Rev Black Polit Econ (2012) 39:445–460
DOI 10.1007/s12114-012-9133-7

Arrival Cohort, Assimilation, and the Earnings of Caribbean Women in the United States

Tod G. Hamilton

Published online: 14 June 2012

Abstract Utilizing data on U.S.-born and Caribbean-born black women from the 1980–2000 U.S. Censuses and the 2000–2007 waves of the American Community Survey, I document the impact of cohort of arrival, tenure of U.S. residence, and country/region of birth on the earnings and earnings assimilation of black women born in the English-, French-, and Spanish-speaking Caribbean. I also test whether selective migration accounts for earnings differences between U.S.-born and Caribbean-born black women in the United States. I show that almost all arrival cohorts of Caribbean women earn less than U.S.-born black women when they first arrive in the United States. However, over time the earnings of early arrival cohorts from the English- and French-speaking Caribbean are projected to surpass the earnings of U.S.-born black women. Indeed, this crossover is most pronounced for women from the English-speaking Caribbean. In models that account for selective migration by comparing the earnings of Caribbean women to U.S.-born black women who have moved across states since birth, I show that more time is required for early arrival cohorts from the English- and French-speaking Caribbean to surpass the earnings of U.S.-born black internal migrants. Women from the Spanish-speaking Caribbean do not seem to experience earnings growth as their tenure of U.S. residence increases. In summary, the findings suggest that selective migration is an important determinant of earnings differences between U.S.-born black women and black women from the Caribbean.

Keywords United States · Caribbean immigrants · Women · Earnings · Assimilation · Blacks · Black immigrants · Selective migration

Introduction

Most subgroups of black immigrants from the Caribbean earn less than U.S.-born blacks (black natives) when they first arrive in the United States (Model 2008).

T. G. Hamilton (✉)
Department of Sociology, Princeton University,
106 Wallace Hall, Princeton, NJ 08544, USA
e-mail: todh@princeton.edu

However, these immigrants begin to close their initial earnings deficit as their tenure in the United States increases. This pattern of earnings assimilation results in greater unadjusted earnings for some subgroups of Caribbean immigrants, particularly those from the English-speaking Caribbean (Kalmijn 1996; Model 2008). Since Caribbean immigrants and black natives share the same phenotype, some scholars and policy makers argue that differences in work ethic, attitudes toward work, and work culture between Caribbean-born blacks and black natives produce labor market differences between the two groups (Glazer and Moynihan 1979; Sowell 1978). While research shows that unadjusted differences in labor market outcomes between Caribbean immigrants and black natives are partly the result of disparate labor market characteristics (Mason 2010; Model 2008), much of this literature has ignored the experiences of black Caribbean women, particularly those from the non-English-speaking Caribbean, as well as cohort of arrival variation in earnings among subgroups of Caribbean immigrants. Moreover, few papers have empirically tested the mechanisms—culture, employer preferences, or selective migration—that are argued to generate the earnings assimilation patterns observed for both male and female Caribbean immigrants (Model 2008; Sowell 1981; Waters 1999).

This paper tests whether selective migration explains earnings differences between U.S.-born and Caribbean-born black women in the United States. Utilizing data on U.S.-born and Caribbean-born women from the 1980–2000 U.S. Censuses and the 2000–2007 American Community Surveys, I show that upon arrival in the United States, most arrival cohorts of Caribbean women have lower earnings than black native women (collectively). In models that attempt to account for the impact of selective migration on earnings by comparing the earnings of black immigrant women to U.S.-born black women who have moved across states since birth (black native movers), I show that the initial earnings gap between black native movers and Caribbean immigrants is significantly greater than the gap between all black natives and Caribbean immigrants. I also show that while arrival cohorts of women from the French-speaking (Haiti) and English-speaking Caribbean are projected to achieve earnings parity and eventually surpass the earnings of black natives (collectively), fewer cohorts from these regions are projected to surpass the earnings of black native movers. Additionally, a longer tenure of U.S. residence is required for these immigrants to surpass the earnings of black native movers. In summary, since the earnings profiles of black immigrants are more similar to the earnings profiles of black native movers than of black native non-movers, these results suggest that selective migration is an important determinant of nativity differences in earnings among black women in the United States.

This paper also documents significant variation in earnings by cohort of arrival for each immigrant subgroup. The primary mechanisms that are purported to generate cultural differences among blacks are socialization in a majority black society or differences in slave histories (Sowell 1978; Waters 1999). Since neither the racial composition nor the slave histories of the major sending countries of black immigrants change over time, the documented variation in earnings by cohort of arrival suggests that cultural differences among blacks is not the primary mechanism that drives labor market differences among blacks. Moreover, it is unlikely that employers possess sufficient information to engage in disparate treatment of different arrival cohorts of immigrants. As a result, these empirical findings do not support the claim that

employer preferences drive labor market differences between U.S.-born and Caribbean-born black women. While previous studies show this result for immigrants from the English-speaking Caribbean (Model 2008), this study shows that this trend also holds for women from Haiti and the Spanish-speaking Caribbean.

