



# Social Networks and Polish Immigration to the UK

Economics of Migration Working Paper 5

by Madeleine Sumption

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## About ippr

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## About the author

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Madeleine holds a Masters degree with honours from the University of Chicago's school of public policy. During her studies she focused on labour economics and presented a thesis on social networks among Eastern European immigrants and its labour market implications. Her recent publications include *Migration and the Economic Downturn: What to Expect in the European Union* (co-authored; Migration Policy Institute); *Immigration and the Labour Market: Theory, Evidence and Policy* (co-authored; Equality and Human Rights Commission); and *Observations on the Social Mobility of the Children of Immigrants in the United States and United Kingdom* (co-authored; Sutton Trust, forthcoming).

Madeleine also holds a First Class Degree in Russian and French from New College, Oxford.

## Author's acknowledgements

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## Foreword: The Economics of Migration project

This working paper forms part of ippr's Economics of Migration project. The project aims to shape thinking around how we understand the economic impacts of migration, provide new evidence about the extent and nature of those impacts in the UK, and offer new insights as to how policy might best address migration to maximise economic benefit. We hope that the project will contribute to a better-informed public debate and a more prepared policy community, better able to evaluate migration's economic contributions, and to manage them to the benefit of all.

Five years on from the accession of new countries to the European Union in 2004, it is important to consider the evolving economic role of migrants from those countries in the UK. This study looks at how Polish migrants have increasingly used social networks to find employment in the UK. Although this has allowed them to maintain very high employment rates, it brings with it a risk that these migrants will be 'locked in' to low-skilled jobs, and less integrated into the wider British economy and society. The paper suggests challenges for an integration policy agenda that is focused on long-term settlement: many migrants from the EU come to the UK for a relatively short period of time, but their economic and social integration is nonetheless important. This will require policy measures that can be effective immediately, such as rapid recognition of migrants' qualifications.

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## Executive summary

Social networks play an important role in channelling workers into jobs. This has benefits: informal networks are often able to match workers and employers faster and more efficiently than formal recruitment mechanisms. But it also has drawbacks, since widespread reliance on social networks in the labour market can lead to social stratification by limiting an individual's opportunities to those that his or her peer group can provide.

Among immigrants in particular, reliance on social networks is likely to indicate poor integration among individuals who face barriers to accessing formal recruitment channels, for example due to language difficulties or a poor understanding of the local labour market. A trade-off emerges, therefore: social networks are likely to help immigrants to find jobs in the short run, but may limit opportunities for full social and economic integration in the longer term.

Since 2004, when enlargement of the European Union gave nationals from the eight Eastern European accession states (known as A8 migrants) the right to work in the UK, the largest A8 group – Poles – has increasingly relied on social networks to find employment. Empirical analysis suggests that this occurred both because of the natural development of social networks over time during a period of huge expansion and flux in the Polish immigrant population and because of the changing profile of the Polish immigrants present in the UK.

Polish immigrants' use of social networks might well be a contributor to their low unemployment and high employment rates in the UK, since informal recruitment is known to speed up the process of matching employers and employees. A more worrying possibility, however, is that it will lead to social stratification, 'locking in' Polish workers' over-representation in low-skilled jobs, despite their high education levels.

### **Implications for policymakers**

The findings of this paper are consistent with the view that Polish workers face barriers to full social and economic integration – a finding supported by qualitative studies on A8 workers' experiences in the UK. The primary challenge to policymakers is how to ease integration in the context of high rates of return migration. The most powerful driver of immigrant integration – the length of residence in the host country – can no longer be relied upon to produce results. For this reason policymakers are advised to focus not just on strategies that are effective over long periods (such as long-term training strategies and language acquisition) but also on measures such as credential recognition and the enforcement of labour standards that can have a more immediate effect.

## Introduction

Social networks play a crucial role in migration. They affect immigrants' decisions to migrate, their choice of destination and their opportunities and integration in the host country on arrival. This paper focuses on immigrants' use of social networks to find employment: the extent to which they rely on informal recruitment as opposed to formal job search methods<sup>1</sup>. Widespread reliance on social networks critically affects immigrants' success in the labour market, shaping the quality and availability of jobs as well as opportunities for social mobility over the long term. Reliance on social networks is also interesting as an indicator of immigrants' ability to become integrated (economically and socially) into the host community.

Over the five years since the enlargement of the European Union in May 2004, the UK has experienced what might be 'one of the most concentrated voluntary migrations in the world today' (Pollard *et al* 2008): the population of immigrants from eight Eastern European accession countries (the 'A8') residing in the UK is estimated to have increased by about half a million (*ibid*)<sup>2</sup>, the majority coming from Poland. The Polish population in the UK expanded roughly sixfold<sup>3</sup> over a four year period, moving from the thirteenth to the first largest foreign-born national group. Although the current economic downturn is thought to be encouraging return migration, it is likely that over the long term, Polish immigrants will remain a significant presence in the UK.

The size and composition of immigrant flows from Eastern Europe are largely beyond the Government's control. However, policy interventions can affect A8 immigrants' economic and social integration, and their impact on the communities in which they live. This paper aims to further the understanding of recent immigrants' labour market experiences, with a view to informing integration policy. The paper describes how over time, as the Polish immigrant community in the UK expanded and developed, Poles became dramatically more likely to obtain jobs through social networks, with concomitant implications for their opportunities and integration. Empirical analysis suggests that much of this change is attributable to the increasing size of Polish social networks, with a smaller but important contribution made by the changing composition of Polish immigrants over time.

This analysis focuses on Poles in the UK. Since they comprise the majority of recent A8 migrants, Polish workers clearly form an important part of any attempt to understand the nature of the recent immigration from a policy perspective. As the largest national group from the recent immigration, Polish immigrants are also the most amenable to study. Statistical analysis of the data from the Labour Force Survey has most validity for this group; and the theoretical predictions for their use of social networks are most clear-cut, since the growth in the Polish community is large enough to allow the widespread emergence of Polish social groups throughout the UK. That said, many of the conclusions reached are also relevant to other A8 nationals.

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1. Throughout this paper, 'informal' recruitment and the 'use of social networks' to obtain jobs are used interchangeably. Researchers typically use 'social networks' to refer to friends, colleagues and family members, although it is important to note that agents and labour market intermediaries can also play a similar role in the labour market (for a review, see Elrick and Lewandowska 2008).

