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Discrimination in the Labour Market: Nationality, Ethnicity and the Recession

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Abstract

Previous research shows that immigrants, in common with other groups that suffer disadvantage in the labour market, are more vulnerable during recession (Hoynes et al., 2012; McGinnity et al., 2013). However, little research has focused on the impact of the Great Recession on work-related discrimination. We examine the extent to which discrimination varies across different national-ethnic groups in Ireland, and whether discrimination increased between 2004, during an economic boom, and 2010, in the midst of a severe recession. Our analysis draws on two large-scale nationally representative surveys on the experience of labour market discrimination. We find that overall non-Irish nationals do experience higher rates of work based discrimination and that there is substantial variation in discrimination across national-ethnic groups. However we find no evidence to suggest that discrimination increased during the recession.

Keywords

Discrimination, recession, ethnicity, labour market, immigrants.

Introduction

A growing body of research shows that immigrants suffer multiple disadvantages in the Irish labour market, with lower employment, higher unemployment and lower wages than Irish nationals (Barrett and Duffy, 2008; O'Connell and McGinnity, 2008). The Great Recession led to a dramatic deterioration in the Irish economy after 2008. In general, immigrants are more exposed to the consequences of economic downturns, and this is clearly the experience in Ireland (McGinnity et al., 2013). Against this backdrop of disadvantage experienced by immigrant groups, we investigate whether immigrants are more likely to report experience of discrimination in the labour market; whether such discrimination differs by nationality and ethnicity; and whether the incidence of discrimination increases in the adverse labour market conditions of the recession.

Our analysis draws on two large-scale nationally representative surveys that collected self-reports of the experience of discrimination. The first was conducted in 2004 in the midst of an economic and employment boom accompanied by substantial inward migration, then a novel episode in Irish demography. The second was conducted in 2010 in the midst of an economic, fiscal and employment crisis of unprecedented severity. Both surveys also collect information on nationality, ethnicity and labour market and socio-demographic indicators (CSO, 2011).

Previous research shows that immigrants, in common with other groups that suffer disadvantage in the labour market, are more vulnerable to falling employment levels and rising unemployment during recession in Ireland (McGinnity et al., 2013) as elsewhere (Hoynes et al., 2012). However, little research has focused on the impact of the Great Recession on work-related discrimination. We recognise that self-reports, in common with other methods of measuring discrimination, are not without their limitations. Self reports

may be biased upwards or downwards, and are unlikely to pick up indirect discrimination (OECD, 2013). However, though we employ robust data in our analysis, we acknowledge that reports of discrimination on their own cannot unambiguously establish the prevalence of labour market disadvantage, and we argue that the analysis of discrimination complements the results of other approaches, including field experiments and statistical analysis of ethnic penalties in labour market outcomes.

This paper contributes to the literature on discrimination in a number of ways. First, it assesses the extent of discrimination experienced by non-Irish nationals in the Irish labour market. Second, it examines the extent to which the experience of discrimination varies between national-ethnic groups. This may contribute to more rigorous and nuanced approaches to the analysis of nationality and ethnicity in future Irish research. Third, this is the first paper, to our knowledge, to shed light on the experience of labour market discrimination in the Great Recession, complementing previous research on objective indicators of immigrants' experiences in tight and slack labour markets. Previous research in the UK found that religious and ethnic penalties in unemployment increased post recession (Khattab and Johnston, 2013).

In the next section we outline the context for our research, focusing on recent trends in migration, the labour market and the economy in Ireland. We then discuss theoretical approaches that inform our analysis, and the research questions deriving from those approaches. Then we discuss our data sources and the measurement of discrimination. The results of the analysis are then presented, followed by a discussion of the findings and their implications.

Changing Migration Patterns and Ireland's Boom and Bust

Ireland represents an interesting case because it combines large-scale immigration into a small labour market that was almost exclusively White and Irish, with a sudden and deep recession immediately following the peak of immigration.

Ireland, historically a country of net emigration, experienced significant inward migration between the mid-1990s and 2008, during a period of rapid growth in the economy and employment. The number of foreign residents increased from 224,300, or 6 percent of the total population in 2002 to 575,600, or 12.8 percent in 2008, before falling back to 550,400, or 12 percent in the wake of the economic crisis in 2012.¹ Following EU enlargement in 2004 and 2007 there was substantial immigration from the New Member States (NMS)² so that by 2008, NMS nationals were the largest group of immigrants, accounting for 5.5 percent of the total population. Nationals of the older EU States³, including the UK, accounted for less than 4 percent of the population, and those from the rest of the world, accounted for another 3.5 percent (O'Connell and Joyce, 2013). Accordingly, about three quarters of all immigrants in the latter years of the last decade were Europeans, and mostly White, while about one in four were of more diverse nationality and ethnicity.

The Irish economy moved into a deep and prolonged recession in 2008, following two decades of rapid growth. The crisis was multi-dimensional, entailing the bursting of a property bubble; a banking collapse; contraction in economic activity; state fiscal crisis; and mass unemployment (O'Connell, 2013). Total employment fell by 13 percent between the end of 2007 and 2011, but it fell by 21 percent among non-Irish nationals. In 2012 the unemployment rate was 14.5 percent among Irish nationals but 17.7 percent among non-Irish nationals. Economic collapse was accompanied by substantial migratory flows, yet a modest decline in the immigrant population because substantial outmigration, mainly of

NMS nationals, was offset by substantial in-migration, mostly from the same region: those who had been displaced from the collapsing sectors/occupations appear to have been replaced by others with different, more marketable skills.

Theoretical Approaches and Research Questions

While measuring the extent of discrimination is challenging, identifying the underlying causes or mechanisms is even more so. Much research in the area focuses on individual motivations, though these are often difficult to measure empirically (Reskin, 2003). Classical works emphasise the role of prejudice or racial animus as a key underpinning of discrimination, with negative feelings and beliefs influencing subsequent behaviour towards that group (Pager and Shepherd, 2008). Different authors have different emphases: Becker (1957) postulates that some employers and economic agents have a ‘taste for discrimination’, which influences their decisions; Blumer (1958) places more emphasis on how groups compete for scarce resources, and later work in this tradition focuses on how the salience of competition may vary in different economic and cultural contexts, and between ethnic groups (Quillian, 2006). Typically, though not always, groups may experience higher rates of discrimination if they are more visibly and/or culturally different. European evidence suggests that immigrants from Sub-Saharan Africa are most likely to perceive discrimination followed by immigrants from North Africa, Latin America and Asia (see OECD, 2013). Prejudice may not always be explicit: literature from social psychology highlights how forms of racial bias that actors are not even consciously aware of, known as implicit prejudice, may influence behaviour (Al Ramiah et al., 2010).

Another variant of preference or prejudice-based discrimination places greater emphasis on ‘in-group favouritism’, a tendency to treat in-group and out-group members differently, which may be manifested in preferential treatment of the in-group in resource allocation

(e.g. in recruitment decisions) (Brekke and Mastekaasa, 2008; McGinnity and Lunn, 2011; Quillian, 2006). McGinnity and Lunn (2011) argue that it is a powerful idea, as even relatively mild in-group favouritism, which does not contain an active element of aggression or negative affect or emotion, can result in substantial discrimination in the allocation of resources.

