

Identifying social and economic push and pull factors for migration to the UK by Bulgarian and Romanian nationals

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Background

This document contains the summary of analysis carried out by a research fellow from the University of Surrey during an ESRC/Department for Communities and Local Government (DCLG) sponsored internship at DCLG. The analysis presented in this note was originally presented as a Power Point Slide Pack and has not been peer-reviewed by external academics.

Health warnings

This analysis primarily uses data from the Labour Force Survey. Please note that some of the groupings used in the analysis contain small numbers that are based on a sample survey. Therefore caution is advised when comparing distributions across several categories, as any differences could be due to sample variation rather than a true difference in characteristics between groups of people.

Objectives

- To explore the role of socio-economic and demographic push and pull factors for A2 and A8 migrants.
- To provide a framework for analysing drivers for potential migration from Bulgaria and Romania to the UK, by comparing existing socio-economic conditions in those countries to those of the UK.
- To investigate the likely patterns of settlement and occupational choices of potential A2 migrants using different data sources.

Bulgaria and Romanian migrants: Some key facts

- Both countries entered the EU in 2007.
- Both are Upper-Middle income countries, with GDP/per capita equal or greater than 40 per cent of EU average in 2008 (figures are taken from Eurostat).
- Bulgaria: Economy relies primarily on industry (27.6 per cent of GDP), producing significant amount of manufactures and raw materials and services (64.9 per cent).
- Romania: Economy predominately based on services (55 per cent of GDP). Industry and agriculture account for 35 per cent and 10 per cent of GDP, respectively.

- Labour Force Participation: 7.5 per cent of Bulgarians are employed in Agriculture, 35.5 per cent in industry and 56.9 per cent in services; whilst for Romanians 29.5 per cent of the population works in agriculture, 31.4 per cent in industry and 39.1 per cent in services. In comparison, Poland at the time of accession had 18 per cent of their workforce employed in agriculture, 28.8 per cent in industry and 53.2 per cent in services.
- Access to the UK labour market: limited to the following means:
 - work permits and Highly Skilled Migrant Programme
 - accession worker registration
 - registration certificates
 - quota-based restricted access for low-skilled in:
 - a) Sector-Based Scheme
 - b) Seasonal Agriculture Work Scheme

Table 1: Push and pull factor differentials for A2 and A8 migrants (a comparison between 2004, 2007 and 2010)

Years 2004 2007 2009	Population	GDP per capita in purchasing power standards	Unemployment Rate (%)	Exchange Rates (Between £ and A8/A2 National Currencies)	Crude Rate of Net Migration*
UK	59,699,828 60,781,352 62,008,048p	124 117 116	4.7 5.3 7.9	1 1 1	3.8 2.9 2.9
BULGARIA	7,801,273 7,679,290 7,563,710	34 38 41	12.1 6.9 9.9	2.8 2.7 2.3	0.0 -0.2 -2.1
ROMANIA	21,711,252 21,565,119 21,462,186	34 42 46	8.1 6.4 8.2	5.6 4.9 5.0	-0.5 0.0 -0.1
POLAND	38,190,608 38,125,479 38,167,329	51 54 56	19.0 9.6 9.6	5.8 5.0 4.6	-0.2 -0.5 0.0
SLOVAKIA	5,380,053 5,393,637 5,424,925	57 68 72	18.2 11.1 14.5	56.5 46.6 1.1	0.5 1.3 0.8
LITHUANIA	3,445,857 3,384,879 3,329,039	50 59 53	11.4 4.3 17.8	4.9 4.8 4.0	-2.8 -1.6 -4.6

* The net migration plus adjustment is the difference between the total change and the natural change of the population. This is defined as the ratio of net migration plus adjustment during the year to the average population in that year, expressed per 1,000 inhabitants.

Key findings from the table above are:

- Declining population in Bulgaria and Romania as well as in Poland and Lithuania over the last six years as shown by negative crude rate of net migration.
- In contrast, the UK's population has increased over this period, partly, (but not entirely) due to a higher positive crude rate of net migration.
- GDP per capita in purchasing power standards has increased for the A2 and A8 countries while it has decreased for the UK, albeit from a much higher base.
- During 2004-2007, the UK experienced an increase in the unemployment rate, whereas A2 and A8 countries have experienced falling unemployment rates (possibly due to declining population).
- The recent increases in unemployment rates in all countries can most likely be attributed to the economic downturn.

