Unequal Entrepreneurship:
Race, Nativity and the Social Organization of Self-Employment

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Abstract

How do race and generational status shape the social organization of contemporary self-employment? Using the Current Population Survey(2000-2010) and three sets of logistic regression models, this paper unpacks the concept of self-employment by analyzing (1) generational disparities in self-employment across four major race/ethnicity groups (Whites, Blacks, Asians and Hispanics), (2) racial disparities in self-employment across three generation groups (first-generation, second-generation and third-generation) and (3)race-generation group disparities in self-employment across low and high-status industry-sectors. Results reveal self-employment is not restricted to the first-generation for Asians and Whites and that multiple generations of Whites are generally more likely than non-Whites to be self-employed. Industry-level analyses indicate first-generation immigrants are more likely to be self-employment in low status industry-sectors while first and second-generation Whites are more likely to be self-employed in high-status industry-sectors. Overall findings show race-generation disparities shape self-employment reflecting exclusionary contexts of reception for immigrants and racial minorities.

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INTRODUCTION

Sociologists have long known that dominant and subordinate group relations are reflected through socioeconomic inequalities. In the United States, race/ethnicity shape enduring systems of inequality spanning several spheres of social life such as wage disparities (Stewart & Dixon 2010), labor market segregation (Kauffman 2010; Grodsky & Pager 2001), wealth accumulation (Oliver & Shapiro 1995), residential segregation (Massey & Denton 1993) and self-employment (Valdez 2011; Robb & Fairlie 2008). Furthermore, sustained growth in immigrant populations since the 1965 Hart-Cellar Act[1] produces additional group disparities shaped by the intersection of race/ethnicity and immigrant generational status.

Researchers focusing on post-1965 immigrants and their U.S. born second-generation children analyze the effects of race/ethnicity, language and resources on intergenerational mobility and incorporation (Alba 2009; Waters & Jimenez 2005; Portes & Rumbaut 2001). The research literature concerning post-1965 immigrant incorporation has two variants. While one approach emphasizes immigrant agency focusing on ethnic cultural repertories and how ethnic solidarity fosters immigrant incorporation (see Alba 2009; Kasinitz et al. 2008), another approach emphasizes how exclusionary contexts of reception[2] such as structural racial hierarchies limit opportunities available to immigrants and their children (see Vasquez 2011; Merenstein 2008; Bonilla-Silva 2003; Portes & Rumbaut 2001). Both approaches capture the

[1] The Hart-Cellar Act passed in 1965 abolished the national quota system for immigrants. The act did not take effect until 1968 and is often referred to as the starting point for the most recent wave of Asian, Latin American and Caribbean/African immigration to the U.S.

[2] Portes & Rumbaut (2001) use the concept of "contexts of reception" to describe the structural disadvantages affecting post-1965 immigrants such as racial discrimination, exclusionary social policies and limited labor market opportunities due to economic restructuring.

complexities embedded within processes of immigrant and second-generation socioeconomic incorporation. Self-employment, in turn, is an important area of inquiry where scholars explore how the dialectic of structure and agency impacts the socioeconomic incorporation of immigrants and ethno-racial minorities.

Beginning with the writings of Max Weber (1922) and Booker T. Washington (1907), self-employment has been understood as an alternative economic strategy for minority groups facing racial/ethnic, cultural or educational disadvantages in the primary labor market. Although entrepreneurship and self-employment have different meanings across academic disciplines (see Davidsson 2004), most sociologists[3] and economists use the terms interchangeably referring to any form of business ownership (Portes 2010; Kesler & Hout 2010; Fairlie & Robb 2008; Zhou 2007; Bates 1997; Borjas 1990). Ethnic entrepreneurship refers to immigrant and racial/ethnic minorities engaging in any type of self-employment (Zhou 2007; Butler & Kozometsky 2004). Previous research offers important insights into how contemporary immigrants and racial minorities use self-employment for economic mobility to overcome a variety of labor market disadvantages and other exclusionary contexts of reception (see Valdez 2011; Zhou 2007). While the ethnic entrepreneurship literature offers explanations for why racial/ethnic and generational disadvantages may result in high rates of first-generation self-employment, researchers have yet to analyze how race/ethnicity impacts the likelihood of self-employment across multiple generations (first, second and third-generations). Furthermore, since self-employment is largely understood as a homogenous category, previous scholarship has not investigated racial/ethnic or generational disparities in self-employment across industries.

[3] Replicating numerous studies in sociology and economics, I will use the terms self-employment and entrepreneurship interchangeably throughout the paper considering both term to mean business ownership/self-employment.

In this paper I analyze racial/ethnic disparities in self-employment across multiple generations and unpack the concept of entrepreneurship by investigating race-generation group variation in self-employment across low and high-status industry-sectors. Findings from this analysis offer nationally representative insights into the effects of race/ethnicity and generational status on the social organization of self-employment within low and high-status industry-sectors.

BACKGROUND

Ethnic Entrepreneurship

Research on the causes of immigrant and ethnic entrepreneurship explains self-employment as an alternative economic strategy to wage/salary employment attributed to labor market disadvantages and ethnic cultural affinities for business ownership. Structural disadvantage theories argue racism, xenophobia, lack of qualifications and the restructuring of the U.S. economy produce labor market disadvantages for non-White first-generation immigrants making self-employment the only viable option for mobility (Portes 2010; Zhou 2007; Light & Rosenstein 1995; Light et al. 1994). In addition, cultural explanations emphasize that ethnic resources (i.e. social capital) and elective affinities for business ownership also function as important determinants for high rates of immigrant and minority entrepreneurship (see Valdez 2011; Min 2008; Zhou 2007; Butler & Kozometsky 2004; Light & Gold 2000). Labor market disadvantages coupled with cultural affinities for entrepreneurship have been used to explain high rates of self-employment for Cubans immigrants in Little Havana (Portes 2010; Portes & Bach 1985), Koreans in New York (Min 2008), Chinese immigrants in New York's Chinatown (Zhou 2007; Kasinitz et al. 2004); Iranians in Los Angeles (Waldinger & Bozorgmeher 1996), and Russian Jewish immigrants in New York (Kasinitz et al. 2008). While case studies of ethnic

entrepreneurship argue that both labor market disadvantages and cultural affinities explain highly entrepreneurial immigrant groups, race/ethnicity scholars favor structural disadvantage frameworks when describing self-employment as a strategy for non-White first-generation Asian, Afro-Caribbean and Latin American immigrants (see Light & Gold 2000; Light & Rosenstein 1995; Waldinger et al. 1990; Bonacich 1973, 1980).