2. Blanchflower *et al* (2007) estimate an upper bound of half a million A8 immigrants by September 2006.

3. Based on 58,000 Poles in the 2001 Census and 458,000 in 2007 as estimated by Pollard *et al* (2008).

## Why should we care about social networks?

It is typically estimated that about 50 per cent of all jobs are obtained informally, using referrals from friends, relatives or other members of a social network (Cahuc and Fontaine 2002, Montgomery 1991, Wahba and Zenou 2005). Social networks, therefore, are central to the proper functioning of the labour market. While most economic models suggest that using social networks brings economic benefits (to employers, employees and the economy as a whole), this rosy picture comes with caveats – including the potential for social stratification and poor integration, as well as increased vulnerability to shocks. This section discusses the relationship between immigrants' social networks and their experience in the host country: their short- and long-term labour market outcomes, and their ability to integrate socially and economically.

### How do social networks influence labour market outcomes?

Economists disagree as to whether a given jobseeker is likely to obtain a higher quality job by using social networks than by using formal channels. The divergence largely depends on whether we see social networks as an information-improving mechanism, or as a recourse for those who cannot find jobs by other means. In reality, there is likely to be some truth in both of these models.

First, as an information-improving mechanism, informal referrals are thought to give employers knowledge about a job candidate that they might not be able to elicit through formal interviewing: the candidate comes with a 'seal of approval' from the person who referred her. Likewise, the job candidate can obtain more information about the nature of the work, and her suitability for it. This would mean that employers and employees are better matched (Montgomery 1991, Munshi 2003). A better-matched employee is more productive and should receive higher wages and stay with the employer for longer. In addition, social networks lower the cost of looking for a job for the jobseeker, because job searches using informal methods have been shown to provide a higher probability of receiving a job offer (Holzer 1988, Frijters *et al* 2003; although note that the latter find that only white natives [not immigrants] experience shorter unemployment duration when using informal job search methods).

On the other hand, if the main reason that employers recruit through social networks is to reduce hiring costs (such as advertising and interviewing expenses), the implications are slightly different. Informal recruitment, under this assumption, does not necessarily imply a higher quality match (and hence higher wages for the worker). Indeed, an economic model in which informal recruitment's main benefit is its low cost can lead to reduced labour market efficiency and decreased employee welfare, as shown by Cahuc and Fontaine (2002).

The second major reason that social networks have implications for job quality is that the kind of worker who obtains jobs informally might do so because he was unable to take advantage of formal job search methods. In other words, informal recruitment tells us something about the workers who use it. Immigrant workers may be particularly likely to rely on social networks, precisely because they find formal recruitment challenging, for several reasons. First, language barriers may make formal routes less accessible or less successful. Much of the literature on refugees, for example, points to the fact that poor language skills make individuals reliant on social networks which allow recent arrivals to access employment (Robinson 1986). Second, recent immigrants may lack knowledge of the local labour market: Marshall (1989) shows that refugees seeking work often did not know which were the large employer sectors in the UK (this is particularly problematic given that many immigrants

change occupation or industry when they move). Third, immigrants' foreign qualifications might not be widely recognised by native employers (Bloch 2002, Kempton 2002, Mesch 2002, Bailey and Waldinger 1991) – a problem alleviated by social networks, either because the enterprise offering a job is run by fellow countrymen, or because a middleman can 'translate' the qualifications and understand their relevance.

If we compare immigrants who obtained their job informally to those who did not, we are likely to find that the former are concentrated in lower-paying jobs. This is primarily because low-skilled employers, at least in the UK, rely most on informal recruitment. Pellizzari (2004) shows that in countries such as the UK, where *formal* recruitment is the primary mechanism for finding employees in most well-paid jobs, employers only rely on informal recruitment for the lowest-productivity jobs – the jobs for which employers are less worried about making a mistake in their selection. On the other hand, in countries where employers use informal recruitment more widely, informally-recruited workers were found to gain higher wages, on average.

Importantly, the cross-country differences in recruitment practices that Pellizzari highlights could mean that immigrants from countries where informal recruitment is not associated with lower wages could suffer when they come to the UK, if they do not realise that recruiting practices here are different. Marshall (1989) shows that, at the time of his study, job hunting norms varied significantly by country and that refugees were likely to bring with them the custom of relying on contacts to find a job despite the fact that this was an 'inefficient method' for refugees whose friends and relatives often knew little about local labour markets and were quite likely to be unemployed. In particular, he argues that his graduate respondents were using job search techniques more appropriate for manual or routine clerical jobs, because they did not understand job hunting methods in the UK<sup>4</sup>.

## How do social networks affect social and economic inclusion?

While immigrants may be better off in the short run if they have the option of using social networks to find employment, a number of important long-term considerations come into play. The reliance on networks is associated with, and in some cases may directly cause, poor economic and socio-cultural integration in the host country.

### **Employment: does size matter?**

Intuitively we know that the more acquaintances an individual has, the greater the likelihood that one of them may pass on information about an appropriate job. Research on the implications of network size largely bears out this intuition, finding that members of larger (or denser) networks are more likely to have a job. Ioannides and Loury (2004) review this literature.

Munshi (2003) finds that when Mexican immigrants' communities in the United States were larger (and hence better equipped to provide informal referrals), this made members of that

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4. At the time of Marshall's study, for example, the UK was distinguished by a greater use of formal application and interview procedures than the countries of origin of refugee respondents.



community more likely to be employed<sup>5</sup>. Another study, on the variation in network size that resulted from the placement of refugees by a public agency, finds that in the long run (a few years) larger networks improve labour market outcomes (employment probability and wages), especially when the networks contain workers with substantial job tenure; but that in the short run larger network growth can decrease the probability of employment, since more individuals compete for the available job information (Beaman 2008). Patacchini and Zenou (2008) study ethnic networks in the UK and find that employment rates for individual ethnic groups increase when members are geographically concentrated. These studies suggest that ‘bigger is better’ when it comes to social networks, at least in the short run.

Note that the quality of the network also matters: networks with higher employment rates have generally been found to be more useful, since members can pass on more labour market information. Wahba and Zenou (2005), for example, find that an individual’s probability of finding a job through friends or relatives increases with both population density and the employment rate of the area in which they live (the authors use population density as a proxy for the size of an individual’s network)<sup>6</sup>.

### **Social stratification**

This strong evidence that social networks can improve employment rates, however, must be qualified by a potential side-effect: social stratification and vulnerability to shocks.

The first thing to note is that the value of a social network depends on who is in it. A jobseeker’s network is much more valuable if its members have information about high-quality jobs. On the other hand, if all of an individual’s contacts can only provide information about low-skilled or low paying jobs, and if the individual faces barriers to participating in formal recruitment mechanisms (as described above), it becomes likely that his or her success in the labour market will be held back. This effect is borne out by the evidence: a study on refugee placement in Sweden finds that living in ethnic enclaves can improve an individual’s employment prospects if the enclave is a high-income one, but can reduce earnings if it is populated by low-income co-ethnics (Edin *et al* 2003). In other words, the use of informal recruitment is likely to reduce the variation in the kinds of jobs that members of a given group can access (Montgomery 1991). This means that highly-qualified immigrants may fail to find appropriately demanding jobs if members of their network are in low-skilled occupations. Continued reliance on social networks in the labour market would make this effect self-perpetuating, such that members become ‘locked in’ to low-productivity jobs. This is particularly relevant in the case of Polish immigrants, since we know that many of them ‘downgrade’ to less skilled occupations once they reach the UK (Dustmann *et al* 2008).

