

**Ethnic Boundaries and Minority Earnings: The effects of Neighborhood,
Workplace, and Industry**

By

Eric Fong (University of Toronto)
and
Feng Hou (Statistics Canada)

LONG ABSTRACT

Introduction

Ethnic boundaries have become a major concern in understanding the incorporation of racial and ethnic minorities into the mainstream economy (Driedger 2003; Schwartzman 2007; Telles and Ortiz 2008; Wimmer 2008). Growing out of Barth's (1969) ethnographic work on how two groups maintain boundaries despite sharing a similar culture, most research on the topic takes a constructionist approach and focuses on the processes of boundary shifting, repositioning, crossing and blurring that occur in maintaining the boundaries (Lamont and Molnar 2002; Wimmer 2008). These studies tend to focus on the mechanisms and contexts that make the processes possible, explore the effects of the processes on ethnic identification (Alba and Nee 2003; Olzak, Shanahan, and McEneaney 1996; Schwartzman 2007) or, as in recent studies, explore the effect of the rigidity of group boundaries (Telles and Ortiz 2008).

This paper attempts to move the discussion of ethnic boundaries from the approach of self-identification to the approach of situating the discussion in specific spatial locations and activities. This focus is rooted in the Chicago ecological approach, which views groups as occupying different positions in the society as they become involved in activities such as competing for cultural and financial resources (Park 1930; Shibutani and Kwan 1965). Along the same vein, Massey and Mullen (1984) have argued that "assimilation does not occur in vacuum" (p.837). Our study follows the same tradition by examining the effect of ethnic boundaries in a specific environment. In particular, we focus on the effect of ethnic boundaries in neighborhood, workplace and industry on the economic well being of minority groups. A higher co-ethnic representation suggests a higher enclosure of ethnic boundaries. Underlying much of this research is an assumption that the ethnic attachment fostered in an ethnic enclosed

environment is a fundamental process that hinders the economic attainments of racial and ethnic minorities (Gordon 1964). This focus reflects the long-standing concern about the inverse relationship between ethnic closure and socioeconomic resources in the study of the integration of racial and ethnic minorities. Since the classic formulation of racial and ethnic relations by Park and Burgess, most studies have argued that integration implies new opportunities and paths, while ethnic closure suggests limited resources and barriers to equality (Gans 1997). This assumption has been challenged in recent decades. The resurgent interest in social disorganization in neighborhoods has led to an understanding of how collective efficacy can develop among residents in neighborhoods, even where they have limited resources, and can facilitate the public good (Sampson and Wilson 1995). In the study of ethnic business, the proposed ethnic enclave hypothesis and later the ethnic economy hypothesis have argued that the mobilization of resources through ethnic linkages among members leads to economic achievements for ethnic minorities working in ethnic businesses or in ethnic concentrated industries, despite their disadvantaged position (Portes and Bach 1985). All these studies have noted that attachment among ethnic members in a more enclosed environment, which inherently delineates a clear ethnic boundary, can lead to ethnic solidarity, which in turn can have direct and positive consequences on the economic achievements of co-ethnic members.

Much has been written about the relationship between co-ethnic concentration in neighborhood, workplace or industry and the economic achievements of minorities. Missing is a comparison of the significance of these co-ethnic concentrated contexts, and an integrated framework that includes all of these co-ethnic contexts to provide a more comprehensive account. Our study bridges the literature by comparing the relative effects of three co-ethnic contexts (i.e., neighborhood, workplace, and industry), and

providing an integrated framework to address simultaneously the effects of ethnic enclosure in the three different contexts on the economic achievements of minorities. To the best of our knowledge, this is the first study to compare the relative effects of neighborhood, workplace, and industry and to explore the combined effects of these contexts. This approach offers a more realistic understanding of the effects of co-ethnic contexts on the economic achievements of minorities, as individuals are simultaneously exposed to neighborhood, work, and industrial contexts in their everyday lives. Their economic achievements can be affected by the individual effects of specific co-ethnic contexts, or by the interaction effect of different co-ethnic contexts at the same time.