Alternative approaches challenge the notion that prejudice is at the root of discrimination. With statistical discrimination models, differential outcomes for immigrant groups are due to information problems (Phelps, 1972). Decisions result from insufficient information on the part of employers about minority groups, and this informational deficiency can be particularly acute at labour market entry (Brekke and Mastekaasa, 2008). While preference-based discrimination relies on the presence of prejudice, statistical discrimination results from employers' lack of information about a minority group: employers use race or migration as a heuristic guide to evaluate job applicants in the absence of adequate information (Pager and Shepherd, 2008). This approach has close parallels to the rich literature in social psychology on stereotyping, where stereotypes are beliefs about a group, for example that they are lazy, intelligent, violent, that are used as a proxy for missing information. Whereas social psychologists see stereotypes as 'faulty and inflexible generalisations', statistical discrimination approaches sees these 'group estimates' as a rational response to uncertainty (Pager and Shepherd, 2008). The implication of both is that discrimination may be reduced over time if employers gain more accurate information about immigrant/minority groups, and encounter such groups more often, and the groups gain labour market experience in a country.

Sociological approaches to discrimination highlight how individual-level explanations may be mediated by organisational or national factors (Reskin, 2003). Characteristics of

organisations, such as personnel practices, may constrain the biasing effects of either cognitive or attitudinal biases (Reskin, 2000). One important example of this is the use of formal, rationalised procedures in an organisation for recruitment and promotion. Formalisation reduces individual discretion, and this may be linked to increased representation of minorities in the organisation (Pager and Shepherd, 2008). While formalisation does not always reduce or eliminate discrimination, formal procedures could be associated with less discrimination. Research in Ireland is limited, but suggests that formalised procedures are more common in larger firms and in certain sectors and occupations (Russell and McGinnity, 2011).

While much research on discrimination relates to decisions at the level of individuals or small groups, societal or national context is also important (Pager and Shepherd, 2008). Structural discrimination can refer to laws and cultural institutions that impose different rules on different groups. The most obvious example in Ireland is that non-Irish EU nationals can reside and work in Ireland with similar rights to Irish nationals, whereas non-EU nationals face very different regulations. Regulations also changed during the period this paper examines: prior to EU enlargement in 2004, there was a significant group of immigrants from outside the EU working under the Employment Permit system with a diversity of skill levels. Following enlargement, Irish policy was to meet labour shortages from within the EU, and to reserve the Employment Permit system to meet identified skill shortages, typically in highly-skilled occupations. While this restricted Non-EU immigration into Ireland, it also meant that Non-EU immigrants working in Ireland tended to be more highly educated than immigrants from Eastern Europe post 2004 (McGinnity et al., 2013).

Another element of research on 'structural discrimination' focuses on the legacies of discrimination, and how differences may relate to past policies and practices. This has most

resonance in countries with a long history of immigration and past discriminatory policies (e.g. the US), but it does alert us to one potential source of discrimination in Ireland. Immigrants who come to Ireland seeking political asylum or protection are not allowed to work while their application is being processed. In theory this period should be short, but in practice applications can be drawn out: over 30 percent of residents in centres for asylum seekers have been in the system for more than 5 years (Joyce and Quinn, 2014). Some national/ethnic groups in Ireland are more closely associated with political migration, in particular Black Africans. Immigrants who have had an extended period in the asylum system and, as a consequence, been excluded from the labour market may have suffered poorer job prospects. Even if individuals have not been so excluded from the labour market, to the extent that employers think this is the case, this may lead to unequal treatment.

Different perspectives on discrimination also differ in their understanding of the impact of social and economic context, in particular the impact of a rapid rise in the population of national/ethnic minorities associated with immigration. From an intergroup contact perspective (Blau, 1977), as the presence of minority groups in the workplace increases, workers will have more opportunities to interact with members of other racial and ethnic groups. Such interaction allows workers from all racial/national groups to acquire information about each other, and gain personal experience with them, making them less likely to indulge in racial stereotypes and biases. As employers gain information about groups this may over-ride previously-held expectations. Preference or prejudice-based approaches to discrimination may be less sanguine about the impact of a growth in the proportion of immigrants in a country. Researchers focusing on anti-immigrant attitudes argue that an increase in the share of immigrants can lead to intensified perceptions of ethnic threat due to increased economic competition and identity-based cultural conflict (Quillian, 2006; Schneider, 2008).

There is little previous research on the impact of the Great Recession on discrimination in the labour market, although there is evidence that immigrants were hit hard in Ireland (McGinnity et al., 2013) and elsewhere (Hoynes et al., 2012). In a deep recession, with increased competition for scarce resources, immigrants may be especially likely to be perceived as competing with members of the host society (Esses et al., 2001). Individuals may perceive more threat and competition from minorities particularly if the economic context entails competitive conditions (Schneider, 2008). Coenders et al., (2008) found that ethnic discrimination became more widespread in periods of high immigration and when the unemployment level had risen strongly. There is some support for this argument in Ireland, where overall attitudes to immigrants in Ireland have become more negative in the period between 2004 and 2010 (McGinnity et al., 2013). However, as discussed above, there are a number of reasons why anti-immigrant sentiment may not necessarily translate into discriminatory behaviour on the part of employers.

Measuring Discrimination and Previous Research

Most definitions regard discrimination as differential or unequal treatment of the members of a group on the basis of their group membership (Pager and Shepherd, 2008). There is a substantial body of evidence pointing to persistent inequalities between immigrant or minority groups and nationals in the labour market, though variation exists between immigrant groups. Unemployment has been shown to be consistently higher among immigrants than natives in Europe (Fleischmann and Dronkers, 2010) and in Ireland (McGinnity et al., 2013). Immigrants and other minorities also tend to be over-educated: employed at occupational levels below their skill level in the UK (Rafferty, 2012) and in Ireland (Barrett and Duffy, 2008). There is also evidence of substantial wage penalties,

whereby immigrants earn less than Irish nationals, and this varies by national group (Barrett and McCarthy, 2007).

While much of the international research on unequal treatment among immigrants focuses on both nationality and ethnicity (Rafferty, 2012), most Irish research focuses on nationality (Barrett and McCarthy, 2007; McGinnity et al., 2013). Irish evidence on the impact of ethnicity is more limited, although O'Connell and McGinnity (2008) show that Black immigrants are more likely to experience unemployment and lower level occupations, even when other factors are controlled for.

Most studies of unequal labour market outcomes among immigrants take account of differences in other factors, such as gender, education and experience. The question remains as to whether the unexplained residual differences in labour market outcomes between immigrant and nationals can be attributed to discrimination. The difficulty with such residual approaches, however, is that other influential human capital differences may not be captured in the data, resulting in inaccurate, and potentially inflated, estimates of possible discrimination (Pager and Shepherd, 2008). One alternative strategy is to measure discrimination directly through field experiments. A field experiment in Ireland found that candidates with Irish names were more than twice as likely to be called to interview than candidates with clearly non-Irish names but otherwise equivalent CVs. However there were no differences within the immigrant group (McGinnity and Lunn, 2011). This method provides powerful evidence of discrimination but is limited to certain sectors and occupations, and the groups under study at a particular point in time.

Self-report studies ask respondents about their experience of discrimination and can be collected in large-scale representative surveys, which allow for comparison between the

experience of minority and majority populations. This method plays an important part in tracking change and stability in discrimination over time. However, self-reports are subjective, relying on the assessment of the individual, which may vary depending on the perspective of the respondents, their expectations and the information available to them (Blank et al., 2004). Strong survey design can minimise this weakness. All questions relating to experiences of discrimination in the survey used in this article are designed to limit chances of bias in response.