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5. Munshi uses a natural experiment to provide a very robust demonstration of this effect. He uses rainfall in Mexican agricultural communities as an instrument to predict the volume of return migration to the United States: when rainfall is sparse in a given year, immigration to the US increases in a way that is exogenous to the labour market conditions in the host country, allowing the econometrician to measure the impact of larger networks without the bias created by self-selection of immigrants to certain locations based on their unobservable characteristics.

6. They also find diminishing marginal returns and, after a certain point, negative returns to network size, which they attribute to ‘congestion’ preventing the efficient transfer of information between contacts. The use of population density as a proxy for network size, however, means that this result could arise from specific characteristics of very large or crowded cities which are unrelated to network size (for example the quality of contacts). To the best of my knowledge, no other study has found negative returns to network size.

Reliance on social networks for employment, therefore, increases the uniformity of the kinds of jobs available with a given (immigrant) group. It also makes the probability of finding a job within a given timeframe more uniform. This is because individuals rely primarily on their employed acquaintances to help them to find work: if the employment rate is high, there will be more information going around; if it is low, information about vacancies will be harder to come by. In other words, employment breeds further employment.

Essentially, this means that a temporary shock to a group's unemployment rate can have a contagion effect within the group and become self-perpetuating (Calvo-Armengol and Jackson 2004). This would make it difficult for otherwise employable immigrants to access job opportunities if the unemployment rate in their network is already high. The result is confirmed by Topa (2001), who notes the effect of social networks in creating geographical concentration of unemployment that cannot be explained by individual or neighbourhood characteristics. He suggests that high unemployment in a social network breeds further unemployment, since it reduces the number of informal referrals available. Since the UK is now in recession, it is worth noting that the particularly high reliance on social networks among Polish immigrants, documented in this paper, may well be prolonged beyond the end of the downturn, for this very reason.

Finally, social networks can breed social stratification by excluding non-members. The extensive sociology literature on ethnic or immigrant groups in the labour market emphasises the tendency of groups with shared identity or social ties to seek to dominate a particular niche and gain control over it by excluding outsiders (see, for example, Waldinger 2000). There is an argument, for example, that a combination of strong social networks and employer discrimination has allowed Asian immigrants and Hispanics to push African Americans out of the more desirable manufacturing jobs in the United States (Andersson *et al* 2005). However, this must be seen in the context of extensive research showing that immigration does not significantly reduce local workers' wages or employment rates in most cases (for a review, see Somerville and Sumption 2009). In particular, the fact that Polish immigrants are overrepresented in 'undesirable' jobs with irregular hours or working conditions (such as agriculture and hospitality), suggests that the prospect of immigrants 'shutting out' locals is not a major drawback associated with their use of social networks, in this case.

### **Integration**

Reliance on social networks in the labour market may be important as an indicator of (and potentially a causal contributor to) poor integration into the host community. As described earlier, immigrants often use social networks in the labour market because they cannot access formal opportunities. This means that an immigrant group that relies heavily on social networks in the labour market may be poorly integrated. Mesch (2002) shows that Russian immigrants to Israel who worked in their own language (many of whom would have accessed these jobs through fellow nationals) were less likely to have social contacts with native Israelis – an indicator of assimilation. Montgomery (1996) also finds that participation in an ethnic network is associated with poor 'subjective adaptation' (essentially satisfaction with life in the host country).

Integration is, of course, a complex and ill-defined concept that can refer to any or all of economic welfare, opportunities and mobility, social ties with non-immigrants, acquisition of host-community cultural norms and psychological adaptation to live in a new country (see Montgomery 1996). It is not surprising, therefore, that researchers disagree as to the exact relationship between social networks and integration.

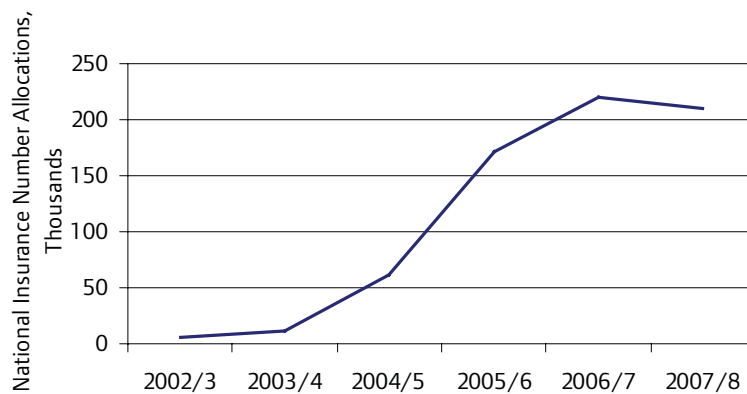
To the extent that there is an academic ‘consensus’, it is that national or ethnic networks ease settlement in the short run, but can shelter immigrants from mainstream life in the host country. Hagan (1998) for example, points to the short-term benefits of organisational support and information on housing and employment, but notes that strong ties within an immigrant group can restrict opportunities outside of that group. Bailey and Waldinger (1991) show that ethnic enclaves allow immigrants to make better use of their skills and to develop human capital in the long run, with the caveat that social mobility is often possible only within the enclave. Networks may delay language acquisition necessary for social integration and the development of human capital (Mesch 2002), but they also enhance economic integration by providing jobs. We might expect economic integration to lead to social integration (Borjas 2006), although this does not have to be the case if jobs are primarily part of an ‘ethnic sector’. (Note also a dissenting opinion that economic and other indices of absorption are not linked [Carmon 1981]).

## Recent EU immigration to the UK

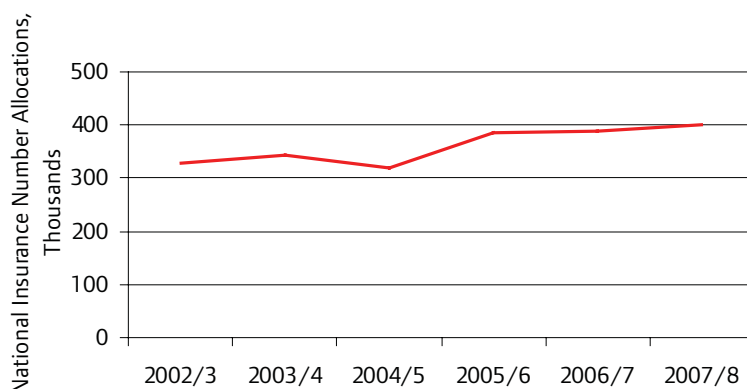
The scale of the Eastern European immigration into the UK following EU enlargement in 2004 was large and unexpected. Between May 2004 and December 2007, the population of A8 immigrants in the UK is estimated to have increased by around half a million (Pollard *et al* 2008). Over a four-year period, Poles moved from being the thirteenth largest to the first largest national group in the UK. The 2001 Census recorded 58,000 people born in Poland but by time of the final quarter of 2007 that number was thought to be approximately 458,000 (ibid).

