

# *Racial wage differentials in developed countries*

Article

Accepted Version

Longhi, S. ORCID: <https://orcid.org/0000-0003-4115-3321>  
(2016) Racial wage differentials in developed countries. IZA  
World of Labor. 365. ISSN 2054-9571 Available at  
<https://centaur.reading.ac.uk/68624/>

It is advisable to refer to the publisher's version if you intend to cite from the work. See [Guidance on citing](#).

Published version at: <https://wol.iza.org/articles/racial-wage-differentials-in-developed-countries>

Publisher: IZA

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the [End User Agreement](#).

[www.reading.ac.uk/centaur](http://www.reading.ac.uk/centaur)

**CentAUR**

Central Archive at the University of Reading

Reading's research outputs online

Part I (“one-pager”)

**Title: The diversity of racial wage differentials**

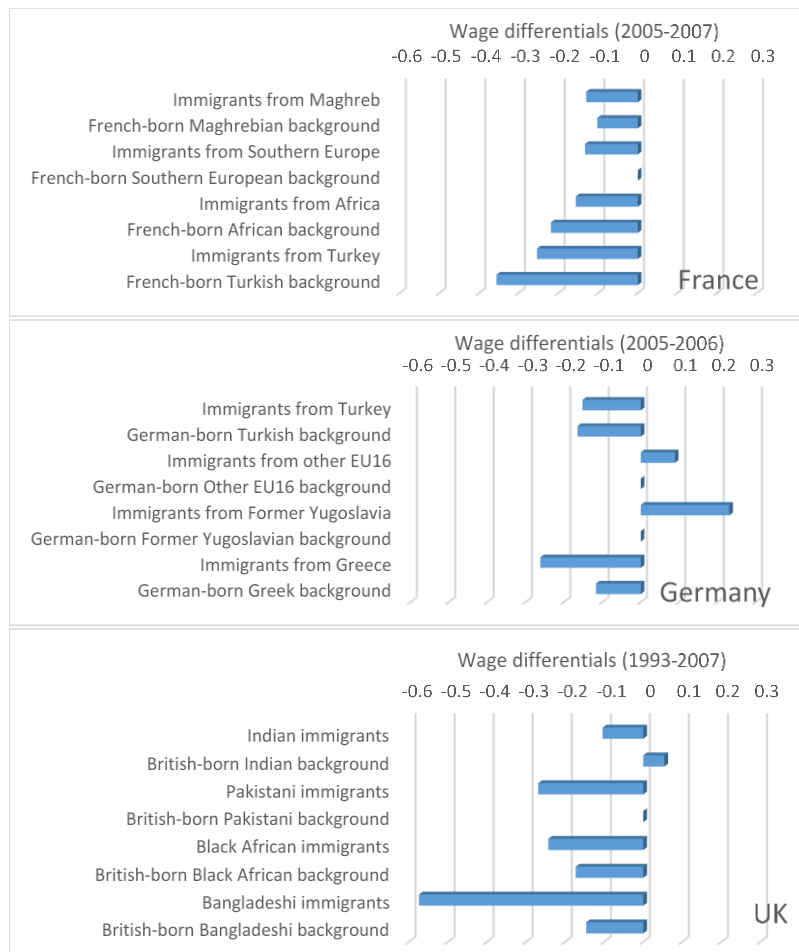
**Teaser:** Racial wage differentials vary across and within racial groups; policy needs to target various sources of inequality

**Keywords:** race; ethnicity; wage; inequality; discrimination

**Elevator pitch:** In many developed countries racial and ethnic minorities are paid on average less than the white majority. While racial wage differentials are partly due to immigration, they also exist for racial minorities of second or further generation. Eliminating racial wage differentials and promoting equal opportunities among citizens with different racial backgrounds is an important social policy goal. Inequalities resulting from differences in opportunities lead to a waste of talent for those who cannot reach their potential and to a waste of resources if some people cannot contribute fully to society.

**Graphical abstract**

In many countries wage differentials differ across minorities



Source: Based on [7], Table 4.

