



5-2017

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Recommended Citation

Lype, Bryson A., "Mass Migration: Examining Factors that Contribute to an Individual's Propensity to Migrate" (2017). *Haslam Scholars Projects*.
https://trace.tennessee.edu/utk_haslamschol/5

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Mass Migration: Examining Factors that Contribute to an Individual's Propensity to Migrate

*The interplay of the numbers (featuring econometric analysis) and
personal accounts (featuring interviews with reverse migrants)*

by Bryson Lype

Abstract:

During the early decades of the twentieth century, a complex social trend developed in America. Sometimes referred to as the “Great Migration,” this time period saw more than six million African Americans leave their homes in the South and migrate to cities in the North and the West of the United States. While there were many reasons for African Americans leaving the South (*e.g.*, searching for higher wages and employment rates, searching for greater tolerance), not all African Americans chose to leave their homes. This project intends to explore different variables that influenced individuals’ propensity to migrate. *What factors played the greatest role in determining if an individual left his home in the South to migrate to the North or the West?* For example, was the migrant’s home community or city size a significant contributor, or did other variables – such as the individual’s level of education and literacy status – play a more prominent role?

At first glance, this research question may seem to be of little more importance than historical relevance. However, mass migration should not be something we only think of in our history textbooks, and it is certainly not limited to America – it is an intrinsic part of human nature across all cultures. As the author Jim Rohn once said, “If you do not like where you are, change it. You are not a tree.” The mass migration of groups of people has occurred for centuries and will continue to foster the globalization of culture, politics, and economics for years to come. Thus, by examining factors that contribute to an individual’s propensity to migrate through the lens of the Great Migration, this project intends to reveal prevalent truths that will allow policymakers and economists to better understand the phenomenon of mass migration.

The first half of this project features a quantitative focus on the numbers themselves. Econometric analysis is used to test hypotheses on different variables in order to better understand individuals' migration tendencies. However, the numbers alone can only tell part of the story. The second half of this project has a qualitative focus on personal accounts of persons who participated in the "Great Migration" in the early twentieth century. Interviews with two reverse migrants – individuals who left the South during the Great Migration and have since returned to the South – were conducted to see how the quantitative findings line up with qualitative research.

The Numbers

Literature Review and Economic Model:

Much of the data for this project is based on information from the U.S. census. However, data from the U.S. census is cross-sectional, meaning that it observes individuals at a single point in time. Yet, the careful work by professors and research assistants to match observations at two points in time has led to the creation of linked datasets – essentially panel data. As Dr. Collins and Dr. Wanamaker write in their paper, "Such datasets are especially useful for studying intergenerational mobility and migration because seeing the same person at two or more points in time – typically in childhood and then again in adulthood – is fundamental to charting how a person's origins are connected to his or her outcomes later in life" [1].

Variables to Consider:

While the creation of these datasets has made possible the exploration of research questions such as mine, it also implies that there is little existing research to which I can compare

my work. Although the literature review was limited, it revealed several key variables to consider. Farm residence, home ownership, literacy, school attendance, and city size appear to be significant variables. In particular, living in a large or “urban” city is cited as the strongest predictor of upward mobility, and this project will explore whether it has a similar relationship with propensity to migrate. In his paper on intergenerational mobility, Raj Chetty writes that segregation, income inequality, quality of primary schools, social capital, and family stability are relevant variables for observing intergenerational mobility ^[2]. However, because of the limited availability of data on these variables on the individual level, I will proceed with the understanding that these factors are likely less relevant for propensity to migrate than they are for intergenerational mobility.

Because I am not able to include Raj Chetty’s variables on the individual level, I must acknowledge that my regressions are vulnerable to omitted variable bias. This is important to consider because omitted variable bias can affect my regression’s coefficient estimates. To understand omitted variable bias and its effect on my regressions, consider:

Figure 1: *Methodology behind omitted variable bias:*

<p>The true regression is: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + E_i$</p> <p>Instead, I omit the variable β_2, running: $Y = \beta_0 + \beta_1 X_1 + E_i^*$, where: $E_i^* = E_i + \beta_2 X_2$</p> <p>Here: $E(\hat{\beta}_1) \neq \beta_1$. Instead: $E(\hat{\beta}_1) = \beta_1 + Bias$</p> <p>From our auxillary regression: $X_2 = \alpha_1 + \alpha X_1 + u_i$, we know that: $Bias = \alpha_1 * \beta_2$</p> <p>Therefore: $E(\hat{\beta}_1) = \beta_1 + \alpha_1 * \beta_2$</p>