Previous research using self-reports in Ireland found higher rates of reported discrimination among national/ethnic minorities than among White Irish in 2004, in both looking for work and in the workplace- Black respondents reported particularly high levels of discrimination (O'Connell and McGinnity, 2008). This echoes findings by McGinnity et al., (2006) on the experience of racism and discrimination in a range of settings, including the workplace, where Black Africans reported the most discrimination of the immigrant groups. While we cannot rule out that there are ethnic/national differences in the propensity to report discrimination, previous research in the US comparing self-reports of wage discrimination and actual wage penalties suggests that any 'over-reporting' was actually more likely among White respondents (Coleman et al., 2008). This suggests that ethnic/national differences, if anything, may be underestimated in this article.

Research Questions

A major advantage of this article is that it is based on two national surveys that collected detailed information about the experience of discrimination, as well as a range of relevant socio demographic indicators, during a booming economy and in the midst of a deep recession. Different theoretical perspectives generate different expectations about how the experience of discrimination might change. The data allow us to address a series of research

questions comparing different types of discrimination experienced by Irish nationals and non-Irish nationals at different phases of the business cycle.

A key first question is whether non-Irish nationals experience higher rates of discrimination in the labour market than Irish nationals. In the light of the theoretical discussion and previous research on discrimination in Ireland, and internationally, our first hypothesis is that non-Irish nationals experience higher rates of discrimination than Irish nationals, both while looking for work and in the workplace.

Secondly, we expect to find variation in the extent of discrimination between groups. Approaches to discrimination highlighting racial prejudice would suggest that visibly different groups, Black Africans and Asians, and non-White Europeans experience greater discrimination. However, approaches that emphasise economic competition might suggest that NMS nationals would also experience discrimination, particularly while looking for work, as they constitute the largest group of immigrants in the labour market during the period. Furthermore this group tend to have lower levels of educational attainment than other immigrants, and may be competing for low-skilled jobs. While non-EU immigrants have the clearest restrictions on conditions of work, selective immigration policies, as noted above, means that they tend to be more highly educated than NMS nationals, whose immigration is not restricted.

Our final set of questions relates to change over time. Here we encounter uncertainty because, between 2004 and 2010, the number and proportion of immigrants in the labour market increased substantially, and Ireland experienced a deep recession. Given the severity of the economic shock and the deterioration in the labour market, we might expect that discrimination against non-Irish nationals increased. With applications far exceeding

vacancies, employers can 'afford' to select candidates on the basis of nationality/ethnicity. This would be consistent with in-group favouritism and economic competition approaches. It would also be consistent with a decline in openness to immigration and in willingness to accept immigrants of different race/ethnicity, and from poorer countries, observed in the Irish population between 2006 and 2010 (McGinnity et al., 2013). However, these negative tendencies may be offset to the extent that, over time, employers become more familiar with immigrants – as suggested by statistical discrimination approaches. Whether such familiarity is sufficient to counteract the impact of in-group favouritism and increased conflict over resources is unclear. Economic approaches highlight that discrimination entails costs for employers. Using ethnicity or nationality as a basis for recruiting or rewarding workers, rather than human capital differences, is an inefficient use of human resources - a luxury that employers may ill-afford in a recession.

Methodology

In this study we use self-reports of discrimination to measure the experience of discrimination while looking for work, and in the workplace in Ireland. We draw on two large-scale nationally representative surveys on the experiences of discrimination, carried out by Ireland's Central Statistics Office (CSO) in 2004 and 2010. These surveys were collected as special modules of the Quarterly National Household Survey (QNHS), which is the official source of labour market indicators for Ireland. The *Equality* modules asked individuals whether they had experienced discrimination across a range of life domains over the previous two years. Respondents were shown the legal definition of discrimination in Ireland, and informed that when the term discrimination is used it refers to this legal definition only (CSO, 2011).⁴ Our analysis focuses specifically on two questions relating to self-reports of work-based discrimination:

***In the past two years, have you personally felt discriminated against
in the workplace?***

- Yes
- No
- Not applicable (don't work, haven't been working in the past 2 years)
- Don't know.

***In the past two years, have you personally felt discriminated against
while looking for work?***

- Yes
- No
- Not applicable (don't work, haven't been looking for work in the past 2 years)
- Don't know.

We restrict the analysis to the working age population (18-64). We base all analysis on the eligible population: we exclude respondents who answered 'not applicable' to the question. The *Equality* modules are particularly useful for our purposes because, unusually in Irish official statistics, they also collect information on ethnicity.⁵ Our analysis combines nationality and ethnicity to form national-ethnic groups.⁶ These groups are created on the grounds that they are comparable, have similar access to the Irish labour market and exhibit similar labour market trajectories.⁷ Merging ethnicity with nationality generates eight national-ethnic groups, outlined in Table 1⁸: White Irish, White UK, White EU-13⁹, White New Member State (NMS), White non-EU, Black African, Asian, and Minority Ethnicity EU.¹⁰ The 'White non-EU' category refers to people of White ethnicity from a range of countries outside the EU, including North America, Australia and Asia. This group is predominantly

English-speaking, and can be expected to share similar labour market experiences. The 'Minority Ethnicity EU' group consists of all non-White Europeans, including Black, Asian and 'Other' Irish nationals,¹¹ the 'Asian' and 'Black African' groups are non-EU.¹²

TABLE 1 here

Our primary objective is to evaluate the association between discrimination and ethnicity, nationality, and recession. We examine whether, if given the same characteristics as the White Irish group, non-Irish nationals report labour market discrimination at higher rates than Irish nationals.

We use binary logistic regression models for our analysis, separate models are run for 2004 and 2010, and a pooled model of 2004 and 2010 data with interaction terms is used to test for significant differences over time. We understand that the coefficients of standard logistic models are sensitive to bias due to inability to account for unobserved heterogeneity, as estimates are affected by omitted variables, so instead we report the average marginal effects (AME). AME average the conditional effects, which means that they are invariant to the exclusion of covariates that are unrelated to covariates already in the model; they are also comparable across groups, samples, time and models (Mood, 2010). We base our test for statistical significance of the interaction effect on the estimated cross-partial derivative (Norton, Wang and Ai, 2004).¹³

Dependent Variables

Discrimination when looking for work and discrimination in the workplace are the dependent variables of our study. The binary variable is coded 1 if the person has experienced discrimination, 0 if not. All analysis is based on the population 'at risk'. The

population at risk of discrimination while looking for work is the working age population (aged 18-64) who were at work or looking for work in the past two years. The analysis of discrimination in the workplace is confined to those who were employees at the time of the survey.¹⁴

Independent Variables

Our key focus is on differences in the experience of discrimination across national-ethnic groups. Our models control for gender, age, education, and duration of residence in country as they are all considered in the literature to be potentially influential covariates.

We expect newly arrived immigrants to experience higher unemployment rates regardless of the business cycle (Wheatley Price, 2001). This disadvantage is expected to decline as immigrants gain more knowledge and experience of, and establish networks in, new labour markets (Brekke and Mastekaasa, 2008). However, previous Irish research has not found evidence of occupational assimilation as a function of time spent in the country (Barrett and Duffy, 2008). Recent migration is measured by including a dummy variable coded 1 if the individual has been resident in Ireland for two years or less, and 0 if they have been resident for longer.¹⁵

Aside from the control for duration, all control variables included are for the entire working population aged 18-64, so any effects of age, gender etc. are based on the full sample, and reflect patterns among the majority White Irish population. In the models of discrimination in the workplace we control for sector of employment, as working conditions may affect experience of discrimination.