Notes: shows racial wage differentials in France, Germany and the UK estimated after accounting for potential experience, region, and time.

### Key findings

Pros	Cons
+ It is difficult to identify and measure whether there is racial discrimination	- For some racial groups sample sizes may be too small for separate empirical analyses
+ We may observe racial wage differentials even in the absence of wage discrimination	- Lack of empirical evidence for some racial minorities may make it harder to identify targeted policies
+ Racial wage differentials are often the result of differences in individual characteristics or of segregation in worse jobs	- Lack of targeted policies may mean that some racial minorities may be left behind and as a result experience persistent inequality
+ Racial wage differentials vary substantially not only between, but also within racial groups, for example across generations and between men and women	- It may be hard for the public to accept policies that are targeted to some racial minorities but not to others
+ Since there are various sources of racial wage differentials, policies may need to address more than one source of inequality	

### Author's main message

There may be racial wage differentials even in the absence of wage discrimination since minorities segregate in poorly paid occupations and lack career progression. Policy should be based on a better understanding of what characteristics and situations prevent racial minorities from moving into better jobs. There are also important differences between and within minorities with some experiencing large wage penalties and others being paid better than white natives. Policy should move away from a 'one size fits all' approach and should target, where possible, specific issues affecting specific minorities

## Part II

---

### **MOTIVATION**

There is clear empirical evidence that in many developed countries racial and ethnic minorities are paid on average less than the (white) majority. Although racial wage differentials have been decreasing over time, they still persist in most countries. Part of the reason for the persistence of racial wage differentials is that many people belonging to racial minorities are immigrants, who may have difficulties communicating in the language of the host country, may be unfamiliar with its labor market, may not have their qualification recognized, and may lack the social networks necessary to obtain an appropriate job.

In countries such as the US, UK, or Australia, however, a large proportion of racial minorities are second generation or further and do not face the typical problems faced by immigrants.

Nevertheless, wage inequalities are common even among native racial minorities.

Reducing racial wage differentials and promoting equal opportunities among citizens with different racial backgrounds are important social policy goals. Racial wage differentials lead to waste of talent for those who cannot reach their potential and to waste of resources if some citizens cannot contribute fully to society. Ultimately, reducing racial wage inequalities is likely to lead to a more cohesive society.

### **DISCUSSION OF PROS AND CONS**

#### **Discrimination**

Various studies have focused on discrimination as a source of racial wage differentials. Theoretical models suggest that minorities may be discriminated against because of negative social attitudes towards them (this is often called taste-based discrimination) or because employers may infer the quality of a job applicant from a minority background based on the perceived average quality of people from that background (this is often called statistical discrimination). Stereotypes, like for example a widespread belief that people from a certain background work less hard than others, may be a reason for employers not to offer a job to racial minority applicants, or to offer them lower wages, at least initially. Racial stereotypes may even become a self-fulfilling prophecy: recent

research on French supermarket workers suggests that those belonging to a racial minority may work less hard if they have racially biased supervisors ([1]).

From an empirical point of view the identification and measurement of discrimination is very hard. Recent evidence suggests that job applicants with minority-sounding names are less likely to be called back for an interview than similar job applicants with majority-sounding names but the evidence of the role that discrimination plays on racial wage differential and whether this is due to taste-based or statistical discrimination, is not very strong (e.g. [2]). The debate on the existence and importance of discrimination and how it operates is still open.

Clearly, policies to reduce racial wage differentials should differ depending on whether discrimination is the result of a dislike of minorities or of lack of information. However, the understanding and elimination of discrimination is not the only avenue for policies aiming at reducing racial wage differentials. It is important to keep in mind that there may be racial wage differentials even in the absence of (wage) discrimination. An important reason why racial minorities may receive lower wages than white natives is that they might be different in terms of characteristics. In the US, for example, Latinos have lower levels of education than Whites, as do Black Caribbean people in the UK. On the other hand, Black African Americans in the US and second generation Pakistanis and Bangladeshis in the UK tend to have high levels of education, but they are also more likely to go to worse schools than Whites, and this is likely to have a negative effect on their wages. In addition, racial minorities also tend to concentrate in poorly paid occupations.