From the equations above, we see that STATA's generated coefficients may be overestimates or underestimates due to bias. The severity of the bias depends on (1) the magnitude of the omitted coefficient, β_2 , and (2) the strength of the correlation between X_1 and X_2 , α_1 . Raj Chetty's research suggests that the variables I am omitting are significant, so the β_2 values have high magnitudes. However, the variables income inequality, quality of primary schools, social capital, and family stability are not expected to be highly correlated with my variables. Thus, the strength of their correlation will be low and α_1 will be near zero. This means that bias is near zero, and I am able to resume with the understanding that omitted variable bias will not significantly affect my coefficient estimates. The exception is that I expect the omitted variable segregation to be correlated with city size, so I must acknowledge that the variable city size may be affected. However, because the literature review suggests that the correlation between city size and segregation, α_1 , is positive and the coefficient for segregation, β_2 , is negative ^[3], the bias will be negative and STATA's generated coefficient for city size will be an underestimation. Thus, the bias only strengthens my hypothesis testing.

Kenneth Chay and Kaivan Munshi authored a paper on black networks and the Great Migration. They write that, "Blacks from southern counties where plantation crops were grown accounted for a disproportionate share of northern migrants" ^[4]. This confirms the notion that farm residence status will be a key variable in propensity to migrate. For my data, the variables "Fatherfarmer" and "Fatherfarmlaborer" will explore and attempt to explain this relationship.

Functional Form:

Besides the fact that my approach is similar to the approach taken by Dr. Collins and Dr. Wanamaker, it makes sense for me to model my research after their project because our research

interests are, in fact, interrelated. They are interested in intergenerational mobility and I am interested in propensity to migrate, and these variables appear to be closely related. As they write, “Investment in migration may lead to windfall gains for oneself and/or for one’s children.” Their findings show that, “Black out-of-state and out-of-region migrants by 1930 had a 69 and 99 percent probability, respectively, of escaping the bottom decile” [1].

Because my question also relies on observing individuals in a linked data-set and there is hypothesized correlation between intergenerational mobility and propensity to migrate, I am able to better specify my functional form by observing the economic models chosen by others conducting research in the area of intergenerational mobility. In essence, because there has not been in-depth study of the propensity to migrate with linked datasets, it is best for me to model my project on similarly conducted projects on intergenerational mobility.

Raj Chetty prepared a paper on intergenerational mobility, in which he writes, “The relationship between [variables allows] us to summarize the conditional expectation of a child's rank given his parents' rank with just two parameters: a slope and intercept” [2]. Therefore, using research conducted on intergenerational mobility as a model for my research on propensity to migrate with a linked dataset, I will use an OLS linear functional form as well.

Data Description:

The data for my project originates from the Integrated Public Use Microdata Series (IPUMS). This data was then coordinated with entries on Ancestry.com in order to find matches between individuals at two different points in time. Individuals were matched based on their age, name, state of birth and race.

Preparing the Data:

In preparing the data for my regressions, I had to make several changes. For several dummy variables, there were values of “1”, values of “0”, and blank values. These blank values limited the number of observations that would be used in my regressions. After gaining an understanding of the variables and why some values were blank, I used the replace command in STATA to replace blank values with values of “0”. For example, in the literacy variable, observations who were literate were denoted with a “1”, observations who were not literate were denoted with a “0”, and observations who were under the age of ten were denoted with a blank value. If I left the variable as it was, my regression would only run observations over the age of ten. I determined that it was better to transform the data to include these observations by replacing blank values with values of “0”. At this point, I now had an equal 5465 observations for each variable.

Next, I decided to drop the categorical urban variable. Instead of generating a dummy variable for urban status, I determined that the variables for city size would illustrate if an observation lived in an urban area. Including the urban variable was redundant and would purposefully introduce unnecessary variance into my regression.