Table 2: Regional distribution of A2 migrants in the UK (national insurance number registrations for 2002-2010)

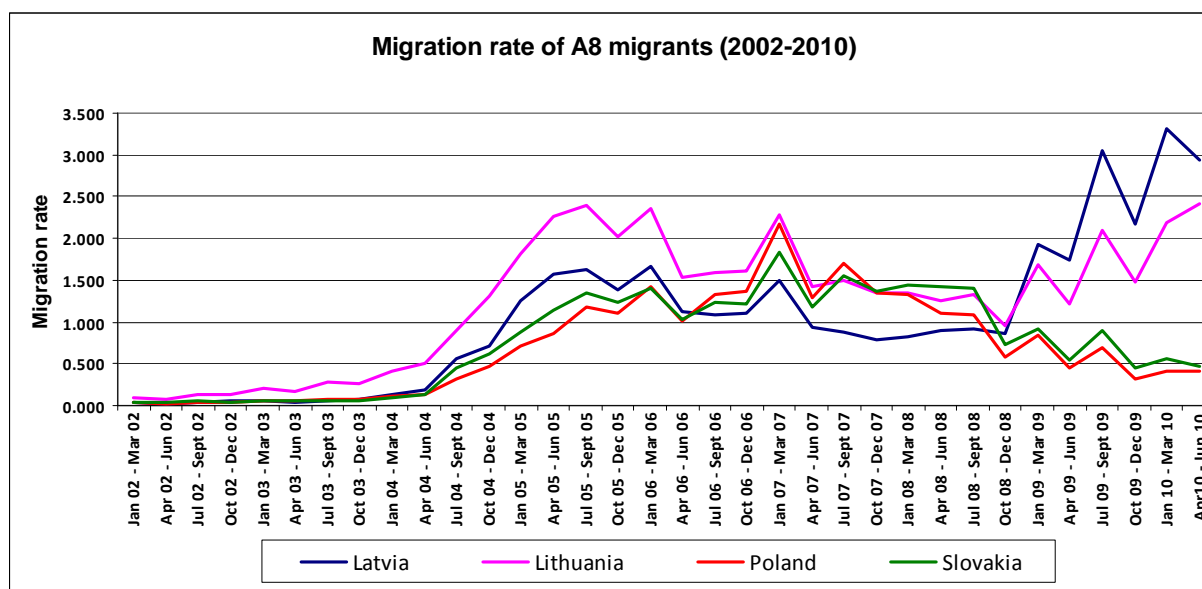
Romania		Bulgaria	
Midlands	11.6%	Midlands	9.4%
East of England	7.4%	East of England	6.5%
South East	13.9%	South East	10.2%
London	46.3%	London	56.4%
North & Others	19.0%	North & Others	16.7%

Key findings from the table above are:

- London is the most popular destination for both Romanian and Bulgarian immigrants. National insurance number registrations show that around half of the national insurance numbers issued to A2 migrants over this period were in London.
- The Northern regions were the second most common destination, with more than one-tenth of national insurance numbers issued in the North and Other regions.
- It should be noted that national insurance number data contains short term migrants and not everyone issued with a national insurance number actually arrived in the UK.

Trends in migration from the A8 and A2 countries

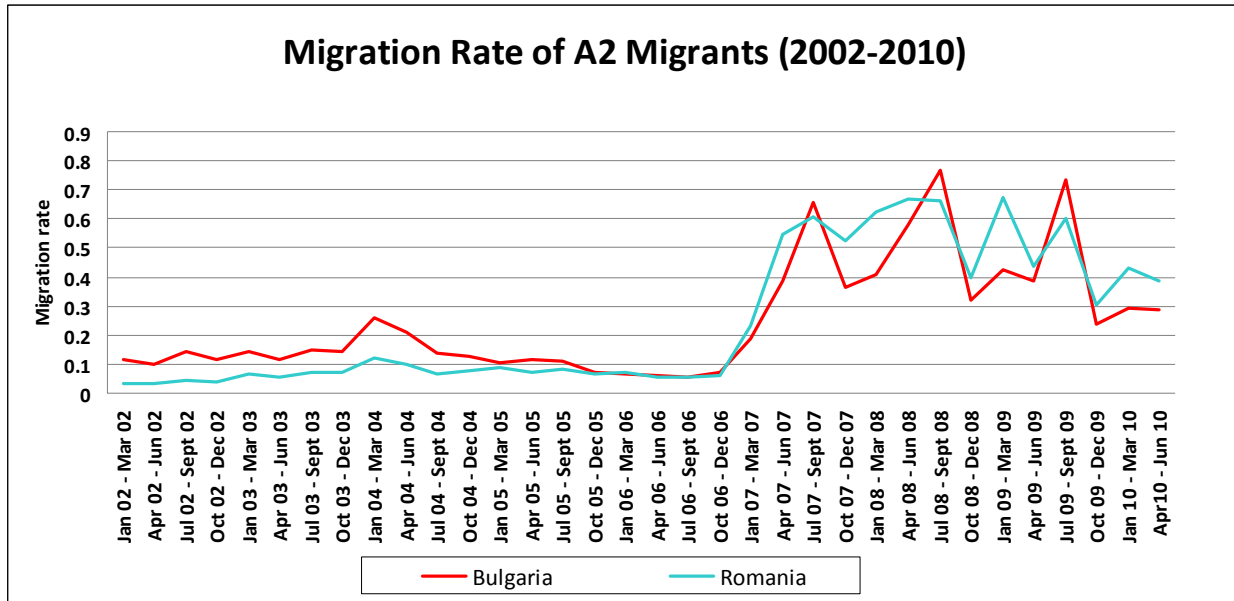
Chart 1: Trends in quarterly migration to the UK amongst A8 migrants (based on national insurance number data)