The literature consistently finds that racial wage differentials decrease when characteristics are taken into account; however, because empirical analyses are always constrained by data availability, different studies may take into account a different set of characteristics, thus potentially estimating different – but equally correct – levels of racial wage differentials. A question then arises: what do all these measures of racial wage differentials mean, and how do we use them for policy?

### **Different ways to quantify racial wage differentials and their meaning**

One common way to measure racial wage differentials is to estimate regression models where the dependent variable is the (log of) hourly wages and dummies for whether the respondent belongs to a certain racial minority are used as explanatory variables. When the models only include racial dummies and no other covariates we talk about ‘unadjusted’ differentials, while we talk about

‘adjusted’ differentials when other covariates, such as education or experience are included in the model. While unadjusted wage differentials measure the average difference in wages between the majority and the minority group taken as a whole, the adjusted differentials measure the residual difference in average wages across groups after taking into account some of the relevant characteristics.

When the other characteristics, such as level of education or work experience, are included in the model, then the racial dummies can be interpreted as the remaining racial wage differential ([3]), which is not due to differences in education and work experience. Some authors use Oaxaca decompositions to measure how much of the racial wage differential remains unexplained. The Oaxaca decomposition divides the racial wage differentials into two components: one which is explained by differences in average characteristics across groups (such as education and experience), and one which is due to differences in average returns to these characteristics. This second component is called the ‘unexplained’ part since it is not clear why returns to characteristics should differ between minorities and the majority.

Most studies focus on measuring how much the racial wage differential reduces when certain characteristics are included in the model and what proportion of the differential remains unexplained (e.g. [4]). It is important to note, however, that the inclusion of certain characteristics may lead to the estimation of larger (rather than smaller) gaps (see below).

Some authors interpret the unexplained part of the racial wage differential – however measured – as discrimination. This, however, is incorrect. The unexplained part is a measure of how much or how little the chosen characteristics explain the racial wage differentials. The unexplained part includes the possible impact of discrimination but also the impact of all other factors not included in the model. Since it is not possible to compare the importance of unmeasured causes, the unexplained part should not be all attributed to discrimination. For example, part of the reason why racial wage differentials remain unexplained may be due to differences across groups in the occurrence of career breaks, spells of self-employment or unemployment, or other factors that are not measured in the data and cannot therefore be taken into account in the models. Unemployment spells may have a negative impact on wages, may themselves be the results of discrimination or lack of opportunities but they are not a source of discrimination in wages.

Although we should not completely neglect the role that discrimination may directly and indirectly play in shaping racial wage differentials, one useful direction for policy is to focus on those

characteristics that have been shown to be important determinants of racial wage differentials. These may be used as intermediate policy targets.

### **Possible determinants of racial wage differentials**

A comparison of unadjusted and adjusted wage differentials and an analysis of which characteristics are most relevant in their determination can be quite revealing and useful for policy. First, some characteristics contribute more than others; second, not all characteristics decrease wages (thus contributing to the racial wage differentials): some characteristics may increase wages and contribute to a reduction of racial wage differentials ([5], [6]). For example, [5] find that the most important determinant of racial wage differentials in the UK is concentration in low-pay occupations, while the comparatively higher level of education of minorities partly compensates for the negative effect of occupational segregation. This suggests that the problem may lie in the access to highly paid jobs or in the lack of career progression rather than in the lack of high levels of education.

The situation may be slightly different in the US, where evidence suggests that racial segregation in the workplace is largely due to segregation by skills and language proficiency, although this seems to be more relevant for Hispanics than for Blacks ([6]). Note, however, that occupational and workplace segregation are slightly different concepts: while workplaces (or employers) may offer jobs in different occupations, the same – or similar – occupations may be available in different workplaces.

The literature rarely compares the relative importance of the various characteristics as determinants of racial wage differentials; instead, various strands of literature focus on one or few possible determinants. The comparison of studies using different data and methodology – and aiming at answering different research questions, some not even focusing on wage differentials – is not straightforward and generalization is not always possible. Nevertheless, by comparing the wider literature we can draw conclusions on what factors may play a role for racial wage differentials, although we cannot directly compare their relevance.