Finally, it is important to note that the maximum age of my observations is forty. This is because the age variable is for the year 1910 and the observations were monitored for twenty years until 1930. If an observation was over the age of forty in 1910, his propensity to migrate would have been significantly affected. So, my age range is 0-40 years in 1910 and 20-60 years in 1930. It has been determined that this a fair representation of the population.

Defining the variables:

As explained above, there are eleven variables in which I am interested.

Figure 2: *Descriptions of variables:*

Variable name	Description of variable	Hypothesized sign
Own_Home_1910	1 = Observation's family owned home in 1910	-
School_1910	1 = Observation attended school in 1910	+
Emp_Status_1910	1 = Observation was at work or unemployed in 1910 (<i>i.e.</i> , observation was in the labor force in 1910)	-
Veteran_1930	1 = Observation was a veteran in 1930	+
City_0	1 = Observation was not living in a city in 1910	-
City_25_up	1 = Observation was living in an identifiable city of greater than 25,000 residents in 1910	+
Migration	1 = Observation's state of residence in 1930 different than observation's state of residence in 1910 (<i>i.e.</i> , observation migrated) (<i>Dependent variable</i>)	N/A
Age_1910	Age of observation in 1910	-

Lit_1910	1 = Observation was literate in 1910	+
Father_Farmer_1910	1 = Observation's father was a farmer in 1910	-
Father_Laborer_1910	1 = Observation's father was a farm laborer (on someone else's farm) in 1910	+

With STATA, I am able to provide basic information on the eleven variables of interest.

Figure 3: Summary statistics for variables of interest:

Variable	Obs	Mean	Std. Dev.	Min	Max
Own_Hom~1910	5465	.2236048	.4166983	0	1
School_1910	5465	.2331199	.4228566	0	1
Emp_Sta~1910	5465	.5725526	.4947534	0	1
Veteran_1930	5465	.0748399	.2631569	0	1
City_0	5465	.7447392	.4360476	0	1
City_25_up	5465	.0924062	.289625	0	1
Migration	5465	.2020128	.4015385	0	1
Age_1910	5465	16.99689	11.2444	0	40
Lit_1910	5465	.4453797	.4970531	0	1
Father_Far~0	5465	.3022873	.4592911	0	1
Father_Lab~0	5465	.0567246	.2313368	0	1

From these summary statistics, we can make several observations. Looking at the mean statistic for the variables, we can observe that: 23.3% of the observations were in school in 1910; 7.5% of the observations were veterans in 1930; 74.5% of the observations did not live in identifiable cities in 1910; 20.2% of the observations migrated; the average age of our

observations in 1910 was 17 years old (37 years old in 1930); 44.5% of the observations were literate; 30.2% of the observations' fathers were farmers; and 5.7% of the observations' fathers were farm laborers.

Econometric Analysis:

At this point, I was ready to perform an econometric analysis to evaluate the impacts of different factors on an individual's propensity to migrate during the Great Migration. My first step was to check for violations of the classical assumptions.

When I first used the data, there were variables for "city size = 0", "city size = 0 to 25,000", and "city size = 25,000 and up". However, including all three variables would result in my regression having perfect multicollinearity – a violation of the sixth classical assumption. In such a case, STATA will not run the regression. Instead, it will drop one of the variables causing the perfect multicollinearity and run the regression without it. I determined that it was best to drop the "city size = 0 to 25,000" variable so that I could see the variation between observations not living in cities and observations living in very large cities. I also ran a Variance Inflation Factor (VIF) test to test for imperfect multicollinearity. The resulting mean VIF was 1.52. This is less than the benchmark score of 5, so imperfect multicollinearity is not a concern.

Figure 4: *Variance Inflation Factor (VIF) test results:*

Variable	VIF	1/VIF
Age_1910	2.69	0.371077
Emp_Sta~1910	2.16	0.462487
City_0	1.54	0.649501
Lit_1910	1.50	0.665952
Father_Far~0	1.46	0.686218
City_25_up	1.45	0.691875
School_1910	1.17	0.857822
Father_Lab~0	1.14	0.879410
Veteran_1930	1.04	0.964103
Own_Hom~1910	1.03	0.969056
Mean VIF	1.52	

Next, it was important to test for the presence of serial correlation in my data – a violation of the fourth classical assumption. I generated a time variable in my data and used the “tsset” command so that I could run a Durbin-Watson test.