Measuring Change over Time

A logistic regression model with interaction terms is run on pooled data in order to test for significant differences over time. In non-linear models the interaction effect is conditional on the independent variables, and, consequently, the significance of the coefficient is unreliable. Therefore we use the Stata user-written command 'inteff' to compute the correct marginal effect of a change in the two interacted variables, which calculates the statistical significance of the entire cross derivative (Norton, Wang and Ai, 2004). Significant interaction effects indicate that discrimination has increased or decreased for a national-ethnic group between 2004 and 2010.

By controlling for certain characteristics we can evaluate how work based discrimination varies, and assess which groups are more vulnerable to discrimination. The models allow for us to investigate the effects of combinations of these characteristics, ensuring that some possible influences, net of discrimination, are controlled for. Crucially, they allow comparisons with Irish nationals. However this is not a dedicated survey of immigrants, so it does not include all relevant variables in the analyses like host language proficiency, ethnically constrained social networks and declining work motivation due to expectations of discrimination, all of which have been linked to immigrants' experience in the labour market (Perreira et al., 2007). It is important to note that rates of discrimination reported in this module are based on the perception of the respondents, as discussed above.

Results

Table 2 shows rates of self-reported discrimination, when looking for work and in the workplace, in 2004 and 2010. Overall, just 6 percent of respondents reported having experienced discrimination when looking for work in 2004 and 2010, and about 5 percent reported having experienced discrimination in the workplace. Rates of discrimination were

substantially higher among most non-Irish nationals in both periods, although discrimination fell for most non-Irish national groups between 2004 and 2010, particularly in looking for work.

TABLE 2 here

Rates of discrimination when looking for work and in the workplace rose for Black Africans, and in 2010 Black Africans experienced extremely high rates of discrimination both looking for work (23%), and in the workplace (29%).

Regression Analysis of Discrimination When Looking for Work

Table 3a shows the results of a logistic regression model of discrimination when looking for work. The model controls for gender, age, education, unemployment, inactivity and duration of residence in Ireland. The results confirm that non-Irish nationals did experience significant rates of discrimination compared with the Irish group, in both 2004 and 2010. The decrease in the marginal effect for the non-Irish group indicates that discrimination had decreased in 2010, the interaction effect shows that this change over time is significant. This does not support our expectation that discrimination increased during the recession, although discrimination was still higher for the non-Irish group in 2010.

TABLE 3a here

We also find that while current unemployment had a strong positive association with the experience of discrimination while looking for work, this had decreased slightly in 2010 and this change over time is significant. The Inactive group were also significantly more likely to experience discrimination when looking for work in 2004 and 2010. Females were less likely to experience discrimination in 2004 but not in 2010, the 45-64 age group were more likely in 2010. Those resident in Ireland for 2 years or less were more likely to experience

discrimination in 2010, so recent entrants to a booming labour market did not report higher levels of discrimination than earlier immigrants, but recent arrivals during the recession did, perhaps reflecting the severe deterioration in the labour market. All education groups were significantly less likely to experience discrimination compared to the primary educated group in 2004.

TABLE 3B here

Table 3b shows summary results of discrimination when looking for work, the model confirms that Black Africans encountered very high rates of discrimination in both 2004 and 2010. While there was some increase in discrimination experienced by Black Africans over time, this is not statistically significant. EU nationals of minority ethnicity also reported high levels of discrimination and this may have increased over time, although the increase is not statistically significant. These two groups vary in nationality but share minority ethnicity, suggesting that ethnicity is a common factor in their experience of discrimination.

White Non-EU nationals reported high rates of discrimination in 2004, but not in 2010, and this change is statistically significant. This is the only group that experienced a decline in their share of the population in the timeframe. We cannot rule out that those who were discriminated against left the country. The effect may also reflect a shift in the composition of non-EU immigrants in the Irish labour market following a policy change after EU Enlargement. Non-EU immigrants working in Ireland in 2010 were more likely to have been recruited into high-skilled occupations with identified skills shortages, and thus encountered less discrimination than in 2004. However this effect does not hold for the Black African group, strengthening the argument that ethnicity is particularly salient when looking for work.

White EU-13 nationals, and UK nationals experienced higher discrimination than Irish nationals in 2004, but this appears to have declined by 2010. While this change is not significant, it would be consistent with a statistical discrimination interpretation in which employers become increasingly familiar with European workers and their qualifications and skills.

Regression Analysis of Discrimination in the Workplace

TABLE 4a here

Table 4a confirms that non-Irish nationals were more likely to experience discrimination in the workplace in 2004 and 2010. The average marginal effects for non-Irish nationals show that discrimination remained constant over time, and the change is not statistically significant. Again this does not support the expectation that discrimination among non-Irish nationals would increase during recession. We find that females experienced high rates of discrimination at work throughout the period. We find a weak effect of sector, with a higher risk of experiencing discrimination in transport in 2004, and a lower risk in construction in 2004, and no significant sectoral effects in 2010. Sector does not influence discrimination among national ethnic groups.¹⁶

TABLE 4b here

Table 4b demonstrates that discrimination in the workplace is quite pervasive and persistent. The Minority EU, Asian, White NMS, Black African and White Non-EU groups all experienced discrimination in the workplace in 2004. Discrimination persisted in 2010 for the White NMS, White Non-EU and Black African groups. There is some indication that rates of discrimination fell for some groups, but the decline is not statistically significant, so

contrary to our expectations, there is no evidence to suggest that discrimination in the workplace increased during the recession.

The Black African group showed much higher rates of discrimination than among White Irish in 2004 and 2010. It is clear from this study that the Black African group are faring particularly badly in the Irish labour market both when looking for work and in the workplace and there is no evidence to suggest that this is due to economic sector or occupation. Part of their manifest disadvantage may be attributed to the long-term effects of an asylum system that consigns asylum seekers to protracted periods of exclusion from Irish society and the labour market. This group of immigrants usually has less favourable labour market outcomes due to less positive selection processes, and greater difficulties in adapting to new environments resulting from stressful experiences surrounding their migration (Fleischmann and Dronkers, 2010). Unfortunately, the QNHS does not provide information on the visa/residency status of non-Irish nationals, so we cannot measure how many Black Africans are refugees, nor relate respondents' experience of discrimination to residency status. It could also be however that employers assume that Black Africans were asylum seekers and had long periods out of the labour market, even if this is not the case, a form of stereotyping.

The White UK and EU-13 groups do not differ significantly from the White Irish in reported experience of discrimination. UK nationals have been coming to Ireland for decades and therefore may be less likely to experience discrimination in the workplace because they are more integrated. EU-13 nationals are a more recent but privileged group of immigrants in Ireland, typically highly skilled and with higher average incomes than Irish nationals (McGinnity et al., 2013).

We can reject the expectation that ethnic competition led to an increase in discrimination, as reports of discrimination in the workplace have remained relatively stable over time, or decreased for some groups.

Discussion

This paper investigates the experience of discrimination in the Irish labour market. We examine the extent to which discrimination varies across different national ethnic groups, and whether discrimination increases between 2004, during an economic boom, and 2010, in the midst of severe recession. To our knowledge, this is the first research to examine the impact of economic crisis on the experience of self reported discrimination in the labour market.