Key points on the graph above are:

- Migration rates are calculated as a percentage of active population in the respective countries using quarterly national insurance numbers data.
- Migration rates fluctuated substantially over the period, with a post-enlargement surge for all A8 nationality groups, but with different groups reaching peaks at different times.
- An upward trend can be seen for Latvia and Lithuania from 2009, before falling in the first quarter of 2010 for Latvia.

Chart 2: Trends in quarterly migration to the UK amongst A2 migrants (based on national insurance number data)



Key points on the graph above are:

- Trend in quarterly migration rates (national insurance numbers as percentage of active population) is quite similar for Bulgaria and Romania.
- The migration rate fluctuated substantially for both countries post-enlargement, with an obvious increase after 2007.
- There was a large fall in the migration rate since September 2009 - likely due to the economic downturn.

Demographic characteristics of A8 and A2 migrants

The results in Tables 3 and 4 below should be treated with particular caution due to low sample size for the migrant groups which could make any comparisons between groups statistically insignificant.

Table 3: Social and demographic statistics by immigrant categories (Labour Force Survey, 2004-2009)

Category	A2 migrants	A8 migrants	Other migrants	Total
1) Gender				
Males	49.8 %	49.6 %	46.7%	46.9 %
Females	50.2 %	50.3 %	53.3%	53.0 %
2) Age				
17-25	28.4%	29.6 %	13.3 %	14.8 %
26-35	39.9 %	47.4 %	28.0 %	29.8 %
36-45	20.7 %	12.6 %	26.5 %	25.2 %
46-50	5.6 %	4.6 %	11.2 %	10.5 %
Over 50s	5.4%	5.8%	21.0%	19.5%
3) Marital Status				
Married	49.5 %	59.4 %	41.9%	43.5 %
Unmarried	50.5 %	40.6 %	58.0%	56.5 %
4) Region				
North East	4.2%	1.6%	1.9%	1.9%
North West	2.2%	7.4%	6.7%	6.7%
Merseyside	0.9%	0.6%	0.8%	0.8%
Yorkshire & Humberside	1.7%	9.5%	6.6%	6.7%
East Midlands	1.9%	9.5%	5.9%	6.2%
West Midlands	5.5 %	6.2 %	8.5 %	8.3 %
Eastern England	7.7 %	9.5 %	8.2 %	8.4 %
London	57.7 %	24.6%	34.6%	42.8%
South East	9.7 %	10.0%	13.7%	13.4%
South West	3.7%	5.7%	4.9%	4.9%
Wales	0.9 %	2.9 %	2.0 %	2.3 %
Scotland	3.1 %	7.7%	4.1 %	4.4 %
Northern Ireland	0.6 %	4.4 %	1.8 %	2.3 %
Total	777	7,624	83,558	91,959

The table above shows that:

- Age profile: Nearly two-fifths of A2 and A8, and over a quarter of all other migrants are in 26-35 years age band.
- Settlement patterns: London and the South East are the most popular destinations for **all** migrants with London particularly popular amongst **A2** migrants (over 50 per cent).
- London, the South East, the East of England, the East Midlands and Yorkshire and Humberside are the most popular areas of settlement for **A8** migrants.