Figure 5: *Durbin-Watson hypotheses and test results:*

H_0: There is no positive serial correlation.
H_A: There is positive serial correlation.
Durbin-Watson d-statistic(11, 5465) = 1.937832

The resulting Durbin-Watson statistic was 1.937832. Based on the critical values on the Durbin-Watson significance table for a 5-percent level of significance, the lower bound was 1.654 and the upper bound was 1.885. My value fell above the upper bound, so I failed to reject the null hypothesis and concluded that there was no positive serial correlation.

At this point, I had to acknowledge the existence of heteroskedasticity in my data. Heteroskedasticity is a violation of the fifth classical assumption, which requires constant variance of the error term. Because my data is based on the United States census, which is cross-sectional, my data is naturally at a greater risk for heteroskedasticity. With this in mind, I graphed the residuals to examine heteroskedasticity. I was not able to determine the source of my heteroskedasticity, so I ran a White Test. The χ^2 value was much greater than the critical value, so I rejected the null hypothesis that there was not heteroskedasticity.

To solve this problem, some of my variables were redefined. Because variables with a wide range of variance are more likely candidates for the source of heteroskedasticity, the city size variables I used in my final regressions were categorical dummy variables (“City_0” and “City_25_up”) rather than quantitative variables. While this shrinks the variation in the x-variables, this means that I must interpret these variables as categorical rather than quantitative variables.

Figure 6: *White Test for heteroskedasticity results:*

```
. imtest,white

White's test for Ho: homoskedasticity
      against Ha: unrestricted heteroskedasticity

      chi2(53)      =      176.56
      Prob > chi2   =      0.0000

Cameron & Trivedi's decomposition of IM-test
```

Source	chi2	df	p
Heteroskedasticity	176.56	53	0.0000
Skewness	4675.18	10	0.0000
Kurtosis	31.72	1	0.0000
Total	4883.47	64	0.0000

Finally, I was able to perform the econometric analysis. I ran a regression with “Migration” as the dependent variable and the other ten variables as independent variables.

Figure 6: *Null and alternate hypotheses:*

H_0:	$\beta = 0$.	The independent variable does not impact the dependent variable.
H_A:	$\beta \neq 0$.	The independent variable does impact the dependent variable.

Figure 7: *STATA output for regression:*

Source	SS	df	MS			
Model	15.5359822	10	1.55359822	Number of obs =	5465	
Residual	865.441877	5454	.158680212	F(10, 5454) =	9.79	
Total	880.977859	5464	.161233137	Prob > F =	0.0000	
				R-squared =	0.0176	
				Adj R-squared =	0.0158	
				Root MSE =	.39835	

Migration	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Own_Home_1910	.0186938	.0131374	1.42	0.155	-.0070608	.0444484
School_1910	.0524677	.0137599	3.81	0.000	.0254929	.0794425
Emp_Status_1910	.0085098	.0160165	0.53	0.595	-.022889	.0399085
Veteran_1930	.1001953	.0208559	4.80	0.000	.0593093	.1410812
City_0	-.0530244	.0153349	-3.46	0.001	-.0830871	-.0229618
City_25_up	-.0001462	.0223695	-0.01	0.995	-.0439993	.043707
Age_1910	-.0026707	.0007868	-3.39	0.001	-.004213	-.0011283
Lit_1910	.0201579	.0132856	1.52	0.129	-.0058872	.0462031
Father_Farmer_1910	-.0175255	.014164	-1.24	0.216	-.0452926	.0102417
Father_Laborer_1910	.0022216	.0248408	0.09	0.929	-.0464763	.0509195
_cons	.2543206	.0180991	14.05	0.000	.2188392	.289802

In order to analyze this output, I must compare the t-statistics to the t-critical values. I will use a two-sided 95% level of significance test. With 5465 observations and 10 independent variables, my degrees of freedom is 5454 (degrees of freedom = $n - k - 1$). My t-critical value is 1.960.

