Does immigration, particularly increases in Latinos affect African American wages, unemployment and incarceration rates?

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Does immigration, particularly increases in Latinos, affect African American wages, unemployment and incarceration rates?

Abstract

This paper evaluates immigration's impact on African American wages, unemployment, employment and incarceration rates using a relatively large cross-sectional dataset of 900 cities. An endemic problem potentially plaguing the cross-sectional metro approach to immigration has been endogeneity. Does increased immigration to a city lead to improved economic outcomes, or does a city's improving labor market attract immigrant inflows? The paper focuses on resolving endogeneity concerns through a variety of controls, statistical methods and tests. Overall, results strongly support one-way causation from increased immigration including Latinos to higher African American wages, lower unemployment, and increased job creation. Rising immigration including from Latin America is not responsible for higher Black incarceration rates.

Keywords: Immigration, African American, wages

JEL Classifications: J15,J61,R23, J1, K42

1. Introduction

The relationship between immigration and the African-American labor market has received limited attention in the economic literature in recent years. A recent NBER survey on immigration for instance with more than 200 references by Kerr and Kerr (2011) does not once mention immigration's effect on African Americans; David Card's (2007) comprehensive summary of the consequences of immigration on major U.S. cities also does not examine its impact on African Americans.[1] One notable exception is the work of Borjas, Grogger and Hansen (BGH, 2010) that finds "a strong correlation between immigration, black wages, black unemployment rates, and black incarceration rates." BGH argue that the rapid rise in Black incarceration rates from 1960 to 2000 was due to falling Black real wages, which in turn is attributable to immigration. They state "Remarkably, as far as we know, no study has examined if there is a link between the resurgence of large-scale immigration and the employment and incarceration trends in the Black population." This study then is the second to study the link between immigration and wages, unemployment, employment, and incarceration rates for African Americans, and the first to examine causality between immigration and African American economic outcomes.

This paper uses new Census data, with considerably more city level observations than prior works, and overturns the results of BGH. It is the first economic work in more than two decades to study the impact of Latino immigration on African Americans, and the first to evaluate the relationship between increases in Latinos and Black incarceration rates. The examination of the economic consequences of immigration, particularly from Latin America, explicitly on African Americans is motivated by the often popular perception that both ethnic groups tend to have large numbers of low skilled workers, possess similar education and demographic profiles, live predominantly in urban areas and sometimes compete directly for the same jobs. There is further a prevailing view that immigrants including Latinos are willing to work for less, and have taken jobs away from Blacks. As a result, widely reported tensions between Blacks and Latinos have emerged, and been extensively covered by policy institutes, political science and sociology journals as well as the popular press. Although these strains are widely perceived as economic in nature, they have paradoxically received no recent attention in the economic literature.

Research by Morris and Gimpel (2007) finds "Conflict between African Americans and Latina/os for group position, status, and political power is increasing as most immigrants of

[1] Card however more than 20 years ago studied the response of African Americans to immigration (Card, 1990; Altonji and Card, 1991); Borjas (1987) also more than two decades ago found "no evidence that black native-born men have been adversely affected by white or Asian immigrants, and only marginal evidence that black natives and black or Hispanic immigrants are substitutes."

Hispanic ancestry settle in areas proximate to African American populations in the nation's largest cities....Recent studies have begun to document, in rising levels of detail, the tension that has emerged between immigrant groups and lower-skilled American natives, a high proportion of whom are African American (McClain et al., 2006; Kim 2000; Vaca, 2004; Hirschman, et al. 1999)." They attribute these tensions to "economic competition among ethnic groups (see also, Bonacich 1972; 1976; Cummings 1977; 1980; Cummings and Lambert 1997; Forbes 1997; Olzak 1992)." Gay (2006) further focuses on Black and Latino economic rivalry: "the trend is disturbing: anti-Latino sentiment among the black mass public may undermine elite efforts to build black-Latino alliances, putting at risk the groups future political and economic status...most accounts of the conflict identify the competition over scarce resources as a central force in Black-immigrant relations. (Alozie and Ramirez, 1999; Falcon, 1988; Johnson and Oliver, 1989; Kaufmann, 2003; McClain, 1993; McClain and Karnig, 1990; McClain and Tauber, 1998; Mindiola et al., 2002; Mohl, 2003; Vaca, 2004)." Saucedo (2008) writes that "Much has been written about the tensions between African Americans and immigrants, especially Latino immigrants. For civil rights advocates and African-American communities, the issue of immigration brings with it concerns about the impact of immigration on African Americans, who are concentrated in the domestic low-wage work force and are often said to face the greatest competition from modern migrant flows into the United States."

Newspapers, which both reflect and sway public opinion and legislation, periodically further report infighting between Latinos and Blacks, much of these tensions fueled by perceived economic rivalry. The New York Times (2006) reports "a growing unease for some Blacks on immigration" as they worry about the plight of low-skilled Black workers, who sometimes compete with immigrants for entry-level positions. The New York Times (2008) comments "a history of often uneasy and competitive relations between Blacks and Hispanics."

This perception thus appears fairly widespread in the main stream media and even provides motivation for BGH. The opening line from their paper is a citation from the Wall Street Journal (2007) - a crackdown of Hispanic immigrants at a rural chicken producer plant led to a shortage of workers, and higher wages for the local Black community. And while BGH begin with a quote linking Hispanic immigration to lower Black economic outcomes, their work does not again mention Hispanic immigration. Thus, while there is extensive work written on Latino and African American rivalry that cite economic competition, these works are not published in economic journals, and only reference immigration as a possible motivating factor in Black-Latino competition; they do not actually estimate the effect of Latino immigration on the African

American labor market, including its impact on wages and unemployment.[2]

A major difficulty endemic in the immigration literature is the issue of endogeneity - cities that are experiencing an economic boom may simultaneously attract immigrants. In this case, increases in immigration will be endogenously related with higher wages and job creation, but not contribute to or cause these improving economic outcomes. To mitigate endogeneity, we use GMM (Generalized Methods of Moments), demographic/educational control variables identified by the literature and control for domestic migration of native-born Americans from other states. If the simultaneity issue is relevant (and a driving factor generating spurious significance), a significant relationship should occur between domestic migration and improving economic outcomes as well as between native and foreign-born migration patterns since both should respond similarly to economic incentives. As a result, we additionally accommodate for endogeneity by controlling for both out-of-state and in-state native-born migration flows.[3] Granger Causality tests evaluate the causal links between immigration and African American wages. If a booming labor market attracts immigrants, MSAs with high wages should lead to more immigration and immigrant inflows; in contrast, if immigration is a relevant causal factor in a metro's economic success, we expect cities with high immigration to cause higher wages and wage growth.

A preview of the results shows that MSAs with more immigrants, including from Latin America, possess significantly higher African American median, mean and per capita wages. The effects are robust across different age cohorts and income levels, including young, poor Black men who BGH posit are the most susceptible to crime induced behavior. Results further reveal that MSAs with higher shares of foreign-born have a lower share of poor Blacks and a higher share that are middle-to-upper income. Greater immigration flows (change in foreign-born from 2005 to 2010 divided by the MSA's total population in 2005) are positively related to higher wages rates in 2010 and wage growth from 2005-2010. Moreover, the foreign-born estimates are substantially larger than the domestic migration counterparts, and there is no significant relationship between flows of immigrants and native-born Americans to particular cities. Causality results further highlight significant one-way Granger causality from immigration to higher Black wages and wage growth; higher wages do not contribute to more immigration and immigration inflows.

[2]Note Card (1990) more than two decades ago reported that in response to the Mariel boat lift, three days of riots occurred in several Black neighborhoods. He noted that a government sponsored committee identified other long-standing grievances in the Black community as its cause, but cited the labor market competition of Cuban refugees as an important background factor.

[3]MSAs are metropolitan and micropolitan statistical areas, where the Census follows the OMB definition: "Metropolitan Statistical Areas have at least one urbanized area of 50,000 or more population" and "Micropolitan Statistical Areas a new set of statistical areas have at least one urban cluster of at least 10,000 but less than 50,000 population plus adjacent territory that has a high degree of social and economic integration."

Increases in immigration further contribute to lower Black unemployment rates, particularly among young Black men. Cities that experience positive flows of immigrants not only have lower unemployment rates, but also possess significant declines in unemployment. Results further show that immigration Granger Cause to higher Black employment rates and job growth.

Lastly, we investigate BGH's findings that link immigration to Black incarceration rates. Their paper posits that immigration induced a decline in Black wages, which then encouraged some Black men to exit the labor force and shift to illegal activities. Their work emphasizes the time series correlation between the rapid rise in both immigration and Black incarceration. BGH stress that Blacks are more susceptible than Whites to immigration, and hence the rise in immigration has contributed to a rise in Black incarceration rates. However, this correlation has clearly broken down. While the share of foreign-born in U.S. MSAs has risen by 57% from 1994 to 2010, the incarceration rates of Blacks and Whites have declined -22% and -11% respectively over this time period. As a result, the Black/White incarceration rates have declined 18%. Our cross-sectional data of 900 MSAs represent the largest study of African American incarceration rates across U.S. cities, and demonstrates that cities with more immigration or immigration flows (increases in immigration from 2005 to 2010) have lower Black incarceration rates. Cities with more Latinos also have lower Black incarceration rates.

This is solely an empirical paper for two reasons. First, this work focuses on endogeneity and robustness. It employs a variety of methods to demonstrate that the regressions do not suffer from a endogeneity bias. To highlight that the results are not sensitive to specific specifications, the paper analyzes the data in both levels and changes, uses alternative control variables, different years, various statistical tests and more than a handful of labor market variables (including African American median wages, average wages, per capita wages, male wages, income shares of the poor and rich, as well as for income share of different age groups). It also evaluates immigration's consequences on Black unemployment, employment and incarceration rates. As a result, it is the most comprehensive empirical study of the impact of the foreign-born, especially from Latin America, on the African American labor market.

Second, there are several prominent model-driven papers including BGH. A key problem with immigration modelling is that the assumptions often drive the conclusions. BGH assume that African Americans and immigrants are substitutes, so naturally their model predicts an increase in immigrants will lower the Black wage rate. However, other papers emphasize that immigrants specialize in different and complementary skill sets; hence, they increase both the supply of labor which tends to depress wages for workers with similar skill profiles, and the demand of workers as they consume goods and services, which creates more jobs. Models developed by Ottaviano and Peri (2006, 2008) and Peri (2007, 2009) show that the increased supply's effect on lower wages tends to be relatively modest, because immigrants tend to be complementary to native-born workers. Peri and Sparber (2009) find that less educated foreign-born workers have a comparative advantage in occupations intensive in manual physical labor skills while natives pursue jobs more intensive in communication-language tasks. Immigrants hence often do not compete for the same jobs, since immigration encourages workers to specialize. Further, other papers (including Card and DiNardo 2000; Card 2001, 2007; Card and Lewis 2005; Toussaint-Comeau 2006; and Shierhotz 2010) exploit models that focus on specialization by encouraging different skill patterns; these papers predict positive effects of immigration on wages. After all, since Adam Smith and David Ricardo, specialization and comparative advantage improves economic efficiency. The Economist magazine (2012) likens immigration to international trade and "benefits countries by letting workers specialise in activities in which they are relatively more productive, raising output. And the larger market created by trade spreads the fixed costs of innovation more thinly, encouraging the development of new goods and ideas."

Immigration further may contribute to improving economic welfare in a city through boosting entrepreneurial activity or increasing its population size. The Kauffman Center (Fairlie, 2011) finds that immigrants tend to be more entrepreneurial as they start their own businesses at nearly twice the rate of other Americans. Hunt and Gauthier-Loiselle (2010) determine that skilled immigrants increase innovation in the U.S. as immigrant's patent at double the native-born rate. Wheeler (2001) provides a model where "urban agglomeration enhances productivity by facilitating the firm-worker matching process." His model assumes workers skills are complementary in production. A similar model can be used to show that immigrants who bring different skill sets complement skills of African Americans, and when immigrants move to a city and its population increases, so do wages in the Black community. Ciccone and Hall (1996) find that agglomeration improves economic activity; Glaeser and Gottlieb (2009) offer an extensive literature survey and new empirical evidence that emphasize the critical role agglomeration economies play in a city's economic development. "The largest body of evidence supports the view that cities succeed by spurring the transfer of information". Thus, immigration by increasing specialization, comparative advantage, entrepreneurial activity or population size can improve labor market efficiency and raise wages of African Americans.

The rest of the paper proceeds as follows. Section 2 presents the data and econometric methodology, Section 3 discusses the results, and Section 4 concludes.

2. Data and Methodology

2.1. Data

We use Census data from factfinder2.census.gov, and consider a relatively large sample of 910 MSAs from the 2010 Census. Our analysis begins with analyzing median Black family income:

"B19013B MEDIAN FAMILY INCOME IN THE PAST 12 MONTHS (IN 2010 INFLATION-ADJUSTED DOLLARS) (BLACK OR AFRICAN AMERICAN ALONE HOUSEHOLDER.)"