Table 4: Social and demographic statistics (continued)

Category	A2 migrants	A8 migrants	Other migrants	Total
5) Education Levels*				
Low (≤17)	26.8%	33.2%	50.4%	48.8 %
Medium (18-20)	34.8%	35.1 %	17.6 %	19.3 %
High (≥21)	38.3%	31.7 %	31.9 %	31.9 %
6) No. of Dependent Children				
No Child	62.5%	62.4%	54.2%	54.9%
1-2 Children	31.3%	34.2%	34.3%	34.3%
3-4 Children	3.1 %	3.4 %	10.2%	9.5%
More than 4 Children	3.1 %	0.0 %	1.3 %	1.2 %
Total	777	7,624	83,558	91,959

* Education is divided into low, medium and high level depending upon the age - age left full time education.

The table shows that:

- Education level: The proportion of those with lower education levels is lower amongst A2 and A8 migrants than amongst all other migrants. A2 migrants also have a higher proportion of highly educated people compared to other migrants.
- Dependent children: A2 and A8 migrants are more likely to have no children than other migrants. Nearly two-thirds of A2 and A8 migrants don't have any dependent children. However, A2 migrants are also more likely to have more than four children.

The results in Table 5 below should be treated with particular caution due to low sample size for the migrant groups which could make any comparisons between groups statistically insignificant.

Table 5: Pre- and post-enlargement characteristics of A2 and A8 migrants (Labour Force Survey, 2004-2009)

Category	Pre-enlargement		Post-enlargement	
	A2 migrants	A8 migrants	A2 migrants	A8 migrants
1) Gender				
Males	48.3 %	44.0 %	48.6%	51.5 %
Females	51.7 %	56.0 %	51.4%	48.5 %
2) Age				
17-25	20.7%	15.5 %	36.1 %	33.8 %
26-35	41.7 %	49.1 %	39.8 %	47.6 %
36-45	23.3 %	16.2 %	20.3 %	11.4 %
46-50	6.6 %	6.1 %	0.75 %	4.0 %
Over 50s	7.7 %	13.0%	3.01%	3.3%
3) Marital Status				
Married	43.3 %	49.4 %	59.4%	64.4 %
Unmarried	56.7 %	50.6 %	48.6 %	35.6 %
4) Education Levels*				
Low (≤ 17)	23.3 %	43.2 %	36.0 %	28.7 %
Medium (18-20)	35.2 %	26.3 %	28.5 %	38.8 %
High (≥ 21)	38.3 %	30.5 %	35.4 %	32.4 %
5) No. of Dependent Children				
No Child	60.3 %	66.3 %	56.6 %	58.8 %
1-2 Children	36.8 %	31.2 %	35.4%	37.3%
3-4 Children	2.8 %	2.4 %	0.0 %	3.8 %
More than 4 Children	0.0%	0.0 %	8.0 %	0.0%
Total	602	2,414	175	5,210

The results in Table 6 below should be treated with particular caution due to low sample size for the migrant groups which could make any comparisons between groups statistically insignificant.

Table 6: Pre- and post-enlargement regional distribution of A2 and A8 migrants (Labour Force Survey, 2004-2009)

Category	Pre-enlargement		Post-enlargement	
	A2 migrants	A8 migrants	A2 migrants	A8 migrants
Region				
North East	1.16 %	1.6 %	8.0 %	2.1%
North West	3.9%	6.4%	1.7%	8.7%
Yorkshire & Humberside	2.9%	5.8%	2.3%	11.4%
East Midlands	2.3%	5.8%	1.1%	11.0 %
West Midlands	3.1 %	5.6 %	6.3 %	7.1 %
Eastern England	5.3%	4.9 %	16.57%	9.7 %
London	60.5 %	44.9%	42.8%	16.1%
South East	4.8%	11.9%	6.8%	9.9%
South West	0.8%	3.9%	5.1%	6.0%
Wales	3.2 %	1.5 %	1.1 %	3.6 %
Scotland	0.8 %	4.0%	6.8 %	8.2 %

The results relating to A2 and A8 migrants in Table 7 below should be treated with particular caution due to low sample size amongst this group especially when looking at the propensity to claim particular types of benefits from what is an already small pool of migrant benefit claimants.

Table 7: Benefit claimants by type of immigrant and UK-born (Labour Force Survey, 2004-2009)

	UK-born	A2 migrants	A8 migrants	Other migrants	Total
1) Claiming Benefits Yes	40.4%	15.4%	23.1%	38.8%	39.8%
2) Type of Social Benefits Claimed					
i) Unemployment related	3.7%	5.7 %	3.7%	5.3%	3.9 %
ii) Income Support	9.9 %	5.7 %	4.4 %	13.2%	10.4 %
iii) Sickness	13.8%	5.7 %	2.4 %	8.6 %	12.9 %
iv) State Pension	28.6%	9.4 %	7.4 %	17.0%	26.6 %
v) Family related (working and child tax credits etc)	0.3 %	0.0%	0.4%	0.4 %	0.3 %
vi) Child Benefit	41.2%	69.8%	77.2%	50.4%	42.9 %
vii) Housing/council	1.2 %	1.8%	2.6%	2.6 %	1.4 %
viii) Others	1.2 %	1.8 %	1.9 %	2.7 %	1.5 %
3) Type of Housing Benefits Claimed					
i) Housing Benefit	81.6%	91.6%	91.6%	84.9%	82.4%
ii) Council Tax Benefit	18.4%	8.3%	10.6%	15.1%	17.6%
Total	78,232	396	3710	41,097	93,419