Figure 8: *Conclusions from regression:*

Variable	Conclusion	Sign
Own_Home_1910	Fail to reject null	+
School_1910	Reject null	+
Emp_Status_1910	Fail to reject null	+
Veteran_1930	Reject null	+
City_0	Reject null	-
City_25_up	Fail to reject null	-
Age_1910	Reject null	-
Lit_1910	Fail to reject null	+
Father_Farmer_1910	Fail to reject null	-
Father_Laborer_1910	Fail to reject null	+

Therefore, with 95% confidence, I fail to reject the null hypothesis for Own_Home_1910, Emp_Status_1910, City_25_up, Lit_1910, Father_Farmer_1910, and Father_Laborer_1910. My data does not suggest that these variables have an impact on an individual's propensity to migrate. However, I reject the null hypothesis for School_1910, Veteran_1930, City_0, and Age_1910. My data suggests that these variables have a significant impact on an individual's propensity to migrate.

Analysis Description:

My econometric analysis yielded some surprising results. I was most surprised by the failure to reject the null hypothesis for the "City_25_up" variable. After reading the existing

literature, I hypothesized that living in a large city would strongly increase an individual's propensity to migrate. However, the calculated t-statistic was -0.01, so I am not able to describe any of the variation in migration with variation in this variable. This lack of significance may be caused by the small number of observations living in large cities in my data. Only 9.2% of observations lived in cities with 25,000 people or more.

On the other hand, "City_0" was one of my most significant variables. The negative coefficient means that an individual was less likely to migrate. This agrees with existing literature and the ideology that individuals living in unidentifiable cities were either more content to stay home or less able to migrate to another state.

I was also surprised by the lack of significance of the "Father_Farmer_1910" and "Father_Laborer_1910" variables. My literature review suggested that farm residence status was a key variable in determining an individual's propensity to migrate. However, these variables cannot explain variation in migration in my data.

"Age_1910" appears to have had a negative effect on an individual's propensity to migrate. This suggests that older individuals were more content to stay home or less able to migrate to another state. This seems reasonable, as younger African-American individuals would have likely had more opportunities in life given the circumstances of this time period.

Veteran status had the most significant impact on an individual's propensity to migrate. This suggests that African-American males were less likely to return to their home states after serving in the military, agreeing with my hypothesis that "Veteran_1910" would have a positive relationship with propensity to migrate.

In summary, the quantitative data examined showed that the following variables were most likely to impact a migrant's propensity to migrate: School_1910, Veteran_1930, City_0,

and Age_1910; while the following variables appeared less likely as predictors of migration: Own_Home_1910, Emp_Status_1910, City_25_up, Lit_1910, Father_Farmer_1910, and Father_Laborer_1910.

Personal Accounts

“You may have heard the world is made up of atoms and molecules, but it's really made up of stories. When you sit with an individual that's been here, you can give quantitative data a qualitative overlay.”

-- William Turner

At this point, my project shifts from looking at mass migration through a quantitative lens to looking at mass migration through a qualitative lens. In an effort to investigate how the raw data is exemplified in real-life situations (or not), I conducted two in-depth interviews with reverse migrants – individuals who left the South during the Great Migration and have since returned to the South – to investigate their situations in terms of the variables which had been analyzed. The proper Institutional Review Board (IRB) approval was obtained prior to conducting these interviews, and individuals’ names are protected within this paper by the use of pseudonyms.

Mr. Bernard Matthews:

His father and father-in-law:

Bernard Matthews’ story begins with the story of his and his wife’s fathers. Bernard’s father, Walter, grew up on a farm in Alabama. Walter was one of nine children, all but two of whom eventually migrated from the South as part of the Great Migration. Walter and his wife had four children in Alabama while he worked as a laborer on the railroad. After the family

migrated from Alabama to follow the railroad, Walter and his wife had another four children (including Bernard) in Tennessee.

On his wife's side of the family, Bernard recalls that his father-in-law was one of eight children who grew up in Georgia. In contrast with his own father's family, only one of Bernard's father-in-law's siblings migrated. "I think that had to do with the fact that my wife's grandfather was a very, very strong-willed man. He wanted his family around, you know. He was very family-oriented." Interestingly enough, the one individual on that side of the family to migrate is the only one of the eight brothers and sisters who is still alive. In addition to Bernard's wife's grandfather's personality, he also had land that allowed his children's families to sustain themselves, whereas Bernard's grandfather did not have land to leave to his nine children.