The Census uses "Blacks or African Americans" interchangeably; this paper follows this convention. Immigrants and foreign-born are also identical terms, and Americans born in the U.S. are native-born.[4] The census reports the number of foreign-born (FB), and the number born in Latin American (LAT):

B05002 "PLACE OF BIRTH BY CITIZENSHIP STATUS"

B05006 "PLACE OF BIRTH FOR THE FOREIGN-BORN POPULATION IN THE U.S."

The Census reports regions in B05006 including Latin America. There is a difference between Latino (someone born in Latin America) and Hispanic (Spanish or Portuguese speaking). The foreign-born sum of the 910 MSAs is 38.8 million, and represents more than 97% of Census surveyed immigrants in the U.S.; the immigrant share (percentage of immigrants) is 13.4%. The Latino foreign-born sum is 20.2 million and its share is 6.8%.

2.2. Accommodating for Endogeneity

Borjas, Freeman, and Katz (BFK, 1997) and Borjas (2003) argue that the metro approach that exploits spatial relationships is flawed for several reasons. Borjas posits "First, immigrants may not be randomly distributed across labor markets. If immigrants endogenously cluster in cities with thriving economies, there would be a spurious positive correlation between immigration and wages. Second, natives may respond to the wage impact of immigration on a local labor market by moving their labor or capital to other cities." He claimed that wage growth then will vary across regions for reasons that are unrelated to immigration, and that exogenous controls are necessary. Both BFK and Borjas maintain that natives may respond to the wage impact

[4] We use the American Community Survey 5-Year estimates since they are available for more than 940 metro areas for median wages; further, the 5-year estimates are also available for foreign-born, native migration rates and other background variables for 910 metros. The Census reports that the 5-year estimates are more reliable and cover more areas than the 1-year estimates; e.g., the 1-year estimates for median wages are available for 465 metros and its standard deviation averages more than double the 5-year-estimates for both 1-year median wages and foreign and native-born immigration shares. For completeness, we also report 1-year foreign-born and migration estimates on median wages and show that the coefficients estimates are robust. Variable definitions for the other independent variables are in the appendix.

of immigration by moving away. As a result, immigration does not have a strong discernible effect due to equilibrating labor market flows. We address these concerns of endogeneity and specification in multiple ways:

(1) We use both OLS and GMM methods and demonstrate that the GMM specifications (see Appendix I) do not suffer from weak instruments. We also accommodate for cross-sectional heteroskedastic errors by reporting White standard errors.

(2) If an economic boom in metro i had attracted immigrants, we would expect the metro to also have attracted native-born workers from other cities; thus, in this case, we would expect a high domestic migration share. If the booming city argument is relevant, we expect the domestic share estimates to be significant and approximately equal to the foreign-born share; further, a high correlation should exist between domestic and foreign-born shares. Alternatively, if immigration was leading to native-born flight, we would expect a negative relationship to occur between the shares. Hence, controlling for domestic share, then should be a good way of controlling for the potential relevance of a booming city or negative net migration.

(3) In additional specifications, we control for the flow in native-born Americans from other states as well as the flow of native-born Americans from the same state.[5] If an economic boom in metro i is contemporaneously occurring, the MSA might experience inflows from native-born from other states and the same state but different MSA. If the booming city argument is relevant, these inflows should be positive and significant; additionally, there should be a high correlation between flows of immigrants and flows of native-born from other states (or from other parts of the same state to that MSA). Controlling therefore for domestic inflows should then be an additional way of controlling for a booming city as well as native-born flight, as it indicates/accommodates the extent that native-born are recently moving to or away from the city.

(4) Scatterplots and correlations analyses illustrate that native-born migration from other states are not significantly correlated to foreign-born migration patterns; hence the concern of endogeneity (via the booming city hypothesis) is not supported . Further, there is no evidence that natives in the same state move away or that natives from other states are deterred by immigration inflows. The low correlation between foreign and native-born shares implies that migration flows do not affect the foreign-born share estimates in the regression analysis.

(5) The regressions use relevant control variables from the literature; both the controls and

[5] A city's share of its own state residents may change from 2005 to 2010 due to births or deaths, but also due to positive (negative) domestic migration as people move from other parts of the state to the MSA (leave the MSA), possibly driven by economic circumstances.

foreign-born estimates are highly significant and explain an economically substantial amount of the variation in wages.

(6) We examine different specifications including both levels (immigration share) and differences (immigration flows) and logged wages and wage growth. Granger Causality tests further evaluate whether cities with higher number of immigrants in 2005 (a high immigration share) experience higher wages in 2010 and increasing wages from 2005 to 2010. Granger Causality tests then evaluate possible reverse causation: whether cities with high wages in 2005 also have a high immigration share in 2010 and immigration inflows from 2005 to 2010.

(7) The results are robust across different wage variables including: median wages, male median wages, mean wages, per capita wages, wages by income group and wages by age group. Results further are consistent for unemployment and employment rates.

(8) Regressions include both 2010 and 2007 census data as estimates maybe sensitive to the business cycle. The 2007 dataset has approximately 700 observations, and provides a check of the robustness of our findings. Using 2010 data should bias the wage estimates downwards towards zero, since rising immigration occurred during 2010's relatively weak economic growth and wage stagnation, which should adversely affects African Americans; e.g., Freeman and Rodgers (2004) find that slow growth adversely hurts African Americans, particularly young Black men. We also use 2010 one-year estimates for immigration, migration and wages; if Borjas's equilibrating labor market arguments are correct, labor market adjustment would not likely be over one-year, but over a decade (the typical dataset used, and the one BGH use).

(9) The 2010 Census consists of a sample size of more than 900 metropolitan and micropolitan cities, and thus not only includes large metropolitan areas similar to most prior metro analysis. Larger cities tend to be richer, slower growing and may not be geographically representative (more are in the North East) than smaller MSAs. Hence, our analysis specfication is considerably more compreshensive than most prior panel works using large MSA data.

2.3. Regression Specification

Nickell and Saleheen (2009) explore immigration's impact on British wages with a theoretical model derived from each region's aggregate production function. Their reliance on regional factors and standard labor market micro-based assumptions indicates this framework provides a good framework to derive an appropriate regression specification. After solving the first order conditions, they demonstrate that the immigrant's wage rate depends on basic factors such as regional productivity, regional labor market slack, regional labor market and unchanging occupation/regional characteristics. The productivity level is proxied by education (including the share that have dropped out, possess a high school degree and have a college degree) as well as experience which is proxied by age (BGH also use age as a proxy for experience). The labor market slack is the lagged unemployment rate, and the occupation characteristics are the share of Blacks engaged in manufacturing as its decline has been cited in other literature including BGH as an important variable in Black wages. Adding additional occupational shares such as construction and Business and Professional Services are not significant. Using Nickell and Saleheen's basic framework, equation (1) tests the effects of an increase in city's i foreign and native-born share on logged Black wages, W_i, for city i:

$$W_i = \alpha + \beta_1 FBN_i + \beta_2 MIG_i + \beta_i Z_i \tag{1}$$

where FBN_i is the foreign-born share relative to the native-born share, MIG_i is the domestic migration share of the total population from other states (native-born Americans that moved to the MSA from other states), and Z_i is a vector of demographic and economic control variables for MSA i. Z_i includes the African American College graduation rate (COL_i), the Dropout rate ($DROP_i$), the High school graduate rate (HS_i), the share employed in manufacturing (MAN_i), the median age (proxy for experience) and the unemployment rate, (UNE_i) in metro i. Alteratively, Altonji and Card (1991), BGH and others consider the share of immigrants in the total population (FB); we prefer this specification as it allows a more ready comparison to the domestic migration variable (which has total population as its denominator). Note, Nickell and Saleheen's specification does not include MIG_i; however, we include it (to control for the possible endogeneity of booming cities or negative native-born migration) and to compare its coefficient size to the foreign-born effect (as a test of the booming city hypothesis). Since FB is a percentage, and the left hand-side is logged, the coefficient is readily interpretable. If underlying economic conditions are the cause of the correlation between FB and W, $\beta_2 > 0$ and FB and MIG should be highly correlated, since native-born Americans (particularly if they have the same age cohort) should respond similarly to economic events.

An additional specification that accommodates further for endogeneity by controlling for native-born Americans flows from other states as well as from the same state is:

$$W_i = \alpha + \beta_1 FB_i + \beta_2 MIG_i + \beta_3 \Delta SS_i + \beta_4 \Delta MIG_i + \beta_i Z_i \tag{2}$$

where ΔMIG is the change in the native-born from 2005 to 2010 normalized (or divided by) population in 2005, and ΔSS is the change in the native-born population from 2005-2010 for the MSA i from the same state divided by population in 2005, and potentially controls for negative net migration flows which may exist if native-born Americans negatively respond to foreign-born inflows. For expediency we refer to these two terms as interstate and intrastate migration flows. If a spurious correlation was driving the result due to a positive unobservable economic shock, we would expect native-born Americans to flow to the MSA from other states (ΔMIG) and from within the state (ΔSS), $\beta_2, \beta_3 > 0$. In contrast, if the unobserved shock was due to native-born flight, we would expect $\beta_3 < 0$. In either cases, if the shocks were relevant there would be an omitted variables problem the β_1 would be biased and should differ from its estimate in (2).

A second reason that we report both specifications is their different sample sizes; inclusion of 2005 data for migration flows lowers the sample size to approximately 495. While equations (1) and (2) evaluate whether cities with more immigrants have higher wages, it is also important to test whether cities experiencing increasing inflows of immigration decrease the MSA's Black wage rate. Hence, we test the effects of foreign-born flows (ΔFB) flows from 2005 to 2010 on logged wages in 2010, $W_{i,2010}$, and accommodate for native-born flows:

$$W_{i,2010} = \alpha + \beta_1 \Delta FB_i + \beta_2 \Delta MIG_i + \beta_3 \Delta SS_i + \beta_i Z_i \tag{3}$$

where ΔFB is the immigrant flow (change from 2005 to 2010 divided by the population in 2005). The distinction between the regressions is subtle. Borjas (2003) argues that the static approach in (1) potentially ignores the long-run adjustment of native-born labor flows that equilibrate the market by moving away: "These factor flows would re-equilibrate the market. As a result, a comparison of the economic opportunities facing native workers in different cities would reveal little or no difference because, in the end, immigration affected every city, not just the ones that actually received immigrants". To accommodate for Borjas' concerns, equation (2) adjusts for native-born flows from other states and movement within the state, and (3) evaluates the current impact of rising immigrant inflows (while controlling for equilibrating domestic migration labor flows) on Black wage rates, presumably before or during the long-run labor adjustment. It further can be used to directly test Borjas' criticism of the metro approach which ignores equilibrating labor flows since our approach tests the importance of both immigrant and native-born flows on an MSA; e.g., if $\beta_1 > 0$ and β_2=0 (or $\beta_1 > \beta_2$), then the metro approach is valid.) Additionally, using annual data, we test whether foreign-born inflows affect the growth rate of wages while controlling for native-born flows :

$$\Delta W_i = \alpha + \beta_1 \Delta FB_i + \beta_2 \Delta MIG_i + \beta_3 \Delta SS_i + \beta_i \Delta Z_i \tag{4}$$

Lastly, Card and DiNardo (200) and Card (2007) presents a specification based on a model where each city produces output using a production function that depends on a CES aggregate.

In this case, logged average wages depend on local skill groups shares and productivity differences across cities. Card (2007) then regresses logged wages on the log of the immigration share in each city (LFB_i) and two control variables: the log of city size, ($LTPOP_i$), and the fraction of college-educated workers in the city. We also include the Black dropout rate; note, Card does not include the effect of migration.

$$W_i = \alpha + \beta_1 LFB_i + \beta_2 LTPOP_i + \beta_3 COLG_i + \beta_4 DROP_i \tag{5}$$

2.4. A Graphical View of the Relationship between Immigration, Domestic Migration and Economic Outcomes

Before presenting the regressions, we examine Borjas, Freeman, and Katz's conjectures concerning the extent of simultaneity and the response of native-born Americans to immigration flows. To gain insight, we present several scatterplots of the relationship between foreign and native-born migration as well as their relationships to Black wages for 910 MSAs. Figure I shows the lack of a strong relationship between immigrant and domestic migration share from other states as the correlation is a relatively modest 7%. Figure II illustrates that this weak link is not due to demographic differences, since the correlation between the foreign-born share of working age (18-64) and domestic migration share that are working age (18-64) is approximately zero. Figure III presents the relationship between immigration and domestic migration flows (change in foreign and domestic born from other states from 2005 to 2010 divided by the MSA 2005 population) and reveals a correlation of only 3%. Figure IV and V also highlight the weak relationship between native and foreign-born flows of working age residents as well as between native and foreign-born flows of high school dropouts; in both cases, there is no significant correlation.

The lack of a significant relationship between native and foreign-born shares as well as between native and foreign-born migration flows has two implications. First, there is no evidence to support the contention that immigrants are deterring non-natives from moving to the region. Second, the lack of significant comovements casts doubt (among several pieces of evidence) on the endogeneity bias potentially caused by booming cities simultaneously attracting immigrants. Since if booming cities attracted immigrants, these cities should be equally attractive to native-born Americans. Thus, MSAs that have boomed should have a significant relationship between foreign and domestic migration shares, and cities that are booming should experience significant comovements in both foreign and native-born Americans inflows. One reason immigration and domestic migration flows may differ is that immigrants tend to choose cities based on historical patterns, Card and Dinardo (2000) state "newly arriving immigrants to settle in places where previous immigrants from the same country already live." (See also Bartel, 1989; Bartel and

Koch, 1991; Dunlevy, 1991). Zavodny (1999) finds that the presence of other immigrants is the primary determinant of the geographic destination of new immigrants "as they seek the presence of other foreign-born persons." Location choice then is not driven by the booming city, but the exogenous presence of other immigrants.