The table above shows that:

- A much higher share of the UK-born and the other migrants group claim benefits relative to A2 and A8 migrants.
- The majority of those claiming benefits are UK-born and other migrants.
- Apart from child benefit, sickness, state pension and income support are the major types of benefits claimed by the UK-born.
- Of the relatively small pool of A2 and A8 migrants who claim benefits, the majority claim child benefit.
- Of the relatively small pool of A2 and A8 migrants who claim benefits, the share of A2 migrants claiming unemployment benefits is higher compared

to other migrant groups. However, as the sample size for the A2 group is particularly small these comparisons need to be treated with caution.

- Of the relatively small pool of A2 and A8 migrants who claim benefits, a slightly higher proportion of A2 migrants claim housing/council tax benefits compared to other migrant groups. The comparison with the UK-born is unlikely to be statistically significant given the very small differences in the claimant rates between the two groups and the large standard error likely to be associated with the estimate for the A2 group.

Type of housing benefits claimed

- Of those individuals claiming housing benefits, more than three-quarters from each group (i.e. UK-born, A2 migrants, A8 migrants and other migrants) claims housing benefit.
- The UK-born and other migrant groups are more likely to claim council tax benefits than A8 and A2 migrants.

The results in Table 8 below should be treated with particular caution due to low sample size for the migrant groups which could make comparisons with the UK-born statistically insignificant.

Table 8: Economic activity/inactivity by immigrant category and UK-born (Labour Force Survey, 2004-2009)

Activity reported	UK-born	A2 migrants	A8 migrants	Other migrants	Total
Employed	79.7%	85.3%	84.0%	71.0%	78.3%
Unemployed	3.5%	3.5%	5.0%	5.6%	3.8%
Student	0.3%	0.5%	0.2%	0.5%	0.3%
Looking after family/home	3.9%	1.5%	2.1%	4.8%	4.0%
Temp sick/injured/disabled	0.7%	0.9%	0.6%	1.2%	0.7%
Long term sick/injured/disabled	6.7%	5.8%	5.8%	10.8%	7.4%
Not looking for jobs	5.2%	2.4%	2.0%	6.0%	5.3%
Total	273,310	570	5,551	55,184	334,615

The table above shows:

- A2 and A8 migrants are more likely to be in employment than the UK-born and other migrants. Furthermore, they are less likely to not be looking for jobs, suggesting that economic motive is the key motivation behind their migration to the UK. However, these differences could be the result of

sample variability rather than reflect the true difference in employment status between the UK-born and various migrant groups.

- Over this period, A2 migrants were as likely to be unemployed as the UK-born, whereas A8 migrants appear to have had both a higher employment rate and a higher unemployment rate than the UK-born and the A2 group. However, these differences could again be the result of sample variability rather than reflect the true differences in unemployment between the UK-born and the various migrant groups.
- The percentage of those who stated long-term illness as the reason for inactivity is roughly the same for the UK-born, A2 and A8 migrants but is higher for the other migrants group.
- Inactivity due to long term sick/injured /disability is the highest form of economic inactivity for all groups.

The results relating to A2 migrants in Table 9 below should be treated with particular caution due to low sample size amongst this group which could makes comparisons with the UK-born and other migrant groups statistically insignificant.

Table 9: Economic activity/inactivity by immigrant category and UK-born (Labour Force Survey, 2010)

Activity reported	UK-born	A2 migrants	A8 migrants	Other migrants	Total
Employed	79.0%	84.2%	83.8%	71.8%	78.4%
Unemployed	5.9%	4.4%	5.6%	6.4%	5.9%
Student	0.2%	0.6 %	0.4%	0.3%	0.2%
Looking after family/home	1.6%	0.6%	1.9%	2.5%	1.7%
Temp sick/injured/ disabled	0.8%	1.2%	0.7%	1.0%	0.9%
long term sick/ injured/disabled	6.4%	6.3%	6.1%	12.0%	6.9%
Not looking for jobs	5.9%	2.5%	1.5%	5.9%	5.9%
Total	57,690	158	1118	6,681	65,647

The table above shows:

- In 2010 employment decreased marginally and unemployment has increased for all categories, possibly due to economic downturn. However, this decrease may not be statistically significant.
- Percentage of temp/sick/injured/ disabled increased for all except the other migrants category and long term sick/ injured decreased for the UK-born, while it remained the greatest for other migrants in 2010.
- The number of those looking after family and the home fell by nearly half for all, except for A8 migrants over the period.
- Inactivity due to long term sick/injured /disability is the highest form of economic inactivity for all groups.