Early life:

In 1944, Walter Matthews and his wife gave birth to Bernard. Bernard remembers that he knew a lot of migrant families from Georgia and South Carolina who grew up together in Tennessee. "For some reason, I don't know, it was like something drew them to Knoxville. And what you would see is one member of a family coming and making way for other members of the family to come." For instance, Walter was the first of his family to migrate. Soon after, three brothers and one sister followed him from Alabama.

Bernard graduated from high school in 1962 and immediately went into the military. He explained to me that he did not want to leave home, but he and many of his friends joined the military because they felt they had no other choice. "During that time, the thing that was driving me leaving was economics. At that time, the mechanism for financing college was not the same

as it is now. I didn't see an opportunity for me to be able to go, financially. So I said, I'll do this. And what I ended up doing was going to college on the GI bill."

The military

Fresh out of high school, Bernard was first stationed in Wyoming, where he stayed for more than two years. I asked Mr. Matthews what it was like to leave his home for the first time. He explained that, "If you have interests that are universal, that you can apply anywhere... then you can live anywhere. Everywhere you go, you can make it your home." Nonetheless, growing increasingly weary of the climate in Wyoming, he took the first opportunity to leave again. He spent the last four years of his service stationed in England.

Working and traveling:

After his time in the military, Bernard returned to Knoxville where he obtained his Bachelor's and Master's degrees in Public Administration. He left Knoxville again, this time migrating to Chicago to work for the Department of Energy. After five years, an opportunity arose in New Mexico. Bernard and his family moved again and lived there from 1978 to 1991. Finally, Bernard had the opportunity to return to Knoxville and work at Oak Ridge National Laboratory. He gave me a gentle smile as he fondly recounted how his journey had taken him full circle.

Thoughts on migration:

Having lived abroad as well as in several regions of the United States, Bernard is certainly an individual with a curious mind. He has read about and studied mass migration

himself, and he shared with me some of his own thoughts on the topic, which I felt were pretty profound. “Migration has two different things that it does. First of all, it is an opportunity for the person who migrates. But it’s also an opportunity for the person who stays because there is less competition for whatever resources were left behind.”

Bernard went on to describe some of the literature he has read on the topic of migration, such as Edward Banfield’s The Unheavenly City^[5]. He spoke to me of Banfield’s theory of “future-oriented” and “present-oriented” individuals. “Future-oriented” people are more likely to migrate because their minds focus on opportunities and possibilities. “Present-minded” people, on the other hand, think more about what is around them right now and how to make the best of their current situation. I found both of these sentiments to be particularly interesting and certainly areas for further study.

Mr. William Hudson:

His father:

In the same vein as Bernard’s story, William’s story also begins with that of his father, Eli, who grew up in East Tennessee. William jumped straight into his description of his father: “My daddy’s story was survival. He was ten years old and sleeping in a barn because his daddy was dead, his mother was dead, and he was working on the farms. That’s where he made his living.”

In 1936, Eli and his wife had William, the oldest of their four children. Access to school was a challenge for the family, but William recalls that his father was determined that his children would go to school. “He went down to the county and convinced them to pay him to take the kids to the next city to catch the schoolbus. So he picked up several kids that lived out

there. When my sister was old enough, she started driving the kids, cause my daddy was a farmer and he had to work the land.” William told me that, growing up, he hated to work with his father on the farm because he would work and work and never get tired. “He believed in work; that’s the only way he knew how to survive, and that’s what he did.”

Leaving home:

Throughout William’s story, I found it clear that his father’s determined work ethic lives on in him. William described to me the two-room grammar school he attended: grades 1-4 on one side and grades 5-8 on the other side. In 1950, his graduating class from grammar school (8th grade) consisted of only three people. He was not allowed to go to the white high school in his town, nor to the one in the next closest town. Determined to continue his education, William left home at the age of *fourteen* to live with his aunt in Columbus, Ohio. He spent the next six Christmases away from his home and his family.

After high school, William returned to East Tennessee. The only job he could get was as a janitor at a nearby plant. After his shift, he would go into the office area where they had applications lined up on the desk. He would see a stack for those with a third grade education, a stack for those with a fourth grade education, but he never saw one for an education higher than sixth grade. Even though William had a high school education at the time, less educated individuals were working in the plant while he could not get a job in that section.