Among the first characteristics considered in the literature as possible determinants of racial wage differentials are education, qualifications and skills. Evidence for various countries, including the US, the UK, France and Germany ([6], [7]) suggests that racial wage differentials are partly due to lower levels of education of many minority groups, especially when they include a large proportion of immigrants. However, there are important differences across minority groups. While some racial

minorities are less qualified than the white majority, others tend to be more qualified. One explanation why racial wage differentials may remain after taking into account qualifications is that minorities are more likely to attend lower quality schools than Whites and this may have a negative impact on their overall skill level. Evidence for Israel focusing on university graduates suggests that racial wage differentials tend to decrease with more time spent in the labor market ([8]).

Another important factor in the determination of racial wage differentials is that minorities tend to segregate in low pay occupations ([5]). Although [6] point to the importance of skills and language proficiency – at least for some US minorities – for workplace segregation, the causes of occupational segregation have not been systematically analyzed. Economic and sociological theories suggest that racial minorities may prefer to work in occupations where a large proportion of co-ethnic works and may therefore be prepared to accept comparatively lower wages to work in these occupations. It has also been suggested that, as the size of the minority in a country increases, people from the majority may increasingly fear competition for scarce resources. The majority would then react by preventing minorities from obtaining high quality jobs and therefore increase their political power ([9], [10] provide evidence for the US). As the size of the minority increases, and the majority adapts to the presence of minority groups, who in turn become more integrated into the host society, occupational segregation should decrease.

Following this strand of literature, various empirical studies have estimated the impact of the relative size of the various minority groups on their labor market outcomes, although the outcome of interest of this part of the literature is often the level of wages of the minority group rather than wage differentials compared to the majority. In addition, these studies analyze the impact of the size of the minority groups by comparing regions within one country or neighborhoods within a city and focus on the impact of residential segregation. These studies tend to find worse labor market outcomes for minorities living in more segregated areas in the US ([10]), although some argue that segregation has a positive impact on wages once selection across areas is taken into account.

One of the mechanisms that may explain the importance of residential segregation on racial wage differentials is the quality of networks and the types of people minority and majority are more likely to interact with, since these play a relevant role in the type of job people may find. A recent study focusing on the US and on Estonia finds that racial wage differentials are larger in areas where people are more likely to choose friends from the same racial background ([11]). However, besides being related to co-ethnic networks, this may also be the result of social class ([5]).



All these – and other – factors may contribute to racial wage differentials and are also likely to interact with each other in a complex manner. In addition, it is likely that different factors may have different importance for each racial minority. For example, for some minorities the main issue may be lack of appropriate qualifications, while for other minorities qualifications may not be an issue while residential location may play a more relevant role. Policy should take into account that the literature has found important differences across and within ethnic minorities: racial wage differentials as well as their determinants are likely to vary across groups and adopting a unified approach to reducing racial wage differentials may be inappropriate.

### **Differences between and within racial minorities**

Although nowadays most countries host increasing proportions of racial minorities, either immigrant or from second or further generations, the size of the minority population, the history and size of immigration fluxes, as well as integration policies vary across countries ([4], [7]). It is therefore not surprising that racial wage inequalities, even for second generations, vary across countries. For example, the experience of Black African Americans in the US is hardly comparable to the experience of second generation Black Africans in the UK. Similarly, because of differences in colonial ties, people of African origin who settled in the UK are likely to be very different from those who settled in France or in Portugal.

More important from a policy point of view is that racial wage differentials vary across groups even within one country. While some minorities, such as Latinos or Mexicans in the US experience large wage penalties, others, such as Asians often receive higher wages than white natives. For example, Figure 1 shows important differences in racial wage differentials across minorities in France and Germany, both among men and women. In France the worst outcomes are experienced by Turkish and Africans, while immigrants from Northern Europe seem to be paid more than French natives ([7]). In Germany it is immigrants from Italy and Greece who have the worst outcomes while those from other EU countries seem to perform much better ([7]). In the UK second generation Whites have overall the best outcomes, while Bangladeshi and Pakistani have the worst ([7]). Among graduates from Israeli universities it is those from Ethiopia who experience the largest wage penalties, while those from the Former Soviet Union experience the smallest wage differentials ([8]).