The results in Table 10 below should be treated with particular caution due to low sample size for the migrant groups which could make comparisons with the UK-born statistically insignificant.

Table 10: Labour market characteristics of immigrants and the UK-born (Labour Force Survey, 2004-2009)

Category	UK-born	A2 migrants	A8 migrants	Other migrants	Total
Job Type					
Permanent	83.5%	48.9 %	78.4%	79.3 %	82.7%
Temporary	3.7 %	4.9 %	10.2%	6.2 %	4.2 %
Self Employed	12.8%	46.2%	11.4%	14.5%	13.1%
Self Employed in Construction	37.7%	78.7%	52.2%	35.3%	38.1%
Part Time	22.3%	14.6%	12.4%	20.0	21.7%
Tenure					
Under 1Year	15.7%	24.5%	34.7%	19.3%	16.6%
2-5 Years	32.7%	52.5%	57.9%	40.5%	34.3%
5-10Years	51.6%	23.0%	7.4 %	40.2%	49.0%
Firm Size					
Less than 25 Employees	40.5%	45.0%	31.6%	37.11%	39.7%
25-50 Employee	52.1%	43.0%	56.6%	44.81%	50.2%
More than 50 Employee	7.4 %	11.9 %	11.2%	18.07%	9.2 %
Sector					
Private	74.4%	88.5%	94.5%	75.8%	74.9%
Public	25.6%	11.5 %	5.5 %	24.2%	25.0%
Total	180,667	485	46,22	38,864	261,323

The table above shows:

- Over three-quarters of the UK-born, A8 and other migrants in employment are permanently employed.
- Temporary employment is highest for A8 migrants and nearly half of the A2 migrants are self-employed. Among the self-employed group, more than half of A2 and A8 migrants are employed in construction.
- Nearly one-fifth of the UK-born and other migrants are part-time employed.
- More than half of A2 and A8 migrants have two to five years of job tenure - consistent with post-enlargement surge in the arrival of those migrants.
- Majority of each category work in medium sized firms in the private sector.

The results in Table 11 below should be treated with particular caution due to low sample size for the migrant groups which could make comparisons with the UK-born statistically insignificant.

Table 11: Industry of employment of immigrants and the UK-born (Labour Force Survey, 2004-2009)

Grouped Industry	UK-born	A2 migrants	A8 migrants	Other migrants	Total
Agriculture/ Production	1.9%	1.0%	2.4%	0.9%	1.7%
Manufacturing	14.9%	5.4%	25.4%	11.0%	14.5%
Construction	8.7%	30.2%	10.4%	3.8%	8.0%
Retail industry	14.1%	6.4%	14.4%	12.8%	13.9%
Hospitality	3.1%	8.1%	10.4%	7.5%	3.9%
Transport/ Tele Communications	7.0%	5.6%	8.8%	8.2%	7.2%
Finance/Real Estate	5.8%	1.2%	1.9%	6.2%	5.8%
Public/ admin/Education	17.2%	5.2%	3.9%	14.1%	16.5%
Health/Social Work	12.2%	12.2%	6.4%	17.0%	12.8%
Other Sectors	15.1%	24.8%	16.1%	18.5%	15.7%
Total	217,327	484	4,645	39,018	261,474

The table above shows:

- Amongst A8 migrants, manufacturing is the most common sector of employment.
- A2 migrants are concentrated in construction and other sectors.
- The share of A2 and A8 migrants in finance and real estate is low compared to the UK-born and other migrants.
- The share of migrants who work in public/admin/education is low relative to the UK-born.
- The share of UK-born and A2 migrants who work in health and social work is the same, although this finding should be treated with caution given the low sample of A2 migrants.

The results in Table 12 below should be treated with particular caution due to low sample size for the migrant groups which could make comparisons with the UK-born statistically insignificant.