We find that, overall, non-Irish nationals do experience higher rates of discrimination in looking for work, and in the workplace, in both boom and recession. We find substantial variation in discrimination across national-ethnic groups. In looking for work, ethnicity is particularly important, and we find that Black Africans and EU nationals of minority ethnicity are particularly likely to experience this form of discrimination. In the workplace, we find that most national-ethnic groups, apart from White UK and White EU-13 groups, are more likely than White Irish to experience discrimination in 2004. By 2010 the Black African, White NMS and White Non-EU groups experience more discrimination than White Irish nationals. The finding that non-Irish nationals experience higher rates of discrimination than Irish nationals is consistent with previous research on immigrants' experience of discrimination in Ireland (McGinnity et al., 2006; McGinnity and Lunn, 2011; O'Connell and McGinnity, 2008).

Contrary to our expectations, we do not find that discrimination increased significantly in the context of recession and a growing immigrant population. In looking for work, the gap in reported discrimination between non-Irish nationals and White Irish fell between 2004 and 2010. In the workplace the gap between non-Irish nationals and White Irish remained relatively stable. We can thus reject the hypothesis that a labour market crisis and an increase in the proportion of immigrants, leads to an increase in perceived ethnic competition for jobs and thus to an increase in discrimination against immigrants.

Why did reports of discrimination not increase during recession? Perhaps by 2010 immigrants have gained more experience and knowledge of the Irish labour market, and have established networks (Brekke and Mastekaasa, 2008). Attitudes to immigrants and immigration in Ireland had become more negative by 2010 (McGinnity et al., 2013), but immigrants were not, for the most part, scapegoated in public debates during the recession. It may also be that those who perceive ethnic competition are those who are unemployed, or inactive, this analysis concentrates on discrimination by employers and employees, thus ruling out discrimination by this group.

Why do reports of discrimination in recruitment among non-Irish nationals fall on average? In 2004 Ireland was a relatively new country of immigration, and employers may not have had experience with immigrant groups. By 2010 this would have changed. The fall in discrimination while looking for work provides some support for a statistical discrimination approach: over time as immigrant groups become more established, employers become better able to identify the work-related characteristics of immigrant job applicants. However, as we are not using panel data we cannot tell if any patterns of improved outcomes are the result of integration, cohort effects, selective out-migration, particularly of East Europeans, or changing immigrant (self) selection (Barrett and Duffy, 2008).

However, this is not true of all groups: visibly different ethnic groups, in particular Black African and Minority ethnicity EU groups report very high rates of discrimination when looking for work, and their experience of discrimination did not decrease over time. This is consistent with discrimination based on racial prejudice, and a preference for White immigrants. Whatever the explanation, this finding, combined with high rates of unemployment and low rates of employment among these groups suggest these groups are particularly vulnerable.

¹ If we count those born abroad, the number rises to 766,770 in 2011 (O’Connell and Joyce, 2013). However, most Irish nationals born abroad are born of Irish parents in the UK, so they are counted as Irish.

² EU New Member States (NMS) refers to States that acceded in 2004 and 2007: Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, and Slovenia.

³ ‘Older EU States’ refers to the ‘Old’ EU15 Member States including Ireland and the UK.

⁴ ‘Under Irish law, discrimination takes place when one person or a group of persons is treated less favourably than others because of their gender, marital status, family status, age, disability, ‘race’ (skin colour or ethnic group), sexual orientation, religious belief, and/or membership of the Traveller Community.’ See www.equality.ie.

⁵ Ethnicity has been collected in the Census since 2006, but it is not collected routinely in the QNHS.

⁶ As part of our analysis we ran all models with ethnicity and nationality as separate categories, however this did not have an effect on results.

⁷ Some of the national-ethnic groups are still somewhat ethnically diverse, however the groups are comparable in terms of their labour market experience and cultural background.

⁸ A small and diverse unallocated residual group of a combination of minority ethnicity that did not lend itself to a meaningful classification was excluded (0.5% sample).

⁹ EU 13 refers to the ‘Old’ EU15 Member States excluding Ireland and the UK: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Portugal, Spain, and Sweden.

¹⁰ Bulgarians and Romanians, who tend to have lower skill levels, on average, were in the White Non-EU group in 2004 but the White NMS group in 2010.

¹¹ Numbers are too small to disaggregate Minority ethnicity Irish nationals.

¹² Due to the recent nature of non-Irish immigration into Ireland, the overlap between immigration status and ethnicity/nationality is very high indeed: almost all non-Irish nationals were born abroad and Irish nationals born abroad are predominantly the children of Irish parents born in the UK.

¹³ For detailed information see Mood (2010) and Norton, Wang and Ai (2004).

¹⁴ We exclude the self employed from the analysis.

¹⁵ Further analysis on duration spent in country was tested, results are available from authors on request.

¹⁶ We also tested for the impact of occupation on experience of discrimination at work but found no significant effects.

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Tables

Table 1 National Ethnic Groups, 2004 and 2010

National-Ethnic Groups	2004		2010	
	n	%	n	%
White:				
Irish	23,047	93.6	15,095	89.7
UK	475	1.9	355	2.1
EU-13	188	0.8	147	0.9
EU NMS	161	0.7	644	3.8
Non-EU	275	1.1	150	0.9
Black African	97	0.4	111	0.7
Asian	100	0.4	104	0.6
Minority Ethnicity EU	144	0.6	119	0.7
Subtotal	24,487	99.5	16,725	99.4
Unallocated residual	114	0.5	82	0.5
Ethnicity Missing	9	0.0	14	0.1
Total	24,610	100	16,821	100

Source: QNHS Equality Module, 2004 and 2010

Table 2 Discrimination in the workplace and looking for work

	Looking for Work		In the Workplace	
	2004	2010	2004	2010
White Irish	5	5.3	4.3	4.5
Minority EU	9.4	17	16.3	11.2
White EU-13	10.6	5.2	9	4.6
White NMS	8.4	6.5	11.1	9.4
White Non-EU	18.7	7.3	10.4	11.1
Asian	7.7	6.6	17.9	11.3
Black African	20.7	22.6	11.6	28.5
White UK	8.6	8.3	6.5	5.6
All	5.7	5.8	4.8	5.2

Source: QNHS Equality Module, 2004 and 2010

Table 3a Logistic Regression with Average Marginal Effects (AME) - discrimination when looking for work

	2004		2010		Δ 2004– 2010 Significant Difference
	Dy/dx	S.E	Dy/dx	S.E	
Ref: White Irish					
Non-Irish	0.06***	0.01	0.03***	0.01	Yes
Ref: Male					
Female	-0.02***	0.01	-0.00	0.01	No
Ref: Resident > 2 years					
Resident <2 years	-0.01	0.01	0.04*	0.02	No
Ref: 25-44					
Under 25	0.00	0.01	-0.00	0.01	No
Age 45-64	0.00	0.01	0.03***	0.01	No
Ref: No formal/Primary Education					
Lower Secondary	-0.03***	0.01	0.02	0.01	No
Upper Secondary	-0.04***	0.01	0.00	0.01	No
Post Secondary	-0.02**	0.01	0.01	0.01	No
Ref: Employed					
Unemployed	0.11***	0.01	0.09***	0.01	Yes
Inactive	0.04***	0.01	0.06***	0.01	No
Constant	-2.82***	0.15	-3.99***	0.22	No
Pseudo R Squared	0.10			0.07	
N of Cases	7,334			5,388	

Source: QNHS Equality Module, 2004 and 2010

Note: Significance probabilities for the coefficients: *** p < .001, ** p < .01, * p < .05

Table 3b Discrimination when looking for work among national ethnic groups, summary