**Figure 1.**

**a) National Insurance numbers allocated to Polish workers**



**b) National Insurance number allocations to non-A8 overseas workers**



Source: Department for Work and Pensions (2008)

Figure 1 shows the growth in the number of immigrants from Poland and from non-A8 countries present in the UK, as measured by National Insurance number allocations<sup>7</sup>. Comparing the top and bottom panels, it is clear that the proportional growth of the Polish community was enormous, while the numbers of other immigrants registering to work in the UK grew much more slowly, and in fact fell between 2003/4 and 2004/5.

Over the first years of post-enlargement migration, therefore, the potential size of Polish social networks grew rapidly. As time passed, national networks may also have become more organised as the ‘first wave’ of A8 migrants<sup>8</sup> settled and developed mechanisms for the transfer of information. We might, therefore, expect the use of social networks in the labour market to become more widespread over time, with many of the consequences described above.

A substantial body of research now addresses the impact of Eastern European immigration in the UK (see for example Lemos and Portes 2008, Pollard *et al* 2008, Coombes *et al* 2007, Ruhs 2006), although it may be some years before flows to and from the UK reach an ‘equilibrium’ point, communities settle, and the overall, long-term role of Eastern European immigrants can be objectively evaluated.

### Characteristics of Polish immigrants after 2004

This paper does not provide a full review of the characteristics of A8 immigrants, which has been done elsewhere (see Pollard *et al* 2008). It does, however, discuss some of the primary characteristics that affect their use or reliance on social networks. The extensive work on social networks suggests that several individual characteristics affect the likelihood that an individual will use his or her social network to get a job, among which the primary factors are age, gender, education, and occupation. As throughout the paper, the focus here is on immigrants from Poland. The data is taken from the Labour Force Survey (LFS) (see box, p14).

Nationality	Median age	% Female	% (of employed) in unskilled* occupations	Median school leaving age
Polish	26	43.8	63.6	19
Other A8	26	45.0	62.9	18
Other immigrants	28	48.3	24.5	21
Natives	39	47.7	18.6	16

\*Including: process, plant and machine operatives, assemblers, construction workers, transport and machine drivers; other labourers, porters, bar and restaurant staff and cleaners

What are the relevant characteristics of Polish immigrants over the 2004–2007 period? On average they are significantly younger than natives and slightly younger than other immigrants arriving in the same period, as shown in Table 1. They are more likely to be male than both natives and other immigrants. Along with the other A8 immigrants, they are more strongly represented in low-skilled occupations than natives and non-A8 immigrants.

7. National Insurance number allocations are not a perfect measure of immigration inflows, since some of the immigrants who receive them will already have been in the country for some time, perhaps working informally. However, for the current purpose of illustrating the growth of the Polish and other immigrant communities, they provide a useful proxy for inflows.

8. Note that many were already acquainted with the UK labour market, having made previous exploratory visits.

The LFS does not provide educational qualification variables for many immigrants. Data on the age at which an individual left full-time education provide a proxy for education, subject to imperfections created by gaps and delays in schooling. While occupational status often provides an indication of skill, this is problematic in the case of recent Eastern European immigrants who are thought to downgrade in the UK, working in occupations that do not require their level of education. This phenomenon is clear from the data: while the educational age proxy suggests that Poles and other Eastern Europeans are more educated than natives, they are still much more likely to be employed in low-skilled occupations. This pattern is corroborated by other estimates: Drinkwater *et al* (2006) estimated that Polish immigrants in the UK had an average of 13.6 years of full-time education, compared to 11.9 years for other A8 nationals (although the quality of this education or its relevance to UK employers is hard to gauge). In the light of this, the present analysis uses educational leaving age, rather than occupational status, as the indication of an individual's skill level.

Finally, immigrants in general are more geographically concentrated than natives. Non-A8 immigrants are most likely to locate in London or the wider South East. While the residence patterns of immigrants (and especially the A8) are in flux, Poles are more dispersed than other immigrants, but less so than natives (42 per cent of non-EU immigrants in 2008 were in London, as opposed to 26 per cent of A8, 22 per cent of Poles and 8 per cent of natives) (Salt 2008).

## Data: The Labour Force Survey (LFS)

The following analysis uses data from the UK's Labour Force Survey (see box). The LFS includes information on how individuals obtained their current job, if they obtained it within the last 12 months (or within the last three months for surveys conducted before spring 2005).<sup>9</sup> One possible response is 'hearing from someone who worked there'. This variable is used here as an indicator that the individual used his or her social network to obtain the job. This 'network' variable only captures part of the social network effect, since people might not give this response if they obtained the job through an informal contact who did not work at the company. It seems likely that this is the case, since the proportion of people obtaining their jobs informally is lower in the dataset than the estimates described above: 27 per cent of all people in the dataset who answered the relevant question obtained their current job in this way. Since the analysis in this paper considers proportional trends over time, we can still learn a great deal about the changes in Poles' use of social networks, even if the whole effect is not captured: the underestimate that the LFS produces for the total proportion of workers obtaining jobs informally is not problematic so long as the *relative* numbers of people obtaining jobs from someone who worked at the company and from someone who did not work at the company are constant over time.

The LFS is likely to under-represent migrant workers, in particular those living in public or non-profit communal accommodation and business addresses, from which the LFS does not sample. If individuals have different patterns of network use from Poles living in standard residential accommodation, the empirical analysis will not account for them. However, this will only bias the analysis in this paper results if the change in behaviour over time is different between the two groups.

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9. All the regressions that use the 'network' variable in this paper contain only data from the surveys in which the question was asked over the 12 month period, in order to ensure consistency across responses.