Table 12: Average years of education by occupation of immigrants (Labour Force Survey, 2004-2010)

Immigrants/ occupation	No. of Observations	Mean	Standard deviation	Min	Max
Poland					
Routine	1896	12.94	2.63	4	25
Semi-routine	219	14.33	2.96	8	27
Intermediate	801	13.49	2.81	7	22
Professional/ managerial	258	15.62	2.87	8	23
Lithuania					
Routine	285	12.12	2.45	4	21
Semi-routine	22	11.86	1.69	9	15
Intermediate	119	12.55	2.46	7	22
Professional/ managerial	21	12.33	2.53	8	17
Slovakia					
Routine	237	12.07	2.37	8	21
Semi-routine	28	14.00	2.69	10	18
Intermediate	83	13.43	2.41	9	19
Professional/ managerial	27	15.22	2.91	11	19
Bulgaria					
Routine	70	13.21	3.08	9	22
Semi-routine	22	13.18	3.03	11	23
Intermediate	105	13.87	3.24	5	26
Professional/ managerial	30	16.43	4.51	11	29
Romania					
Routine	81	11.95	2.53	7	19
Semi-routine	26	13.07	2.43	9	17
Intermediate	91	12.15	2.99	3	20
Professional/ managerial	54	15.57	2.85	9	20

Note: Years of education is estimated in the LFS by subtracting age left full time education from age.

The table above shows the following:

- Average number of years of education by occupation is highest for Bulgarians and lowest for Romanians in routine and intermediate jobs.
- In semi-routine jobs, on average Polish migrants are the most, and Lithuanians are the least educated migrants.
- For professional and managerial occupations, Bulgarian migrants are the most educated group whilst Lithuanians are the least educated immigrant group.

The results in Table 13 below should be treated with particular caution due to low sample size for the migrant groups which could make comparisons with the UK-born statistically insignificant.

Table 13: Occupational attainment by immigrant category and UK-born (Labour Force Survey, 2004-2009)

Category	UK-born	A2 migrants	A8 migrants	Other migrants	Total
Managers and senior officials	14.8%	8.1%	3.9%	15.1%	14.7%
Professional occupations	12.0%	8.5%	4.2%	17.4%	12.7%
Associate professional and technical	13.6%	6.4%	4.4%	15.7%	13.7%
Administrative and secretarial	12.7%	7.5%	5.6%	9.2%	12.1%
Skilled trade occupations	12.0%	26.4%	14.8%	7.4%	11.4%
Personal service occupations	7.9%	8.8%	7.5%	8.3%	7.9%
Sales and customer service occupations	7.8%	3.1%	3.9%	6.7%	7.5%
Process, plant and machine operatives	7.9%	6.4%	17.8%	7.7%	8.1%
Elementary occupations	11.1%	24.8%	37.8%	12.5%	11.8%
Total	134,613	295	2,926	24,403	162,237

The table above shows:

- The UK-born are employed in higher level jobs such as managers and senior officials in proportions compared to A2 and A8 migrants.
- Over 15 per cent of other migrants are employed in associate professional and technical jobs whilst A2 and A8 migrants are much more concentrated in low skilled occupations and more than one-third of A8 and a quarter of A2 migrants are in elementary occupations.
- The UK-born are also more concentrated in administrative and secretarial jobs compared to other migrants.
- Over a quarter of A2 migrants work in skilled trade occupations.
- The smallest fraction of A2 and A8 migrants is found in sales and customer service occupations.

Summary findings: Labour Force Survey analysis

Social and demographic characteristics

- Social and demographic characteristics of A2 and A8 migrants are similar. Around half of the A2 and A8 migrants are in the 17-35 age group, married, female, and without any children. The A2 migrants are both more likely to have no children and to have more than four children, compared to other migrant groups. However, due to particularly small sample sizes for this group, it is impossible to say whether these likelihoods are statistically significant.
- London and South East are the most popular destination for the A2 and A8 migrant groups, but London dominates as the destination choice for A2 migrants, with more than half of the A2 migrants based in London.
- A2 and A8 migrants have a lower proportion of low educated people compared to other migrants. A2 migrants also have a higher proportion of highly educated people compared to other migrants.

Labour market characteristics

- Employment is high amongst A2 and A8 migrants - a higher proportion of migrants from the two groups is employed compared to the UK-born and other migrant groups, although this difference may not be statistically significant.
- Around half of the A2 and A8 migrant groups have two to five years job tenure and are working in medium-size firms in private sector.

- Construction for A2 and manufacturing for A8 migrants are the main industries of employment. A2 migrants are also concentrated in health/social work and other sectors.
- The UK-born are more represented in higher level jobs - jobs such as managers and senior official – compared to A2 and A8 migrants.
- A2 and A8 migrants are much more concentrated in low skilled occupations.
- However, over a quarter of A2 migrants work in skilled trade occupations.
- The sales and customer service occupations are the least preferred choices amongst A2 and A8 migrants.