	2004		2010		Δ 2004–2010
	Dy/dx	S.E	Dy/dx	S.E	Significant Difference
Ref: White Irish					
Minority EU	0.05**	0.21	0.09***	0.02	No
White EU-13	0.06***	0.02	0.01	0.03	No
White NMS	0.04	0.02	0.01	0.01	No
White Non-EU	0.08***	0.01	0.00	0.03	Yes
Asian	0.04	0.03	0.00	0.04	No
Black African	0.08***	0.02	0.10***	0.02	No
White UK	0.04***	0.01	0.01	0.02	No
Constant	-2.82***	0.15	-3.98***	0.23	
Pseudo R Squared	0.10		0.09		
N of Cases	7,334		5,388		

Source: QNHS Equality Module, 2004 and 2010

Note: Other covariates reported in Table 3a controlled for. Significance probabilities for the coefficients: *** $p < .001$, ** $p < .01$, * $p < .05$

Table 4a Logistic Regression with Average Marginal Effects (AME), discrimination in the workplace

	2004		2010		Δ 2004–2010
	Dy/dx	S.E	Dy/dx	S.E	Significant Difference
Ref: White Irish					
Non-Irish	0.04***	0.01	0.04***	0.01	No
Ref: Male					
Female	0.02***	0.01	0.03***	0.01	No
Ref: Resident > 2 years					
Resident <2 years	0.00	0.01	-0.02	0.02	No
Ref: 25-44					
Under 25	-0.01	0.01	-0.01	0.01	No
Age 45-64	0.00	0.01	-0.00	0.01	No
Ref: No formal/Primary Education					
Lower Secondary	-0.02**	0.02	0.00	0.01	No
Upper Secondary	-0.01	0.01	-0.02	0.01	No
Post Secondary	0.01	0.01	0.00	0.01	No
Ref: Industry					
Agriculture/Forestry	0.00	0.02	-0.04	0.05	No
Construction	-0.04**	0.02	-0.03	0.03	No
Trade	-0.01	0.01	0.01	0.01	No
Transport	0.03**	0.01	0.02	0.02	No
Accommodation/Food	-0.00	0.01	0.01	0.02	No
Information/Communication	-0.01	0.02	0.01	0.02	No
Financial	0.01	0.01	0.01	0.02	No
Professional/Scientific	0.01	0.01	-0.01	0.02	No
Administration/Support	0.01	0.01	-0.00	0.02	No
Public Administration/Defence	0.01	0.01	0.02	0.01	No
Education	0.01	0.01	-0.02	0.10	No
Health/Social Work	-0.01	0.01	0.01	0.01	No
Other	-0.01	0.01	0.01	0.01	No
Constant	-3.15***	0.19	-3.37***	0.26	
Pseudo R squared	0.02			0.03	
N of Cases	9,987			6,428	

Source: QNHS Equality Module, 2004 and 2010

Note: Significance probabilities for the coefficients: *** p < .001, ** p < .01, * p < .05

Table 4b Discrimination in the workplace among national ethnic groups, summary

	2004		2010		Δ 2004– 2010
	Dy/dx	S.E	Dy/dx	S.E	Significant Difference
Ref: White Irish					
Minority EU	0.06***	0.02	0.04	0.03	No
White EU-13	0.03	0.02	0.01	0.03	No
White NMS	0.07***	0.02	0.04***	0.01	No
White Non-EU	0.05**	0.02	0.05**	0.02	No
Asian	0.06**	0.02	0.04	0.02	No
Black African	0.08**	0.03	0.08***	0.02	No
White UK	0.02	0.02	0.01	0.02	No
Constant	-3.21***	0.19	-3.40***	0.27	
Pseudo R Squared	0.03		0.03		
N of Cases	9,987		6,428		

Source: QNHS Equality Module, 2004 and 2010

Note: Other covariates reported in Table 4a controlled for. Significance probabilities for the coefficients: *** $p < .001$, ** $p < .01$, * $p < .05$

Online Appendix Table 1- Part One, Correlation Matrix 2004 Sample Variables

	Discrimination in work	Discrimination looking for work	Female	Under 25	Age 45-64	Lower secondary	Upper secondary	Post secondary	Migrate 2002- 2004	Non- Irish	White UK	White EU13	White NMS
Discrimination in work													
Discrimination looking for work	.250**												
Female	.040**	-.046**											
Under 25	0.008	0.009	-0.011										
Age 45-64	-.018*	.023*	-0.005	-.190**									
Lower secondary	-.025**	-0.009	-0.005	-.022**	.118**								
Upper secondary	-0.010	-.029**	.038**	.171**	0.002	-.200**							
Post secondary	.061**	0.007	0.005	.041**	-.044**	-.262**	-.320**						
Migrate 2002-2004	.032**	.075**	-.039**	.133**	-.081**	-.032**	.015*	.057**					
Non-Irish	.062**	.118**	-.041**	.083**	-.089**	-.036**	-0.001	.087**	.590**				
White UK	0.010	.026*	-.015*	-0.012	-0.002	.013*	-0.008	.017**	.145**	.549**			
White EU13	.026**	.037**	-.013*	.036**	-.038**	-.025**	0.001	.061**	.196**	.344**	-0.012		
White NMS	.034**	0.020	-.037**	.091**	-.050**	-.027**	0.007	0.012	.384**	.318**	-0.011	-0.007	
White non-EU	.030**	.078**	-0.005	.029**	-.046**	-.019**	-0.001	.051**	.241**	.416**	-.015*	-0.009	-0.009
Asian	.030**	0.013	-.028**	.053**	-.038**	-.022**	0.004	.034**	.220**	.250**	-0.009	-0.006	-0.005
African	0.015	.070**	0.000	0.012	-.043**	-0.007	0.003	0.009	.144**	.246**	-0.009	-0.006	-0.005
Minority EU	.032**	0.017	-.013*	.032**	-.030**	-.023**	0.008	.037**	.133**	.185**	-0.011	-0.007	-0.006
Agriculture	-.036**	-0.018	-.185**	-.039**	.058**	.023**	-.023**	-.047**	-.025**	-.038**	-.024**	-0.011	-0.012
Construction	-.037**	-.035**	-.213**	.045**	-.015*	.069**	.028**	0.008	.017**	.015*	0.005	-0.010	.037**
Trade	-0.013	-.026*	-0.003	.074**	-0.003	.063**	.103**	-0.010	.015*	0.008	0.006	-0.007	.035**
Transport	.021**	-.024*	-.118**	-.015*	.025**	.059**	.042**	-.020**	-0.004	-0.002	0.005	0.010	-0.003
Acc-food	0.000	0.001	0.007	.086**	-.013*	.027**	.051**	.013*	.083**	.077**	-0.001	.043**	.076**
Info	-0.001	0.014	-.064**	-.012*	-.029**	-.025**	0.002	.111**	0.010	.033**	0.002	.054**	0.001
Financial	0.015	-.027*	.017**	.014*	-.031**	-.043**	.035**	.129**	-0.004	-.014*	-0.008	.015*	-0.010
Professional	.016*	-0.016	-.039**	.020**	-.025**	-.042**	-.016*	.159**	0.004	0.005	.014*	0.009	-0.004
Administration	0.004	-0.004	0.003	.022**	0.004	0.000	.023**	.024**	.025**	.022**	0.010	.041**	0.000
Public administration	0.014	-.021*	-.017**	-.018**	.017**	-.031**	.089**	.069**	-.025**	-.038**	-.020**	-0.010	-.015*
Education	.033**	-.022*	.065**	-.014*	.051**	-.056**	-.056**	.235**	-.023**	-0.012	-0.004	0.009	-.018**
Health	0.009	-.026*	.144**	-.029**	.052**	-.015*	-.015*	.156**	-.014*	-0.005	-0.005	-.017**	-.014*
Other	-0.013	0.002	0.003	0.006	.027**	0.011	.014*	.031**	-0.012	0.006	.021**	0.001	-0.008
Unemployed	.056**	.194**	-.043**	.065**	-0.011	.033**	.016*	0.003	.027**	.035**	0.006	0.009	.015*
Inactive	-.026**	0.013	.190**	-.083**	-.043**	-.056**	-.134**	-.353**	-.032**	-.034**	-0.003	-.032**	-.050**