### Using the Labour Force Survey

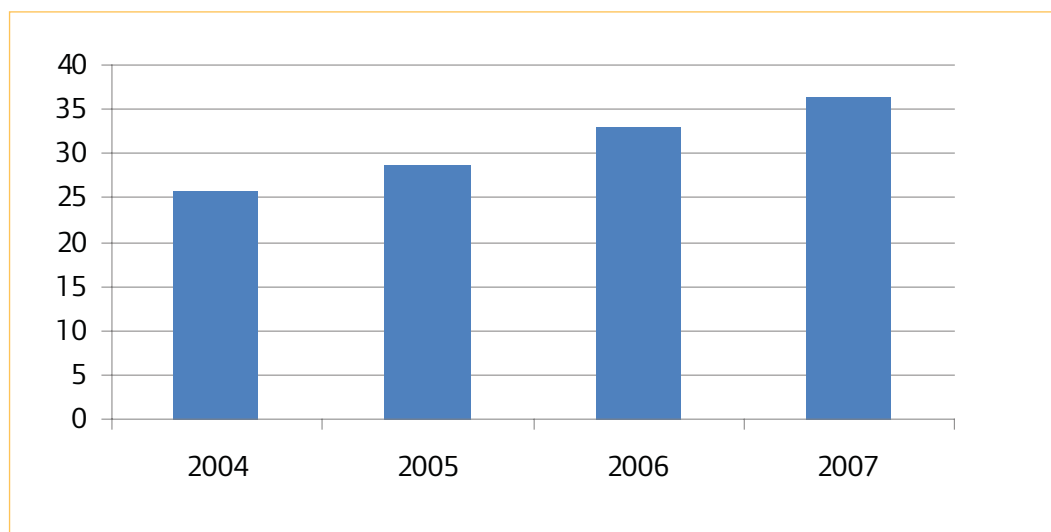
This paper analyses data from 15 Labour Force Surveys between 2004 and 2007 inclusive. The Labour Force Survey is a panel survey administered by the UK government and used to calculate the unemployment rate. Each quarter about 120,000 individuals are interviewed, selected at random. Once selected an individual is interviewed for five consecutive quarters, as long as they remain at the same address and agree to participate. For this study the surveys were combined to create an independent cross-sectional time series: for each individual one observation is taken – the last one in which they appear in the survey – giving a total of just over 600,000 responses, 0.4 per cent of which are from Polish immigrants. Of the Polish immigrants, 70 per cent were employed at the time of their LFS interview, and 35 per cent answered the question about how they obtained their job (the rest had been in their current job long enough that the question was not asked, under the LFS protocol).

## The prevalence of informal referrals

How heavily do Polish workers rely on social networks in the labour market, and how does this compare to other groups? When we compare the natives to all immigrant workers as a group, employed immigrants are marginally less likely to have obtained their current job informally – 26 per cent compared with 27 per cent for natives (the difference is not statistically significant). When we compare Polish immigrants to natives, however, the difference is much larger: 32 per cent of Poles in the dataset who obtained their job between 2004 and 2007 (the difference with natives is significant at the 1 per cent level).

During the period studied, the use of networks by Polish workers steadily increased. Figure 2 shows the percentage of Polish workers who used a network to obtain their current job, by the year in which that job was obtained. Approximately 26 per cent of Poles who got their jobs in 2004 used a social network, compared to 36 per cent in 2007 – an increase of about 40 per cent.

**Figure 2.**  
Network use by  
Poles



Two factors are at work which will be explored in this paper. First, the data suggests that for a given cohort (those who arrived in a given year) immigrants who obtained their jobs later were more likely to do so through their social network. Second, for individuals who obtained

their job in a given year, the proportion using a social network also increases, the more recently they arrived (this could be attributed either to the length of stay per se, or to differing characteristics of later immigrants – to be discussed below).

Table 2 displays the same phenomenon as a linear probability regression. The coefficient of 0.046 in column I implies that for each year between 2004 and 2007, the use of networks increased by approximately 4.6 percentage points. Breaking down the results by ‘old’ and ‘new’ immigrants (pre- and post-2004) reveals an interesting detail: the phenomenon is much more significant for more recent immigrants. Column II shows that the yearly increase goes up to 5.2 percentage points when we consider only Poles who arrived in 2004 or later. Column III shows that the effect for pre-2004 immigrants alone is not statistically significant. This is probably because the sample size of pre-2004 Poles is too small to obtain robust results, although it could also suggest pre-2004 Polish immigrants did not experience the same expansion in the use of social networks over the first few years since enlargement (for example because social links between ‘old’ and ‘new’ Poles are not well developed, with the earlier immigrants occupying different types of jobs in different sectors).

**Table 2: Polish workers’ use of social networks over time, 2004–2007**

	(I) All cohorts	(II) Recent immigrants (2004+)	(III) Pre-2004 cohort
Year job obtained	0.046* (2.89)	0.052* (3.02)	0.015 (-0.32)
R-squared	0.008	0.009	0.01
N	996	926	70

T-statistics in parentheses. Sample comprises working-age Poles.

\* Significant at 1 per cent

## What caused the increase in network use among Poles?

The increase in the importance of social networks for Poles obtaining jobs between 2004 and 2007 is large and significant. As outlined earlier, the trend has several important implications for the welfare of immigrants and their communities. Why did this change occur? The following analysis explores two major hypotheses: first, that ‘the same’ Poles began to behave differently over time; and second, that ‘different’ Poles arrived in the UK who were already disposed to behave differently.

### The same people behaving differently

According to this scenario, the workers we observe in 2007 (who arrived between 2004 and 2007) are essentially similar to those we observe in 2004, but they behave differently because their environment has changed, for two primary reasons: a larger network and greater integration.

The size of the Polish network increased over time, providing greater opportunities for its members to disseminate information about jobs. The research reviewed earlier provides a convincing picture of this effect. If this influence is at work, Poles in the UK should be expected to use social networks more, simply because they know more people.

The change over time could be observed even without a change in the essential characteristics of Poles in the UK, because of integration. As time passes between 2004 and 2007 more and more of the people we observe have been in the UK for longer. This means



they may have gained a better knowledge of the local labour market, have gained UK work experience and developed social ties. The amount of time spent in the host country is probably the most widely recognised factor increasing economic and social integration (Bloch 2002, Carmon 1981, Carey-Wood *et al* 1995, Kempton 2002, Mesch 2002). To the extent that close ties within immigrant networks are associated with poor integration, we may expect the use of networks to *decrease* with time as immigrants become integrated. On the other hand, immigrants who have been resident for longer are likely to know more people, and so may find it easier to gain an informal referral.

### Different people behaving differently

Under this hypothesis, the constant inflow of Polish immigrants changes the composition of the Polish community in the UK. If the average 2004 arrival is a different kind of person to the average 2007 arrival, patterns of network use should also change. The most important theory supporting this view is that of *endogenous moving costs*. Social networks themselves affect the decision to migrate and the destination chosen (Koser and Pinkerton 2002 discuss this phenomenon for asylum seekers). They reduce the costs of settling in a new country, providing information about housing and employment. This means that a larger network can make migration worthwhile even for lower productivity workers expecting relatively lower wages (Carrington *et al* 1996, Massey and Espinosa 1997). In other words, migration is to some extent a self-perpetuating process (Massey 1990), and we should expect less skilled workers to migrate in increasing proportions over time. If lower-skilled workers also use networks more than high-skilled ones (and there is strong evidence that this is the case – see for example Hellerstein *et al* 2008), we should also expect the prevalence of informal referrals to increase over time.