While previous studies find that self-employment is a preferred alternative strategy for first-generation immigrants (see Herman & Smith 2010; Hipple 2009; Kasitniz et al. 2004; Light & Gold 2000), case studies in New York City (Kasinitz et al 2008, 2004), Los Angeles (Rumbaut 2008) and the Southwest (Valdez 2006) suggest self-employment declines in the second-generation. Although these studies indicate that high rates of self-employment are restricted to first-generation immigrants, no study to date has examined national-level rates of self-employment across multiple generations[4]. Furthermore, by emphasizing the propensity for non-White immigrants to pursue self-employment, researchers have generally neglected to investigate the extent to which self-employment may serve as an economic strategy for contemporary White immigrants and their second-generation children. By including first and second-generation Whites into studies of immigrant incorporation, researchers can better understand how race shapes the outcomes and experiences within and across multiple generations (see Park & Meyers 2010).

This paper builds on previous case studies by using nationally representative data to analyze self-employment disparities across multiple generations and four major racial/ethnic groups including Whites. Rather than comparing all generations of non-Whites to third-generation Whites, I include first and second-generation Whites in order to analyze how race

[4] It should be noted that Light & Gold's (2006) study of second-generation self-employment uses national-level data, but their findings are restricted to New York and Los Angeles.

impacts the likelihood of self-employment within multiple generations. I now turn to previous approaches used to measure the consequences of ethnic entrepreneurship and discuss how the present analysis may better capture the racial/ethnic, generational and industry-sectoral heterogeneity within self-employment.

Consequences of Entrepreneurship

The consequences of self-employment are often measured by comparing the socioeconomic mobility of entrepreneurs with their co-ethnics employed in the wage-salary labor market (see Zhou 2007). Relying on income or wages to measure entrepreneurial success, most studies arrive at divergent conclusions concerning self-employment and the mobility of immigrants and racial minorities. For instance, both Borjas (1990) and Bates (1997) analyze the average earnings of self-employment versus wage/salaried employment concluding that self-employed immigrants earn less than their co-ethnics working in the mainstream labor market. Portes and Zhou (1996) challenge Borjas's findings by criticizing his decision to exclude outliers (i.e. extremely successful entrepreneurs) arguing that highly successful immigrant entrepreneurs are an important component for the immigrant entrepreneurial experience. By including the influential cases Portes and Zhou refute Borjas's conclusions finding self-employment on average results in higher earnings for immigrants compared to wage/salary employment.

More recently, Valdez (2011, 2006) finds low-skilled Latino/a self-employment results in lower earnings suggesting entrepreneurship may not be beneficial for Hispanics with low levels of education. Other studies describing the success and failures of self-employment emphasize the important effects class resources such as education and the financial capital necessary to succeed in self-employment (Valdez 2011; Lofstrom 2011; Fairlie & Robb 2008). While analyses of earnings explain some aspects of entrepreneurial success, using income as a one-dimensional

measure of success limits researchers' abilities to appreciate how different types of self-employment may be more or less likely associated with particular groups. By examining the racial and generational self-employment disparities across industry-sectors, researchers unpack and analyze the heterogeneity within contemporary self-employment.

Stratification scholars argue for expanding studies of inequality beyond analyses of earnings/wage by emphasizing social status variation across occupational classes (see Weeden & Grusky 2005). Through an analysis of self-employment disparities across occupations and industries, researchers can better appreciate how economic activities, networks and employment boundaries reproduce social inequality through "good and bad jobs" (Kalleberg et al. 2000; Kim & Sakamoto 2010; Weeden & Grusky 2005; Grusky 2005). Although industry and occupational analyses of prestige are common in studies of racial or gender labor market segregation (Kaufman 2010; Waldinger & Lichter 2003; Grodsky & Pager 2001; England et.al 1994), few studies have analyzed status disparities within self-employment across industry-sectors. By analyzing racial and generational disparities in self-employment across low and high status industry-sectors, this paper disaggregates self-employment investigating how race/ethnicity and generational status shape the social organization of the self-employed.

HYPOTHESES AND ANALYSIS STRATEGY

The analysis is divided into two stages. The first stage relies on two hypotheses investigating the effects of race/ethnicity and generational status on the odds of being self-employed. In the second stage, a third and final hypothesis investigates race-generation group disparities in self-employment across low and high status industry-sectors. In addition to analyzing race and generation variables of interest, all models use control variables in order to isolate effects of race and generation from other factors that may be associated with self-

employment. These control variables include class resources (measured through educational attainment and homeownership), family structure, metropolitan and regional residence and industry-sectors. Each of these controls will be further discussed in the section on measures.

Hypothesis 1. The odds of self-employment are greater in the first generation and decline in the second and third-generations across all race/ethnicity groups, net of class resources and other control variables.

The first hypothesis assumes 1) that self-employment is a function of limited labor market opportunities and 2) such labor market opportunities increase in later generations, which in turn, result in a steady reduction in self-employment in subsequent generations. It is then expected that the likelihood of being self-employed decreases following the first-generation after controlling for the effects of resources. This hypothesis enables me to analyze whether self-employment is in fact restricted to the first-generation within four different major race/ethnicity groups. The odds of self-employment for first and second-generation respondents are analyzed in comparison to third-generation respondents within four race/ethnicity groups (Whites, Blacks, Asians & Hispanics). The addition of first generation Whites to the model enables me to analyze whether first-generation status is universally associated with a greater propensity for self-employment across race/ethnicity groups.