Figures VI presents further evidence on the Borjas, Freeman, and Katz contentions by examining the link between immigrant share in 2005 and domestic migration flows, while Figure VII presents a scatterplot on immigrant share and in-state migration flows. Here the evidence is slightly contradictory. Figure VI displays a modest negative relationship (-10% correlation) between immigrant share and domestic migration flows, which provides additional evidence against the endogeneity supposition, but modest support for the negative response of native-born Americans to foreign-born inflows. However, Figure VII exhibits a very strong relationship (+26% correlation) between the foreign-born share in a MSA and in-state migration flows, and provides strong evidence against the contention that immigrants are leading to native-born flight as cities that have more immigrants tend to retain native-born Americans.[6] This is unlikely due to endogeneity as native-born from other states should also to move to the state, which is clearly not the case. It is hence not easy to explain this correlation and may indicate that it is important to control for this variable; we further investigate the effects below.

Figure VIII illustrates a strong association between the immigrant share in 2005 and Black median income growth from 2005-2010, and Figure IX displays a similar positive link between immigrant flows and median income growth over the same period. Figure X highlights that MSAs with immigration inflows (from 2005-2010) experience substantial higher Black wages in 2010. Overall, Figures VIII-X indicate a significant positive link between immigration and African American wages as the correlations (Prob. Values) are 24% (.000), 15% (.000) and 21% (.000), respectively. If these relationships were purely due to an unobserved shock, we would expect a similar link to occur for domestic migration. Figures XI-XIII highlight a positive link between domestic migration in 2005 and Black income growth, domestic migration flows and Black income growth, as well as domestic migration flows and Black wages in 2010; however the correlations (Prob. Values)are substantially lower: 14% (.001), 6% (.113) and 5% (.265). Lastly, Figure XIV reveals only a small, insignificant 3% (.42) bond between changes in population of same state residents and wage growth. These results casts further doubt on the relevance of Borjas' endogeneity contention; while there is a significant relationship between immigrants and

[6]Results support Butcher and Card (1991), Wright et al. (1997) and Card and Dinardo (2000) who conclude that native outflows from large MSAs are unrelated to immigrant inflows, and reject the demographic balkanization theory of Frey (1995, 1996) and Borjas et al. (1997) that immigrant inflows lead to native outflows.

residents of the same state (so immigrants are not leading to native-born flight), there is no evidence this is due to the unobserved booming cities argument, as no significant link occurs between same state migration flows and African American wages or wage growth.

Overall, although these are only scatter plots that illustrate correlations, they are for a substantial number of MSAs and convey three key messages: there is little relationship between native and foreign-born migration, domestic migration is not substantially correlated to economic activity, and immigration and African American economic activity are significantly related. More importantly, the regression tables that follow confirm, that even after controlling for demographic MSA characteristics, the link between immigration and high wages is positive and robust; further, the immigration effect on wages (and other labor market measures) is substantially higher than the relationship between domestic migration and these same labor market variables.

2.5. GMM assumptions

GMM provides consistent estimates when the instruments are correlated with the endogenous explanatory variables, and orthogonal to the error term. GMM can yield biased inference if there are weak instruments - this occurs when the set of instrumental variables do not adequately explain the endogenous variable. Before GMM tests are presented, we evaluate the validity of the assumptions and test whether the instruments adequately explain foreign-born. Our instruments are the six control variables plus several additional variables related to foreign-born background characteristics and demographics. These are the foreign-born dropout rate, the foreign-born high school graduation rate, the foreign-born college graduate rate and the total amount of schooling; additionally, we use the total population, Black population and total college graduation rate.

A regression of the immigration share on the instruments yields an adjusted R^2 of 61.2% and F statistic of 118.2 (Prob.=.0000), and most variables are significant at the 5% level.[7] Staiger and Stock (1997) state that a weak instrument problem exists when the first-stage F statistic is less than ten. Stock, Wright and Yogo (2002) further posit that the first-stage F statistic must be large, typically exceeding 10, for TSLS inference to be reliable, and a small R^2 implies that the instruments are weak.[8] The Cragg-Donald F statistic used for multiple endogenous variables is 2.23 and not significant using the Stock-Yogo (2002) test statistics. An alternative measure is the significance of the foreign-born on the additional instruments; the R^2 and F statistic are 41.1% and 91.2, respectively.

[7]We always report the adjusted R^2 statistic.

[8]Stock, Wright and Yogo write that F statistic is valid when there is only one endogenous variable. Although both foreign and domestic immigration shares are possibly endogenously, they are uncorrelated (see above), so we can test them separately using the F statistic specification mentioned above.

To test whether the GMM model assumptions are valid and there are sufficient moment conditions, we use Hansen's J-test, which is a test for over-identifying restrictions. The J-statistic from the GMM regression is 3.2 [Prob. .65], and implies we cannot reject the null hypothesis that the model is valid. We evaluate the orthogonality assumption of GMM, which is the second condition of valid instruments with the C_T test or Eichenbaum, Hansen and Singleton (EHS) Test. This test evaluates the orthogonality condition of a sub-set of the instruments (the foreign-born background characteristics and population variables).[9] The test statistic is 3.01 [Prob. .45], and hence the null that the additional instruments are exogenous cannot be reject. For the Latin American share, the Hansen's J-statistics are 3.01, there are large R^2 and F statistic for the first stage regression (62% and 123, respectively), the C_T test by EHS is 3.0 and Cragg-Donald (1993) statistic is 4.64. Hence, clearly, there is not a weak instrument problem.

3. Regression Results

3.1. Wages and Immigration

Table 1 presents the effect of immigration and domestic migration on African American wages. Results for (1.1) reveal that a 1% increase in FB (the immigration share) is associated with a 1.6% rise in Black median wages with a corresponding t statistic of 7.8 (Prob. Value = .0000). The coefficient is economically large; e.g., consider the St. Louis MSA with an immigrant share of 4.5%. If St. Louis had an immigration share equal to other top 30 MSAs (13.5%), median wages would be 13% higher. The R^2 statistic equals 22%, and indicates that the regression explains a significant amount of Black wages. The FB estimate is roughly five times larger and significantly different than the MIG estimate; further, since FB and MIG are basically orthogonal, removing MIG changes FB only slightly, from 1.6 to 1.5. The GMM specification (1.2) also highlights that increases in FB have a significant and economically sizeable effect on Black wages as the coefficient is 2.6 with a t statistic nearly 6 (Prob.=0.0000).

Equations (1.3) and (1.4) show a significant positive relationship exists between Black wages and LAT (the share of Latinos in an MSA); the Latino OLS and GMM estimates are 1.4 and 3.1 with t statistics of 5.1 and 4.2, respectively; the R^2= 20%. Equations (1.5)-(1.8) highlight that increases in FB and LAT also lead to significant increases in African American mean wages; the coefficients estimates are similar and the t stats on average exceed 5. The R^2= 34% for (1.5) and 32% for (1.7). A similar positive, significant and economically sizeable relationship exists between immigration and per capita Black wages; e.g., (1.9)-(1.12) highlight that the FB (LAT)

[9]This test is computed as the difference in two Sargan (1952) statistics (or two J-statistics) and thus is also known as the difference in Sargan statistics.

estimates are large and the t statistics on average also exceed 5. The R^2= 37% for (1.9) and 38% for (1.11). Note, the FB and LAT estimates are roughly similar for the OLS and GMM estimates across all three measures of wages, and FB estimates average more than three times larger than the MIG estimates across the 12 equations. We also evaluate the effects of immigration on Black men; BGH posit that they are more likely, if economic conditions deteriorate, to commit crimes and become incarcerated. The immigration estimates are sizeable, very significant and substantially greater than MIG; the OLS (GMM) estimates are 1.8 (3.1) for FB and 1.7 (2.9) for LAT, with t statistics averaging approximately 5.

Equations (1.13)-(1.24) use equation (2), and re-estimate equations (1.1)-(1.12) with two additional control variables: interstate (ΔMIG) and intrastate migration/population flows (ΔSS); it does not include the domestic migration share, MIG. For conciseness, we report only FB, ΔMIG and ΔSS as the estimates for the other control variables do not change markedly. The sample size falls from 908 to 496, due to fewer observations in 2005. The FB estimates in (1.13)-(1.24) reveal that increases in immigration are linked to significant increases in Black median, mean, and per capita wages as the t statistics generally range from 5 to 7, all with Prob. of 0.0000. The R^2 for (1.13), (1.17) and (1.21) are 34%, 53% and 56%, and for (1.15), (1.19) and (1.23) are 31% 52% 54%, respectively. These statistics imply that we can explain a considerable amount of the variation in African American wages across U.S. metros. The increase in the R^2 occurs as the 2005 data includes all metropolitan statistical areas, but excludes most micropolitan statistical areas, which have a higher sampling variance according to the Census. Most importantly, the FB estimates are similar to equations (1.1)-(1.11) and indicate that accommodating for migration flows and different sample size do not alter inference.

Table 2 presents additional specifications to assess the robustness of the results. We first examine Nickell and Saleheen's foreign to native-born immigration share. Results in (2.1)-(2.4) are similar in significance to (1.1)-(1.4) with t statistics for FB that exceed 5 and for LAT that exceed 4. Equations (2.5)-(2.08) present the estimates using the one-year 2010 Black Median Wage, FB and MIG variables; the coefficient estimates are similar to the 2010 five-year average estimates in (1.1)-(1.4), and cast doubt on the relevance of the equilibrating labor market hypothesis (It is unlikely, as well as there is no evidence, that a positive immigration shock will lead immediately within one-year to negative net migration; evidence using growth rates additional support this contention and cast doubt on the importance of negative net migration). Lastly, equations (2.9)-(2.12) uses 2007 wages, foreign-born and native-born shares, and the unemployment rate lagged to 2005. The sample size is 495, and the R^2 is 36%. The OLS (GMM) FB estimates are 1.9 (2.1); this compares to 1.6 (2.6) in Equation 1.1 (1.2). The similarity of the estimates highlights the robustness to an alternative sample period in a different period of the business cycle. Lastly, we tested Card's (2007) specification given by (5), where the FB and LAT logged estimates for the OLS (GMM) specifications are 0.1 (0.2) and 0.06 (0.1), respectively. All t stats are significant at the 99.9% level. Overall, Tables 1 and 2 demonstrate that the effects on immigration including from Latin America, are robust across different wage specifications - in all cases, the FB and LAT estimates are positive, significant and substantially larger than the MIG parameter estimates.

Table 3 explores whether immigration affects African Americans differently depending on their income levels, which are a proxy for skills and experience. The dependent variable in equations (3.1)-(3.4) is the share of the Black population with income less than \$20,000. The FB estimates for the OLS (GMM) are approximately -.5 (.-5) with t statistics -5.0 (-4.0). The LAT estimates are -.6 (-.7) with t statistics of -4.4 (-3.3), and hence similar to the FB estimates. These results imply that cities with more immigrants including Latinos have significantly fewer Blacks with low income. An alternative specification that uses the official poverty definition of the Census also has significant FB estimates of -.43(.09) and -.62(.17) for the OLS and GMM regressions, respectively; the R^2 is 38%, but there are only 280 observations compared to the 908 observations for (3.1). Additionally, if the \$15,000 threshold is used, the FB (s.e.) coefficients are -.6 (.12) and -1.0 (.31) for the OLS and GMM specifications, and hence again there is significant evidence that MSAs with more immigrants have fewer poor Blacks. Finally, Card's specification yields highly significant negative coefficients (s.e.) as well since the GMM specification for FB and LAT equals .12 (.017) for -.22 (.019), respectively and further support the premise that immigration is not creating a Black underclass with incentives to commit crimes.[10]

In sharp contrast, more immigration is associated with more upper-middle class/rich African Americans (incomes exceeding \$75,000); the FB and LAT estimates in (3.5)-(3.8) are roughly +.6 with t statistics averaging above 5. Results are also significant for incomes greater than \$60,000 with FB and LAT coefficients ranging from .6 to .8 with t statistics again averaging above 5. In all specifications, results indicate that cities with more foreign (or Latin American) born as a share of population have significantly more African Americans with higher income; the coefficients are economically sizeable and the Prob. values are less than .001. The Card specification also supports the link between immigration and rich African Americans, as the t statistics for FB and LAT are all above 5. Lastly, we examine whether immigration increases

[10]The J-statistics for the GMM specifications in Table 3 along with the alternative tests using the poverty line and \$15,000 specification range between 3-8, and are not significant; further, C_T tests and Cragg-Donald statistics support the GMM assumptions.

the rich to poor gap among African Americans (incomes exceeding \$75,000 - incomes $<$ \$20,000) in (3.9)-(3.12). The OLS and GMM regression both reveal that the FB coefficient is .8 with a t statistic exceeding 4 (Prob. 0.000) and an R^2 estimate of 24%, which is sizeable for explaining an income share gap between rich and poor. The LAT estimates are also positive and sizeable, indicating that increases in Latinos to a metro are associated with more rich and less poor Blacks; further, FB averages 3 times MIG across (3.1)-(3.12). Equations (3.13)-(3.24) use (2) and confirm that the results are robust to domestic migration flows across states (ΔMIG) and within states (ΔSS). For conciseness, we report only FB (or LAT), ΔMIG and ΔSS estimates. The fact that we are accommodating for migration flows (as well as other relevant variables) makes it very unlikely that there is a spurious correlation of more immigrants/more rich Blacks and fewer immigrants/less poor Blacks.