Our analysis focuses on the income attainment of four recent immigrant minority groups in Canada. We proceed in three stages. First, we outline the literature pertaining to the effects of co-ethnic concentration in neighborhood, workplace and industry on income attainment among minority groups. We then discuss the combined model that focuses on how the concept of ethnic completeness helps us to understand the extensity of ethnic enclosure in neighborhoods, workplaces and industries. We argue that the effect of particular co-ethnic concentration in neighborhood, workplace, or industry on income attainment among minority groups is uniformly opposite direction to the various combined effects of these co-ethnic contexts (e.g., combined effect of co-ethnic concentration in neighborhood and workplace) because of the increased level of ethnic completeness. Finally, we test the hypothesis developed in the discussion of six minority groups in eight major Canadian metropolitan areas. The data is based on the 2006 Canadian census.

Data and Methods

This study is based on the 2006 Canadian Census 20% sample microdata file. The study focuses on Canada's four largest racial minority groups (Black, Chinese,

Filipino, and South Asian) and two large White minority ethnic groups (Italian and Portuguese). In 2006, the four racial minority groups accounted for 72% of Canada's total racial minority population and 12% of the total population¹. Italians and Portuguese are two European ethnic groups known to have a high degree of residential and workplace concentration (Hou, 2009; Reitz 1990). They account for 2.3% and 0.8% of Canada's total population respectively.

We restrict our study sample to eight large metropolitan areas, each with a population of at least 500,000 (Toronto, Montreal, Vancouver, Ottawa, Calgary, Edmonton, Winnipeg, and Hamilton). The majority of our selected population groups (about 84% of Blacks, 91% of Chinese, 90% of Filipinos, 89% of South Asians, 79% of Italians and 79 % of Portuguese) are located in these metropolitan areas.

For our regression model, we include only individuals aged 20 to 65 who had positive earnings and worked at least one week in the year prior to the census. We excluded those who worked at home or outside Canada or had no fixed workplace, since we can only define the workplace concentration for those who had a specific workplace.

Measures

Our outcome variable is the log transformation of weekly earnings, which is computed as annual earnings divided by number of weeks worked.

Our first focal explanatory variable, co-ethnic residential concentration, is measured as the proportion of a minority group in a census tract. Earlier studies on residential concentration often used census tracts to represent neighborhoods (e.g.,

¹ In this study, the term “racial minorities” refers to “visible minorities,” defined by Canada’s Employment Equity Act as “persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour.” The regulations that accompany the Act identify the following visible minority groups: Chinese, South Asians, Blacks, Arab/West Asians, Filipinos, Southeast Asians, Latin Americans, Japanese, Koreans, and others (Renaud and Costa 1999).

Alba et al. 1995; Fong and Shibuya 2000). Census tracts are small geographic areas with relatively homogeneous physical characteristics and social living conditions. They have carefully designed attributes and allow for national and historical comparisons. A typical neighborhood consists of about 4,000 individuals.

Our second focal explanatory variable, co-ethnic workplace concentration, is measured as the proportion of a minority group in a workplace. To identify a workplace in the census micro data file, we use the combination of an individual's self-reported work address and classified industries based on 300-digit 2002 North American Industrial Classification System industries. If all workers with a common work address are employed in one industry, the address is defined as one workplace. If workers with a common work address are employed in multiple industries, the address is divided into multiple workplaces. The distribution of the workplaces that we derived from census data is similar to that of establishments derived from the Labour Force Survey, which is Canada's official source for labour statistics.² As a standard statistical unit in business surveys, the establishment is defined as the most homogeneous unit of production. The census is the only data source from which we can derive information on the ethnic composition of the workplace. Common household surveys often contain ethnicity/race information, but may not contain workplace identifiers. Conversely, business surveys contain ample information on workplace but no ethnicity/race variables.

The third focal explanatory variable is industrial concentration. For a given minority group in a metropolitan area, industrial concentration is defined as $(E_{ij}/O_{ij})/(E_{j-1}/O_{j-1})$, where E_{ij} is the number of workers of minority group i in industrial sector j , O_{ij} is

² According to the Labour Force Survey (LFS), in May 2006, there were 147,500 establishments with 20 or more employees, compared with our census derived number of 147,200. In LFS there were 9,545,000 employees working in establishments with 20 or more employees, compared with our census derived number of 9,759,000.

the number of workers of all other ethnic groups in industrial sector j , and E_{j-1} and O_{j-1} are similarly defined as workers of a minority group and other workers in all other industrial sectors. The industrial sectors are based on the 3-digit level of the 2002 North American Industry Classification System (103 sectors).