Figure 1: Racial and gender wage differentials in France and Germany



Source: Based on [7], Table 4.

Notes: Wage differentials of racial minority men are relative to wages of White native men, while wage differentials of racial minority women are relative to wages of White native women. The racial wage differentials are estimated after accounting for potential experience, region and time.

Besides differences across racial minority groups, there is also considerable heterogeneity within each group. An interesting example is that of gender. The literature focusing on men consistently finds large racial wage differentials; the literature analyzing racial wage gaps among women, in contrast, finds that in general women belonging to a racial minority tend to be paid the same – or even more – than white native women. This finding is consistent across various countries such as

the US, the UK, and Israel ([2], [7], [8]), although it may not be so clear cut for countries such as France and Germany ([7]). The smaller racial wage differentials among women may be the result of self-selection: women, especially those belonging to racial minorities, are often less likely than men to participate in the labor market and those who do participate are likely to have qualities (such as higher education or motivation) that make them more likely to receive comparatively higher wages. Nevertheless, there is not much evidence on the reasons for smaller racial wage differentials among women than among men.

Most studies estimate gender-specific racial wage differentials, where wages of minority men are compared with wages of White native men, and wages of minority women are compared with wages of White native women. Nevertheless, it is also interesting to see how wages of ethnic minority men and women compare to wages of White native men. Figure 2 shows an example for the UK that allows us to compare wage differentials by race and gender; the vertical line in the graph corresponds to the gender wage gap for White British women, which is about 22% in the period 2013-2016. The Figure shows that Indian men receive similar wages than White British men. Indian immigrant women experience a gender wage gap which is similar to that of White British women, while British-born Indian women are paid more than white British women and therefore experience a smaller gender wage gap. Bangladeshi men and women experience large racial wage gaps compared to White British men and on average receive lower wages than White British women. However, the racial wage gap is smaller among women and there seems to be no gender wage gap among British-born Bangladeshis. In contrast, Bangladeshi immigrant women seem on average to receive higher wages than Bangladeshi immigrant men, suggesting that the gender wage gap for this group may even be in favor of women; it is possible that self-selection into the labor market plays an important role for this group. Among Black Caribbean immigrants, both men and women are paid on average similarly to White British women, i.e. they both experience racial wage gaps compared to White British men, but the gender wage gap between Black Caribbean immigrant men and women is almost non-existent. Black Caribbean men and women who are British-born experience only small racial wage gaps and on average seem to be paid more than White British women, although still less than White British men.

Figure 2: Racial and gender wage differentials in the UK (2013-2016)



Source: Author’s calculation using UK Labour Force Survey 2013 (first quarter)-2016 (second quarter).

Notes: Wage differentials are relative to wages of White native men and are estimated after accounting for time

Besides differences between men and women, there are also important differences between those born abroad and those born in the host country. Although in general racial wage differentials tend to be lower for people born in the host country, this is not always the case (e.g. Turkish men in France, see Figure 1). More recent literature also suggests that racial wage differentials may be larger among workers with low skills while they may be essentially inexistent among high-skill workers, at least in the US ([2]) and generally tend to vary across the wage distribution and by type of salary (see e.g. [12] for the US, and [13] for the UK).

### LIMITATIONS AND GAPS

Although the concept of ‘race’ is quite clear, data limitations may make it hard to empirically analyze racial wage differentials. As discussed above, the labor market experience is specific to each racial group. However, the researcher often does not have enough sample size to analyze each group separately. For example, the group of “other” whites is rarely analyzed and it includes people from different countries of origin, ranging from the US, Australia or New Zealand, to various European countries. These groups have different histories and are likely to experience very different wage differentials compared to the majority (see e.g. Figure 1). Although such a heterogeneous

group is of little use for policy, the separate experiences of groups from each country of origin would still be of interest. Similarly, in many developed countries the group of mixed race people is also becoming more important. However, the experience of a person with an Asian and a British parent is likely to be different from the experience of someone with an African and a British parent. The main reason for lack of empirical research is that most existing datasets do not provide large enough sample sizes to disaggregate these groups. As a result, most evidence is based on the largest racial groups, and neglects the smaller ones.

