United Kingdom: Evidence from the GHS”, *Economic Journal*, Vol. 107, pp 333-345.

Blau, P. M. and Duncan, O. D. (1967) The American Occupational Structure, John Wiley & Sons, Inc, 605 Third Avenue, New York, NY 10016.

Bleakley, H. and Chin, A. (2004), “Language Skills and Earnings: Evidence from Childhood Immigrants”, *The Review of Economics and Statistics*, Vol. 86, No. 2, pp 481-496.

Borjas, G. J. (1985), “Assimilation changes in Cohort Quality and the earnings of Immigrants”, *Journal of Labor Economics*, Vol. 3, No. 4, pp 463-489.

Bratsberg, B. and Ragan, J. F. (2002), “The Impact of Host-Country Schooling on Earnings- A Study of Male Immigrants in the United States”, *Journal of Human Resources*, Vol. 37 No. 1, pp 63-105.

Carliner, G. (1995), “The Language Ability of U.S. Immigrants: Assimilation and Cohorts Effects”, *NBER Working Paper No.5222*, National Bureau of Economic Research.

Chiswick, B. (1978), “The Effect of Americanization on the Earnings of Foreign Born men”, *Journal of Political Economy*, Vol. 86, No. 5, pp 897-921.

Chiswick, B. (1980), "The Earnings of White and Coloured Male Immigrants in Britain", *Economica*, Vol. 47, No. 185, pp 81-87.

Chiswick, B. (1993), "Soviet Jews in the United States: An Analysis of their linguistics and Economic Adjustment", *International Migration Review*, Vol. 27, pp 260-285.

Chiswick, B. and Miller, P.W. (2002), "Immigrant Earnings: Language Skills, Linguistic Concentrations and the Business Cycle", *Journal of Population Economics* Vol. 15, No. 1, pp 31-57.

Chiswick, B. and Miller, P.W. (2007), "Earnings and Occupational Attainment: Immigrants and Native-Born", *IZA Discussion Paper No. 2676*, IZA, Germany.

Clark, K. and Lindley, J. (2006), "Immigrants Labour Market Assimilation and Arrival Effects: Evidence from the UK Labour Force Survey", *IZA Discussion Paper No.2228*, IZA Germany.

Clark, K. and Drinkwater, S. (2007), "Ethnic Minorities in the Labour Market: Dynamics and Diversity" *Joseph Rowntree Foundation Publication*, The Policy Press, Fourth Floor, Beacon House, Queens Road, Bristol, BS8 1QU, UK.

Cortes, K. E. (2004), "Are Refugees Different from Economic Migrants? Some Empirical Evidence on the Heterogeneity of Immigrants Group in the US", *The Review of Economics and Statistics*, Vol. 86(2), No. 4, pp 465-480.

Drinkwater, S. Eade, J. Garapich, M. (2006), "Poles Apart? EU Enlargement and the Labour Market Outcomes of Immigrants in the UK", *IZA Discussion Paper No.2410*, IZA Germany.

Dustmann, C. and Fabbri, F. (2003), "Language Proficiency and the Labour Market Performance of Immigrants in the UK", *The Economic Journal*, Vol. 113, No. 489, pp 695-717.

Dustmann, C. and Fabbri, F. (2005), "Immigrants in the British Labour Market", *Fiscal Studies*, Institute for Fiscal Studies, Vol. 26, No. 4, pp 423-470.

Elliott, R. J. and Lindley, J. K. (2008), "UK Immigrant Wage Differentials, ethnicity and Occupational Segregation", *The Journal of the Royal Statistical Society, Series A*, Vol. 171, No. 3, pp 645-671.

Friedberg, R. M. (2000), "You Can't Take It with You? Immigrant Assimilation and the Portability of Human Capital", *Journal of Labor Economics*, Vol. 18, No. 2, pp. 221-251.

Hartog, J. and Zorlu, A. (2005), "Refugees, Asylum Seekers and Policy in Europe", *IZA Discussion Paper No.1753*, IZA, Germany.

Hatton, T. J. (1997), "The Immigrant Assimilation Puzzle in late Nineteenth Century America", *The Journal of Economic History*, Vol. 57, No. 1, pp 34-62.

Home Office Statistical Bulletins 1989-2006, <http://www.homeoffice.gov.uk/rds>.

Home Office (2001) Control of Immigration: Statistics United Kingdom 2000 Presented to Parliament by Secretary of State for the Home Department, November 2001.

Home Office (2004) Control of Immigration: Statistics United Kingdom 2003 Presented to Parliament by Secretary of State for the Home Department, November 2004.

Home Office (2007) Control of Immigration: Statistics United Kingdom 2006 Presented to Parliament by Secretary of State for the Home Department, August 2007.