The remainder of this paper will proceed as follows: Section II presents the background, Section III describes the data and methodology used in the study, Section IV presents results, and Section V offers conclusions.

Background

Migration of Caribbean Women to the United States

Black women from the Caribbean have played a significant role in initiating and sustaining contemporary migration flows from the Caribbean to the United States. Indeed, provisions in the Immigration and Nationality Act of 1965 produced these migration trends. The Immigration and Nationality Act of 1965 removed provisions that favored immigrants from the Eastern Hemisphere and replaced them with policies that favored professional qualifications and family reunification. However, when this act took effect, Census data from 1960 show that there were relatively few Caribbean immigrants in the United States who were eligible to sponsor the visas of family members (Kent 2007). As a result, Model (2008) suggests that the Immigration and Nationality Act of 1965 had the greatest impact on individuals from the Caribbean who were seeking to enter the United States on visas that required labor certification. During this period the two easiest labor certificates to obtain were those for nurses and domestic servants (Palmer 1974). Because of this, women were often the primary household migrants from the Caribbean to the United States and represented a disproportionate share of immigration flows from this region (Model 2008:23).

U.S. Census data from 1970, the first census with significant numbers of black immigrants, reflect the gender imbalance of migration from the Caribbean. Unlike the male-dominated migration flows from the other major sending regions of immigrants to the United States, in 1970, roughly 60 % of working aged black immigrants from the Caribbean were women (Model 2008:23). This demographic pattern has persisted. Data from the 2000 U.S. Census show that women represent almost 55 % of adult immigrants from the Caribbean living in the United States. In addition to the relative ease of obtaining nursing and domestic worker certifications, Model (2008) argues that the persistence of the female-driven migration patterns from the Caribbean is also the result of the matriarchal structure of West Indian families in which women depend less on men's work to support the family and the relative acceptance of black female immigrants in the U.S. labor force (Model 2008:25). In summary, because of the female-dominated migration patterns from the Caribbean to the United States, Caribbean women have played a disproportionate role in generating the economic position as well as the perceptions of this group in the United States.

Theoretical Considerations

U.S. Census data from 1970 to 2000 show that relative to black natives, subgroups of black immigrants from the Caribbean have more favorable labor market outcomes.

Because of phenotype similarities between these two groups, these findings led some scholars and policymakers to question the salience of discrimination and racism in determining the labor market outcomes of black natives (Glazer and Moynihan 1979; Sowell 1978). In particular, research argues that cultural differences between Caribbean immigrants and black natives produced by differences in slave histories explain labor market differences between the two groups (Sowell 1975, 1978, 1981). Sowell argues that slaves in America relied on their masters for everything, including rations for food and clothing. According to Sowell (1981) this system of reliance robbed black natives of the initiative and drive to succeed after slavery ended. Specifically, Sowell (1981) notes that "With many generations of discouragement of initiative and with little incentive to work any more than necessary to escape punishment, slaves developed foot-dragging, work-evading patterns that were to remain as a cultural legacy long after slavery itself disappeared" (Sowell 1981:187). In contrast, according to Sowell, in the West Indies, slaves were given provisions grounds to produce their own food for subsistence and were allowed to sell their surplus crop for profit. Because of this, Sowell (1978) states that "…even during the era of slavery, black West Indians had generations of experience in individual rewards for individual effort, in at least part of their lives, as well as experience in marketing their surplus, and in managing their own food needs and monetary returns" (Sowell 1978:46). In summary, according to Sowell, these differences in slave histories help contribute to contemporary labor market differences between West Indian blacks and native blacks.

Advancing a different cultural argument, Waters (1999) argues that in a majority black country it is common for blacks to occupy a wide range of jobs in society. As a result, West Indian immigrants have high ambition and expectations of success. She also suggests that socialization in a majority black country creates a strong sense among black immigrants from the English-speaking Caribbean that racism should be challenged and that it can be overcome. As a result, these immigrants are less threatened and hostile towards whites. This less antagonistic relationship creates an environment in which blacks from the English-speaking Caribbean are favored over black natives by white employers. Waters (1999) notes that "This combination of high ambitions, friendly relations with whites on an interpersonal level, and strong militance in encountering any perceived discrimination leads to some better outcomes in the labor market for West Indians than for black Americans" (Waters 1999: 141).

Counter to the cultural arguments, work in this area also posits that labor market differences between the two groups are the result of selective immigration (Butcher 1994; Kalmijn 1996; Model 1991, 1995, 2008). Migration is highly correlated with observed and unobserved factors that produce favorable labor market outcomes (Chiswick 1978). Accordingly, labor market differences between black immigrants and black natives might be the result of selective factors associated with migration rather than cultural factors.