In fact, some of the observable characteristics of Polish immigrants do change over the four-year period, suggesting that a similar process may have taken place.

**Table 3: Change in characteristics over time, by year of arrival, for Polish working-age immigrants**

Year of arrival	2004	2005	2006	2007
Median age	27	26	25	
Median education leaving age	20	20	20	19
Percent female	37.8	41.6	46.7	51.6
Percent married	40.3	37.3	33.2	28.1

Note that these figures represent the characteristics of A8 immigrants by year of arrival; they do not show the change in the overall

A8 population present in the UK in a given year

The average age of Polish immigrants arriving in the UK decreased slightly, meaning that the average immigrant would have less labour market experience. The education leaving age did not change meaningfully. The proportion of women increased substantially, and the proportion that was married declined. The impact of these changes on Poles' reliance on social networks is discussed in the next section.

## Empirical results from the Labour Force Survey data

Table 4 shows the results of a multiple linear probability regression of network use on the year an individual's job was obtained and a number of factors that we expect to affect immigrants' reliance on social networks. This enables us to explore whether the increase in



the use of social networks over time was likely to be due to the changing observable characteristics of Polish immigrants, or whether the effect remains even when we control for these changes. It also allows us to determine which characteristics have been influential in Polish workers' use of social networks over the whole period. Column I shows the results for all Polish immigrants; column II for immigrants arriving in 2004 or later.

**Table 4. OLS Estimates for probability of network use**

	(I) All Poles	(II) Recent arrivals only
Year job obtained	0.049** (2.55)	0.048** (2.33)
Years in the UK	-0.014 (-0.18)	-0.016 (-0.66)
Female	0.102*** (2.75)	0.102*** (2.68)
Married	0.019 (0.045)	0.018 (0.41)
Age	0.002 (0.62)	0.003 (0.90)
Education leaving age	-0.002 (0.16)	-0.001 (-0.5)
Unskilled job	0.075* (1.80)	0.085** (1.99)
R-squared	0.090	0.104
N	787	733

OLS=Ordinary Least Squares

T-statistics in parentheses

\*\*\* Significant at 1% level \*\* Significant at 5% level \* Significant at 10% level

Sample includes employed Poles obtaining jobs between 2004 and 2007. Regressions include controls for all industry sections; 13 government office regions and two measures of mobility (quarters in survey; whether changed jobs during survey). T-statistics calculated with robust standard errors.

## Gender

Research on integration suggests that different patterns exist for men and women (Hagan 1998, Schoeni 1998). Researchers have found conflicting results on whether women integrate more or less easily than men, and the culture of the source country is doubtless a very important factor in this regard, since labour force participation and outcomes vary strongly by country of origin group (see Montgomery 1996 for a discussion). On the other hand, the economic theory of social networks provides a clearer prediction – that women should be more likely to use social networks than men, in the presence of discrimination. This is because, if we assume that informal recruitment works by providing better information about candidates, female workers whose outward characteristics may be undesirable to employers (in the presence of statistical discrimination) but whose actual ability is high will benefit most from the transfer of additional information (Munshi 2003). The empirical findings confirm this hypothesis: Polish women were 10 percentage points more likely to have used a network to obtain their current job than Polish men, holding all else constant<sup>10</sup>. The effect is the same when we consider recent immigrants only. Since the proportion of female Polish immigrants increased over the period studied, this will have contributed to the increase in the prevalence of informal recruitment.

10. Note, however, that the same trend does not hold for native women, who are on average less likely to use networks than native men.

### **Length of stay in the UK**

As discussed earlier, economic and social integration into the host community takes place over time, as immigrants acquire language skills and work experience, and get to know the local labour market. The length of time in the UK is negative but not statistically significant in this analysis. If the negative effect is genuine, this suggests that longer residence reduces immigrants' reliance on social networks.

### **Education**

We should expect that less educated workers will be more likely to use informal recruitment. First, they are more likely to be working in unskilled positions for which informal recruitment is more common (Pellizzari 2004, Hellerstein *et al* 2008). Second, less educated immigrants are thought to find integration harder (Bogue *et al*, forthcoming), and hence rely more on the immigrant network (Kempton 2002, Bloch 2002, Montgomery 1996). In this analysis, workers in unskilled jobs were 7.5 percentage points more likely to have used a social network (8.5 percentage points for recent immigrants) – consistent with expectations. On the other hand, the educational leaving age is negative, but very small and not statistically significant. This may be because downgrading among Polish workers has reduced the return on education, meaning that less differentiation occurs between workers with more and less education.

### **Age and marriage**

Munshi (2003) suggests that older workers should benefit most from informal referrals for the same reason that women would: employers are less willing to hire them, so additional information helps those whose actual ability is high. Younger immigrants are thought to integrate more easily into host communities and hence may have less need for national social networks. In this analysis, the impact of age is very small and not statistically significant, however. The impact of marriage is positive but also not statistically significant. The positive effect, if it indeed exists, could occur because marriage gives an individual access to more acquaintances through their spouse.

### **Year the job was obtained**

For each year that passed between 2004 and 2007, Polish immigrants became 4.9 percentage points more likely to use a social network to get their job, holding constant other individual characteristics (and 4.8 percentage points more likely when we consider recent arrivals only). In other words, even when we control for other factors that affect the use of social networks, there is still a substantial increase in their importance over the period studied.

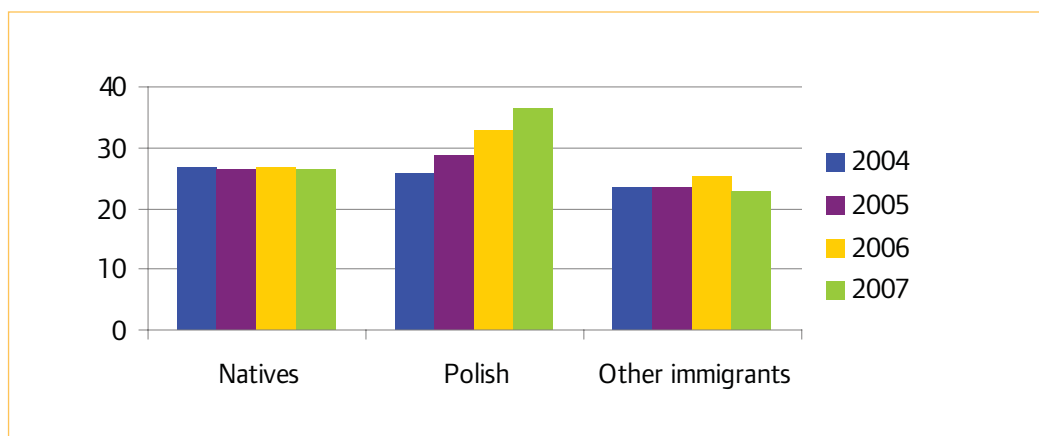
This suggests that both of the hypotheses described earlier have some truth: different immigrants (primarily, more women) arrived over time, increasing the extent to which social networks were used; but 'the same' immigrants also began to behave differently, relying to a greater extent on their (potentially expanding) network.