Some of the labor market determinants of racial wage differentials, such as education or occupational segregation are not disputed. It is yet not clear, however, what determines these outcomes, whether they are due to pre-labor market discrimination, or to choices or aspirations (for example in terms of desired occupation), which may themselves be the results of real or perceived additional difficulties faced by minorities compared to the majority. A better understanding of the underlying mechanisms may help in the design of new policies to reduce inequalities.

## **SUMMARY AND POLICY ADVICE**

In many developed countries racial and ethnic minorities are paid on average less than the white majority. Although they have been decreasing over time, racial wage differentials still exist in most countries, even for second and further generations.

Although it is likely that racial wage differentials are partly the result of direct and/or indirect discrimination, the empirical evidence on the relevance of discrimination in generating racial wage differentials is lacking. Despite this, anti-discrimination legislation is undoubtedly important. Nevertheless, anti-discrimination legislation is not the only way to reduce racial wage differentials. The literature suggests that minorities tend to segregate in worse neighborhood, in poorly paid occupations and often lack career progression. New policies to reduce racial wage inequalities should be based on a better understanding of what characteristics and situations prevent racial minorities from moving into better jobs, perhaps by improving mentoring practices or by increasing aspirations of minority workers.

Another important issue that should be considered is that within many countries there are important differences across minorities and within them. While some minorities experience large wage penalties, some are paid similarly or even more than white natives. Racial wage differentials tend to be smaller among women than among men and may also vary by other characteristics such as education. Policy should move away from a “one size fits all” approach where race is seen as one

single issue, should take into account that reasons for lack of success differ across minorities and should target, where possible, specific issues affecting specific minorities. For some minorities policies may need to focus on increasing skills or improving education, while for other minorities policies may need to focus on improving aspirations. Such policies may also differ by gender and generation. However, the danger with policies targeted to very specific groups is that some other groups may be left behind simply because there is not enough empirical evidence about their situation. Policies that favor some small groups over others may also be seen as controversial.

Instead of policies specifically targeted to some narrowly defined minority groups, it may be useful to have policies targeting ‘issues’ rather than ‘groups’. For example, policies to increase aspirations and mentoring for career progression could be targeted to all workers in certain low-pay occupations. They may benefit mostly minorities (which tend to segregate in these occupations) but may also benefit white natives from poorer socio-economic background if the reasons for lack of success in their job are shared with racial minorities.

### **Acknowledgments**

The author thanks two anonymous referees and the IZA World of Labor Editors for many helpful suggestions on earlier drafts. Financial support provided by ESRC through the Research Centre on Micro-Social Change (MiSoC) (award no. RES-518-28-001) based at the Institute for Social and Economic Research at the University of Essex, where part of this work was undertaken, is gratefully acknowledged.

### **Competing interests**

The IZA World of Labor project is committed to the IZA Guiding Principles of Research Integrity. The author declares to have observed these principles.

### **REFERENCES**

#### **Further reading:**

Altonji, J. G. and R. M. Blank. “Race and Gender in the Labor Market.” In: Ashenfelter, O. C. and D. Card (eds). *Handbook of Labor Economics, Volume 3*. Amsterdam, the Netherlands: Elsevier, 1999; pp. 3143-3259.

Carneiro, P., J. J. Heckman, and D. V. Masterov. "Understanding the Sources of Ethnic and Racial Wage Gaps and Their Implications for Policy." In: Nielsen, L. and R. Nelson (eds). *Handbook of Employment Discrimination Research*. Amsterdam, the Netherlands: Springer, 2005; pp. 99-136.