Table 4 investigates the impact of different foreign-born age cohorts on median wages of similar age cohorts of African Americans. Grouping by age and income is standard in the immigration literature. The dependent variables in (4.1)-(4.4) are the share of the young (aged 18-24) Black population that are poor (incomes $<$ \$15000). The relevant independent variables are the share of young (18-24) foreign and native-born in the MSA along with the relevant demographic control variables.[11] Results show that MSAs with more young immigrants including Latinos have lower rates of poverty for young Blacks; the OLS FB and LAT estimates are relatively similar (roughly -1.3 each) with t statistics approximately -7. The R^2 estimates are 31% and 30% for (4.1) and (4.3). The GMM estimates further for both FB and LAT are similar and highly significant. The dependent variables for (4.5)-(4.12) are the income shares below \$15,000 for Blacks aged 25-44 and 45-64, and the independent variables are foreign and native-born shares with the correspondingly age cohort, plus the same control variables. All FB and LAT estimates are significant with t statistics averaging -5.5 and the R^2 are 32%, 35%, 36% and 35% for (4.5), (4.7), (4.9), and (4.11) respectively.

Equations (4.13)-(4.24) possess the same age groupings, but examine the impact of foreign and native-born on upper-middle income African Americans. Results are starkly different. MSA with more young foreign-born including Latinos have significantly more young well-off African Americans. Additionally, MSAs with more immigrants including Latinos aged 25-44 or 45-64 also have significantly more well-off African-Americans (with incomes $>$ \$60,000; results for \$75,000

[11]The GMM first stage yields an R^2statistic of 26% and an F statistic of 20, and implies the second stage GMM regression does not suffer from weak instruments; J and C_T tests indicate the orthogonality condition of the instruments is valid. Age grouping for immigrants from Latin America are not provided by the Census for most MSAs, so we assume they are similar to foreign-born immigrants of their same age group in their MSA. We tested this assumption for 200 MSAs where there was Latino data and could not reject this assumption.

are similar). This table presents clear evidence that MSAs with young, middle-aged or older immigrants also experience higher wages for young, middle-aged or older Black workers earning high wages, and there are fewer young, middle-aged or older poor African Americans.

Table 5 considers alternative levels/differenced specifications using (3)-(5).[12] Results in (5.1)-(5.4) in Table 5 indicate that cities experiencing large inflows of immigrants (from 2005 to 2010) including from Latin America have higher African American wages in 2010; the t statistics all exceeding 4 with Prob. 0.001. Accommodating for native-born flows from other MSAs do not alter the results as (4.13)-(4.16) possess similar FB estimates. Further, MSAs experiencing large inflows of immigrants (from 2005 to 2010) also experience higher wage growth (from 2005 to 2010). The OLS and GMM estimates for both FB and LAT once again are economically large and highly significant (t stats exceed 4). Additionally, (5.9)-(5.12) use Equation (6) below and demonstrates that MSAs with a higher shares of immigrants (including Latinos) have significantly higher wage growth from 2005 to 2010. The results are robust to controlling for native-born interstate and intrastate migration flows (5.21-5.24). Overall, Table 5 demonstrates that MSAs that have increasing immigration inflows including from Latin America experience higher wages and wage growth; further, MSAs with more immigrants in 2005 possess significantly higher wage growth 2005-2010. There is no evidence of spurious correlation as MSAs with more native-born migrating from other states do not experience higher wages or wage growth; e.g., the MIG estimates average one-tenth the FB estimates and are not significant.

$$\Delta FB_i = \alpha + \gamma_1 FB_{i,2005} + \gamma_2 MIG_{i,2005} + \gamma_3 W_{i,2005} + \gamma_i Z_{i,2005} \tag{6}$$

3.2. Causality

Table 6 extends Table 5 results by more explicitly examining causality results. We use the following specifications, where ΔW_i is the change in logged median wages from 2005 to 2010:

$$W_i = \alpha + \beta_1 FB_{i,2005} + \beta_2 MIG_{i,2005} + \beta_3 W_{i,2005} + \beta_i Z_{i,2005} \tag{7}$$

$$FB_i = \alpha + \gamma_1 FB_{i,2005} + \gamma_2 MIG_{i,2005} + \gamma_3 W_{i,2005} + \gamma_i Z_{i,2005} \tag{8}$$

$$\Delta W_i = \alpha + \beta_1 FB_{i,2005} + \beta_2 MIG_{i,2005} + \beta_3 W_{i,2005} + \beta_i Z_{i,2005} \tag{9}$$

$$\Delta FB_i = \alpha + \gamma_1 FB_{i,2005} + \gamma_2 MIG_{i,2005} + \gamma_3 W_{i,2005} + \gamma_i Z_{i,2005} \tag{10}$$

If β_1 is a significant determinant of wages and γ_3 =0 in (7) and (8), then one-way Granger causality exists. Increases in immigration lead to higher wages, and data reject the spurious

[12] We use as additional controls the share of the population that is African American and the metro's total dropout rate; we drop the manufacturing share and age as these variables are relatively constant across years, the unemployment rate as it lagged and the high school graduation as it is rarely significant.

correlation argument that wages lead to more immigrants. Additionally, we test (9) and (10); if $\beta_1 > 0$ and $\gamma_3 = 0$, then increased immigration leads to higher wage growth and not vice versa (higher wages do not attract higher immigration or immigration inflows to the MSA). Results in (6.1) and (6.13) indicate that cities with more immigration in 2005 have higher wages in 2010, and wage growth from 2005-2010; e.g., $\beta_1 > 0$. Whereas, (6.2) and (6.14) reveal that cities with higher wages (ECON05 row) in 2005 do not experience more immigrants in 2010 or immigrant inflows from 2005-2010; e.g., γ_3=0. Hence, there is significant evidence of one-way causation: MSAs with more immigration have higher Black wages and wage growth, and not vice-versa.

Equations (6.3) and (6.17) highlight that MSAs with higher immigrant shares in 2005 have significantly less poor Blacks (incomes $<$ \$20,000) and a decreasing percentage of poor Blacks; similarly, (6.4) and (6.18) show that cities with less poor Blacks have more immigrants and immigrants inflows as the $\gamma_3 < 0$ under the ECON05 variable. This implies there is evidence of bi-causality. In contrast, for rich Blacks, $\beta_1 > 0$ in (6.5) and (6.17), and $\gamma_3 = 0$ in (6.6) and (6.18). This supports significant evidence of one-way causation: immigration leads to MSAs with more rich Blacks, and not vice versa. Results in (6.7) and (6.8) along with (6.19) and (6.20) provide additional robust evidence of one-way causation from immigration to higher Black male wages in 2010 and wage growth from 2005 to 2010. Lastly, results in (6.9) and (6.10) along with (6.21) and (6.22) use 2007 wage data instead of 2005, and provide further significant evidence of one-way causation from immigration in 2007 to higher wages in 2010 and not vice versa (since $\gamma_3 = 0$ in (6.10) and (6.22), there is not evidence that higher wages lead to increased immigration and immigration inflows). The results are robust to additional demographic controls.[13]

3.3. Unemployment and Employments Rates

Tables (7) and (8) assess the effects of immigration including from Latin America on Black unemployment rates. Equations (7.1)-(7.4) highlight that MSAs with higher immigration have significantly lower Black unemployment rates. This effect is economically sizeable and significant. The OLS (GMM) equations highlight that MSAs with 6% (4.5%) more immigrants as a share of their population have a 1% lower unemployment rate with t statistics of -4.5 (-3.3). MSAs with more Latinos also experience significantly lower Black unemployment rates. Since young African Americans have high unemployment rates and young men are particularly more likely to be incarcerated, we focus on the determinants of young, Black men ages 20-24 in (7.5)-(7.8) and ages 25-34 in (7.9)-(7.12). The immigration and migration share use a similar age profile,

[13] Lastly, note domestic migration also Granger Causes wages, since the $MIG05$ estimates are significant in equations (6.1), (6.3), (6.5) and (6.7). To some extent, this is evidence that supports the booming city argument; however, the domestic migration ($MIG05$) estimates average however half the immigration estimates($FG05$).

20-24 and 25-34. Results clearly indicate that young Black men have lower unemployment rates in MSAs with more young immigrants including Latinos. Estimates for FB and LAT are significantly greater than MIG.

Equations (7.13)-(7.24) have the same independent variables as (7.1)-(7.12), but estimate (3) to evaluate whether MSAs with higher immigration inflows (while controlling form domestic migration) have lower Black unemployment rates. In all twelve equations, MSAs with rising immigration flows experience declining unemployment. A second difference between (7.1)-(7.12) and (7.13)-(7.24) is the number of observations falls from 895 to 594 as 2007 data includes a smaller set of MSAs; note, 2007 is used in lieu of 2005 data, because 2005 has less than half the observations of 2007. The R^2s in (7.5) and (7.9) are 26% and 38%, respectively. The last two columns of Table 6 address causation for unemployment. Increases in immigration in 2007 lead to significantly lower unemployment in 2010 and falling unemployment from 2007 to 2010 as $FB05$ is significant and negative in (6.11) and (6.23). However, since γ_3=0 in (6.12) and (6.24), there is no evidence that unemployment effects immigration inflows. As a result, there is significant evidence of one-way Granger Causation. Additional controls for education, age or occupation in 2007 do not change the results.

Table (8) explores different specifications of both foreign-born and the control variables on unemployment and changes in unemployment; e.g., (8.1)-(8.6) use changes in the control variables from 2007-2010, while (8.7)-(8.8) employ the 2007 control variables in levels, and examine changes in unemployment. The negative relationship between Black unemployment and foreign-born shares or flows is robust using controls in levels or percentage changes: immigration leads to lower Black unemployment and falling unemployment rates. (8.13)-(8.20) show the significant negative link between immigration and Black unemployment is also robust after controlling for domestic migration flows. The R^2=34%, and most coefficients are significant. Further, the coefficients for FB and LAT are large, and economically sizeable. Although not shown for conciseness, allowing for changes in interstate and intrastate migration flows do not alter inference. Tables (7) and (8) results are clear and informative (as well as robust to functional form in levels or differences): MSAs with more immigrants and increasing flows of immigrants have both low Black unemployment rates and declining rates of Black unemployment.

Table (9) investigates the impact of immigration on both Black employment rates (Black employment divided by its civilian population) and employment growth. Because unemployment rates do not include discouraged workers, they may understate the true level of unemployment, particularly for young Blacks who may have dropped out of the labor force. Further, policymakers are interested in generating jobs for their citizens, so it is important to understand the link between immigration and job creation. Equations (9.1)-(9.4) demonstrate that cities with more foreign-born (as a share of the MSA) experience higher Black employment rates. Equations (9.5)-(9.12) report the relationship between young immigrants aged 20-24 and 16-19 and young Black men with similar ages. Job creation for this demographic cohort is important, since obtaining a job makes it more unlikely a young Black man will be incarcerated. FB and LAT estimates are significant and positive in all cases - MSAs with more young immigrants have more jobs for young, Black men. Lastly, we test whether immigration inflows leads to more jobs and job growth. Equations (8.9)-(8.10) and (8.11)-(8.12) in Table (8) test equations (3) and (4), respectively. A significant positive relationship exists between immigrant share in 2007 and subsequent changes in job growth; e.g., the t statistics in (8.9)-(8.10) exceed six and three, respectively. There is also a significant positive link between immigration flows and changes in job creation among African Americans as the t statistics in (8.11)-(8.12) are highly significant. Thus, MSAs with more immigrants and immigrant inflows including from Latin America experience higher employment growth for African Americans.

3.4. Incarceration Rates and Immigration

BGH paper begin their paper with the following: "The employment rate of African-American men fell from 74.9% in 1960 to 67.9% in 2000..The decline in labor market participation among Black men was accompanied by a rapid increase in the number of Black men in correctional institutions. As recently as 1980, only 0.8% of Black men (and 1.4% of Black high school dropouts) were incarcerated, by 2000, 9.6% of Black men (and 21.2% of Black high school dropouts) were incarcerated." They blame immigration "as immigrants disproportionately increased the supply of workers in a particular skill group, the wage of Black workers in that group fell, the employment rate declined, and the incarceration rate rose." However, if this were true, the sustained increase in immigration over the last two decades should have led to declining economic conditions and increased incarceration rates among African Americans.