## How does this compare to other immigrant groups?

The empirical evidence presented in this paper demonstrates a sizeable increase in Poles' reliance on social networks in the labour market. The results indicate that both the growth in the size of the Polish community and the changing characteristics and behaviour of Polish immigrants are likely to have played a role. How do we know, however, that the change in the role of social networks was not in fact due to economy-wide developments in the labour market occurring at the same time?

Figure 3 shows the prevalence of network use among natives, Poles and other immigrants (excluding from the A8) obtaining their jobs between 2004 and 2007. It is clear that while a substantial increase in the use of social networks can be seen among Poles, other groups do not see this change. This confirms that the rapidly changing situation for Polish immigrants was in all likelihood due to specific factors affecting that group during a time of great change in the nature and circumstances of the Polish population, rather than due to underlying changes in the British labour market.

**Figure 3.**  
Network use by  
natives, Poles  
and other  
immigrants



## What do the findings imply for other Eastern European immigrants?

While this paper has focused on Poles, much of its argument should also apply to other Eastern European immigrants, albeit to a lesser extent. As described earlier, Polish and other A8 immigrants share characteristics such as youth and the propensity to be employed in unskilled occupations, as well as being more geographically dispersed than non-A8 immigrants. Non-Polish A8 national populations in the UK also grew between 2004 and 2008, suggesting that they should have experienced similar phenomena: primarily, an increase in the availability of informal job referrals; and decreasing costs of moving to the UK as the national network of each group increased (assuming that they form separate social groups rather than one 'Eastern European' network). On the other hand, the sheer size of the Polish population allows economies of scale in the formation of organisations that facilitate social interaction and informal employment – Polish-language newspapers in wide circulation, Polish employment agencies and websites, and complementarities between workers at a single firm who speak the same language, for example – that is more difficult for the smaller A8 immigrant groups that do not have these advantages.

Two groups other than Poles are large enough to obtain reliable statistics on overall network use in the first years since EU enlargement: Lithuanians and Slovaks (these are the second and third most numerous A8 migrants to the UK). The results are varied: 37 percent of Lithuanians interviewed obtained their job through a social network, and 25 percent of Slovaks; by comparison the other A8 nationals combined (excluding Poles, Slovaks and Lithuanians) did so in 30 per cent of cases (2004 to 2008 inclusive). While sample size does not allow a detailed examination of how this changed over time, it is clear that substantial heterogeneity exists – as one would expect given the existence of different norms and practices in different source country labour markets. In any case, however, reliance on social

networks is higher among the A8 as a group than among native workers. This suggests that the conclusions and policy implications discussed in the following section are relevant to A8 nationals outside of Poland, and particularly to Lithuanians, who also appear to have relied strongly on social networks in the labour market.

## Conclusions and discussion

The analysis in this paper suggests that networks have acted as an increasingly important mechanism for Polish workers to find employment. This is perhaps not surprising, given the growth of the Polish community *per se* – growth that may have created an environment in which Poles had more opportunities available to them within their own national network, and hence less need or incentive to look for work outside of that network.

### **Is the increasing use of social networks a good thing?**

The growing importance of social networks has both positive and negative implications. As discussed earlier, informal recruitment is often believed to improve labour market efficiency by reducing the cost of recruitment and increasing its speed. By using this mechanism more than natives, therefore, Poles may have contributed to economic efficiency in the UK<sup>11</sup>.

In the short term, well developed social networks make it easier for immigrants to find jobs, suggesting that the trends described in this paper are beneficial to Poles. Economic theory dictates that having more options cannot be a bad thing in the short run – suggesting that immigrants should be better off with developed social networks than without. Indeed, the strong role of social networks could, in part, explain the very low unemployment and high employment rates that Polish workers have enjoyed in recent years. One of the conclusions of the literature reviewed in this paper is that even if networks do not always lead to the most *efficient* matches of employers with employees, they do cut costs and speed up the matching process – both of which would be expected to reduce frictional unemployment (unemployment that is always present in the economy).

However, if immigrants use social networks for the ‘wrong reasons’ – for example, they do not understand that this is not the primary recruitment mechanism for high-productivity jobs in the UK, in contrast to their home country (Marshall 1989) – they could end up with a lower wage than they might have done if they had pursued more formal job search methods. Also, social networks may hinder long-term opportunities and integration; and they may indicate that Poles are having trouble finding high-skilled employment.

As described earlier, evidence on the causal effects of social networks on economic and social integration into the host community is mixed. It seems likely that the question involves a short-term versus long-term trade-off, with networks helping initial settlement but hindering eventual social mobility and integration and making the Polish community vulnerable to long-lasting employment shocks. Reliance on social networks may be particularly likely to reduce social mobility in the case of Polish workers as well as other Eastern Europeans, because of their documented tendency to downgrade to lower

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11. This is not the only way that recent immigration may have improved labour market efficiency. Borjas (2001) argues that immigrants ‘grease the wheels of the labor market’, since they are more sensitive than natives to regional wage variations. Pollard *et al* (2008) show that Eastern Europeans have often chosen to locate in areas where skill shortages were greatest, suggesting that they have contributed to labour efficiency in this manner.

occupational statuses than their educational level implies. Since A8 workers are concentrated in low-skilled industries, it may be difficult for high ability workers to obtain higher quality jobs, if their network is primarily composed of other A8 migrants.

In other words, the strong reliance on social networks has the potential to ‘lock in’ some of the downward mobility that Eastern Europeans experience when they come to the UK. Indeed, some commentators have noted this trend with concern. Adrian Favell, for example, posits that the A8 states are in danger of becoming a ‘new Victorian servant class for a West European aristocracy of creative-class professionals and university-educated mums’ (Favell 2008).

As the UK moves deeper into recession, it is worth emphasising one of the arguments reviewed in this paper: that the reliance on social networks leads to a vulnerability to shocks in employment levels or wages. Freedom of movement in the UK and Poland’s geographical proximity make migration from Poland potentially less permanent than from other countries, and substantial numbers of Poles are expected to return home as a result of the recession (Somerville and Sumption 2009). If the downturn exacerbates long-term social stratification, this could cause substantial integration difficulties even after the economic recovery. It might also make the UK a less attractive destination for Polish workers (especially as relative conditions improve in Poland due to EU investment in the region), suggesting that the immigrants might not see a return to previous rates of very high immigration from Poland even when demand for A8 labour increases again.