Empirical research on black immigrants supports this position. The gendered nature of migration patterns from the Caribbean suggests that male and female Caribbean immigrants might have different earnings profiles. Using data from the 1970–2000 U.S. Census, Model (2008) shows that relative to U.S.-born blacks (both men and women) every arrival cohort from the English-speaking Caribbean has lower earnings upon arrival in the United States. However, women from the English-speaking Caribbean require less time to catch up to the earnings of U.S.-born black

women than men from the English-speaking Caribbean require to catch up to the earnings of U.S.-born black men. Indeed, she shows that several arrival cohorts from the English-speaking Caribbean are projected to surpass the earnings of black native women after approximately 10 years of U.S.-residence. Model (2008) also shows that the initial earnings of immigrants from the English-speaking Caribbean decline as immigration from this region becomes less selective on labor market characteristics.

Using data from the 1980 U.S. Census, Butcher (1994) directly tests the impact of selective migration on nativity differences in earnings by comparing the earnings of black immigrant men to those of black natives who have moved across states since birth. She argues that if migration is correlated with unobserved factors that produce favorable labor market outcomes for black immigrants, then the earnings of this group should closely resemble those of a similarly selected group of black natives, black native movers. Butcher (1994) shows that the earnings of black immigrant men are more similar to those of black native movers than to those of black native non-movers. She concludes that selective migration, rather than culture, explains earnings differences between black immigrant men and black native men. However, because multiple cross sections of data with sufficient observations of black immigrants were not available when Butcher completed this work, she was not able to evaluate the earnings assimilation of different cohorts of black immigrants.

Model (2008) builds on Butcher (1994) by using data from the 1970–2000 U.S. Censuses to evaluate whether immigrants from the English-speaking Caribbean who have resided in the United States for 5 years or less have similar earnings to U.S.-born blacks who have moved within the last 5 years. Similar to Butcher (1994), her results also show that the earnings of both groups of migrants are remarkably similar in each of these census waves. However, these patterns may not hold for all Caribbean immigrants.

Kalmijn (1996) conducts an analysis of earnings differences between male immigrants from the English-, French-, and Spanish-speaking Caribbean utilizing data from the 1990 U.S. Census. Kalmijn (1996) shows that only immigrants from the English-speaking Caribbean have greater earnings than black natives. Since this study is based on a single cross section, the impact of duration of U.S. residence on earnings is evaluated by assuming that cohort of arrival differences do not exist among Caribbean immigrants. Given this, Kalmijn finds that male immigrants from the English-speaking Caribbean surpass the earnings of black natives after 12 years of U.S. residence. However, men from the French- and Spanish-speaking Caribbean require 21 and 34 years to surpass the earning of black natives, respectively. In a similar study conducted for black female migrants and using data from the 1990 Census, Corra and Kimuna (2009) show that after controlling for relevant labor market characteristics, women from the English- and French-speaking Caribbean have greater earnings than black natives. However, women from the Spanish-speaking Caribbean earn less than black native women. Using data from the 2000 Census, Corra and Kimuna (2009) also show that no subgroup of Caribbean women earns more than black native women.

To summarize, although research shows that most of the earnings advantage credited to Caribbean immigrants is the result of differences in characteristics correlated with earnings, previous research has shown that after roughly 10 years of residence in the United States, the earnings of black immigrants, particularly those

from the English-speaking Caribbean, are projected to surpass those of black natives (Chiswick 1978; Dodoo 1997; Kalmijn 1996; Model 2008). While both the relatively low initial earnings among black immigrants and the subsequent increase in earnings could be produced by selective migration, these results could also be explained by culture. Proponents of a cultural position might argue that it takes time for black immigrants to adjust to their new labor markets. However, after they adjust to these new labor markets, the cultural attributes associated with being a black immigrant allow them to achieve better outcomes than most black natives.

I advance the literature on black immigrants in three ways. First, I examine whether the earnings of different arrival cohorts of Caribbean women converge to the earnings of three subgroups of U.S.-born women: U.S.-born black women (collectively), U.S.-born black internal migrants, and U.S.-born non-Hispanic white women. Second, I analyze the earnings profiles of three subgroups of Caribbean women: English-, French-, and Spanish-speaking Caribbean immigrants. Third, I utilize data that capture more contemporary migration flows from the Caribbean. Specifically, I analyze data from the 1980–2000 U.S. Censuses in conjunction with data from the 2001–2007 American Community Survey to estimate earnings assimilation models that evaluate the impact of cohort composition and duration of U.S. residence on the earnings of Caribbean immigrants using pseudo-panel techniques developed by Borjas (1985). Given these extensions, I test the following hypotheses regarding the relative importance of selective migration in explaining the earnings assimilation patterns of Caribbean-born women:

Hypothesis 1 The earnings of some cohorts of women from the Caribbean reach parity and surpass those of black native women as their tenure in the United States increases.

Hypothesis 2 The initial earnings gap between Caribbean immigrants and black native movers is greater than the gap between Caribbean immigrants and all black natives.

Hypothesis 3 The earnings of Caribbean-born women vary by cohort of arrival.