What do more recent data show? Annual data for incarceration rates and immigration go back to 1993, and Figure XV graphs this relationship. The positive slope of immigration is unmistakeable (up 57%), but the incarceration rate of Blacks (Whites) have declined 21% (11%). The BGH work emphasized that Black incarceration rates rose faster than Whites; however, from 1995, the relative incarceration rate of Blacks to Whites fell 18%. Figure XVI plots percentage changes in immigration and Black incarceration rates, and no relationship exists.[14]

[14]In addition, BGH groups by age and education cohorts and the figures in their paper illustrate that the African

Do MSAs with more immigration inflows have higher Black incarceration rates? The 2010 Census reports the number of African Americans living in institutions including detailed breakdowns of the number in nursing homes, juvenile facilities and federal, state and local jails. In previous years, this variable is not reported or there is no detailed breakdown to obtain local incarceration rates. We take the number of Blacks incarcerated in local jails and divide by the number of Blacks in the MSA to obtain the the Black incarceration rate for MSA i. The sample size is 904. Figure XVII highlights a significant negative relationship between immigration inflows and incarceration rates; the correlation is -14% with Prob.=.001. Immigration does not lead to Black crime. Figures XVIII and XIX illustrate a negative link between Black incarceration rates and both domestic interstate and intrastate migration flows; however, in both cases, the correlation is less than half the foreign-born relationship and not significant. The following regressions confirm these relationships.

Table 10 considers whether increased immigration including from Latin America to an MSA contribute to higher Black incarceration rates. Equations (10.1)-(10.4) reveal that a significant negative relationship exists between immigration and Black incarceration rates. The FB and LAT estimates are highly significant in all four specifications with t statistics of -4.1 (-4.4) and -2.8 (-3.9) for the OLS (GMM) regressions, respectively. These estimates imply that MSAs with more immigrants (including from Latin America) have lower Black incarceration rates. Equations (10.5)-(10.8) test (3) and evaluate the impact of FB (and LAT) controlling for migration flows from 2005-2010 on Black incarceration rates; the sample size is 495. MSAs with rising inflows of immigrants including Latinos have lower Black incarceration rates. Equations (10.9)-(10.10) use 2007 FB, MG and controls with a sample size of 650. These results show that MSAs with high immigration shares also experience low rates of Black incarceration. Equations (10.11)-(10.12) use different controls; it adds the the total employment rate in 2008 and the percent of Blacks in manufacturing to control for the MSA's economic environment and drop marriage and total high school graduation rates (which were typically insignificant in Table 10). The FB estimates are approximately -.4 for both OLS and GMM with t statistics of -5.0 and -4.4 with Prob. .001, respectively. For conciseness, we do not report the LAT estimates, but they have similar parameter estimates and are highly significant. Lastly, equations (10.13)-(10.24) additionally control for native-born migration flows and has a sample of 487. The FB and LAT estimates are robust to this specification, and show that MSAs with more immigration experience lower rates of Black incarceration, regardless of domestic migration. Additionally, throughout the

American cohorts move closely. In this case, a common contemporaneous unobserved shock can simultaneously affect all cohorts. This can lead to spurious inference as the observations are not independent, but correlated and imply the t statistics will be biased upwards.

table the FB estimates are again substantially more negative than the MIG estimates.

Overall, the evidence is clear that endogeneity is not a problem: use of GMM accommodates for endogeneity, the FB estimates are significantly different than the MIG estimates, and controls for domestic migration flows do not change inference. Moreover, results are robust across different sample sizes, different years and different specifications, including immigration shares and flows.

4. Conclusion

This paper provides extensive evidence that African Americans in MSAs with more immigration experience significantly higher wages, lower unemployment and higher job creation; it is the first study in more than two decades to show that Latino immigration increases Black wages and employment, and lowers unemployment, particularly among youth. The effect is typically very significant with t statistics often exceeding four or five, and robust across different age groups and income levels. Increases in foreign born share and inflows including Latinos to an MSA is associated with less Blacks in poverty and more with higher income; this positive impact is robust across young, middle-aged and older Black workers. The rise in immigration moreover has not led to sustained rises in the Black incarceration rates. Cities with more foreign-born or changes in foreign-born including Latinos have lower Black incarceration rates.

We show that endogeneity is not a significant problem plaguing the results. If booming cities attract immigrants or if immigrants lead to negative net migration, controlling for native-born migration from other states or the same state should be important. However, native-born shares and flows are nearly orthogonal to foreign-born shares or flows, and do not affect the regression's parameter estimates. Increases in foreign-born workers, not increases in native-born workers from other states, lead to significantly higher African American wages and wage growth and lower unemployment. Causality tests moreover reveal that cities with more immigrants including Latinos Granger Cause higher wages and lower unemployment; whereas, cities with high Black wages or low unemployment do not lead to more foreign-born including Latinos. Thus, the results significantly reject the hypothesis that booming cities cause immigration or immigration inflows, since results significantly support one-way causation from immigration to improved Black labor market opportunities. The paper provides strong evidence in support of the cross sectional metro approach of Card, Peri and others.

Table 1: **Wages for African Americans**

VAR	FBOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	LATOLS	LATGMM
	(1.1)	**(1.2)**	**(1.3)**	**(1.4)**	**(1.5)**	**(1.6)**	**(1.7)**	**(1.8)**	**(1.9)**	**(1.10)**	**(1.11)**	**(1.12)**
CON	9.631**	8.704**	9.671**	8.598**	9.249**	8.063**	9.256**	7.994**	10.175**	8.540**	10.185**	8.504**
	0.135	0.350	0.135	0.377	0.146	0.362	0.150	0.380	0.206	0.461	0.215	0.485
FB	1.614**	2.632**	1.432**	3.121**	1.360**	3.858**	1.020**	3.062**	1.992**	3.807**	1.612**	4.655**
	0.204	0.411	0.278	0.764	0.236	0.464	0.300	0.662	0.217	0.609	0.241	0.913
MIG	0.332**	0.963*	0.360**	1.236*	0.440**	1.929**	0.496**	0.340	0.450**	3.012**	0.457**	3.700**
	0.108	0.444	0.109	0.640	0.101	0.415	0.101	0.578	0.119	0.648	0.121	0.798
COLG	0.176	0.017	0.184	-0.010	0.005	-0.057	0.011	-0.062	0.072	-0.107	0.097	-0.145
	0.127	0.162	0.128	0.172	0.066	0.094	0.067	0.098	0.185	0.209	0.187	0.221
DROP	0.084	0.172	0.070	0.177	-0.476**	-0.356**	-0.489**	-0.366**	-1.238**	-1.125**	-1.249**	-1.119**
	0.097	0.102	0.096	0.107	0.085	0.103	0.086	0.105	0.185	0.187	0.184	0.189
HS	-0.438**	0.193	0.137*	0.207	0.146	0.179	-0.692**	-0.253	-1.243**	-0.781**	-1.281**	-0.789**
	0.137	-0.472	-0.067	-0.678	-0.237	-0.692	0.148	0.182	0.216	0.282	0.213	0.295
MAN	0.488**	0.523	0.537**	0.349	0.178	0.233	0.399*	0.362	0.313	0.341	0.364	0.470
	0.155	0.523	0.155	0.206	0.278	0.399	0.180	0.245	0.205	0.240	0.206	0.263
UNE	-0.012*	0.003	-0.014*	0.003	-0.021**	0.001	-0.019**	-0.001	-0.016*	-0.001	-0.016*	-0.002
	0.006	0.009	0.006	0.009	0.005	0.009	0.006	0.009	0.006	0.011	0.007	0.013
AGE	0.014**	0.015**	0.014**	0.014	0.021**	0.024*	0.022**	0.025*	0.015**	0.034*	0.016**	0.030*
	0.003	0.010	0.003	0.011	0.003	0.010	0.003	0.010	0.004	0.012	0.004	0.014
	(1.13)	**(1.14)**	**(1.15)**	**(1.16)**	**(1.17)**	**(1.18)**	**(1.19)**	**(1.20)**	**(1.21)**	**(1.22)**	**(1.23)**	**(1.24)**
FB	1.68**	2.597**	1.665**	2.667**	1.489**	2.485**	1.471**	2.814**	1.840**	3.638**	2.448**	2.636**
	0.224	0.5497	0.283	0.617	0.198	0.310	0.238	0.507	0.428	0.650	0.320	0.499
ΔMIG	0.440	3.374**	0.331	3.146*	0.320	2.289*	0.228	2.289*	0.321	2.613**	0.271**	2.645**
	0.308	1.147	0.352	1.530	0.255	0.930	0.251	0.931	0.215	0.226	0.853	0.877
ΔSS	-0.033	-1.962	-0.440	-1.294	-0.834	-1.869*	-0.901	-2.908*	-0.375	-2.477	-1.248	-2.249*
	0.268	1.223	0.275	1.394	0.202	0.889	0.207	1.143	0.287	1.541	0.941	1.130

Table 1 reports coefficients and White Heteroscedasticity-consistent standard errors for 2010 African American wages, where FB and LAT represent the 2010 foreign and Latin American born share of the population. Equations (1.1)-(1.4) present median wages, (1.5)-(1.8) are mean wages, and (1.9)-(1.12) are per-capita wages. (1.13)-(1.24) additionally accommodate for domestic migration flows from other states (ΔMIG) and same state migration flows (ΔSS) from 2005-2010; for conciseness, these equations only report the foreign-born share and the migration flows. COL, DROP, HS, MAN, URE are the 2010 Black College graduation rate, Dropout rate, High school graduation rate, manufacturing share, the unemployment rate in 2007, and median age for the MSA. ** (*) indicates significance at the 1% (5%) level.

Table 2: **Alternative Wage Specifications**

VAR	FBOLS	FBGMM	LATOLS	LATGMM	FBOLS	LATOLS	FBOLS	FBGMM	FBOLS	FBGMM	LATOLS	LATGMM
	(2.1)	**(2.2)**	**(2.3)**	**(2.4)**	**(2.5)**	**(2.6)**	**(2.7)**	**(2.8)**	**(2.9)**	**(2.10)**	**(2.11)**	**(2.12)**
CON	9.646**	8.685**	9.676**	8.585**	9.011**	8.718**	8.829**	8.722**	9.678**	8.804**	9.517**	9.704**
	0.135	0.357	0.135	0.382	0.178	0.222	0.194	0.223	0.245	0.477	0.294	0.414
FB	1.104**	1.987**	1.019**	2.527**	1.061**	1.368**	1.079**	1.351**	1.858**	2.114**	1.925**	1.828**
	0.167	0.379	0.216	0.584	0.302	0.657	0.457	0.841	0.218	0.529	0.285	0.610
MIG	0.356**	1.050*	0.372**	1.322*	0.522**	0.805	0.487**	0.874*	0.444**	2.188**	0.415**	1.117**
	0.108	0.442	0.109	0.641	0.125	0.452	0.124	0.450	0.119	0.565	0.120	0.222
COLG	0.175	0.010	0.182	-0.014	0.415*	0.387	0.557*	0.486**	0.565**	0.353	0.783**	0.242
	0.127	0.164	0.128	0.173	0.209	0.228	0.212	0.208	0.175	0.385	0.183	0.452
DROP	0.080	0.172	0.067	0.174	0.795**	0.805**	0.813**	0.802**	0.894**	0.986**	0.386	-0.179
	0.097	0.103	0.096	0.107	0.169	0.181	0.167	0.180	0.275	0.234	0.184	0.407
HS	-0.438*	0.196	0.136*	0.209	0.268	0.388	-0.848**	-0.737*	0.362	0.277	-0.257	-0.015
	0.136	-0.467	-0.053	-0.863	-0.654	-0.848	0.269	0.376	0.177	0.258	0.283	0.340
MAN	0.494*	0.525	0.535**	0.420*	0.234	0.264	0.430	0.397	0.265	1.366	0.251	1.288
	0.155	0.525	0.156	0.208	0.357	0.430	0.235	0.258	0.191	1.108	0.200	1.135
UNE	-0.013*	0.002	-0.014*	0.002	-0.024**	-0.016	-0.020*	-0.019	-0.023	0.000	-0.019	-0.019
	0.006	0.009	0.006	0.009	0.008	0.010	0.010	0.010	0.008	0.014	0.011	0.014
AGE	0.014**	0.015	0.014**	0.015	0.023**	0.024**	0.026**	0.026**	0.003	-0.004	0.007	0.002
	0.003	0.010	0.003	0.011	0.006	0.007	0.006	0.007	0.004	0.007	0.004	0.005
	(2.13)	**(2.14)**	**(2.15)**	**(2.16)**	**(2.17)**	**(2.18)**	**(2.19)**	**(2.20)**	**(2.21)**	**(2.22)**	**(2.23)**	**(2.24)**
FB	1.137**	2.863**	1.194**	2.845**	0.128**	0.126**	0.066**	0.073**	2.455**	2.492**	2.352**	1.880**
	0.348	0.547	0.556	0.930	0.021	0.041	0.015	0.016	0.281	0.432	0.411	0.301
ΔMIG	.449	4.512**	4.081**	4.673**	-0.163	-0.444	-0.161	-0.100	0.478	3.081**	0.325	2.463**
	0.276	1.107	1.884	1.580	0.297	1.167	0.302	0.340	0.274	0.772	0.282	0.724
ΔSS	-2.367*	-3.744**	-3.674**	-5.104**	-0.390	0.053	-0.257	-0.282	-0.385	-1.766	-0.297	-0.320
	1.073	1.235	1.286	1.499	0.259	0.751	0.262	0.288	0.235	0.957	0.239	0.971

Equations (2.1)-(2.4) report 2010 median wages for African Americans and uses the foreign to native-born share. Equations (2.5)-(2.8) use the one-year 2010 Black median wage, FB and MIG estimates. Equations (2.09)-(2.12) test the log of median wages in 2007, with FB, MIG and other controls from 2007; the unemployment rate is lagged to 2005. COL, DROP, HS, MAN, URE and Age are the 2010 African American College graduation rate, Dropout rate, High school graduation rate, Manufacturing share, the unemployment rate in 2007 and median age for the MSA. ** (*) indicates significance at the 1% (5%) level.

