



#### Available online at www.sciencedirect.com

## **ScienceDirect**



EconomiA 15 (2014) 20-29

www.elsevier.com/locate/econ

# Effect of racial segregation on proficiency of Brazilian elementary school students

Roberto Manolio Valladão Flores a,\*, Luiz Guilherme Dácar da Silva Scorzafave b

<sup>a</sup> Brazilian Agricultural Research Corporation (EMBRAPA), Brazil
<sup>b</sup> School of Economics, Business Administration and Accounting at Ribeirão Preto, University of São Paulo, Brazil
Available online 21 March 2014

#### **Abstract**

Recent research has found that black students have worse performance than white students on standardized cognitive tests. Racial segregation is frequently pointed out as one of the main factors behind this situation in the international literature. We studied the effects of racial segregation on the black—white score gap for 5th-grade students in Brazil. Even after the inclusion of several control variables, we found that the higher school racial segregation is, the higher the score differential between white and black students. © 2014 National Association of Postgraduate Centers in Economics, ANPEC. Production and hosting by Elsevier B.V. All rights reserved.

JEL classification: I21; J13

Keywords: School proficiency; Racial segregation; Race

#### Resumo

Pesquisas recentes vêm encontrando que alunos de cor de pele negra têm pior desempenho escolar que alunos de cor de pele branca em testes cognitivos padronizados. A segregação racial é frequentemente apontada na literatura internacional como uma das principais responsáveis por essa diferença. Esse artigo analisa o efeito da segregação racial escolar no diferencial de desempenho entre alunos brancos e negros no 5° ano do ensino fundamental no Brasil. Nos modelos estimados, mesmo após a utilização de diversas variáveis de controle, foi encontrada evidência de que nas escolas onde a segregação entre brancos e negros é maior, o diferencial de proficiência escolar contra os alunos negros é maior.

© 2014 National Association of Postgraduate Centers in Economics, ANPEC. Production and hosting by Elsevier B.V. All rights reserved.

Palavras chave: Desempenho escolar; Segregação racial; Raça

E-mail addresses: robertovalladao@embrapa.br (R.M.V. Flores), scorza@usp.br (L.G.D.d.S. Scorzafave). Peer review under responsibility of National Association of Postgraduate Centers in Economics, ANPEC.



Production and hosting by Elsevier

<sup>\*</sup> Corresponding author.

#### 1. Introduction

The discussion on the wage gap between black and white workers has been gaining space lately in Brazilian society. Studies of this issue have found that, even after controlling for many observed characteristics, black workers still earn less than white ones. There is an intense intellectual debate about whether this gap: (1) is due to discrimination suffered by blacks in the labor market or (2) due to non-observable variables that affect wages and are different across race groups. A hypothesis pointed out in the defense of the second argument is that the worse earnings of blacks could be related to the worse quality of education to which they have access during childhood and adolescence. For a long time it was hard to investigate the validity of this hypothesis. However, with the advent of large-scale evaluation after the mid 1990s, it became possible to assess to what degree the educational proficiency of white and black children differs and what the reasons behind these results are.

One of the elements that can explain this gap is racial segregation inside classrooms, schools and/or neighborhoods. According to Card and Rothstein (2007), the literature shows two possible mechanisms through which racial segregation could affect the educational performance of black students. First is the peer effect, by which black students would have lower expectations and aspirations than white students due to expectation of lower earnings in the labor market. Ogbu (2003) claims that black children have lower aspirations in terms of educational achievement than similar white students and that the contact with these low expectation colleagues contributes to worse school performance. A second mechanism through which racial segregation could affect proficiency is that black enrollment shares could be correlated with school quality. As observed by Boozer et al. (1992), black students have smaller probability of studying in schools with more resources in the United States. For example, in general black students use computers in schools less frequently than white students. In the same way, Card and Krueger (1992) found that black students usually study in schools with higher student—teacher ratios which pay lower salaries to teachers while analyzing segregated states in the United States.

The present study analyzes the impact of racial segregation on the proficiency gap between black and white students in São Paulo state, Brazil. To measure achievement we used the language (Portuguese) and mathematics proficiency scores of the *Prova Brasil*, a nationwide achievement test given by the Ministry of Education. The goal is to show the effect of racial segregation on the gap between the performances of black and white students, since the literature indicates that school achievement of black students is usually lower than that of white students (Soares and Alves, 2003).

The results indicate that racial segregation has a direct effect on the black—white proficiency gap, that is to say, the more segregated the school, the worse the proficiency of black students relative to white students, even when a large number of control variables are considered.

This paper is organized as follows: the second section is a literature review about the proficiency gap between different race students and also the impact of racial segregation on this gap; the third section presents the econometric model used to measure the impact of racial segregation; the fourth section brings a descriptive analysis of data; and the fifth section presents the estimation results. The last section contains our final considerations.

#### 2. Literature review

Worse school achievement of black students when compared to white ones has been verified since standardized tests started to be implemented on a wide scale in the second half of the twentieth century, mainly in the United States. Therefore, many researchers have been trying to find explanations for the school proficiency gap between the races. The way these tests are applied and the prejudice of teachers toward students' race are frequently suggested as possible explanations. Another fact that has been highlighted in the literature is that racial segregation in schools, neighborhoods and cities could also be responsible for this proficiency gap.

Fryer and Levitt (2004) rejected the hypothesis that there could be prejudice by teachers toward students of different skin color. They verified that black students taught by black teachers do not have better results than the ones taught by white teachers. On the other hand, a factor that could contribute to the proficiency gap between races would be the school vacation return: black students present worse evolution when back from vacation compared to white students, which suggests that higher contact with family has a stronger effect on white students.

### Download English Version:

# https://daneshyari.com/en/article/992827

Download Persian Version:

https://daneshyari.com/article/992827

<u>Daneshyari.com</u>