Hypothesis 2. The odds of self-employment are greater for Blacks, Asians and Hispanics in comparison to Whites across all three generation groups, net of control variables.

This hypothesis is based on the concepts of racialized structural disadvantages (see Winant 2011; Bonilla-Silva 2003; Jackman 1994) and assumes that 1) non-White minorities experience barriers in the mainstream labor market and 2) such labor market barriers increase the likelihood of self-employment for non-White groups. It is then expected that the odds of being

self-employed should be greater for Blacks, Asians and Hispanics compared to Whites across generations after controlling for class resources and other factors.

> ***Hypothesis 3. After controlling for the effects of class resources, measured as educational attainment and homeownership, there are significant race-generation group disparities in self employment across low and high-status industry-sectors.***

The final hypothesis assumes 1) labor market stratification is reproduced in the distribution of self-employment across industry-sectors–from the most to least profitable and from sectors with the highest to lowest social status, 2) non-White race-generation groups are more likely to be self-employed in lower status industry-sectors than Whites, which in turn are more likely to be self-employed in higher status industry-sectors, and 3) that first-generation groups are more likely than third-generation groups to be self-employed in low status industry-sectors. Since previous research tends to treat self-employment as a homogenous category, this hypothesis attempts to analyze the extent to which race/ethnic and generational status intersect to shape the likelihood of engaging in low or high status self-employment. I now turn to the data, sample and results from the analyses.

Data

Data come from a six-year pooled cross-sectional sample of the March Current Population Survey (CPS). The CPS is a nationally representative stratified random sample of households conducted every year by the U.S. Census Bureau and the Bureau of Labor Statistics. The survey uses a complex sampling "4-8-4" rotation scheme where household units are interviewed for four consecutive months, not contacted for 8 consecutive months, and then interviewed again for four consecutive months. This design results in one half of the respondents

in any given year being sampled again the following consecutive year[5]. In order to ensure that all cases are unique observations, researchers using the CPS often compile samples that skip every other year in order to avoid repeat observations (Park & Meyers 2010; Alba & Farley 2002). I replicated designs used in previous analyses of the CPS and included only the even number years between 2000 and 2010 for my sample.

Due to the relatively young ages of the "new" second generation, researchers interested in socioeconomic outcomes of the adult second-generation often encounter insufficient sample sizes in nationally representative data (see Alba & Farley 2002; Portes & Rumbaut 2001). Pooling multiple cross-sections of CPS data has been demonstrated as the best way to ensure sufficient numbers of adult second-generation respondents (Park & Meyers 2010; Alba & Farley 2002). I pooled six years of CPS data (2000, 2002, 2004, 2006, 20008, and 2010) in order to ensure sufficient cases of second-generation respondents after stratifying samples by race, generation and industry-sectors. In order to make the data representative at the national level, I used the supplementary weights provided by the CPS, replicating the approach used in previous analyses of CPS data (see Reitz et.al 2011; Alba & Farley 2002). With the large sample size obtained by pooling the cross-sections, the CPS is the ideal dataset to explore self-employment across multiple generation groups and industry-sectors.

Sample

The CPS is unique in that it is currently the only nationally representative survey that asks respondents about their parents' nativity (Park & Meyers 2010; Alba & Farley 2002). This question allows me to categorize respondents as either belonging to the first-generation (immigrants), second-generation (U.S. born children of immigrants) or third-generation (U.S.

[5] For a detailed discussion of the CPS sampling rotation scheme, please consult U.S. CENSUS Bureau Current Population Survey Design and Methodology Technical Paper 66, October 2006 or see Alba & Farley 2002.

born with U.S. born parents), described in greater detail below. In order to focus my analysis on first and second-generation respondents belonging to the post-1960's immigration era, I restricted the sample to individuals between the ages of 18 and 50. This ensured that all first and second-generation respondents from pre-1960's immigration waves were excluded from the analysis. Post-1960's immigration is understood as qualitatively different from earlier waves of immigration (Alba 2009; Alba & Farley 2002), and restricting the total sample by age allowed me to compare respondents across generations within comparable periods of their respective life-courses. Total sample size is (407,148). All models estimated are restricted by race/ethnicity, generation or industry-sector, which results in smaller sample sizes for each model.

Measures

Self-Employment. Self-employment serves as the only dependent variable for all models estimated. It is a binary variable measuring whether a respondent is self-employed. I recoded the CPS "class of worker" question which asks full-time employed respondents whether they are self-employed, wage/salaried or public employees. Respondents were coded as (1) if self-employed or (0) if not self-employed. Part-time workers and military personnel were excluded from the analysis[6].

Nativity. Nativity is operationalized as generational status. Generational status is a categorical variable measuring whether respondents are first-generation immigrants, U.S. born second-generation or U.S. born third-generation (or higher). I recoded the CPS "nativity" variable which asks about respondents' to indicate whether they are foreign-born (first-generation), U.S. born with at least one foreign-born parent (second-generation), or U.S. born with two U.S.-born parents (third-generation or higher). In order to maintain sufficient cases of

[6] In studies of self-employment, part-time workers are often excluded due to researchers' interest in individuals for whom self-employment is the only source of income (see Fairlie & Robb 2008)

second-generation respondents, I replicated Alba & Farley's (2002) procedure by collapsing respondents with two foreign-born parents and respondents with only one foreign-born parent into a single second-generation category.

Race/ethnicity. Racial group categories are based on respondents' self-reported responses to the CPS "race" and "Hispanic" ancestry questions. Because the U.S. Census Bureau does not consider Hispanics to be a racial category, individuals with Hispanic ancestries are given a separate question in addition to the race question. This means Hispanic respondents could report their race as White, Black, or Asian. Due to the confusion these categories create, I replicated other studies and categorized racial groups by differentiating between Hispanics and Non-Hispanics (Park & Meyers 2010; Merenstein 2008). This enabled me to categorize respondents who self-reported their race as White, Black or Asian and non-Hispanic as. (i.e. Non-Hispanic Whites, Non-Hispanic Blacks, Non-Hispanic Asians)[7]. I then grouped all respondents who identified as White, Black or Asian Hispanics into a category labeled Hispanics. I excluded Native American/Eskimos due to their small numbers in the sample (1.48% of the sample). I analyze three categories that operate as major racial groups, (Whites, Blacks, Asians) and one major ethnic/ancestry group (Hispanics)[8]. The percentages and numbers of cases in the total sample organized by race and nativity are presented below in (Table 1A).