Khan A. (1997), "Post-Migration Investment by Immigrants in the United States", *Quarterly Review of Economics and Finance*, Vol. 37, pp 285-313.

Leslie, D. and Lindley, J. K. (2001), "The impact of Language Ability on Employment and Earnings of Britain's Ethnic Communities", *Economica*, Vol. 68, No. 272, pp 587-606.

Lindley, J. K. (2002a), "Economic Assimilation & Labour Market performance of British Refugees and Economic Migrants" *Research Paper Series*, Globalisation and Labour Market Programme (GEP), The University of Nottingham, UK.

Lindley, J. K. (2002b), "Race or Religion? The Impact of Religion on the Employment and Earnings of Britain's Ethnic Communities." *Journal of Ethnic and Migration Studies*, Vol. 28, No. 3, pp 427-442.

McDonald, J. T. and C. Worswick, (1998), "The Earnings of Immigrant Men in Canada: Job Tenure, Cohort and Macroeconomic Conditions", *Industrial and Labor Relations Review* Vol. 51, No. 3, pp 465-82.

Nickell, S. (1982), "The Determinants of Occupational Success in Britain", *The Review of Economic Studies*, Vol. 49, No. 1, pp 43-53.

Schaeffer, P. V. (1995), "The work effort and Consumption of Immigrants as a Function of their Assimilation", *International Economic Review*, Vol. 36, No. 3, pp 625-642.

Shields, M. and Wheatley-Price, S. (1998), "The earnings of male immigrants in the England: Evidence from quarterly LFS", *Applied Economics*, Vol. 30, pp 1157-1168.

Shields, M. and Wheatley-Price, S. (2001), "Language fluency and Immigrants Employment Prospects: Evidence from Britain's ethnic minorities", *Applied Economics Letters*, Vol. 8, No. 11, pp 741-745.

UNHCR (1993), The State of the World's Refugees 1993: The Challenge of Protection  
Penguin: New York.

UNHCR (1998), The State of the World's Refugees: a humanitarian agenda. - 1997-98  
Oxford: Oxford University Press.

UNHCR (2005), 2004 Global Refugees Trends UNHCR Geneva.

UNHCR (2007), 2006 Global Refugees Trends UNHCR Geneva.

Verbeek, M. (2000) A Guide to Modern Econometrics, Wiley, Chichester, England.

Wheatley-Price, S. (2001). "The employment adjustment of male immigrants in England,"  
*The Journal of Population Economics*, Vol. 14, No. 1, pp 193-220.

White, M. and Kaufman, G. (1997), "Language usage, Social capital and School completion  
among Immigrants and Native-Born Ethnic Groups", *Social Science Quarterly*, Vol.78, No.  
2, pp 385-398.

[www.statistics.gov.uk](http://www.statistics.gov.uk)

## Appendix A.1 List of Asylum sending countries

<i>LFS Code</i>	<i>Country</i>	<i>No. of Asylum Applications</i>	<i>Refugee-Business Ratio(2000-2006)</i>	<i>Category I, II, III,IV</i>
1	UK	---	---	UK Born
6	Ireland	---	---	IV
7/8	Channel Islands Isle of Man	---	---	IV
11	Australia	---	<1	IV
12	Canada	---	<1	IV
13	New Zealand	---	<1	IV
14	Kenya	High in Mid 1990s	1-5	II
15	Uganda	High in early 1990s & 2000	>5	I >=1989
16	Tanzania	High 1993-96	1-5	I: 1989-1996 II >=1997
17	Malawi	---	---	---
18	Zambia	---	<1	III
19	Zimbabwe	Nothing until 1996, V. high since then, especially early 2000s	<1: 2000 & 2006 >1: 2003	IV: 1989-96 II >=1997
20	Botswana	---	---	---
21	Gambia	High 1995-97 Lower since then	---	II >=1989
22	Ghana	V. High in early 1990s Lower since then	1-5: 2000 & 2006 <1: 2003	I: 1989-96 II >=1997
23	Nigeria	V. high in mid-90s & high since then	<1: 2000 1-5: 2003 & 2006	II >=1989
24	Sierra Leone	V. High until 2002	>5	I >=1989
25	Barbados	---	---	IV
26	Jamaica	Nothing until 1996 High in Early 2000	>5: 2000 <1: 2003 & 2006	IV: 1989-95 III >=1996
27-32	Trinidad & Tobago, West Indies, Caribbean, Belize, & Guyana	----	----	IV
33	Bangladesh	Nothing until 1997, Quite high till 2003, lower since then	<1: 2000 1-5: 2003 & 2006	IV: 1989-96 II >=1997
34	India	Generally quite high, especially in mid 1990s	<1	III
35	Sri Lanka	V. high especially early 2000s	>5: 2000 & 2006 1-5: 2003	I >=1989
36-38	Hong Kong, Malaysia & Singapore	---	<1 & 0	IV
40-44	Gibraltar, Malta, Seychelles, Mauritius & Other New Commonwealth	---	0	IV
45	Algeria	High 1994-2002 Lower since then	>5	I >=1989
46	Morocco	---	1: 2000 <1 2003 & 2006	III
47	Tunisia	---	>5: 2000 1: 2003 & 2006	II