Table 3: **Immigration and African American Wage shares**

VAR	FBOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	LATOLS	LATGMM
	(3.1)	**(3.2)**	**(3.3)**	**(3.4)**	**(3.5)**	**(3.6)**	**(3.7)**	**(3.8)**	**(3.9)**	**(3.10)**	**(3.11)**	**(3.12)**
CON	0.464**	0.193	0.458**	0.211	0.041	0.566*	0.046	0.539*	-0.422**	0.373	-0.412**	0.328
	0.047	0.223	0.050	0.224	0.042	0.252	0.044	0.246	0.074	0.431	0.079	0.425
FB	-0.503**	-0.506**	-0.659**	-0.690**	0.624**	0.599**	0.708**	0.939**	1.126**	1.034**	1.296**	1.629**
	0.100	0.129	0.148	0.202	0.086	0.158	0.133	0.232	0.149	0.250	0.219	0.378
MIG	-0.174*	0.130	-0.172*	0.199	0.109*	-0.323	0.106*	-0.419	0.283**	-0.452	0.278**	-0.618
	0.051	0.245	0.051	0.244	0.048	0.252	0.049	0.252	0.083	0.438	0.084	0.443
COLG	0.003	-0.036	0.001	-0.063	0.057	0.057	0.060	0.095	0.054	0.093	0.059	0.159
	0.040	0.058	0.042	0.055	0.041	0.066	0.042	0.059	0.079	0.101	0.081	0.093
DROP	0.121	0.164	0.124	0.172	-0.086*	-0.261*	-0.091*	-0.274*	-0.207*	-0.425*	-0.214*	-0.446*
	0.076	0.104	0.076	0.104	0.049	0.114	0.049	0.112	0.105	0.187	0.105	0.185
HS	0.004**	0.002	0.001	0.002	0.001	0.002	-0.005**	-0.006**	-0.008**	-0.005	-0.010**	-0.011**
	0.001	0.005	0.005	-0.004	-0.003	-0.005	0.001	0.002	0.002	0.003	0.002	0.004
MAN	-0.155*	-0.185	-0.167*	0.181*	0.067	0.090	0.197**	0.119	0.336**	0.331*	0.364**	0.285
	0.069	-0.185	0.070	0.087	0.146	0.197	0.068	0.089	0.117	0.158	0.119	0.157
UNE	0.006*	0.001	0.005	0.002	0.000	0.005	0.001	0.004	-0.006	0.004	-0.003	0.002
	0.003	0.005	0.003	0.005	0.002	0.005	0.003	0.004	0.004	0.008	0.005	0.008
AGE	-0.004**	0.004	-0.005**	0.001	0.005**	-0.009	0.005**	-0.005	0.009**	-0.013	0.009**	-0.006
	0.001	0.006	0.001	0.006	0.001	0.007	0.001	0.007	0.002	0.012	0.002	0.011
	(3.13)	**(3.14)**	**(3.15)**	**(3.16)**	**(3.17)**	**(3.18)**	**(3.19)**	**(3.20)**	**(3.21)**	**(3.22)**	**(3.23)**	**(3.24)**
FB	-0.664**	-0.918**	-1.353**	-0.672**	0.640**	0.880**	0.676**	1.358**	1.043**	0.859**	0.891**	1.570**
	0.072	0.129	0.252	0.093	0.068	0.131	0.093	0.269	0.156	0.117	0.161	0.315
ΔMIG	-0.352**	-1.466	-1.497**	-0.278*	0.050	0.836*	-0.020	0.933*	1.038*	0.124	0.033	1.110*
	0.098	0.370	0.438	0.100	0.104	0.331	0.108	0.414	0.463	0.162	0.161	0.526
ΔSS	0.180	1.198**	1.910	0.216	-0.151	-1.199**	-0.182	-1.997**	-0.674	-0.069	-0.138	-1.545
	0.124	0.431	0.635	0.123	0.105	0.390	0.106	0.613	0.560	0.148	0.145	0.775

Equations (3.1)-(3.4) reports the 2010 share of poor African Americans (incomes < \$20,000); (3.5)-(3.8) present the 2010 share of African Americans with incomes > \$60,000. (3.09)-(3.12) give the 2010 rich minus poor shares (incomes > \$60,000 - incomes < \$20,000). (3.13)-(3.24) additionally accommodate for domestic migration flows from other states; for conciseness, we only report the FB (foreign-born) share and the migration (MIG) flows. COL, DROP, HS, MAN, URE and Age are the African American College graduation rate, Dropout rate, High school graduation rate, Manufacturing share, the unemployment rate in 2007 and median age for the MSA. ** (*) indicates significance at the 1% (5%) level.

Table 4: **Wages for African Americans**

VAR	FBOLS	FBGMM	LATOLS	LATGMM	LATOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	LAOLS	LATGMM
	(4.1)	**(4.2)**	**(4.3)**	**(4.4)**	**(4.5)**	**(4.6)**	**(4.7)**	**(4.8)**	**(4.9)**	**(4.10)**	**(4.11)**	**(4.12)**
CON	0.080**	0.088**	0.077**	0.097**	0.312**	0.637**	0.306**	0.644**	0.149**	0.332**	0.146**	0.329**
	0.010	0.016	0.010	0.019	0.029	0.071	0.029	0.076	0.021	0.052	0.021	0.052
FB	-0.125**	-0.125**	-0.132**	-0.150**	-1.059**	-1.982**	-1.077**	-2.106**	-1.133**	-2.108**	-0.970**	-2.368**
	0.016	0.030	0.020	0.042	0.147	0.370	0.180	0.456	0.231	0.302	0.278	0.437
MIG	0.511**	0.421	0.497**	0.192	-0.020	-0.769**	-0.022	-0.819**	-0.025	-1.458**	-0.036	-1.491**
	0.100	0.231	0.099	0.290	0.025	0.141	0.025	0.154	0.060	0.338	0.060	0.342
COLG	0.006	0.007	0.006	0.008	-0.008	0.019	-0.009	0.020	-0.014	0.008	-0.014*	0.008
	0.005	0.006	0.005	0.007	0.013	0.036	0.013	0.037	0.006	0.016	0.006	0.016
DROP	0.009	0.011	0.011	0.010	0.044	-0.088	0.048	-0.088	0.052	-0.044	0.056	-0.037
	0.009	0.009	0.009	0.010	0.029	0.046	0.029	0.048	0.031	0.053	0.031	0.053
HS	0.004	0.006	0.006	0.006	0.016	0.025	-0.116**	-0.164**	-0.076**	-0.107**	-0.074**	-0.105**
	0.006	0.005	0.003	-0.118	-0.165	-0.116	0.016	0.026	0.013	0.019	0.014	0.019
MAN	-0.009	-0.004	-0.012	0.008	0.030	0.051**	0.002	0.028	-0.053**	-0.046	-0.062**	-0.054
	0.010	-0.004	0.009	0.010	0.038	0.020	0.030	0.052	0.021	0.034	0.021	0.034
UNE	0.001	0.001	0.001	0.001	0.025**	0.016**	0.025**	0.016**	0.022**	0.016**	0.022**	0.016**
	0.001	0.001	0.001	0.001	0.002	0.003	0.002	0.003	0.002	0.002	0.002	0.002
AGE	0.000	-0.001	-0.001	-0.001	-0.001	0.000	-0.001	0.000	0.001	0.003**	0.001	0.003**
	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	(4.13)	**(4.14)**	**(4.15)**	**(4.16)**	**(4.17)**	**(4.18)**	**(4.19)**	**(4.20)**	**(4.21)**	**(4.22)**	**(4.23)**	**(4.24)**
FB	0.395**	0.624**	0.345**	0.945**	0.488**	2.223**	0.076**	1.923**	1.991**	5.241**	1.179**	5.188**
	0.110	0.246	0.163	0.430	0.212	0.610	0.224	0.706	0.480	0.741	0.513	1.031
MIG	0.668**	3.481**	0.679**	5.454**	0.125**	1.765**	0.121**	1.731**	0.672**	2.857**	0.690**	3.083**
	0.445	2.010	0.444	2.567	0.032	0.262	0.032	0.274	0.109	0.662	0.108	0.666

Table 4 examines wages by age group and income share. (4.1)-(4.4) report the African American income share < \$20,000 for Blacks ages 18-24, and uses the foreign and native-born migration shares with the corresponding age, 18-24. (4.5)-(4.8) and (4.9)-(4.12) present the African American income share < \$20,000 for ages 25-34 and 45-64, respectively; the foreign and native-born migration shares have similar age cohorts. The dependent variables in (4.13)-(4.24) are the share of Black men with incomes > \$60,000, and use the same age cohorts for Black men and FB and MIG in (4.1)-(4.12); these equations use the same controls; for conciseness, we report only FB and MIG. COL, DROP, HS, MAN, URE and Age are the African American College graduation rate, Dropout rate, High school graduation rate, Manufacturing share, the unemployment rate in 2007 and median age for the MSA. ** (*) indicates significance at the 1% (5%) level.

Table 5: **Wages, Wage Growth and Immigration Inflows**

VAR	FBOLS	FBGMM	LATOLS	LATGMM	LATOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	LAOLS	LATGMM
	(5.1)	**(5.2)**	**(5.3)**	**(5.4)**	**(5.5)**	**(5.6)**	**(5.7)**	**(5.8)**	**(5.9)**	**(5.10)**	**(5.11)**	**(5.12)**
CON	-0.174	-0.658	-0.269	-0.741	10.396**	10.205**	10.499**	10.040**	-0.078	-0.744**	-0.148	-0.764*
	(1.263)	(1.656)	(1.478)	(3.322)	(1.153)	(1.679)	(1.436)	(5.042)	(0.208)	(0.216)	(0.280)	(0.351)
ΔFB	5.105**	6.861**	6.181*	13.737**	5.231**	13.081**	5.058**	27.185**	1.076**	0.914**	0.902**	1.605**
	(0.813)	(1.656)	(1.478)	(2.522)	(1.153)	(1.679)	(1.436)	(5.042)	(0.180)	(0.216)	(0.280)	(0.351)
ΔMIG	0.440	0.340	0.629	0.323	0.533	1.207	0.433	0.607	0.150	0.129	0.237	0.133
	(0.313)	(0.485)	(0.317)	(0.330)	(0.314)	(1.159)	(0.380)	(1.655)	(0.106)	(0.127)	(0.105)	(0.122)
$\Delta BPOP$	1.055**	-3.032**	0.147	-3.232**	1.712*	1.138	2.210**	0.485	0.435	0.832**	0.618**	0.786**
	(0.698)	(1.017)	(0.670)	(1.183)	(0.693)	(1.178)	(0.683)	(1.856)	(0.138)	(0.181)	(0.121)	(0.178)
$\Delta DROP$	0.464	-0.104	0.325	-2.455	0.189	-2.630	0.468	-6.197**	-0.554	-2.364**	-1.033**	-2.189**
	(0.663)	(1.614)	(0.709)	(2.276)	(0.649)	(2.255)	(0.670)	(3.654)	(0.346)	(0.724)	(0.300)	(0.687)
$\Delta COLG$	-0.136	-1.675**	-0.459	-2.251**	-0.203	0.368	-0.096	-0.683	-0.409	2.270**	-0.145	2.268**
	(0.253)	(0.501)	(0.253)	(0.616)	(0.282)	(0.522)	(0.254)	(0.995)	(0.273)	(0.736)	(0.256)	(0.754)
	(5.13)	**(5.14)**	**(5.15)**	**(5.16)**	**(5.17)**	**(5.18)**	**(5.19)**	**(5.20)**	**(5.21)**	**(5.22)**	**(5.23)**	**(5.24)**
ΔFB	1.670**	11.184**	3.273**	16.189**	5.515**	20.645**	5.105**	28.448**	0.435**	0.832**	0.618**	0.786**
	(0.312)	(1.159)	(0.345)	(1.157)	(0.380)	(1.587)	(0.384)	(1.617)	(0.138)	(0.181)	(0.121)	(0.178)
ΔMIG	0.458	0.639	0.517	-0.352	0.540	2.945	0.436	0.746	-0.554	-2.364**	-1.033**	-2.189**
	(0.312)	(1.159)	(0.345)	(1.157)	(0.380)	(1.587)	(0.384)	(1.617)	(0.346)	(0.724)	(0.300)	(0.687)
ΔSS	0.160	-6.323**	0.764	-3.695	-0.478	-11.197**	-0.151	-2.229	-0.409	2.270**	-0.145	2.268**
	(0.529)	(2.636)	(0.521)	(2.516)	(0.528)	(3.091)	(0.526)	(2.620)	(0.273)	(0.736)	(0.256)	(0.754)

Equations (5.1)-(5.4) test (3): the dependent variables are log median wages and independent variables are in percent changes. Equations (5.5)-(5.8) use (4), where the dependent variables are wage growth and the independent variables are foreign and domestic flows, and the control variables are in percentage changes. Equations (5.9)-(5.12) employ (5) and test whether MSAs with higher FB and MIG in 2005 experience higher wage growth; the control variables are again percentage changes. Equations (5.13)-(5.24) additionally accommodate for changes in interstate and intrastate migration/population flows. ** (*) indicates significance at the 1% (5%) level.