Data, Methods, and Measures

Data

This paper combines data on females between the ages 25–64 from the 5 % Integrated Public Use Micro Series (IPUMS) samples of the 1980, 1990, and 2000 United States Censuses of Population with data from IPUMS samples of the 2001–2007 American Community Surveys (ACS) to analyze earnings differences between Caribbean-born women and women born in the United States (Ruggles et al. 2004). Immigrants are defined as individuals born outside of the United States. The U.S.-born black sample is generated by taking a 20 % sample of each census wave and a 50 % sample from each ACS wave. Similarly, the U.S.-born non-Hispanic white sample is generated by taking a 5 % sample of each census wave and a 10 % sample of each ACS wave. The Caribbean sample is divided into three subgroups. These subgroups include women from the English-speaking Caribbean, the Spanish-speaking Caribbean (this

subgroup is composed of individuals born in either Puerto Rico, Cuba, or the Dominican Republic), and Haiti. Since Haiti represents the majority of French- or Creole-speaking black immigrants in the United States, a separate category is created for these immigrants. The analysis excludes individuals who reside in institutions or group quarters, individuals who were born abroad to American parents, individuals born in U.S. outlying areas, individuals who are not in the labor force, individuals who report having a disability that restricts work, and individuals with negative business, farm, or wage/salary income. To avoid complications involved with the labor market participation decisions of some women during the childbearing years, the sample is restricted to women who routinely worked at least 35 hours per week for at least 27 weeks in the year the survey was conducted. The sample is also restricted to women who have total earnings that are greater than zero. After these restrictions, the final analytic sample includes 170,491 U.S.-born black women, and 35,610 Caribbean-born black women. Although not the focus of this paper, this study also includes a sample of 287,542 U.S.-born non-Hispanic white women and 152,000 non-Hispanic white immigrants for comparison purposes.

Empirical Model

$$\log(Y_i) = X_i\beta + \alpha_1 black\ native\ mover_i + \alpha_2 black\ native\ nonmover_i + A_i\gamma + C_i\delta + T_i\pi + \varepsilon_i \quad (1)$$

Equation 1 represents the empirical model used in this paper. The outcome variable, Y, is the logarithm of weekly earnings. The black native mover and black native non-mover variables capture the impact of across state migration for U.S.-born blacks. X is a vector of variables that controls for a standard set of economic and demographic factors. These factors include experience, experience squared, education, marital status, the number of own children living in the house, the presence of an own child younger than 5 years old in the house, the state of current residence, and English proficiency. A is a vector of dummy variables indicating how long an immigrant has lived in the United States. These variables are set to 0 for native-born individuals. C is a vector of dummy variables identifying immigrant arrival cohorts. T is a vector of dummy variables indicating the survey year. Lastly, ε is a random error term.

In order to identify both cohort and assimilation effects, Eq. 1 imposes the restriction that the period effect on each outcome is the same for both immigrants and the U.S.-born. Therefore, the period effect is estimated for U.S.-born women, and this information is used to identify cohort and assimilation effects for immigrants (Borjas 1987).

Results

Descriptive Results

Using data on Caribbean women from each of the survey waves used in this study, Table 1 illustrates differences in earnings and demographic characteristics among

Table 1 Descriptive statistics for U.S.-born blacks, U.S.-born non-Hispanic whites, non-Hispanic white immigrants, and Caribbean-born blacks by region of birth in 1980–2007, U.S. women aged 25–64