<i>LFS Code</i>	<i>Country</i>	<i>No. of Asylum Applications</i>	<i>Refugee-Business Ratio(2000-2006)</i>	<i>Category I, II, III,IV</i>
48	Libya	---	1-5: 2000 & 2006 <1 : 2003	II
49-50	Egypt & South Africa	---	<1	III
51	Other Africa	Fairly large number each year	>1	II
52-54	USA, Caribbean & other America	---	<1	IV
55	Ecuador			II
56	Pakistan	High till 2002 Lower since then	1-5 : 2000 & 2006 <1 : 2003	II
57	Burma	----	----	----
58	China	V. High since 1997	<1	III
59-60	Japan & Philippines	----	<1	IV
61	Vietnam	Nothing until 1996 High from 2001	----	I >=1997
62	Iran	V. High in early 2000s	>5	I >= 1989
63	Israel	----	<1	IV
64	Other Middle East	High in early 2000	>5	II
65	Other Asia	High 1994-2002 Lower since then	>5	II
66-73	Western Europe	----	----	IV
74	Albania	Nothing till 1991. High 1997-02 Lower since then	>5 : 2006	I >= 1991
75	Bulgaria	1989-97 Nothing after that	<1	I 1989-97 IV >=1998
76	Germany	----	----	IV
77	Czechoslovakia		1-5 : 2000 0 : 2003	I : 1989-99 IV : >=2000
78	Hungary	----	----	IV
79	Poland	High in late 1990s Nothing after 2000	<1	I : 1989-99 IV >=2000
80	Romania	High in late 1990s & early 2000s	1 : 2000 <1 : 2003 & 2006	I : 1989-99 III >=2000
81-88	Other Western European Countries	----	----	IV
89	Yugoslavia, Other & Former Yugoslavia	High from 1992-99 Nothing after that	>5	I >= 1989
90	Iceland	----	----	IV
91	Turkey	V. High until 2003 Lower since then	>5	I >= 1989
92	Former USSR	High in late 1990s	1-5	II
93	Rest of the World	----	----	----
96	Angola	High in early 2000s	>5	I >=1989
97	Ethiopia	High in early 90s	>5	I >=1989
98	Somalia	High throughout	>5	I >=1989
99	Zaire	High in early 90s, Nothing after 1997	---	I: 1989-97
100	Cuba	---	---	----
101-104	Mexico, Argentina, Brazil & Chile	---	<1	IV

<i>LFS Code</i>	<i>Country</i>	<i>No. of Asylum Applications</i>	<i>Refugee-Business Ratio(2000-2006)</i>	<i>Category I, II, III,IV</i>
105	Columbia	High in late 1990s	1-5 : 2000 >5 : 2003 & 2006	II
106	Uruguay	---	---	IV
107	Venezuela	---	<1	IV
108	Iraq	High in late 1990s and early 2000s	>5	I >=1989
109	Lebanon	High in early 1990s, Nothing after that	>5 : 2000 >5 : 2003 & 2006	II
110	Bali, Timor etc	---	---	I
111	Korea	---	0	IV
112-115	Macao, Liechtenstein, Andorra, Belarus	---	---	IV
116	Bosnia	---	---	I
117	Croatia	---	>5 : 2000, 2006 1-5 : 2003	I
118	Czech Republic	High 1997-99	1-5 : 2000 <1 : 2003	I :1989-1999 IV >=2000
119	Estonia	---	<1	I :1989-1999 IV >=2000
120	Macedonia	Fairly low 1997-2000	----	I >=1997
121	Lithuania	----	>5 : 2000 1-5 : 2003	I : 1989-2003 IV >=2004
122	Latvia	----	N/A	I : 1989-2003 IV >=2004
123	Moldova	Some from 1997, High in early 2000	<1	I : 1997-2006
125	Slovak Republic	---	---	I : 1989-1999 IV >=2000
126	Slovenia	---	---	I : 1989-1999 IV >=2000
127	Ukraine	Nothing until 1995 High 1996-2003	----	I : 1997 -1999 III >=2000
128-129	San Marino & Vatican city	----	----	IV
130	Sudan	High in early 1990s	>5 : 2000 & 2003 1-5 : 2006	I
131	Cambodia	---	---	I
132	Indonesia	----	0	IV
133-136	Micronesia, Miquelon, Greenland, Bermuda	----	----	IV
137	Taiwan	----	0	IV
138	Laos	----	----	I
139	Afghanistan	High in late 1990s & early 2000	>5 : 2006	I >=1989
140	Thailand	----	<1	IV
141-142	Former soviet states Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan Uzbekistan	V. High in late 1990s	>5	I : 1989-2000 II >=2001