Benefit claimants

- A higher proportion of the UK-born claim benefits compared to A2 and A8 migrants and the lowest share for benefits claiming is associated with A2 migrants, although this finding may be due to the low sample size of A2 migrants
- Apart from child benefit, sickness, state pension and income support are the major types of benefits claimed by the UK-born.
- Housing benefit is the most common type of housing benefit claimed by migrants compared to council tax benefits for all groups.
- Of those migrants claiming some form of social benefit, Child benefit is the most common form of social benefits claimed by migrants. The large majority of A8 and A2 migrants who claim benefits, claim child benefit.
- Unemployment related benefit claims are highest for A2 migrants. A2 migrants are more likely to claim unemployment related benefits than the UK-born and other migrant groups. However, caution is warranted once more due to the small sample size for the A2 in particular which may mean that the differences in claimant rates relative to the much larger UK-born and other migrant groups are the product of sample variability rather than a reflection of the true characteristics for this group.

Using the A8 experience to gauge potential inflows from the A2

Empirical methodology

- To evaluate the potential migration flows from Bulgaria and Romania an econometric analysis of the determinants of A8 migration to the UK is used to gauge the potential future migration flows from the A2 countries to the UK.
- In the second step an out of sample prediction is made using the estimated coefficients of determinants of A8 migration to simulate the potential emigration rates from Bulgaria and Romania.
- The equation is estimated for three periods; the entire period (2002-2009), the pre-enlargement period (2002-2004Q2) and for the post-enlargement period (2004Q3-2009).

Limitations

- Data limitations and shortcomings.
- Assumption of static and permanent migration decision.
- Conceptual problems of specification.
- The potential effect of other EU countries' decisions.

Econometric methodology

- Following Bauer and Zimmermann's (1999) methodology, the following equation was estimated using a fixed effects estimator for a quarterly panel data set of 330 observations.

$$\ln \frac{Emigration_{st}}{Population_{st-1}} = \beta_0 Z_s + \beta_1 \ln \frac{Unemp_{st-1}}{Unemp_{ht-1}} + \beta_2 \ln \frac{rGDP_{st-1}}{rGDP_{ht-1}} + \beta_3 \ln MStock_{ht-1} + \beta_4 \ln SActive_{st-1} + \varepsilon_{st}$$

Where as **S** = Source Country, **h** = Host Country and **t** = year

Z_s = dummy variables indicating the respective sending countries.

Unemp = Unemployment Rate, **r GDP** = Real GDP per capita

Mstock = Share of Migrants Stock in the host Country.

Sactive = Demographic Share of Active Population (aged 15-39) in the source Country.

Table 14: Drivers of A8 migration: Estimation results

	<i>Total Period (2002-2009)</i>	<i>Pre- Enlargement (2002-Q2 2004)</i>	<i>Post- Enlargement (Q3 2004-2009)</i>
Relative Real GDP per capita	4.730*** (0.653)	1.733* (0.699)	-1.381** (0.422)
Relative Unemployment Rate	0.540*** (0.120)	0.425 (0.287)	0.0833 (0.067)
Migrant Stock	0.731*** (0.073)	0.159 (0.086)	0.182*** (0.051)
Demographic Share 15-39 year olds	-9.947*** (2.693)	-19.32*** (3.472)	0.225 (1.929)
Observations	330	100	230
Adjusted R-squared	0.508	0.259	0.103

Standard errors in parentheses, *p<0.05, **p<0.01, ***P<0.001

The key results shown in the table above are:

- The impact of relative real GDP per capita turns out to be negatively significant on the post enlargement migration to the UK.
- The relative rate of unemployment and the share of active young population in the source country are positive push factors for migration to the UK, though post enlargement results are not significant.
- The share of migrant stocks in the UK is an important pull factor for migrants and is positively significant for the total period and the post - enlargement period.

Table 15: Out of sample prediction for A2 migration to the UK based on the post enlargement sample

Country	Average Migration Rate
Bulgaria	0.61
Romania	0.38
Total	0.49

Policy implications

- Housing: there may be scope for DCLG to use these results of potential migration from the A2 countries to feed into scenario analysis of the demand for housing going forwards.
- Local Government Finance: the estimates presented here could be important for local authority finance settlements, which are dependent on accurate and up to date population forecasts.
- Localism, Decentralisation and Building the Big Society: the methodology and estimates presented here could be a valuable information source for local authorities in deciding the best way to allocate resources.