**Key references:**

- [1] Glover, D., A. Pallais, and W. Pariente. Discrimination as a Self-Fulfilling Prophecy: Evidence from French Grocery Stores, NBER Working Paper No. 22786, 2016. Online at: <http://www.nber.org/papers/w22786>
- [2] Lang, K., and J.-Y. K. Lehmann. "Racial Discrimination in the Labor Market: Theory and Empirics." *Journal of Economic Literature* 50:4 (2012): 959-1006. Online at: <http://www.ingentaconnect.com/content/aea/jel/2012/00000050/00000004/art00001>
- [3] Elder, T. E., J. H. Goddeeris, and S. J. Haider. "Unexplained Gaps and Oaxaca-Blinder Decompositions." *Labour Economics* 17:1 (2010): 284-290. Online at: <http://www.sciencedirect.com/science/article/pii/S0927537109001171>
- [4] Aeberhardt, R., D. Fougère, J. Pouget, and R. Rathelot. "Wages and Employment of French Workers with African Origin." *Journal of Population Economics* 23:3 (2010): 881-905. Online at: <http://link.springer.com/article/10.1007/s00148-009-0266-3>
- [5] Longhi, S., C. Nicoletti, and L. Platt. "Occupation and Pay across the Generations: The Labour Market Experience of Four Ethno-Religious Groups in Britain." In: Lambert, P.S., R. Connelly, B. Blackburn, and V. Gayle (eds). *Social Stratification: Trends and Processes*. Ashgate, 2012; pp. 151-165.
- [6] Hellerstein, J. K. and D. Neumark. "Workplace Segregation in the United States: Race, Ethnicity, and Skill." *The Review of Economics and Statistics* 90:3 (2008): 459-477. Online at: <http://www.mitpressjournals.org/doi/abs/10.1162/rest.90.3.459#.WCHIKNWLSUK>
- [7] Algan, Y., C. Dustmann, A. Gritz, and A. Manning. "The Economic Situation of First and Second-Generation Immigrants in France, Germany and the United Kingdom." *The Economic Journal* 120:1 (2010): F4-F30. Online at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0297.2009.02338.x/full>

- [8] Epstein, G. S., D. Gafni, and E. Siniver. *Even Education and Experience Has Its Limits: Closing the Wage Gap*, CREAM Discussion Paper 01/15, 2015. Online at: [http://www.cream-migration.org/publ\\_uploads/CDP\\_01\\_15.pdf](http://www.cream-migration.org/publ_uploads/CDP_01_15.pdf)
- [9] Huffman, M. L., and P. N. Cohen. "Racial Wage Inequality: Job Segregation and Devaluation across U.S. Labor Markets." *American Journal of Sociology* 109:4 (2004): 902-936. Online at: [http://www.jstor.org/stable/10.1086/378928?seq=1#page\\_scan\\_tab\\_contents](http://www.jstor.org/stable/10.1086/378928?seq=1#page_scan_tab_contents)
- [10] Tienda, M., and D.-T. Lii. "Minority Concentration and Earnings Inequality: Blacks, Hispanics, and Asians Compared." *American Journal of Sociology* 93:1 (1987): 141-165. Online at: [http://www.jstor.org/stable/2779676?seq=1#page\\_scan\\_tab\\_contents](http://www.jstor.org/stable/2779676?seq=1#page_scan_tab_contents)
- [11] Toomet, O., M. van der Leij, and M. Rolfe. "Social Networks and Labor Market Inequality between Ethnicities and Races." *Network Science* 1:3 (2013): 321-352. Online at: <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9148929&fileId=S2050124213000209>
- [12] Heywood, J. S. and D. Parent. "Performance Pay and the White- Black Wage Gap." *Journal of Labor Economics* 30:2 (2012): 249-290. Online at: [http://www.jstor.org/stable/10.1086/663355?seq=1#page\\_scan\\_tab\\_contents](http://www.jstor.org/stable/10.1086/663355?seq=1#page_scan_tab_contents)
- [13] Green, C. P., J. S. Heywood, and N. Theodoropoulos. "Performance Pay and Ethnic Earnings Differences in Britain." *Oxford Economic Papers* 66:3 (2014): 798-823. Online at: <http://oep.oxfordjournals.org/content/66/3/798.short>