**Appendix A.2: Distribution in each Category by Country**

<i>Category I</i>	<i>Percentage</i>	<i>Category II</i>	<i>Percentage</i>	<i>Category III</i>	<i>Percentage</i>
Uganda	2.80%	Kenya	6.34%	Zambia	2.78%
Tanzania	1.06%	Tanzania	0.46%	Jamaica	4.64%
Ghana	3.77%	Zimbabwe	11.68%	India	46.49%
Sierra Leone	2.18%	Gambia	1.14%	Morocco	2.03%
Sri Lanka	11.23%	Ghana	3.29%	Egypt	1.86%
Algeria	2.56%	Nigeria	12.04%	South Africa	29.70%
Vietnam	0.53%	Bangladesh	10.47%	China	7.59%
Iran	6.28%	Cyprus	1.79%	Romania	1.83%
Albania	2.06%	Tunisia	0.52%	Russia Federation	2.42%
Bulgaria	0.71%	Libya	1.40%	Ukraine	0.98%
Zechoslovakia	0.44%	other South America	2.41%		
Poland	4.04%	Pakistan	35.36%		
Romania	1.18%	other middle east	5.07%		
Yugoslavia	7.46%	Other Asia	2.80%		
Turkey	12.15%	former USSR	1.21%		
Angola	2.06%	Columbia	2.41%		
Ethiopia	1.42%	Lebanon	1.63%		
Somalia	10.91%				
Zaire	0.62%				
Iraq	6.75%				
Indonesia	0.12%				
Bosnia	1.24%				
Croatia	1.50%				
Czech Republic	0.88%				
Estonia	0.12%				
Macedonia	0.24%				
Lithuania	2.89%				
Latvia	0.68%				
Moldova	0.21%				
Russia	1.33%				
Slovak republic	0.71%				
Slovenia	0.06%				
Ukraine	0.77%				
Sudan	2.42%				
Cambodia	0.09%				
Laos	0.03%				
Former USSR	0.70%				

**Table A4.2 Continued:**

<i>Category IV</i>	<i>Percentage</i>	<i>Category IV</i>	<i>Percentage</i>
Ireland,	7.87%	Netherlands	1.86%
Australia	6.44%	Germany	3.44%
Canada	2.49%	Germany	0.83%
New Zealand	3.46%	Bulgaria	0.61%
Zimbabwe	1.15%	Germany	0.90%
Barbados	0.19%	Czechoslovakia	0.20%
Jamaica	1.01%	Hungary	0.53%
Trinidad and Tobago	0.76%	Poland	6.35%
west indies	0.19%	Austria	0.39%
Caribbean	0.56%	Switzerland	0.52%
Belize	0.04%	Greece	1.20%
Guyana	0.36%	Portugal	4.06%
Bangladesh	5.13%	Spain	3.06%
Hong Kong	2.00%	Finland	0.75%
Malaysia	1.34%	Norway	0.61%
Singapore	0.40%	Sweden	1.35%
Cyprus	0.02%	Iceland	0.15%
Gibraltar	0.05%	Mexico	0.36%
Malta	0.17%	Argentina	0.31%
Seychelles	0.06%	Brazil	1.57%
Mauritius	0.77%	Chile	0.15%
Other New Commonwealth	0.45%	Uruguay	0.06%
Other Africa	3.97%	Venezuela	0.21%
United States	7.54%	Korea	0.69%
Caribbean	0.11%	Macao, Macau	0.14%
Other Central America	0.13%	Belarus	0.11%
Japan	2.27%	Czech	0.68%
Philippines	5.24%	Estonia	0.08%
Israel	0.44%	Lithuania	0.82%
Belgium	0.82%	Latvia	0.30%
Denmark	0.83%	Slovak Republic	1.31%
France	5.59%	Slovenia	0.01%
Italy	3.43%	Indonesia	0.31%
Luxembourg	0.04%	Bermuda	0.01%
Thailand	0.91%	Taiwan	0.13%

**Note:****Category I: Refugees and asylum seekers****Category II: Mixed Refugees and Economic Migrants****Category III: Mainly Economic Migrants****Category IV: Economic Migrants****Rb-ratio >5****Rb-ratio 1 – 5****Rb-ratio 0 < & < 1****Rb-ratio = 0**