(3) $W_i = \alpha + \beta_1 \Delta FB_i + \beta_2 MIG_i + \beta_i \Delta Z_i$

(4) $\Delta W_i = \alpha + \beta_1 \Delta FB_i + \beta_2 \Delta MIG_i + \beta_i \Delta Z_i$

(5) $\Delta W_i = \alpha + \beta_1 FB_{i,2005} + \beta_2 MIG_{i,2005} + \beta_i Z_{i,2005}$

Table 6: **Wage and Immigration Causality Tests**

VAR	MED	FB	POR	FB	RIC	FB	MMED	FB	MED	FB	UNR	FB
	(6.1)	**(6.2)**	**(6.3)**	**(6.4)**	**(6.5)**	**(6.6)**	**(6.7)**	**(6.8)**	**(6.9)**	**(6.10)**	**(6.11)**	**(6.12)**
CON	2.277**	-0.008	0.169**	0.021	0.062**	0.983**	6.968**	0.002	4.734**	-0.072	0.115**	-0.002
	(0.920)	(0.016)	(0.026)	(0.006)	(0.018)	(0.010)	(0.587)	(0.003)	(0.746)	(0.042)	(0.027)	(0.007)
FB05	0.795**	0.799**	-0.198**	0.788**	0.305**	0.802**	0.843**	0.794**	0.624**	0.801**	-0.113	0.991**
	(0.224)	(0.011)	(0.045)	(0.018)	(0.058)	(0.005)	(0.131)	(0.020)	(0.315)	(0.017)	(0.032)	(0.010)
MIG05	0.482**	0.007	-0.102**	0.008	0.086**	0.004	0.265**	0.013	0.240**	0.011	0.001	0.007
	(0.100)	(0.004)	(0.032)	(0.007)	(0.036)	(0.002)	(0.054)	(0.007)	(0.122)	(0.005)	(0.018)	(0.006)
ECON05	0.564**	0.001	0.572**	-0.032*	0.821**	-0.002	0.237**	0.033	0.532**	0.007	0.469**	-0.011
	(0.061)	(0.002)	(0.051)	(0.011)	(0.145)	(0.009)	(0.058)	(0.024)	(0.075)	(0.004)	(0.121)	(0.024)
BPOP05	0.660*	0.010*	-0.017	0.005	-0.001	0.005	0.002	0.006	-0.147	0.003	0.053	-0.007
	(0.308)	(0.005)	(0.029)	(0.006)	(0.031)	(0.004)	(0.002)	(0.006)	(0.183)	(0.002)	(0.026)	(0.010)
VAR	ΔMED	ΔFB	ΔPOR	ΔFB	ΔRIC	ΔFB	ΔMMED	ΔFB	ΔMED	ΔFB	ΔUNR	ΔFB
	(6.13)	**(6.14)**	**(6.15)**	**(6.16)**	**(6.17)**	**(6.18)**	**(6.19)**	**(6.20)**	**(6.21)**	**(6.22)**	**(6.23)**	**(6.24)**
CON	6.377**	-0.017	0.173**	0.027	0.062	-0.001	9.067**	-0.021	4.734**	-0.043	0.115	-0.002
	(0.600)	(0.021)	(0.026)	(0.008)	(0.019)	(0.004)	(0.888)	(0.030)	(0.746)	(0.020)	(0.027)	(0.007)
FB05	0.695**	0.154**	-0.198**	0.098**	0.305**	0.111**	1.732**	0.152**	0.624**	0.041*	-0.113**	0.991**
	(0.224)	(0.018)	(0.043)	(0.019)	(0.056)	(0.020)	(0.303)	(0.019)	(0.315)	(0.012)	(0.032)	(0.010)
MIG05	0.452**	0.008	-0.087**	0.018*	0.073*	0.024**	0.433**	0.004	0.240	0.000	0.001	0.007
	(0.100)	(0.006)	(0.025)	(0.008)	(0.029)	(0.008)	(0.120)	(0.006)	(0.122)	(0.005)	(0.018)	(0.006)
ECON05	-0.636**	0.002	-0.433**	-0.042*	-0.183**	0.040	-0.946**	0.003	-0.468**	0.005	0.469**	-0.011
	(0.061)	(0.002)	(0.049)	(0.016)	(0.141)	(0.025)	(0.087)	(0.003)	(0.075)	(0.003)	(0.121)	(0.024)
BPOP05	-0.066	0.016*	-0.014	0.009	-0.003	0.010	0.715**	0.017*	-0.147*	0.013	0.053*	-0.007
	(0.108)	(0.006)	(0.027)	(0.008)	(0.030)	(0.008)	(0.134)	(0.006)	(0.183)	(0.007)	(0.026)	(0.010)

Table 6 reports OLS wage causality regressions. The independent variables in equations (6.1)-(6.8) are in 2010, and (6.9)-(6.12) are in 2007. ECON05 is the economics variable. The dependent variables are all in 2010 and include Median income, (MED), FB (Foreign-Born), Poor (share of Black income, < \$20,000, POR10), Rich (share of Black income above \$60,000), MMED is male median income, and unemployment is UNR. Equations (6.13)-(6.24) all examine foreign-born flows or logged changes in the economics variable from 2005-2010, and (6.21)-(6.24) indicate changes from 2007-2010. One-way causality exists when the FB05 variable explains the independent economic variable, and when ECON05 is insignificant in explaining the foreign-born share or flow. ** (*) indicates significance at the 1% (5%) level.

Table 7: **Unemployment rates and Immigration, particularly for Young African Americans**

	FBOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	LATOLS	LATGMM
	(7.1)	**(7.2)**	**(7.3)**	**(7.4)**	**(7.5)**	**(7.6)**	**(7.7)**	**(7.8)**	**(7.9)**	**(7.10)**	**(7.11)**	**(7.12)**
CON	0.082**	0.044	0.090**	0.159**	0.159**	0.155**	0.155**	0.153**	0.193**	0.193**	0.187**	0.157**
	(0.017)	(0.035)	(0.019)	(0.036)	(0.015)	(0.021)	(0.016)	(0.021)	(0.020)	(0.020)	(0.020)	(0.032)
FB	-0.167**	-0.231**	-0.148**	-0.263*	-1.418**	-1.816**	-2.152**	-2.371**	-0.782**	-0.882**	-1.193**	-2.639**
	(0.037)	(0.076)	(0.055)	(0.106)	(0.314)	(0.605)	(0.467)	(0.843)	(0.217)	(0.237)	(0.312)	(0.578)
MIG	-0.025	0.045	-0.023	0.034	-0.420**	-0.418*	-0.476**	-0.562**	-0.530**	-0.580*	-0.513**	0.030
	(0.023)	(0.053)	(0.022)	(0.054)	(0.109)	(0.184)	(0.106)	(0.171)	(0.172)	(0.224)	(0.173)	(0.372)
DROP	0.008**	0.000	0.008*	-0.005	-0.054*	-0.047*	-0.057*	-0.054	-0.092*	-0.092**	-0.091**	-0.119**
	(0.033)	(0.036)	(0.033)	(0.036)	(0.024)	(0.026)	(0.024)	(0.024)	(0.038)	(0.038)	(0.038)	(0.043)
BPOP	0.005*	0.007**	0.004*	0.005**	-0.005*	-0.003	-0.006*	-0.004	-0.005*	-0.005*	-0.005*	0.000
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
COLG	0.019	0.029	0.012	0.015	0.014	0.010	0.012	0.002	-0.023	-0.023	-0.024	-0.086*
	(0.017)	(0.027)	(0.019)	(0.025)	(0.010)	(0.025)	(0.011)	(0.024)	(0.014)	(0.014)	(0.014)	(0.027)
TDROP	0.000	0.001	0.000	0.001	0.002*	0.002*	0.002*	0.002*	0.003*	0.003**	0.003**	0.005**
	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
HS	0.030	0.027	0.059*	0.042	0.280**	0.230**	0.272**	0.237**	0.257**	0.287**	0.248**	0.117*
	(0.023)	(0.036)	(0.027)	(0.036)	(0.039)	(0.048)	(0.038)	(0.049)	(0.051)	(0.061)	(0.051)	(0.061)
	(7.13)	**(7.14)**	**(7.15)**	**(7.16)**	**(7.17)**	**(7.18)**	**(7.19)**	**(7.20)**	**(7.21)**	**(7.22)**	**(7.23)**	**(7.24)**
ΔFB	-0.460**	-0.386**	-0.349**	-0.987**	-0.311*	-0.615*	-0.904**	-1.234**	-0.460*	-0.962**	0.438	0.482
	(0.179)	(0.109)	(0.112)	(0.360)	(0.141)	(0.241)	(0.264)	(0.347)	(0.179)	(0.475)	(0.410)	(0.413)
ΔMIG	-0.397**	-0.201**	-0.186**	-0.081	-0.326	-0.554**	-0.411**	-0.451**	-0.397**	-0.637**	-0.740**	-0.714**
	(0.064)	(0.043)	(0.043)	(0.112)	(0.046)	(0.095)	(0.093)	(0.093)	(0.064)	(0.136)	(0.135)	(0.142)

Equations (7.1)-(7.4) present the determinants of unemployment rates for African Americans. Equations (7.5)-(7.12) present the unemployment determinants for ages 20-24 and 25-34, and uses similar age cohorts for FB and MIG. The bottom rows accommodate for changes in domestic and foreign migration flows. ** (*) indicates significance at the 1% (5%) level.

Table 8: **Immigration, Unemployment and Employment: Alternative Specifications**

VAR	FBOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	FBOLS	FBGMM	FBGMM	LATGMM	FBOLS	FBGMM
	(8.1)	**(8.2)**	**(8.3)**	**(8.4)**	**(8.5)**	**(8.6)**	**(8.7)**	**(8.8)**	**(8.9)**	**(8.10)**	**(8.11)**	**(8.12)**
CON	0.118**	0.153**	0.113*	0.137*	0.002**	0.001**	0.092**	0.122**	0.804**	0.836**	0.012**	0.005**
	(0.006)	(0.007)	(0.005)	(0.007)	(0.001)	(0.000)	(0.009)	(0.013)	(0.010)	(0.008)	(0.002)	(0.002)
ΔFB	-0.326**	-0.851**	-0.346**	-0.558**	-0.003**	-0.002*	-0.612**	-2.307**	2.082**	0.789**	0.232**	0.351**
	(0.094)	(0.147)	(0.116)	(0.183)	(0.001)	(0.001)	(0.146)	(0.507)	(0.295)	(0.248)	(0.058)	(0.127)
ΔMIG	-0.204**	-0.220**	-0.206**	-0.228**	-0.003**	-0.004**	-0.263**	-0.321**	0.235**	0.405**	0.028	0.148
	(0.037)	(0.083)	(0.037)	(0.083)	(0.001)	(0.001)	(0.045)	(0.134)	(0.134)	(0.114)	(0.022)	(0.049)
ΔBPOP	-0.287**	0.016*	-0.309**	-0.035**	0.028**	0.029**	-0.022	0.006	-0.015	0.076	-0.663	-0.764
	(0.061)	(0.068)	(0.060)	(0.068)	(0.002)	(0.002)	(0.015)	(0.021)	(0.097)	(0.089)	(0.050)	(0.031)
ΔDROP	-0.016	0.096	-0.009	0.228	-0.001	-0.001	0.042	-0.054	-0.177	-0.198	0.028	-0.078
	(0.051)	(0.197)	(0.049)	(0.226)	(0.002)	(0.002)	(0.038)	(0.047)	(0.269)	(0.278)	(0.018)	(0.067)
ΔCOLG	0.008**	0.056	0.007**	0.054	0.000	0.000	0.081**	0.092**	-0.004	0.036	0.037**	0.037**
	(0.021)	(0.033)	(0.021)	(0.039)	(0.001)	(0.001)	(0.025)	(0.028)	(0.048)	(0.051)	(0.007)	(0.010)
	(8.13)	**(8.14)**	**(8.15)**	**(8.16)**	**(8.17)**	**(8.18)**	**(8.19)**	**(8.20)**	**(8.21)**	**(8.22)**	**(8.23)**	**(8.24)**
ΔFB	-0.458**	-1.198**	-0.326**	-0.503**	-0.035*	-0.114**	-0.441**	-1.982**	0.283*	0.098	0.045**	0.101**
	(0.103)	(0.242)	(0.099)	(0.178)	(0.014)	(0.025)	(0.169)	(0.608)	(0.120)	(0.125)	(0.012)	(0.033)
ΔMIG	-0.193**	-0.157	-0.199**	-0.182*	-0.013**	-0.022**	-0.159*	-0.420*	0.221	0.454**	0.039**	-0.048*
	(0.033)	(0.100)	(0.034)	(0.088)	(0.003)	(0.007)	(0.068)	(0.158)	(0.155)	(0.154)	(0.009)	(0.023)
ΔSS	-0.042	-0.076	-0.052	-0.133	-0.009	-0.021	-0.097	-0.261	0.020	0.033	0.216**	0.210**
	(0.039)	(0.104)	(0.037)	(0.096)	(0.006)	(0.012)	(0.056)	(0.209)	(0.023)	(0.025)	(0.004)	(0.005)

Equations (8.1)-(8.4) examine unemployment rates uses migration flows and changes in the control variables from 2007-2010. (8.5)-(8.6) examine unemployment using the levels of foreign and native-born and unemployment in 2007. (8.7)-(8.8) presents the changes in unemployment from 2007-2010, and foreign and domestic migration as well as control variables in 2007. (8.9)-(8.10) present the employment rate in 2010 and change in immigration flows from 2007-2010 using changes in foreign and domestic migration flows and changes in the control variables; The dependent variables in (8.11)-(8.12) are employment growth from 2007 and 2010; the independent variables are the same - migration flows and changes in the control variables. The bottom rows (8.13)-(8.24) additionally control for domestic migration flows. ** (*) indicates significance at the 1% (5%) level.