On another note, if reliance on social networks is an indicator of poor integration, the findings in this paper suggest that integration of the recent wave of immigrants is problematic (this conclusion is supported by some qualitative studies which find, for example, that A8 migrants often spend little social or work time with British people [Spencer *et al* 2007]). This means that a social inclusion strategy that fully considers the needs of immigrants is important.

### **What are the implications for policymakers?**

This last consideration raises the wider question as to how policymakers should conceive of integration in the context of return migration. If the new Eastern European migration establishes itself as a steady stream of temporary immigrants, one of the most powerful factors aiding integration – the length of time spent in the UK – will be diminished. The empirical findings in this paper suggest that time spent in the UK has only a small relative effect on the reliance on social networks relative to other factors. If this accurately reflects their integration, it means that the benefits of any measures aimed at the economic or social integration of immigrants could be reduced if programmes are effective over the long term only. Initiatives such as frameworks for the recognition of foreign qualifications, which can have immediate effect and do not rely on long stays in the UK – for example efforts to improve the effectiveness of NARIC<sup>12</sup> and extend its coverage of vocational qualifications – could therefore be most effective.

Other policies that do not depend on long residence in the UK include the enforcement of labour standards (including minimum wages and working conditions), so that immigrants who come for short periods to work in low-skilled jobs do not find themselves exploited. The

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12. The national agency responsible for providing information, advice and opinion on vocational, academic and professional skills and qualifications from over 180 countries worldwide

provision of comprehensive multi-language information about workers' rights and available public services (some of which is currently provided by unions) may also be useful in a context where many workers will not be able or willing to invest in learning English given the short period they intend to stay in the UK. At the same time, policymakers should not 'over-correct' when considering migrants as temporary: removing barriers to access for language tuition and creating better incentives for employers to provide language training will remain important for the substantial numbers of immigrants who will remain in the UK for some time, or who will return on subsequent occasions.

## Appendix 1: Mobility and its impact on the empirical results

The Labour Force Surveys used in these regressions only include information on how an individual obtained her current job if she has been employed in that job for one year or less at the time of the LFS interview. The fact that the analysis only contains immigrants who obtained their job within a year of being interviewed could affect the results if mobility is associated with reliance on social networks, as follows.

Suppose, for simplicity, that immigrants can be divided into mobile and non-mobile types, where the mobile ones change jobs at least once a year, and the non-mobile ones stay in the same job for years on end. Consider a sample of immigrants interviewed in 2007 who arrived in 2004. Mobile ones will answer the network question (since they will have changed jobs recently), while non-mobile ones will not (since we assume they have been in the same job since 2004). On the other hand, all individuals who arrived in 2007 and are working will have answered the network question, whether or not they are mobile types. This means that for later immigrants, the dataset becomes progressively more likely to include the non-mobile individuals. If these individuals use networks more (either because of their specific characteristics or because informal recruitment might lead to better match and longer employment duration), the use of networks will appear to grow, due to the increase in the proportion of non-mobile individuals answering the network question.

This appendix discusses the change in mobility among Poles over the period studied and the relationship between mobility and network use. It concludes that while mobility may have changed over time, mobility does not significantly affect network use in the data, and therefore does not pose a problem for the analysis.

### Patterns of mobility

Measuring mobility is complicated by the fact that individuals typically participate in the LFS for fewer than the full five quarters. However, if we consider employed individuals who were interviewed in all five quarters, we find that for both Poles and natives, approximately 11 per cent of workers changed jobs at least once (very few individuals changed jobs more than once). There are also no significant differences between Poles and natives when we consider people present in the survey for fewer quarters.

### Changes in mobility over time

First, consider mobility as it can be measured by examining individuals who change jobs during the survey period. The proportion of Poles changing jobs during the period in which they appear in the LFS does not change significantly over time for groups present for less than five quarters. For those present five quarters (about one third of the Polish sample) the proportion switching jobs at least once increases by approximately 1.6 percentage points per year (see Table A1).

Switching jobs, however, is not the only indicator of mobility. Mobility is related to attrition in the Labour Force Survey. Since the survey follows households, not individuals, people drop out of the survey if they change address. If people move in order to change jobs, attrition may lead us to underestimate mobility, since we do not observe individuals when they have just changed jobs. The average number of quarters for which Poles appear in the survey increases each year by 0.18 (based on an average value of 3.5 over the whole period – see Table A2), compared to a smaller increase (0.04) for natives. This measure suggests that Poles became less geographically mobile over the period studied. Since the two measures of

mobility point in different directions, we cannot assertively conclude that mobility increased or decreased.

Most importantly, mobility does not affect the probability of using a network, in the data. There is no statistically significant relationship between switching jobs and network use, nor between attrition from the survey and network use (see Tables A3 and A4). This suggests that we do not need to adjust the findings in this paper in order to account for changes in mobility.

**Table A1: Regressions of job switching on LFS year, by the number of quarters an individual appears in the survey, for Polish immigrants**

Number of quarters present	2	3	4	5
LFS year	0.006 (0.67)	0.015 (0.77)	0.014 (1.04)	0.016* (1.65)
N	317	251	240	840
R-squared	0.0014	0.002	0.005	0.0032

*T-statistics in parentheses. \* Significant at 5%. Dependent variable: job switch during survey period*

**Table A2: Regressions of number of quarters in survey on LFS year, for Polish immigrants**

	(I) All Polish immigrants	(II) Recent arrivals only
LFS year	0.183** (4.84)	0.301** (6.01)
N	1975	1414
R-squared	0.012	0.025

*T-statistics in parentheses. \*\* Significant at 1%. Dependent variable: number of quarters in survey*

**Table A3: Regressions of network use on number of quarters in survey, for Polish immigrants**

	(I) All Polish immigrants	(II) Recent arrivals only
Number of quarters in survey	-0.008 (-0.70)	-0.007 (-0.59)
N	736	684
R-squared	0.0007	0.0006

*T-statistics in parentheses. Dependent variable: used social network to obtain job*

**Table A4: Regressions of network use on job switching, by the number of quarters an individual appears in the survey, for all Polish immigrants**

Number of quarters present	2	3	4	5
Job switch during survey	0.153 (0.62)	0.019 (0.11)	-0.075 (-0.36)	0.067 (0.87)
N	122	107	96	249
R-squared	0.0032	0.0001	0.0014	0.0031

*T-statistics in parentheses. Dependent variable: job switch during survey period*



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