Variables	(1) All Black natives	(2) Black native movers	(3) Black native non-movers	(4) English-speaking Caribbean	(5) Spanish-speaking Caribbean	(6) Haiti	(7) All U.S.-born non-Hispanic whites	(8) U.S.-born non-Hispanic white movers	(9) U.S.-born non-Hispanic white non-movers	(10) Non-Hispanic white immigrant
Number of observations	170,491	61,405	109,086	25,491	2,285	7,834	287,542	112,260	175,282	152,000
Weekly earnings (Mean)	695.843 (1.20)	787.149 (2.27)	644.447 (1.35)	775.277 (3.37)	593.351 (9.17)	637.403 (5.50)	808.123 (1.21)	886.275 (2.25)	758.070 (1.36)	870.815 (2.05)
Average weeks worked last year	49.657 (0.01)	49.738 (0.02)	49.612 (0.02)	49.994 (0.03)	49.302 (0.12)	49.793 (0.06)	49.832 (0.01)	49.775 (0.01)	49.868 (0.01)	49.804 (0.01)
Age (Mean)	41.138 (0.02)	42.483 (0.04)	40.381 (0.03)	42.351 (0.06)	41.721 (0.21)	41.543 (0.11)	42.549 (0.02)	43.063 (0.03)	42.219 (0.02)	44.326 (0.03)
Married (proportion)	0.392 (0.00)	0.423 (0.00)	0.375 (0.00)	0.432 (0.00)	0.424 (0.01)	0.492 (0.01)	0.630 (0.00)	0.621 (0.00)	0.635 (0.00)	0.648 (0.00)
Number of own children in house (Mean)	1.130 (0.00)	1.060 (0.00)	1.169 (0.00)	1.167 (0.01)	1.186 (0.03)	1.520 (0.02)	0.832 (0.00)	0.774 (0.00)	0.868 (0.00)	0.841 (0.00)
Presence of a child younger than 5 years old (proportion)	0.126 (0.00)	0.110 (0.00)	0.134 (0.00)	0.129 (0.00)	0.132 (0.01)	0.187 (0.00)	0.099 (0.00)	0.090 (0.00)	0.104 (0.00)	0.081 (0.00)
Education mean in years	13.175 (0.01)	13.414 (0.01)	13.040 (0.01)	13.108 (0.01)	12.235 (0.06)	12.476 (0.03)	13.656 (0.00)	14.004 (0.01)	13.433 (0.00)	13.498 (0.01)
Predicted experience	21.963 (0.03)	23.069 (0.04)	21.341 (0.03)	23.243 (0.07)	23.486 (0.23)	23.067 (0.11)	22.893 (0.02)	23.059 (0.03)	22.786 (0.03)	24.829 (0.03)
Speaks poor English (proportion)	0.002 (0.00)	0.003 (0.00)	0.002 (0.00)	0.004 (0.00)	0.305 (0.01)	0.189 (0.00)	0.002 (0.00)	0.002 (0.00)	0.002 (0.00)	0.066 (0.00)
Immigrated Prior to 1970 (Proportion)				0.183 (0.00)	0.312 (0.01)	0.131 (0.00)				0.471 (0.00)
Immigrated between 1970 and 1974 (proportion)				0.156 (0.00)	0.133 (0.01)	0.132 (0.00)				0.089 (0.00)
Immigrated between 1975 and 1979 (proportion)				0.149 (0.00)	0.095 (0.01)	0.122 (0.00)				0.096 (0.00)
Immigrated between 1980 and 1984 (proportion)				0.171 (0.00)	0.147 (0.01)	0.231 (0.00)				0.071 (0.00)
Immigrated between 1985 and 1989 (proportion)				0.162 (0.00)	0.133 (0.01)	0.164 (0.00)				0.078 (0.00)
				0.090 (0.00)	0.084 (0.01)	0.108 (0.00)				0.081 (0.00)

Table 1 (continued)

Variables	(1) All Black natives	(2) Black native movers	(3) Black native non-movers	(4) English-speaking Caribbean	(5) Spanish-speaking Caribbean	(6) Haiti	(7) All U.S.-born non-Hispanic whites	(8) U.S.-born non-Hispanic white movers	(9) U.S.-born non-Hispanic white non-movers	(10) Non-Hispanic white immigrant
Immigrated between 1990 and 1994 (proportion)										
Immigrated between 1995 and 1999 (proportion)				0.062 (0.00)	0.063 (0.01)	0.073 (0.00)				0.078 (0.00)
Immigrated between 2000 and 2007 (proportion)				0.027 (0.00)	0.033 (0.00)	0.039 (0.00)				0.036 (0.00)

The sample consists of women aged 25–64. The sample is taken from the 5 % Integrated Public Use Micro Series (IPUMS) samples of the 1980–2000 Censuses and the 2001–2007 IPUMS waves of the American Community Survey. The sample excludes individuals who reside in institutions or group quarters, individuals who were born abroad to American parents, individuals born in U.S. outlying areas, individuals who are not in the labor force, individuals who report having a disability that restricts work, individuals with negative business, farm, or wage/salary income, and individuals with total earnings that are less than zero. The sample is also restricted to women who worked more than 35 h per week and who worked for at least 27 weeks in the year the survey was conducted. Standard errors are shown in parenthesis. Weekly earnings are adjusted to reflect 2006 dollars

black native and Caribbean women. Column 1 of Table 1 shows that, in the aggregate, U.S.-born blacks earn approximately $695 per week. Looking at the weekly earnings of the three subgroups of Caribbean immigrants in Columns 4 through 6 of Table 1 reveal that women from the English-speaking Caribbean are the only subgroup of Caribbean immigrants who have weekly earnings that are greater than black natives (collectively). In contrast, Column 10 shows that non-Hispanic white immigrants have weekly earnings that are $175 greater than black natives and $95 greater than women from the English-speaking Caribbean.

Columns 2 and 8 of Table 1 suggest that internal migration has a significant impact on the earnings of both black and white natives. These two columns show that both groups of internal migrants have weekly earnings that are greater than their non-moving counterparts. These descriptive results suggest that selective migration might play an important role in explaining labor market differences between Caribbean-born women and black native women.

Regression Results

Before evaluating the earnings assimilation of Caribbean women, Table 2 first documents unadjusted and adjusted differences in earnings between black women, U.S.-born non-Hispanic white women, women from the Caribbean, and non-Hispanic white immigrant women. Column 1 shows differences in the logarithm of weekly earnings controlling only for the survey year of each observation. These results show that non-Hispanic white immigrants are the only subgroup of immigrant women who earn significantly more than U.S.-born non-Hispanic white women (the reference category). Since the reference group for immigrants and black natives is the same, the coefficient on these variables can be compared against each other. Column 1 shows that women from the English-speaking Caribbean are the only subgroup of Caribbean immigrants who earn more than black natives. Indeed, Column 2 shows that this finding holds even after controlling for a standard set of social and demographic characteristics.