(Table 1A about here)

Industry-Sectors. I classified all respondents in the labor force into aggregate industry-sectors based on their self-reported three-digit U.S. Census "industry" categories in the CPS. I

[7] I refer to Non-Hispanic Whites, Non-Hispanic Blacks and Non-Hispanic Asians simply as Whites, Blacks and Asians.
[8] While I am aware of the ethnic diversity within the Asian and Hispanic categories, I refer to them as racial groups in order to compare how racial group classifications structure and organized entrepreneurship. Data limitations concerning sample sizes within industries necessitated that I use aggregate racial categories for this analysis.

generally replicated the aggregate industry categories used in previous research on entrepreneurship (Fairlie & Robb 2008; Valdez 2006; Logan et.al 2003). The categories include: Agriculture; Mining/Utilities[9], Construction; Manufacturing; Wholesale Trade; Retail Trade; Transportation; Information; Finance-Insurance-Real Estate (F.I.R.E.); Professional Services; and Personal Services.

Industry-sectors offer more variation than occupational classifications when studying self-employment because many entrepreneurs consider their occupations to consist of tasks and duties associated with management occupations (Davidson 2004). An analysis of self-employment focusing on occupations rather than industries may result in high numbers of self-employed persons identifying as managers, thus obscuring the status hierarchy across industries. (i.e. manager of a small restaurant vis-à-vis manager of a financial corporation). The aggregate industry-sector categories enable me to measure the social status associated with sectors. The social status of the industry-sectors was determined by multiple indicators, including the median Hauser-Warren SEI score, mean total income and educational attainment.

Table 1B presents the social status of the ten industry-sectors, ranging from highest to lowest. Only the three highest and three lowest status industry-sectors were used in the models testing Hypothesis 3.It should be noted that although Agriculture is a low status industry, I excluded it from my analysis because it is commonly designated as a distinctly different form of self-employment[10]. The six industry-sectors used in the analyses for Hypothesis 3 included the three lowest in social status (Transportation, Retail Trade and Personal Services), and the three highest (F.I.R.E., Professional Services and Information).

[9] The Mining/Utilities category was dropped from the analyses due to insufficient cases for Asians and Blacks.
[10] Although Agriculture is a form of self-employment, it is often excluded from research on self-employment due to the unique relationship between farming and government subsidies (see Fairle & Robb 2008, and CPS Technical Paper 2006).

(Table 1B about here)

Control Variables. In order to account for possible variation in the models attributed to the presence of class resources or other factors, I introduce several control variables into the models. Each model contains the same control variables. I operationalized the concept of class resources by including measures for educational attainment and whether or not a respondent owns a home (*homeownership*). Educational attainment is measured as the proportion of respondents completing various levels of education within an industry-sector. Levels of education include the proportion of individuals with no school, high school education, college education, and post-graduate education. These two variables are central to disadvantage theoretical frameworks because they serve as proxies for social class (Fairlie & Robb 2008; Light & Gold 2000). I also control for family characteristics by using measures for *gender*, *marriage*, and *age.* This first set of control variables enables me to analyze racial or generation disparities in self-employment after accounting for any variation attributable to class resources or family structure. A second set of control variables accounts for the variation attributable to contextual conditions such as metropolitan residence (*metropolitan area*) or the region of the country in which respondents reside (*regional residence*). Finally, I account for ebbs and flows in self-employment over time by controlling for all of the survey years as fixed effects in the models estimated. The addition of these sets of control variables allows me to accurately analyze racial and generation disparities after accounting for the effects of resources, demographics and time.

Modeling

I estimated logistic regression models to test the three hypotheses. Since self-employment is a binary variable, I used logistic regression to accurately model the non-linearity produced by limited categorical dependent variables. Non-linear probability models such as logistic regression models must be used with binary dependent variables to account for the nonlinearity observed between independent variables and binary dependent variables (Long 1997). The logistic regression models are initially estimated as the log of odds, also known as the logit which produces coefficients ranging from -∞ to ∞. Due to the difficulty in interpreting factor and unit changes in logit coefficients (Long 1997), the exponential of the log of odds (odds-ratios) are used to simplify interpretation of results. The calculation for the log of odds (logit) and the exponential of the log of odds (odds-ratios) are displayed below.

Logit or log of odds:

$$\ln\left[\frac{\Pr(y=1|x)}{1-\Pr(y=1|x)}\right] = ln\Omega(x) = x\beta$$

Odds Ratio or Exponential of the log of odds:

$$\Omega(x) = \exp[ln\Omega(x)] = \exp(x\beta)$$

Odds-ratios are multiplicative coefficients. This means that positive effects result in odds-ratios greater than one and negative effects result in odds ratios between zero and one. The ratio values indicate the odds of how often something happens relative to how often it does not happen (Long 1997). Results from the models can also be interpreted as the percentage-change in the odds and the percent likelihood of an event occurring. All logistic regression models were estimated in samples stratified by race, generation and industry-sectors. I now turn to the results from the logistic regression models used to analyze the three research hypotheses.

RESULTS

Generational Disparities across Racial Groups (Hypothesis 1)

Table 2 presents results from the first set of models estimating the effects of generational status on the odds of self-employment across four different race/ethnicity groups (see Models 1-4, Table 2). Although the results for Whites, Blacks and Hispanics appear to support the hypothesis that the likelihood of being self-employed is generally greater in the first-generation (see Models 1,2,4 in Table 2), second generation Whites and Asians also appear to be more likely to be self-employed when compared with their respective third-generation co-ethnics. (see Models 1 & 3 in Table 2). In other words, while first generation Whites, Blacks and Hispanics are more likely than their third-generation counterparts to be self-employed after controlling for the effects of resources (as expected), second-generation Asians, however, are more likely than their first and third-generation Asians to be self-employed. It should also be noted that although control variables such as educational attainment, homeownership and family structure are significantly associated with self-employment (as expected), significant generational differences remain across race/ethnicity groups after holding theses effects constant. With respect to Asians and Whites, it appears that self-employment may not be entirely restricted to the immigrant first-generation.