Online Appendix Table 1-Part Two, Correlation Matrix 2004 Sample Variables

	White non-EU	Asian	African	Minority EU	Agriculture	Construction	Trade	Transport	Acc-food	Info	Financial	Professional	Admin
Discrimination in work													
Discrimination looking for work													
Female													
Under 25													
Age 45-64													
Lower secondary													
Upper secondary													
Post secondary													
Migrate 2002-2004													
Non-Irish													
White UK													
White EU13													
White NMS													
White non-EU													
Asian	-0.007												
African	-0.007	-0.004											
Minority EU	-0.008	-0.005	-0.005										
Agriculture	-0.011	-0.012	-0.012	-.014*									
Construction	0.005	-0.009	-0.009	.013*	-.036**								
Trade	-0.005	0.006	-.014*	-0.008	-.049**	-.053**							
Transport	-0.009	-0.006	-0.002	0.009	-.029**	-.031**	-.042**						
Acc-food	.019**	.054**	0.012	.038**	-.032**	-.034**	-.046**	-.027**					
Info	.013*	0.012	-0.003	0.002	-.024**	-.026**	-.035**	-.021**	-.023**				
Financial	-0.005	-0.010	-0.010	-0.009	-.030**	-.032**	-.043**	-.026**	-.028**	-.021**			
Professional	-0.003	-0.011	-0.006	0.001	-.030**	-.033**	-.044**	-.026**	-.028**	-.022**	-.027**		
Administration	-0.003	0.006	-0.004	-0.002	-.025**	-.027**	-.036**	-.021**	-.023**	-.018**	-.022**	-.022**	
Public administration	-.017**	-0.011	-0.011	-0.008	-.033**	-.035**	-.048**	-.028**	-.031**	-.023**	-.029**	-.029**	-.024**
Education	0.002	-0.005	-.014*	0.005	-.041**	-.044**	-.060**	-.035**	-.039**	-.029**	-.036**	-.037**	-.030**
Health	0.001	.020**	0.006	0.002	-.050**	-.054**	-.073**	-.043**	-.047**	-.036**	-.045**	-.045**	-.037**
Other	0.000	0.000	-0.011	0.005	-.032**	-.034**	-.047**	-.028**	-.030**	-.023**	-.028**	-.029**	-.024**
Unemployed	0.012	0.007	.034**	.020**	-.028**	-.030**	-.041**	-.024**	-.026**	-.020**	-.025**	-.025**	-.021**
Inactive	0.000	-.012*	.023**	-.025**	-.165**	-.178**	-.241**	-.142**	-.155**	-.118**	-.146**	-.148**	-.121**

Online Appendix Table 1- Part Three, Correlation Matrix 2004 Sample Variables

	Admin	Public admin	Education	Health	Other	Unemployed	Inactive
Discrimination in work							
Discrimination looking for work							
Female							
Under 25							
Age 45-64							
Lower secondary							
Upper secondary							
Post secondary							
Migrate 2002-2004							
Non-Irish							
White UK							
White EU13							
White NMS							
White non-EU							
Asian							
African							
Minority EU							
Agriculture							
Construction							
Trade							
Transport							
Acc-food							
Info							
Financial							
Professional							
Administration							
Public administration	-.024**						
Education	-.030**	-.040**					
Health	-.037**	-.049**	-.061**				
Other	-.024**	-.031**	-.039**	-.048**			
Unemployed	-.021**	-.027**	-.034**	-.042**	-.027**		
Inactive	-.121**	-.161**	-.201**	-.247**	-.157**	-.137**	

Online Appendix Table 2- Part One, Correlation Matrix 2010 Sample Variables

	Discrimination in work	Discrimination looking for work	Female	Under 25	Age 45-64	Lower secondary	Upper secondary	Post secondary	Migrate 2008-2010	Non- Irish	White UK	White EU13	White NMS
Discrimination in work													
Discrimination looking for work	.196**												
Female	.046**	-0.014											
Under 25	-0.005	-0.006	-.017*										
Age 45-64	-0.001	.062**	-0.010	-.165**									
Lower secondary	0.001	.038**	-.023**	-0.003	.176**								
Upper secondary	-.025**	-0.010	-0.003	.197**	.044**	-.177**							
Post secondary	.040**	-0.017	.054**	-.030**	-.018*	-.286**	-.387**						
Migrate 2008-2010	0.005	.040**	-0.009	.090**	-.047**	-.025**	0.005	.031**					
Non-Irish	.066**	.051**	-.028**	.040**	-.099**	-.067**	.016*	.077**	.337**				
White UK	-0.007	0.015	-0.004	-.023**	.026**	-.018*	-0.002	0.011	.104**	.445**			
White EU13	0.001	0.002	-0.014	0.013	-.024**	-.026**	-0.009	.049**	.182**	.285**	-0.014		
White NMS	.040**	0.003	-.021**	.055**	-.106**	-.043**	.040**	.019*	.198**	.605**	-.029**	-.019*	
White non-EU	0.017	0.001	-0.015	0.007	-.022**	-0.015	-0.005	.034**	.082**	.288**	-0.014	-0.009	-.019*
Asian	.020*	-0.003	-0.011	0.009	-.039**	-.029**	-0.012	.058**	.116**	.239**	-0.012	-0.007	-.016*
African	.086**	.085**	.019*	-0.005	-.030**	-.016*	-0.010	.043**	0.011	.247**	-0.012	-0.008	-.016*
Minority EU	.024*	.049**	-.019*	0.013	-.021**	-0.015	0.004	.022**	.042**	.101**	-0.012	-0.008	-.017*
Agriculture	-.031**	-0.024	-.144**	-.018*	.063**	.031**	-0.008	-.053**	0.005	-.023**	-0.014	-0.005	-0.003
Construction	-.024*	-.029*	-.145**	-0.014	.024**	.041**	0.005	.027**	-0.012	-0.002	-0.006	-0.009	.020*
Trade	0.004	-.026*	0.001	.049**	-0.007	.037**	.109**	-0.008	0.007	.037**	-0.011	-0.008	.070**
Transport	0.007	-.028*	-.108**	-.028**	.037**	.050**	.061**	-.029**	-0.006	-0.014	-0.008	0.007	-0.009
Acc-food	0.009	-0.020	0.008	.093**	-.025**	0.000	.067**	.019*	.028**	.080**	-0.006	0.014	.096**
Info	0.001	-0.008	-.058**	-0.010	-.017*	-.037**	0.001	.094**	.018*	.032**	.021**	.070**	-0.001
Financial	-0.001	-.033**	-0.006	-.020**	-0.015	-.048**	.017*	.101**	-0.003	-.019*	0.007	0.006	-.027**
Professional	-0.017	-0.022	-.027**	-.017*	-0.004	-.030**	-.035**	.131**	-0.002	-0.006	.019*	-0.006	-0.014
Administration	-0.002	-0.016	-.020*	-0.002	.020**	0.003	.015*	.023**	0.012	.034**	0.014	.034**	.024**
Public administration	0.006	-0.023	-.018*	-.033**	.023**	-.025**	.033**	.086**	-.020*	-.054**	-.021**	-.017*	-.035**
Education	-0.018	-.032*	.095**	-.025**	.039**	-.065**	-.071**	.227**	-.026**	-.046**	-0.001	-0.005	-.043**
Health	.029**	-.040**	.156**	-.033**	.052**	-.030**	-.039**	.182**	-0.010	0.010	0.000	-0.013	-.031**
Other	0.004	-0.019	0.011	.017*	0.010	0.009	0.004	.055**	0.011	0.002	-0.004	0.004	0.002
Unemployed	.033**	.142**	-.121**	.073**	-0.008	.066**	.043**	.024**	.031**	.072**	0.013	-0.004	.074**
Inactive	-0.012	.035**	.150**	-.017*	-.063**	-0.008	-.091**	-.382**	-.023**	-.086**	0.005	-.032**	-.104**