Column 3 of Table 2 adds controls for duration of U.S. residence. These variables show that relative to immigrants who have been in the United States more than 10 years (the reference group), those who have resided in the United States between zero and 5 years and those who have resided in the United States between 6 and 10 years earn approximately 15 % and 10 % less per week, respectively. Since the reference category for the duration of U.S. residence variable is immigrants who have been in the United States for more than 10 years, in this model the immigrant dummy variables now represent differences between U.S.-born non-Hispanic white women and subgroups of immigrants who have resided in the United States at least 10 years. Adding these variables increases the coefficient on all the immigrant dummies. This result implies that the earnings of all immigrants increase as their tenure in the United States increases. However, even among immigrants who have resided in the United States for more than 10 years, women from the English-speaking Caribbean remain the only subgroup of black immigrants who earn more than black natives.

Columns 4 through 6 of Table 2 show weekly earnings models that disaggregate black natives by migration status (black native movers and black native non-movers). These columns show that even after adjusting for social and demographic characteristics, the earnings of black native movers are significantly greater than those of black

Table 2 Weekly earnings regressions for U.S.-born blacks, U.S.-born non-Hispanic whites, non-Hispanic white immigrants, and Caribbean-born blacks, U.S. women aged 25–64

Variables	(1)	(2)	(3)	(4)	(5)	(6)
Race/Nativity: (Reference group: U.S.-born non-Hispanic white women)						
Black natives	−0.134***	−0.061***	−0.061***			
Black native movers				−0.002	−0.011***	−0.010***
Black native non-movers				−0.209***	−0.092***	−0.093***
English-speaking Caribbean	−0.002	−0.023***	0.010***	−0.002	−0.022***	0.011***
Spanish-speaking Caribbean	−0.291***	−0.172***	−0.146***	−0.291***	−0.172***	−0.146***
Haiti	−0.232***	−0.112***	−0.082***	−0.232***	−0.112***	−0.082***
Non-Hispanic white immigrant	0.066***	−0.005**	0.024***	0.067***	−0.003	0.026***
Years in U.S.: (Reference group: Immigrants who have resided in U.S. more than 10 years)						
0–5			−0.158***			−0.159***
6–10			−0.104***			−0.104***
Education in years		0.121***	0.121***		0.121***	0.121***
Predicted experience		0.024***	0.024***		0.024***	0.023***
Predicted experience squared		−0.000***	−0.000***		−0.000***	−0.000***
Social and demographic characteristics		Yes	Yes		Yes	Yes
State of residence controls		Yes	Yes		Yes	Yes
Survey year controls	Yes	Yes	Yes	Yes	Yes	Yes
Constant	6.583***	4.404***	4.422***	6.584***	4.426***	4.444***
Observations	645643	645643	645643	645643	645643	645643

Sources: The dependent variable is the natural logarithm of weekly earnings. The sample consists of women between the ages of 25–64. The sample is taken from the 5 % Integrated Public Use Micro Series (IPUMS) samples of the 1980–2000 Censuses and the 2001–2007 IPUMS waves of the American Community Survey. Robust standard errors are in parentheses

***$p<0.01$, **$p<0.05$, *$p<0.1$

native non-movers. Indeed, the fully specified model in Column 6 of Table 2 shows that black native movers earn just 1 % less than U.S.-born non-Hispanic white women. Moreover, the only subgroup of black immigrant women who earns more than black native movers are women from the English-speaking Caribbean. However, this difference is small, less than 2 %.

Table 3 further analyzes nativity differences among blacks as well as documents cohort differences among subgroups of Caribbean women in the United States by estimating models based on Eq. 1. The models in Table 3 account for the impact of residence in the United States by including variables that capture the number of years spent by Caribbean immigrants in the United States. The reference category for these variables is black immigrants whose tenure in the United States is between zero and 5 years. Including these variables in the regression models means that the cohort of arrival coefficients represent differences between cohorts of black immigrants and U.S.-born non-Hispanic white women when the tenure of Caribbean women in the United States is evaluated between zero and 5 years. The analysis in Table 3 *excludes* non-Hispanic white immigrants.

Columns 1 through 3 of Table 3 reveal several interesting patterns. First, with the exception of the earliest arrival cohort from the Spanish-speaking Caribbean, the coefficients on all the other cohort of arrival variables are negative and statistically significant. This suggests that in the first 5 years after arriving in the United States, these cohorts earn less than U.S.-born non-Hispanic white women. Second, Columns 1 through 3 of Table 3 show that with the exception of the earliest cohort of women from the English-speaking Caribbean, all other cohorts of women from the English-speaking Caribbean earn more than immigrants from the same cohort who migrated from the other major sending regions. Third, the coefficient on the black natives variable is greater than (less negative) almost all of the arrival coefficients regardless of region. This suggests that most Caribbean women also earn less than black natives within the first 5 years after arriving in the United States. Fourth, with the exception of the model for women from the Spanish-speaking Caribbean that shows that earnings of these immigrants remain constant over time, the coefficients on all the years since migration variables are positive and statistically significant. This suggests that the earnings of these black immigrants increase as they acquire greater tenure of U.S. residence. Fifth, the coefficients on the arrival cohorts for women from each of the sending regions/countries become more negative over time. This implies that the initial earnings gap between these cohorts of immigrants and U.S.-born non-Hispanic white women and black natives is increasing for newly arrived immigrants.