(Table 2 about Here)

Racial Disparities across Generation Groups (Hypothesis 2)

Table 3 presents the second set of models for the first stage of the analysis which estimates the effects of race/ethnicity on the odds of self-employment across multiple generations, net of control variables (see Hypothesis 2). Results indicate significant racial disparities exist across all three generations with Blacks, Asians and Hispanics all less likely than

Whites to be self-employed, after controlling for the effects of resources (see Table 3, Models 1-3). These results appear to challenge the assumptions tied to the second hypothesis. Rather than finding greater odds of self-employment among Blacks, Asians or Hispanics, Whites appear to have greater odds of being self-employed in the first, second and third-generations. While class resources are positively associated with greater odds of self-employment for respondents in all three generations, significant racial differences remain suggesting that Whites may also be experiencing labor market disadvantages forcing them into self-employment, or conversely, White racial affiliation may offer advantages for pursuing self-employment. Whether White self-employment is a result of disadvantage or advantage is not yet apparent. Only by analyzing the types of self-employment different groups are more or less likely to engage in can I determine whether self-employment is advantageous.

(Table 3 about Here)

Race-Generation Disparities across Industry-Sectors (Hypothesis 3)

Table 4 presents the final set of models analyzing race-generation group disparities in the odds of self-employment within low and high-status industry-sectors. Results appear to support the third hypothesis suggesting that race-generation disparities persist across industry-sectors after controlling for the effects of class resources and other factors. Results reveal significant race-generation disparities with first-generation immigrants and racial minorities more likely than third-generation Whites to be self-employed in low-status industries, and first and second-generation Whites more likely than third-generation Whites to be self-employed in high status industry-sectors, net of controls (see Models 1-6, Table 4). In addition, all non-White race-generation groups are less likely than third-generation Whites to be self-employed in high status industry-sectors (see Table 4).

Low-Status Industry-Sectors

Within Personal Services (see Model 1), the lowest status industry-sector, second-generation Blacks are more than twice as likely as third-generation Whites to be self-employed, net of control variables. First-generation Asians and second-generation Whites are also more likely than third-generation Whites to be self-employed in Personal Services. Hispanics on the other hand are less likely than third-generation Whites to be self-employed in Personal Services. Model 1 also shows that although resources are positively associated with self-employment in personal services, race-generation disparities persist, net of the effects of these controls.

Results from Model 2, for the Retail Trade sector also show significant race-generation disparities after holding control variables constant. First generation Whites, Hispanics and Asian are more likely than third-generation Whites to be self-employed in Retail Trade. The odds of self-employment in Retail Trade for Asian immigrants are approximately two times greater than third-generation Whites, net of control variables. In addition, second-generation Asians are also more likely than third-generation Whites to be self-employed in Retail Trade. While the results for first generation Asians, Hispanics and second-generation Asians at first glance may suggest that these race-generation disparities are a function of racial disadvantages in the labor market, the results for first-generation Whites and the non-significant results for the remaining race-generation groups suggest both race and first-generation status are positively associated with self-employment in Retail Trade. White immigrants are also more likely than third-generation Whites to be self-employed in retail, suggesting there may be an immigrant effect associated with low status self-employment in retail.

Model 3 (see Table 4) presents the results for the final low-status industry-sector, Transportation. The odds of self-employment within Transportation are greater for first-

generation Whites, Blacks, Asians and Hispanics than third-generation Whites, net of control variables. First-generation Blacks are three times more likely than third-generation Whites to be self-employed in transportation. First-generation Asians and Whites are twice as likely as third-generation Whites to be self-employed in transportation. Based on the results presented in models 1 through 3, all immigrants (including Whites) and racial minorities are generally more likely than third-generation Whites to be self-employed within these low-status industry-sectors, after accounting for the effects of class resources and other control variables. These results suggest there may be a racial and immigrant generation effect associated with self-employment in the transportation industry-sectors. I now turn to the analysis of race-generation disparities within the three high status industry-sectors.

High-Status Industry-Sectors

Models 4 through 6 in Table 4 present results for race-generation disparities in self-employment in high-status industries, after controlling for class resources and other control variables. Within the Information sector (Model 4), first-generation White immigrants are twice as likely as third-generation whites to be self-employed, net of control variables. All other race-generation groups are less likely than third-generation Whites to be self-employed in the Information sector.

(Table 4 about Here)

Within the Professional Services industry-sector, first and second-generation Whites are more likely than third-generation Whites to be self-employed, after controlling for the effects of resources. All other non-white race-generation groups are less likely than third-generation Whites to be self-employed in Professional Services. And finally, second-generation Whites are

more likely than third-generation Whites to be self-employed in the highest status industry-sector, Finance-Insurance-Real-Estate (F.I.R.E.), after controlling for the effects of class resources. Once again, all non-White race-generation groups are less likely than third-generation Whites to be self-employed in F.I.R.E. It should also be noted that although class resources are positively associated with self-employment in high status industry-sectors, significant racial-generational disparities persist where White race-generation groups are more likely than non-White race-generation groups to be self-employed in high status industry-sectors. I now turn to the interpretation of these results drawing on the ethnic entrepreneurship and race/ethnicity literature.