In regression models, we also include the standard human capital and other demographic variables that are conventionally used to predict individual earnings: education, potential years of work experience (and its squared term), self-employment, full-time/part-time status, marital status, generational status, official language ability, and place of residence. Education is based on the individual's most advanced certificate, diploma or degree and is coded as 8 dummy variables with Bachelor's degree as the common reference group: no certificate/degree, high school graduation, trades or apprenticeship certificate, college program of 2 years or less, college program of more than 2 years, certificate below Bachelor, graduate degree (certificate above Bachelor, Master's, and doctorate degree), and degree in medicine. Potential years of experience are derived from "age minus years of schooling minus 6". Self-employment contrasts the self-employed with paid workers. Full-time is defined as working 30 hours or more per week. Marital status is coded as married vs. others. Generational status is coded as three dummy variables with the first generation (immigrants whose age at immigration is 18 or over) as the common reference group: 1.5 generation (immigrant whose age at immigration is younger than 18), 2nd generation (one or both parents are foreign born), 3rd-and-higher generation (both parents are Canadian born). Official language ability is coded as two dummy variables with English or French mother tongue as the common reference: mother tongue is a foreign language and speaking English/French, and not speaking English/French. Location of residence is coded as seven dummy variables, each representing one metropolitan area, with Toronto as the common reference.

Fixed effect models will be used in our analysis to control possible unobserved effects of metropolitan characteristics, as the metropolitan dummy variable is included in the model. Our focus will be on the effects of co-ethnic composition in neighborhood, workplace and industry, and their interaction effects.

References

- Alba, Richard and Victor Nee. 2003. *Remaking the American Mainstream: Assimilation and Contemporary Immigration*. Cambridge: Harvard University Press.
- Barth, Fredrik. 1969. *Ethnic Groups and Boundaries: The Social Organization of Culture Difference*. Boston: Little, Brown.
- Driedger, Leo. 2003. "Changing Boundaries: Sorting Space, Class, Ethnicity and Race in Ontario." *The Canadian Review of Sociology and Anthropology* 40:593-621.
- Gans, Herbert J. . 1997. "Toward a Reconciliation of "Assimilation" and "Pluralism": The Interplay of Accultural and Ethnic Retention." *International Migration Review* 31 875-892.
- Gordon, Milton. 1964. *Assimilation in American Life: The Role of Race, Religion, and National Origins*. New York: Oxford University Press.
- Lamont, Michele and Virag Molnar. 2002. "The Study of Boundaries Across the Social Sciences." *Annual Review of Sociology* 28:167-195.
- Massey, Douglas S and Brendon P. Mullan. 1984. "Process of Hispanic and Black Spatial Assimilation." *American Journal of Sociology* 39:836-873.
- Olzak, Susan, Suzanne Shanahan, and Elizabeth H. McEneaney. 1996. "Poverty, Segregation, and Race Riots: 1960 to 1993." *American Sociological Review* 61:590-613.
- Park, Robert E. 1930. "Assimilation, Social." in *Encyclopedia of the Social Science*, edited by E. R. A. Seligman and A. Johnson. New York: Macmillan.
- Portes, Alejandro and Robert Bach. 1985. *Latin Journey: Cuban and Mexican Immigrants in the United States*. Berkeley: University of California Press.
- Sampson, Robert J. and William Julius Wilson. 1995. "Toward a Theory of Race, Crime, and Urban Inequality." Pp. 37-56 in *Crime and Inequality*, edited by J. H. a. R. Peterson. Stanford, CA: Stanford University Press.
- Schwartzman, Luisa Farah. 2007. "Does Money Whiten? Intergenerational Changes in Racial Classification in Brazil " *American Sociological Review* 72:940-963.
- Shibutani, Tamotsu and Kian M. Kwan. 1965. *Ethnic Stratification*. New York: Macmillan.
- Telles, Edward E. and Vilma Ortiz. 2008. *Generations of Exclusion: Mexican Americans, Assimilation and Race*. New York: Russell Sage Foundation.
- Wimmer, Andreas. 2008. "The Making and Unmaking of Ethnic Boundaries: A Multilevel Process Theory." *American Journal of Sociology* 113:970-1022.