To project when a particular cohort of immigrant women surpasses or converges to the earnings of U.S.-born non-Hispanic white women, the coefficient on a particular cohort of arrival variable must be added to one of the years since arrival variables. For example, Column 1 suggests that members of the pre-1970 arrival cohort who hail from the English-speaking Caribbean earn 6 % (−.052 plus .118) more than U.S.-born non-Hispanic whites after they have lived in the United States for more than 21 years. The results in Column 1 also suggest that only the arrival cohorts who entered the United States prior to 1985 from the English-speaking Caribbean are projected to surpass the earnings of U.S.-born non-Hispanic whites. In contrast, Column 3 shows that only the earliest arrival cohort from Haiti is projected to surpass the earnings of U.S.-born non-Hispanic white women.

Table 3 Weekly earnings regressions for U.S.-born blacks, U.S.-born non-Hispanic whites, and Caribbean-born blacks by region of birth, U.S. women aged 25–64

Variables	(1) English-speaking Caribbean & U.S.-born blacks and non-Hispanic whites	(2) Spanish-speaking Caribbean & U.S.-born blacks and non-Hispanic whites	(3) Haitian & U.S.-born blacks and non-Hispanic whites	(4) English-speaking Caribbean & U.S.-born blacks and non-Hispanic whites	(5) Spanish-speaking Caribbean & U.S.-born blacks and non-Hispanic whites	(6) Haiti & U.S.-born blacks and non-Hispanic whites
Race: (Reference group: U.S.-born non-Hispanic white women)						
Black native natives	−0.055***	−0.055***	−0.055***			
Black native movers				−0.008***	−0.009***	−0.009***
Black native non-movers				−0.084***	−0.084***	−0.084***
Year of arrival:(Reference group: U.S.-born non-Hispanic white women)						
Prior to 1970	−0.052***	−0.043	−0.165***	−0.049***	−0.041	−0.163***
1970–1974	−0.054***	−0.134*	−0.204***	−0.052***	−0.133*	−0.203***
1975–1979	−0.096***	−0.190***	−0.265***	−0.095***	−0.190***	−0.264***
1980–1984	−0.091***	−0.222***	−0.256***	−0.091***	−0.222***	−0.257***
1985–1989	−0.140***	−0.246***	−0.234***	−0.140***	−0.247***	−0.235***
1990–1994	−0.140***	−0.353***	−0.275***	−0.140***	−0.353***	−0.276***
1995–1999	−0.163***	−0.464***	−0.259***	−0.164***	−0.465***	−0.260***
2000–2007	−0.194***	−0.712***	−0.307***	−0.195***	−0.712***	−0.308***
Years in U.S.: (Reference Group: Immigrants with 0–5 years of U.S. residence)						
6–10	0.034**	0.014	0.061**	0.034**	0.014	0.061**
11–15	0.094***	0.028	0.098***	0.094***	0.027	0.098***
16–20	0.111***	0.044	0.165***	0.110***	0.043	0.165***
More than 21	0.118***	0.009	0.190***	0.117***	0.008	0.190***
Constant	4.249***	4.235***	4.240***	4.273***	4.260***	4.265***
Observations	483524	460318	465867	483524	460318	465867

Sources: The dependent variable is the natural logarithm of weekly earnings. The sample consists of women between the ages of 25–64. The sample is taken from the 5 % Integrated Public Use Micro Series (IPUMS) samples of the 1980–2000 Censuses and the 2001–2007 IPUMS waves of the American Community Survey. These regressions also include variables that capture current state of residence indicators, number of own children in the household, presence of a own child younger than 5 years old in the household, education in years, predicted experience, the squared of predicted experience, a variable that captures whether an individual speaks poor English, marital status, and survey year indicators. Robust standard errors are in parentheses

***$p<0.01$, **$p<0.05$, *$p<0.1$

Similarly, particular cohorts of immigrant women are able to surpass the earnings of black natives over time if the sum of the coefficient on a particular cohort of arrival variable plus the coefficient on the relevant years since arrival variable is greater than the coefficient on the black natives variable. For example, Column 1 shows that women from the English-speaking Caribbean who arrived prior to 1970 are projected to surpass the earnings of black natives after they have resided in the United States between 6 and 10 years. Indeed, Columns 1 and 3 show that several cohorts of Caribbean women are able to surpass the earnings of black natives with increased duration of U.S. residence. However, variation does exist in the timing of this earnings crossover. For example, the pre-1980 arrival cohorts from the English-speaking Caribbean are able to surpass the earnings of black natives after they have resided in the United States between 6 and 10 years. In contrast, no member of these same cohorts from Haiti surpasses the earnings of black natives within this time period.