DISCUSSION

Self-Employment in the First-Generation

Although self-employment appears to be more likely for first-generation Whites, Blacks and Hispanics, second-generation Asians are more likely than first or third generation Asians to be self-employed, after controlling for class resources. In contrast to previous studies of the second-generation in New York (Kasinitz et al. 2008), findings for second-generation Asians and Whites indicate that self-employment may remain a preferred economic strategy for second-generation groups indicating possible intergenerational disadvantages or advantages depending on which industry-sector groups are self-employed in. These nationally-representative findings are similar to Light & Gold's (2006) findings that self-employment remains high in the first and second-generations within New York City and Los Angeles. Whether second-generation Whites and Asians are engaging in self-employment due to labor market disadvantages or for strategic economic advantages is a question requiring further in-depth research exploring why these

groups pursue self-employment. Present findings indicate that self-employment is not restricted to the first-generation for Asians and Whites.

Racial Minorities & Self-Employment

In contrast to the assumptions of the second hypothesis, Whites are more likely than non-Whites to be self-employed across all three generations. Since much of the ethnic entrepreneurship literature tends to focus on Asian and Latin American immigrant groups, this research neglects to acknowledge the sustained presence of contemporary White immigrants in the current immigration era. Results indicate that Whites from multiple generations are more likely than non-Whites to be self-employed suggesting that White racial affiliation may be advantageous in securing self-employment. At the same time, White immigrant self-employment may be a function of cultural barriers (i.e. language difficulties) creating obstacles for these groups in the mainstream labor market. More research is needed to better understand the casual mechanisms driving first and second-generation White self-employment. This analysis indicates future inquiries must acknowledge contemporary White immigrant communities and how these groups negotiate the structural effects of race within contemporary U.S. society. By including White comparison groups in research on immigrants and the second-generation, researchers can isolate the effects of race from generational status and explore how the intersection of race and generation impacts the socioeconomic incorporation of White and non-White groups in the United States.

Unpacking Self-Employment by Industry-Sector

The second stage of the analysis reveals a great deal of variation by race/ethnicity and generational status different types of self-employment. The observed heterogeneity appears to be organized by the intersection of race and generation, which, in turn, form unique social spaces

where socioeconomic rewards and opportunities are offered or denied to actors (Stewart & Dixon 2010:194). Results support the assumptions of the third hypothesis indicating that while first-generation status is associated with low status self-employment, White racial affiliation is positively associated with high status self-employment. Non-White groups across multiple generations are less likely than third-generation Whites to be self-employed in high status industry-sectors. After controlling for the effects of resources, results indicate that while disadvantaged immigrant groups may pursue low-status self-employment due to labor market disadvantages, White racial affiliation may simultaneously offer advantages (i.e. white privilege) in securing self-employment within high-status sectors regardless of generation, after accounting for the effects of class resources.

Overall, the second stage of this analysis demonstrates how exclusionary contexts of reception such as racial hierarchies and xenophobia may affect the industry-sectors within which different groups are more or less likely to engage in self-employment. While these nationally-representative findings offer important insights into heterogeneity within self-employment, this analysis is limited in its ability to identify how mechanisms such as racial discrimination or to use Frank Parkin's (1979) idea of "exclusion through social closure", may be driving the race-generation disparities across industry-sectors. These results do provide valuable information regarding the racial and generational stratification within contemporary self-employment which in turn, must be considered in theoretical frameworks using self-employment as either a strategy for upward or downward mobility. Self-employment is not a monolithic phenomenon and racial-generational disparities across industries are of critical importance for understanding whether self-employment fosters or hinders the socioeconomic incorporation of immigrants and racial minorities.

CONCLUSION

Building on the ethnic entrepreneurship research literature, this paper offers a nationally representative analysis of the effects of race and generational status on the social organization of self-employment. Unpacking the concept of self-employment, I investigated the extent to which contemporary self-employment is fraught with racial and generational disparities across different industry-sectors. While case studies of ethnic enclaves and immigrant gateway regions generally find self-employment declines in the second-generation, these national-level findings suggest self-employment may continue to be a preferred strategy for some second-generation groups (i.e. Whites and Asians). In contrast to the assumptions found in immigrant and minority entrepreneurship literature, Whites are more likely than non-whites to be self-employed across all generations. These findings demonstrate the importance of including first and second-generation Whites for comparative analyses of how race and generation shape socioeconomic outcomes for non-White immigrants and their children.

This paper expands upon previous conceptions of entrepreneurship by disaggregating self-employment into several industry-sectors. The presence of race-generation group disparities in low and high-status industry-sectors after controlling for class resources suggests that while first-generation groups (including White immigrants) are more likely to be self-employed in low status industry-sectors, White racial affiliation across generations is associated with a greater likelihood of self-employment in high status industry-sectors. The industry-sector analysis suggests that while Whites may possess certain advantages in pursuing high status self-employment, White immigrants may confront linguistic or cultural barriers driving them to pursue low status self-employment. These divergent results reveal the complexities and tensions surrounding the intersection of race/ethnicity and generational status as they relate to self-

employment specifically and socioeconomic incorporation more broadly. Although racial and generational disadvantages may explain why immigrants and racial minorities have greater odds of low-status self-employment more research is need to understand why first and second-generation Whites ethnic entrepreneurs are more likely to be self-employed in both low and high-status industry-sectors.

Despite limitation in the data to capture casual processes, findings provide national-level insights into the social organization of contemporary self-employment. Results illuminate fruitful areas for further in-depth research to explore how the processes involved in pursuing self-employment vary across race-generation groups. By disaggregating self-employment into high and low status industry-sectors, this paper illustrates how contemporary entrepreneurship is simultaneously shaped by racial and generational (dis)advantages within different industry-sectors. Gate-keeping mechanisms used by dominant group members (third-generation Whites) to maintain boundaries and positions of superiority in the labor market appear to be replicated within self-employment resulting in a generally limited access to high status self-employment for non-White race-generation groups. Self-employment may reflect how race functions as an enduring system of inequality (Valdez 2011; Bonilla-Silva 2003; Jackman 1994). Future inquiry into group conflict, competition, and disparities in access to different forms of capital may shed light onto the mechanisms that (re)produce the observed asymmetries in contemporary self-employment.