Online Appendix Table 2- Part Two, Correlation Matrix 2010 Sample Variables

	White non- EU	Asian	African	Minority EU	Agriculture	Construction	Trade	Transport	Acc-food	Info	Financial	Professional	Admin
Discrimination in work													
Discrimination looking for work													
Female													
Under 25													
Age 45-64													
Lower secondary													
Upper secondary													
Post secondary													
Migrate 2008-2010													
Non-Irish													
White UK													
White EU13													
White NMS													
White non-EU													
Asian	-0.007												
African	-0.008	-0.006											
Minority EU	-0.008	-0.007	-0.007										
Agriculture	-0.006	-0.012	-0.012	-0.013									
Construction	0.000	-0.011	-0.006	-0.007	-.022**								
Trade	0.009	-0.008	0.000	-0.007	-.039**	-.037**							
Transport	-0.010	-0.007	0.007	0.002	-.023**	-.022**	-.039**						
Acc-food	.021**	.017*	-0.001	.035**	-.026**	-.025**	-.045**	-.027**					
Info	0.007	0.013	-0.011	-0.006	-.020**	-.019*	-.034**	-.020**	-.023**				
Financial	-0.007	-0.002	-0.013	0.010	-.024**	-.023**	-.040**	-.024**	-.027**	-.021**			
Professional	-0.002	-0.012	-0.003	0.001	-.023**	-.022**	-.039**	-.023**	-.027**	-.020**	-.024**		
Administration	0.003	-0.010	0.013	-0.005	-.019*	-.018*	-.033**	-.019*	-.022**	-.017*	-.020**	-.019*	
Public administration	-0.013	-0.014	-0.010	-0.015	-.027**	-.026**	-.046**	-.027**	-.031**	-.024**	-.028**	-.027**	-.023**
Education	-.017*	-0.012	-0.012	-0.013	-.035**	-.034**	-.061**	-.036**	-.041**	-.031**	-.037**	-.036**	-.030**
Health	0.004	.088**	.021**	-0.003	-.043**	-.041**	-.074**	-.044**	-.050**	-.038**	-.045**	-.044**	-.037**
Other	0.007	0.005	-0.009	0.003	-.025**	-.024**	-.043**	-.026**	-.029**	-.022**	-.026**	-.026**	-.021**
Unemployed	0.009	0.005	.035**	0.009	-.045**	-.042**	-.076**	-.045**	-.052**	-.039**	-.046**	-.045**	-.038**
Inactive	-0.011	-.026**	-0.003	-0.004	-.132**	-.125**	-.225**	-.133**	-.153**	-.116**	-.137**	-.133**	-.112**

Online Appendix Table 2 Part Three - Correlation Matrix 2010 Sample Variables

	Public administration	Education	Health	Other	Unemployed	Inactive
Discrimination in work						
Discrimination looking for work						
Female						
Under 25						
Age 45-64						
Lower secondary						
Upper secondary						
Post secondary						
Migrate 2008-2010						
Non-Irish						
White UK						
White EU13						
White NMS						
White non-EU						
Asian						
African						
Minority EU						
Agriculture						
Construction						
Trade						
Transport						
Acc-food						
Info						
Financial						
Professional						
Administration						
Public administration						
Education	-.042**					
Health	-.051**	-.068**				
Other	-.030**	-.039**	-.048**			
Unemployed	-.053**	-.069**	-.085**	-.050**		
Inactive	-.155**	-.205**	-.252**	-.147**	-.258**	

Online Appendix Table 3 Means Table 2004 Sample

	N	Mean	Std. Deviation
Discrimination in work	15,122	0.05	0.22
Discrimination looking for work	8,826	0.06	0.23
Female	24,610	0.62	0.49
Under 25	24,610	0.06	0.25
Age 45-64	24,610	0.34	0.47
Lower secondary	24,610	0.14	0.35
Upper secondary	24,610	0.20	0.40
Post secondary	24,610	0.29	0.46
Migrate 2002-2004	24,610	0.02	0.15
Non-Irish	24,610	0.06	0.24
White UK	24,610	0.02	0.14
White EU13	24,610	0.01	0.09
White NMS	24,610	0.01	0.08
White non-EU	24,610	0.01	0.11
Asian	24,610	0.00	0.06
African	24,610	0.00	0.06
Minority EU	24,610	0.01	0.08
Agriculture	24,610	0.03	0.18
Construction	24,610	0.04	0.19
Trade	24,610	0.07	0.25
Transport	24,610	0.02	0.15
Acc-food	24,610	0.03	0.17
Info	24,610	0.02	0.13
Financial	24,610	0.03	0.16
Professional	24,610	0.03	0.16
Administration	24,610	0.02	0.13
Public administration	24,610	0.03	0.17
Education	24,610	0.05	0.21
Health	24,610	0.07	0.26
Other	24,610	0.03	0.17
Unemployed	24,610	0.02	0.15
Inactive	24,610	0.45	0.50
Valid N (listwise)	8,252		

Online Appendix Table 4 Means Table 2010 Sample

	N	Mean	Std. Deviation
Discrimination in work	10,564	0.05	0.22
Discrimination looking for work	6,281	0.06	0.24
Female	16,821	0.61	0.49
Under 25	16,821	0.05	0.22
Age 45-64	16,821	0.34	0.47
Lower secondary	16,821	0.12	0.32
Upper secondary	16,821	0.19	0.39
Post secondary	16,821	0.38	0.49
Migrate 2008-2010	16,821	0.01	0.11
Non-Irish	16,821	0.10	0.30
White UK	16,821	0.02	0.14
White EU13	16,821	0.01	0.09
White NMS	16,821	0.04	0.19
White non-EU	16,821	0.01	0.09
Asian	16,821	0.01	0.08
African	16,821	0.01	0.08
Minority EU	16,821	0.01	0.08
Agriculture	16,821	0.02	0.15
Construction	16,821	0.02	0.14
Trade	16,821	0.06	0.24
Transport	16,821	0.02	0.15
Acc-food	16,821	0.03	0.17
Info	16,821	0.02	0.13
Financial	16,821	0.02	0.15
Professional	16,821	0.02	0.15
Administration	16,821	0.02	0.13
Public administration	16,821	0.03	0.17
Education	16,821	0.05	0.22
Health	16,821	0.08	0.27
Other	16,821	0.03	0.16
Unemployed	16,821	0.08	0.27
Inactive	16,821	0.43	0.50
Valid N (listwise)	5,608		