Column 2 of Table 3 shows very interesting assimilation patterns for immigrants from the Spanish-speaking Caribbean. In this model, the coefficients on all the variables that capture duration of U.S. residence are statistically insignificant. This result suggests that the earnings of black immigrants from the Spanish-speaking Caribbean remain constant as their duration of U.S. residence increases. However, this result should be taken with caution for several reasons. First, relative to the other immigrant samples, the Spanish-speaking Caribbean sample is small. Moreover, the Spanish-speaking Caribbean subgroup is composed of individuals from Puerto Rico, Cuba, and the Dominican Republic. Puerto Ricans make up almost 27 % of this subgroup. Since Puerto Rico is a U.S. territory, relative to the other major sending countries of black immigrants, there are no restrictions on migration between U.S. mainland and Puerto Rico. As a result, the earnings assimilation results for immigrants from the Spanish-speaking Caribbean might be impacted by a less selective migration process as well as return migration.

Columns 4 through 6 of Table 3 shows assimilation models for each of the major sending regions of Caribbean immigrants where black natives are disaggregated by internal migration status. The coefficient on the black native movers variable in these models (−.009) suggests that black native movers earn slightly less than U.S.-born non-Hispanic whites. Additionally, since the coefficient on the black native mover variable is larger than the coefficient on the black native variable in Columns 1–3, this implies that every cohort of immigrants will require more time to surpass the earnings of black native movers than to surpass the earnings of black natives (collectively).

Conclusion

Research suggests that Caribbean immigrants earn less than black natives when they arrive in the United States. However, this work also shows that as immigrants' tenure in the United States increases, the earnings of black immigrants grow and, for some cohorts, surpass the earnings of black natives (Kalmijn 1996; Model 1995, 2008). While research argues that this crossover is the result of selective migration, the labor market achievements of black immigrants might be driven by the preferences of white employers or by cultural differences between the two groups (Sowell 1978, 1981; Waters 1999).

This study builds on the work of Butcher (1994) and Model (2008) by incorporating data from the 1980–2000 U.S. Censuses in conjunction with data from the 2001–2007 American Community Surveys on women from the English-, French-, and Spanish-speaking Caribbean to evaluate whether selective migration explains initial differences in earnings and differences in earnings trajectories between cohorts of Caribbean immigrants and women born in the United States (both black and white).

Specifically, I test three hypotheses related to the earnings assimilation of black immigrants: 1.) The earnings of women from the Caribbean reach parity and surpass those of black native women as their tenure in the United States increases; 2.) The initial earnings gap between Caribbean immigrants and black movers is greater than the gap between Caribbean immigrants and all black natives; 3.) The earnings of Caribbean women vary by cohort of arrival.

I find support for all three hypotheses. Almost every arrival cohort of women from the Caribbean earns less than black native women when they first arrive in the United States. Models that show the projected earnings assimilation of different immigrant arrival cohorts suggest that most cohorts of women from the English-speaking Caribbean will surpass the earnings of black natives as their tenure of U.S. residence increases. In contrast, only pre-1975 migrants from Haiti are projected to surpass the earnings of black natives. Models that test Hypotheses 2 by comparing the earnings of Caribbean women to those of black native movers show that the initial earnings gap between black native movers and cohorts of women from the Caribbean is significantly greater than the gap between black natives (collectively) and cohorts of women from the Caribbean. Because of this, fewer cohorts of black immigrants are able to surpass the earnings of black native movers. Indeed, a longer tenure of U.S. residence is required for any arrival cohort to surpass the earnings of black native movers.

Counter to the models for women from Haiti and the English-speaking Caribbean, assimilation models estimated using data on women from the Spanish-speaking Caribbean show that these women do not seem to experiences earnings growth as their tenure in the United States increases. However, because a large fraction of these women migrate from Puerto Rico, this result might be impacted by return migration and the less selective migration patterns between the United States and Puerto Rico.

The earnings of Caribbean women vary by cohort of arrival. This result builds on one of the central findings produced by Model (2008) in support of the claim that nativity differences among blacks are produced by selective migration rather than by cultural differences among blacks. She suggests that the declining advantage of more recently arrived cohorts of immigrants from the English-speaking Caribbean is uniquely consistent with selective migration. That is, since it is unlikely that white employers can differentiate between different cohorts of immigrants or to endow particular arrival cohorts with cultural attributes—either those produced by differences in slave history or socialization in a majority versus a minority black country—this result does not bode well for explanations that attempt to explain earnings differences between Caribbean immigrants and black natives that grounded in cultural differences or employer preferences. (Model 2008:81). While the current study estimates similar patterns of cohort declines in earnings for women from the English-speaking Caribbean as Model (2008), this study also documents cohort declines in

earnings for women from Haiti—a majority black country that has a different slave history than that of the United States—as well as for women from the Spanish-speaking Caribbean. Collectively, the findings suggest that when immigrants arrive in the United States is at least as important as their country/region of birth. These results imply that understanding the time varying factors that drive immigration flows, rather than differences across regions or countries, is critical to understanding labor market differences between black immigrants and black natives.

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