Since nationally representative aggregate data cannot measure or explore the interactions between actors within low and high-status industries, these results demonstrate the need for further inquiry into the social processes within different types of self-employment. Rather than focusing on cases of specific ethnic groups within enclaves or gateway cities, future

research on self-employment must explore particular industry-sectors to better understand how race/ethnicity and generational status shape processes within self-employment such as securing business loans, obtaining licenses, marketing and business closure rates. By treating industry-sectors as the unit of analysis rather than racial/ethnic groups, future researchers may be able to illuminate how structure and agency are embedded in group characteristics which in turn reproduce social hierarchies reflected hierarchical organization of self-employment. How race and generational status influence the industrial hierarchies elucidate how exclusionary contexts of reception continue to impact the socioeconomic incorporation of immigrants and racial minorities in the United States.

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APPENDIX

Table 1A: Race-Generation Groups: Cross-Tabulation of Race and Generational Status for all Cases

Race/Ethnicity & Generation Groups	First Generation	Second Generation	Third Generation	Row Totals (By Race-Ethnicity)
White	**12,381** 4.46% 17.10%	**11,482** 4.14% 40.95%	**253,487** 91.40% 82.79%	**277,350** 68.12%
Black	**4,496** 11.08% 6.20%	**1,053** 2.60% 3.70%	**35,018** 86.30% 11.42%	**40,567** 9.96%
Asian	**14,590** 72.58% 20.13%	**2,915** 14.50% 10.47%	**2,598** 12.92% 01.03%	**20,103** 4.94%
Hispanic	**41,029** 59.35% 56.60%	**12,653** 18.30% 45.02%	**15,446** 22.34% 05.03%	**69,128** 16.98%
Column Totals (By Generation Group)	**72,496** 17.81%	**28,103** 6.90%	**306,549** 75.29%	**407,148** 100.00% 100.00%
Top number indicates number of cases. Top percentage is row percent (race-ethnicity). Bottom percentage is column percent (generation group). All percentages may not add up to 100% because of rounding. Source: Current Population Survey (CPS) 2000,2002,2004,2006,2008,2010.				

Table 1B. Indicators for the Relative Social Status of Industry-Sectors (Highest to Lowest)

Industry-Sector	Median S.E.I	Mean Annual Income	Percentage with No Schooling	Percentage H.S. Grad	Percentage College Grad	Percentage Post-Grad
F.I.R.E.*	45.45	58,566	.02	23.21	32.02	9.32
Professional Services*	44.40	43,889	.13	20.63	24.63	19.69
Information*	41.82	49,081	.04	24.33	28.03	9.12
Wholesale Trade	36.09	46,652	.23	34.10	22.18	4.05
Manufacturing	30.30	46,224	.30	37.29	16.42	5.99
Mining/Utilities	29.81	51,597	.33	38.07	13.91	4.19
Construction	28.30	38,684	.44	42.11	8.86	1.76
Transportation*	27.84	43,042	.09	41.50	13.25	2.86
Agriculture	27.60	27,866	1.06	34.98	11.28	2.98
Retail Trade*	27.07	27,348	.15	35.54	12.39	2.44
Personal Services*	24.95	23,814	.30	32.11	11.68	3.43

Source: Current Population Survey (CPS) 2000,2002,2004,2006,2008,2010.
F.I.R.E. refers to Finance, Insurance and Real Estate
* The stars indicate the three highest and lowest industry-sectors used in the analysis for Hypothesis 3

Table 2: Effects of Generational-Status on the Odds of Self-Employment within Four Race Groups

	Model 1	*Model 2*	*Model 3*	*Model 4*
Models Stratified by Racial Groups Affiliation	*Whites*	*Blacks*	*Asians*	*Hispanics*
Generational Status (Ref: 3rd Gen)				
1st Generation Foreign Born	**1.375*** **	**1.351*** **	1.076	**1.181** **
2nd Generation U.S. Born	**1.229*** **	1.339	**1.359***	1.093
Family/Human Capital Factors				
Gender	**.6071*** **	**.6213*** **	**.6869*** **	**.6338*** **
Married	1.340***	1.214**	1.656***	1.236***
Age	1.329***	1.216***	1.232***	1.226***
Age-Squared	.9979***	.9989***	.9989***	.9978***
No School	.8484	.1181*	1.176	1.364
Grade School	.9857	.8208	.8306	.9429
Some College	1.097***	1.199	1.046	1.048
College Graduate	1.201***	1.258**	1.006	1.124
Post-Graduate	1.183***	1.642***	.9831	1.310**
Homeowner	1.475***	1.317***	1.439***	1.462***
Metropolitan Residence				
Metropolitan Area	.8749***	.9659	.8064	.9069
Regional Residence (ref=South)				
Northeast	.9068***	.8314*	.7016***	.7921***
Mid-West	.8943***	1.053	.5823***	.7118***
West	1.267***	1.312**	.8094**	1.010
Industry Categories (ref=Retail Trade)				
Agriculture	8.681***	4.879***	.9825	.8575
Construction	2.808***	4.547***	.8717	1.840***
Manufacturing	.2873***	.2303***	.1519***	.2211***
Wholesale Trade	.7217***	.8930	.7504	.6749**
Transportation	.7615***	2.119***	.5849**	1.145
Information	.6046***	.8511	.2416***	.5519**
F.I.R.E.	1.089*	1.530**	.3692***	.8870
Professional Services	1.075*	1.533***	.4582***	1.298***
Personal Services	1.709***	3.149***	.8991	.8936
Model Goodness of Fit Statistics				
Log Likelihood	-1190000000	-12295545	-8133150.2	-20080773
LR Chi2	12343.44***	926.74***	680.80***	1945.81***
Degrees of Freedom	31	31	31	31
Pseudo R2	.128	.095	.106	.081
N	277,350	40,567	20,103	69,128

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests)

All Models include fixed-effects corresponding to survey years 2000,2002,2004,2006,2008,2010 and are restricted by Age (18-50)

Source: March Current Population Survey (CPS) 2000,2002,2004,2006,2008,2010

Table 3. Effects of Race on Odds of Self-Employment within Generational-Status Groups