Table 9: **African American Employment rates and Immigration**

VAR	FBOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	LATOLS	LATGMM
	(9.1)	**(9.2)**	**(9.3)**	**(9.4)**	**(9.5)**	**(9.6)**	**(9.7)**	**(9.8)**	*(9.9)*	**(9.10)**	**(9.11)**	**(9.12)**
CON	0.616**	0.376*	0.635**	0.541**	0.546**	0.770**	0.881**	0.838**	0.766**	0.562**	0.774**	0.786**
	(0.044)	(0.192)	(0.045)	(0.150)	(0.157)	(0.045)	(0.015)	(0.029)	(0.020)	(0.068)	(0.020)	(0.031)
FB	0.446**	0.910**	0.606**	1.396**	1.356**	0.436**	0.233**	0.553**	0.121	0.439**	0.190**	0.192**
	(0.085)	(0.243)	(0.125)	(0.328)	(0.362)	(0.092)	(0.048)	(0.101)	(0.049)	(0.130)	(0.065)	(0.085)
MIG	-0.021	-0.009	-0.030	-0.154	-0.154	0.426	0.465**	0.423	0.451	0.789	0.451	0.454
	(0.053)	(0.203)	(0.053)	(0.182)	(0.195)	(0.291)	(0.088)	(0.232)	(0.138)	(0.463)	(0.137)	(0.139)
MAR	0.169	0.335*	0.177*	0.307*	0.309*	0.074	0.014	0.036	-0.032	0.084	-0.034	-0.039
	(0.075)	(0.144)	(0.077)	(0.123)	(0.137)	(0.049)	(0.018)	(0.034)	(0.029)	(0.074)	(0.028)	(0.038)
COLG	0.039	0.128*	0.040	0.120**	0.120	0.042	0.003	0.025	0.005	0.071	0.005**	0.004**
	(0.025)	(0.063)	(0.026)	(0.054)	(0.058)	(0.025)	(0.007)	(0.016)	(0.011)	(0.039)	(0.011)	(0.012)
DROP	-0.166**	-0.165**	-0.170**	-0.180**	-0.180**	0.001	-0.007	-0.006	0.027	0.053	0.027	0.029
	(0.040)	(0.063)	(0.040)	(0.055)	(0.057)	(0.019)	(0.010)	(0.014)	(0.015)	(0.029)	(0.015)	(0.015)
BPOP	0.000	-0.194	0.014	-0.078	-0.081	-0.278**	-0.188**	-0.226**	-0.345**	-0.464**	-0.335**	-0.330**
	(0.043)	(0.131)	(0.045)	(0.103)	(0.121)	(0.051)	(0.032)	(0.039)	(0.041)	(0.078)	(0.041)	(0.041)
HS	-0.004	-0.013**	-0.005**	-0.014*	-0.015*	-0.006**	-0.003**	-0.006**	-0.002	-0.008**	-0.005**	-0.003**
	(0.001)	(0.004)	(0.001)	(0.004)	(0.004)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)
TDRP	-0.158*	1.103	-0.161*	0.783	0.793	0.575**	0.026	0.354*	0.021	0.931**	0.020	0.021
	(0.069)	(0.650)	(0.069)	(0.522)	(0.545)	(0.180)	(0.018)	(0.123)	(0.022)	(0.259)	(0.022)	(0.029)

Equations (9.1)-(9.4) report the determinants of employment rates for African Americans. (9.5)-(9.12) report the determinants for young African American men ages 20-24, and then young Black men ages 16-19. The foreign-born and native-born shares uses a similar age demographic, 20-24 and 16-19, respectively. MAR,COLG, DROP, BPOP and HS are the African American marriage rate, college graduation rate, dropout rate, share in the total population and high school graduation rate. TDRP is the MSA's total dropout rate. ** (*) indicates significance at the 1% (5%) level.

Table 10: **Immigration and Black Incarceration rates**

VAR	FBOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	LATOLS	LATGMM	FBOLS	FBGMM	FBOLS	FBGMM
	(10.1)	**(10.2)**	**(10.3)**	**(10.4)**	**(10.5)**	**(10.6)**	**(10.7)**	**(10.8)**	**(10.9)**	**(10.10)**	**(10.11)**	**(10.12)**
CON	0.016	0.063**	0.016	0.029	0.029**	0.023	0.023**	-0.001	0.019*	0.009	0.010	0.032
	(0.009)	(0.022)	(0.009)	(0.023)	(0.007)	(0.018)	(0.008)	(0.021)	(0.009)	(0.018)	(0.006)	(0.018)
FB	-0.041**	-0.045**	-0.037*	-0.054**	-0.065*	-0.293**	-0.033	-0.172**	-0.042**	-0.020**	-0.042**	-0.044**
	(0.010)	(0.010)	(0.013)	(0.014)	(0.028)	(0.082)	(0.031)	(0.076)	(0.010)	(0.006)	(0.008)	(0.010)
MIG	-0.020**	-0.023*	-0.021*	-0.026*	-0.002	-0.015	0.003	0.020	-0.019*	-0.003	-0.003	-0.016
	(0.007)	(0.011)	(0.008)	(0.011)	(0.009)	(0.024)	(0.009)	(0.022)	(0.006)	(0.003)	(0.003)	(0.006)
MAR	0.019	-0.006	0.021	-0.005	-0.012	-0.005	-0.015	-0.010	0.015	-0.006	0.010*	0.019*
	(0.020)	(0.012)	(0.021)	(0.012)	(0.011)	(0.015)	(0.012)	(0.018)	(0.020)	(0.015)	(0.005)	(0.008)
DROP	0.019	-0.018	0.022	-0.016	-0.006	-0.005	-0.001	-0.002	0.022	-0.003	0.000	0.000
	(0.027)	(0.010)	(0.028)	(0.010)	(0.008)	(0.010)	(0.009)	(0.011)	(0.027)	(0.010)	(0.000)	(0.000)
COLG	0.001	-0.016	0.001	-0.018	-0.009**	0.000	-0.007	0.002	0.001	-0.001	-0.019**	-0.016*
	(0.002)	(0.009)	(0.002)	(0.010)	(0.004)	(0.009)	(0.005)	(0.009)	(0.002)	(0.008)	(0.004)	(0.008)
BPOP	-0.059**	-0.048**	-0.061**	-0.047**	-0.042**	-0.026*	-0.040**	-0.010	-0.062**	-0.022	-0.036**	-0.051**
	(0.017)	(0.012)	(0.017)	(0.013)	(0.008)	(0.012)	(0.008)	(0.013)	(0.017)	(0.012)	(0.006)	(0.012)
HS	0.003	-0.037	0.003	-0.035	-0.004	0.000	0.002	0.027	0.000	0.015	-0.011	-0.025
	(0.006)	(0.023)	(0.006)	(0.023)	(0.005)	(0.018)	(0.005)	(0.022)	(0.006)	(0.019)	(0.004)	(0.019)
TDROP	0.143**	0.171**	0.091**	0.004	0.142**	0.132**	0.086**	0.053	0.081**	0.032	0.086**	0.100
	(0.019)	(0.018)	(0.022)	(0.040)	(0.019)	(0.041)	(0.022)	(0.033)	(0.020)	(0.078)	(0.022)	(0.072)
	(10.13)	**(10.14)**	**(10.15)**	**(10.16)**	**(10.17)**	**(10.18)**	**(10.19)**	**(10.20)**	**(10.21)**	**(10.22)**	**(10.23)**	**(10.24)**
FB	-0.034**	-0.044**	-2.932**	0.011	-0.074**	-0.177*	-0.111*	-0.159*	-0.034**	-0.046*	-0.038**	-0.047**
	(0.009)	(0.015)	(-0.035)	(-0.055)	(0.027)	(0.073)	(0.056)	(0.064)	(0.009)	(0.016)	(0.009)	(0.016)
ΔMIG	0.004	-0.012	-0.284**	0.011	-0.002	-0.024	0.015	0.031	0.003	-0.016	-0.007	-0.005
	(0.011)	(0.041)	(0.005)	(0.006)	(0.009)	(0.029)	(0.011)	(0.024)	(0.011)	(0.041)	(0.010)	0.039)
ΔSS	-0.005	0.002	0.049**	0.009	-0.005	0.024	-0.014	-0.038	-0.005	0.004	-0.003	-0.020
	(0.009)	(0.037)	(-0.011)	(-0.014)	(0.010)	(0.040)	(0.009)	(0.030)	(0.009)	(0.038)	(0.008)	(0.035)

Table 10 investigates the determinants of 2010 incarceration rates. Equations (10.1)-(10.4) report the determinants of incarceration rates. Equations (10.5)-(10.8) uses foreign and native-born migration flows and changes in the independent control variables. (10.9)-(10.10) examine the incarceration rate using 2007 independent variables. Equations (10.11)-(10.12) replace MAR and DROP with two variables that proxy for the economic environment: the total employment rates in 2008 and the share of Blacks in manufacturing. (10.13)-(10.24) additionally accommodate for changes in interstate and intrastate migration flows. ** (*) indicates significance at the 1% (5%) level.

Appendix I: Data

Additional Independent Variables: Mean income: *B19025B, ''AGGREGATE HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2010 INFLATION-ADJUSTED DOLLARS) (BLACK OR AFRICAN AMERICAN ALONE HOUSEHOLDER).*" We divide aggregate income by Black population to obtain mean income.

Income Shares: *B19001B, ''HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2010 INFLATION-ADJUSTED DOLLARS) (BLACK OR AFRICAN AMERICAN ALONE HOUSEHOLDER)."* This variable gives income by percentile including poor and rich households.

Poverty Share: *B17001B ''POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE (BLACK OR AFRICAN AMERICAN ALONE."*

Income by age groups: *B19037B ''AGE OF HOUSEHOLDER BY HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2010 INFLATION-ADJUSTED DOLLARS) (BLACK OR AFRICAN AMERICAN ALONE HOUSEHOLDER)."* We consider age groups of 16-19, 25-44, 45-64.

Male median income: *B20017B ''MEDIAN EARNINGS IN THE PAST 12 MONTHS (IN 2010 INFLATION-ADJUSTED DOLLARS) BY SEX BY WORK EXPERIENCE IN THE PAST 12 MONTHS FOR THE POPULATION 16 YEARS AND OVER WITH EARNINGS IN THE PAST 12 MONTHS (BLACK OR AFRICAN AMERICAN ALONE)."*

Unemployment rate: C23002B, *''SEX BY AGE BY EMPLOYMENT STATUS FOR THE POPULATION 16 YEARS AND OVER (BLACK OR AFRICAN AMERICAN ALONE)."*

C23002B Employment rate: *''SEX BY AGE BY EMPLOYMENT STATUS FOR THE POPULATION 16 YEARS AND OVER (BLACK OR AFRICAN AMERICAN ALONE)."*

PCT20B Incarceration rate: *''GROUP QUARTERS POPULATION BY GROUP QUARTERS TYPE (BLACK OR AFRICAN AMERICAN ALONE)."*

Additional Control variables include:

S2301 ''Employment Status, ACS 2005". We use the percentage of White unemployment in the MSA. *WUN05(-)*

S2301 ''Employment Status, ACS 2008." We use the total employment rates in the MSA. *TEMP98(+)*

C24010B ''SEX BY OCCUPATION FOR THE CIVILIAN EMPLOYED POPULATION 16 YEARS AND OVER (BLACK OR AFRICAN AMERICAN ALONE) Universe: Civilian employed Black or African American alone population 16 years and over,." *OMAN(+)*. We use the percentage of Blacks in manufacturing in the MSA.

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