	Model 1	*Model 2*	*Model 3*
Models Stratified by Generational-Status	*1st Gen.*	*2nd Gen*	*3rdGen*
Race/Ethnicity Groups(Ref:Whites)			
Black	**.5046*** **	**.6793***	**.5830*** **
Asian/Pacific Islander	**.7520*** **	.8418	**.8173***
Hispanic	**.5125*** **	**.5803*** **	**.6369*** **
Family Structure & Human Capital			
Gender	**.6935*** **	**.5348*** **	**.6079*** **
Married	1.226***	1.342***	1.358***
Age	1.183***	1.365***	1.316***
Age-Squared	.9983***	.9965***	.9969***
No School	1.168	.3042	.8103
Grade School	.8407***	.9813	.9778
Some College	.9438	1.077	1.104***
College Graduate	.9614	1.218*	1.216***
Post-Graduate	.9032	1.145	1.239***
Homeowner	1.543***	1.137*	1.443***
Metropolitan Residence			
Live in Metropolitan Area	.9259	.9342	.8770***
Regional Residence (Ref. South)			
NorthEast	.8081***	.7757**	.9066***
MidWest	.6889***	.7272***	.9149***
West	1.038	1.038	1.245***
Industry Categories (Ref. Retail Trade)			
Agriculture, Forestry, Fishing	.6026***	4.285***	8.733***
Construction	1.490***	2.399***	2.942***
Manufacturing	.1852***	.3675***	.2848***
Wholesale Trade	.7525**	.5885*	.7262***
Transportation	1.071	.7422	.8134***
Information	.5006***	.5962**	.6006***
F.I.R.E.	.5678***	1.047	1.139**
Professional Services	.7858***	1.071	1.123***
Personal Services	.7815***	1.929***	1.869***
Model Goodness of Fit Statistics	*Model 1*	*Model 2*	*Model 3*
Log Likelihood	-28731455	-10188939	-120900000000
Wald Chi2	2337.44***	1111.47***	13208.07***
Degrees of Freedom	32	32	32
Pseudo R2	.096	.127	.123
N	72,496	28,103	306,549

(two-tailed tests) * P<.05 **p<.01 ***p<.001

All Models include fixed-effects corresponding to survey years 2000,2002,2004,2006,2008,2010 and are restricted by Age (18-50). Source: March Current Population Survey (CPS)

Table 4. Race-Generation Group Disparities in the Odds of Self-Employment across Low and High Status Industry-Sectors (Odds Ratios)

	Model 1	*Model 2*	*Model 3*	*Model 4*	*Model 5*	*Model 6*
	Low Status Industry-Sectors			*High Status Industry-Sectors*		
Industry Categories	*Personal Services*	*Retail Trade*	*Trans-port*	*Info-Tech*	*Profssnl Services*	*F.I.R.E*
Race-Generation Groups **(Ref:3rdGen Whites)**						
1stGen_N.H.White	1.136	**1.758*** **	**2.770*** **	**2.259*** **	**1.201** **	1.061
2ndGen_N.H.White	**1.350** **	1.240	1.286	1.119	**1.136* **	**1.368* **
1stGen_N.H.Black	.7719	.7857	**3.081*** **	.4637	.4879***	.7130
2ndGen_N.H.Black	**2.238* **	1.720	1.832	1.788	.5418*	.5496
3rdGen_N.H.Black	.8714	.4688***	.8731	**.5249** **	**.5378*** **	**.6220*** **
1stGen-Asian/P.I.	**1.212** **	**2.119*** **	**2.332*** **	**.5036* **	**.6747*** **	**.5976*** **
2ndGen_Asian/P.I.	1.546	**1.729* **	.7656	1.206	.8939	.6941
3rdGen_Asian/P.I.	1.025	1.306	.8683	1.400	.8574	**.4755* **
1stGen_Hispanic	.4515***	**1.201* **	**1.518*** **	.8964	**.8883*** **	**.7431* **
2ndGen_Hispanic	1.149	.9935	.8774	.5565	**.6916*** **	**.7062* **
3rdGen_Hispanic	.7499*	.6332**	.6913	**.4973* **	**.5847*** **	**.5654** **
Family Structure/Human Capital						
Gender	**.8149*** **	**.8028*** **	**.5521*** **	**.7441** **	**.5049*** **	**.3919*** **
Married	1.512***	1.887***	1.273**	1.254	1.183***	1.147*
Age	1.444***	1.349***	1.159***	1.210**	1.247***	1.262***
Age-Squared	.9958***	.9968***	.9985*	.9979*	.9976***	.9977***
No School	.3071	1.362	.9365	-------	1.459	-------
Grade School	.7375***	1.035	1.211	.7780	1.292***	.6817
Some College	1.296***	1.259***	.8921	1.052	.8811***	1.384***
College Graduate	1.124*	2.037***	.6617***	1.454*	.8730***	1.519***
Post-Graduate	.8361	2.091***	1.079	1.145	1.072*	1.328*
Homeowner	2.032***	1.759***	1.335***	.7932	1.241***	1.779***
Metropolitan Residence						
Living in Metropolitan Area	.7221***	.6954***	.5724***	1.299	1.112**	.7517***
Regional Residence (Ref. South)						
North-East	.9015	.9317	.8695	1.076	.9026**	.5578***
Mid-West	.8221***	.9362	.8802	1.116	.8902**	.8747
West	1.029	1.219***	1.039	1.598**	1.359***	1.572***
Model Goodness of Fit Statistics						
Log Likelihood	-18317456	-18402812	-7297761.7	-3311847.5	-55523193	-11093585
Wald Chi2	2090.99***	2174.45***	390.60***	188.30***	2848.92***	1087.59***
Degrees of Freedom	30	30	30	29	30	29
Pseudo R2	.144	.144	.054	.061	.069	.116
N	47,210	57,255	17,687	10,761	136,664	27,635

(two-tailed tests) * P<.05 **p<.01 ***p<.001

All Models include fixed-effects corresponding to survey years 2000,2002,2004,2006,2008,2010 and are restricted by Age (18-50).
Source: March Current Population Survey (CPS)