The military:

Knowing that he would have a better chance at getting a job if he was a veteran, the 5’3”, 117-pound eighteen-year-old volunteered through the draft and joined the military, even though

he admitted that he did not want to. His mom did not want him to join the military either – she cried at the news. But William was determined, and this was his next step toward a better life.

From 1954-1956, William was stationed in Germany. He spoke about the differences in race relations he experienced in his time overseas. “Soldiers, we’re all the same [race]. And in Germany, it was A-Okay to be black.” It was surprising to William to come back to a part of the world that treated him differently, because he had been overseas “long enough to get indoctrinated to a certain way of life.” For example, once he was back in the States, William went to get a Coke with a fellow ex-soldier who was white without even considering the stigma. The lady behind the counter told the white soldier, “I’m sorry, we can’t serve him in here.” William recalled: “That right there still bothers me today. I wish I had said I’m not going anywhere. I’ve been in the military, I’ve served this country, I’ve protected you and your family. Why didn’t I just say no? Well, I might have been put in jail.”

“I can resign”:

After his time in the military, William briefly resumed work as a janitor at the plant. He recalled enjoying shop-work class in high school, so he wanted to work in the plant’s machine shop. He talked to the plant’s personnel manager, who told him that they could not put William in machine shop because of his race. William replied, “I live here and I’ve lived here most of my life.” The plant manager said, “We can’t afford to do that because if we do, we will probably cause the plant to shut down. People might protest.”

As always, William kept persisting. He took a course through correspondence through the mail for eighteen months. He went back to the manager after that training, but the manager

told him, “William, what are we going to have to do to get through to you that we just can’t do it?” William replied: “Well, I’ll tell you what I can do. I can resign.”

In search of opportunity:

His mind set, William decided to move to Chicago. He worked there for three years, finding some of the same race-related problems. “I didn’t see much difference between the North and the South. Down South, it was more ‘matter-of-fact.’ We knew where everyone stood. You don’t sit in the front of the bus, you don’t use the front entrance to a building. Up North, there was the same treatment, but it was more of a subtlety.”

After three years of working in Chicago, William believed he had enough practical experience and was determined to get into the machinist field back home. Back in East Tennessee, he found himself out of a job for eighteen months. “I drove over 10,000 miles, and nobody, nobody would hire me.” Finally, he got the job – with one condition. William was to go through the four-year apprenticeship program as if he had no experience. “I had to start from the beginning and act like I was dumb, like I didn’t know anything. All the while, I knew more than some of the machinists knew.” In his second year, however, William won “Apprentice of the Year.”

William told me how his father thought he was crazy when he wanted to leave his job as a janitor and move to Chicago. When he came back and got the machinist job, he took his father to look at the plant, and he was in total amazement. Within the next six months, Eli Hudson and his wife both passed away and the four children sold the farm.

Continuing education:

Three years into the apprenticeship program, William thought to himself, “Maybe I’ll be a foreman one day.” So, he decided to take some supervising courses at the University of Tennessee. For the next seven years, William was going to school part-time, year-round. “I would go to school from 8:00am to 2:30pm and work from 3:30pm to midnight. Each week I would schedule out when I could eat and sleep, and I’d do okay until about Thursday. But by Thursday, I tell you I was just so tired. Once I finished school, I added a part-time job. I was trying to gain as much experience and knowledge as I could in a short period of time.”

After the apprenticeship program, William worked from 1964-1996 in East Tennessee. He spent most of those years as a general machinist, but he ended up retiring as a human resources manager. His story is a classic tale of determination overcoming adversity again and again. “I was persistent. You were not going to outdo me. Once I wanted something, I pushed and pushed. That’s the way I’ve always been.” William had always wanted to be a machinist because he was really good with his hands. I can vouch for that: at the end of our interview, he proudly showed me a wooden grandfather clock and a well that he had built.

Conclusion: Do the Personal Accounts Support the Statistical Data?

After completing both quantitative and qualitative research on the same research question, it is interesting to see where the findings line up and where they disagree.

As previously noted, the econometric analysis I performed yielded some surprising results. I had expected individuals living in cities with populations greater than 25,000 to be more likely to migrate, but the analysis concluded that it was not a significant variable.

However, only 9.2% of the observations lived in such cities. After looking at the issue through a

qualitative lens, I believe the interviewees' accounts tell me that the small sample size likely contributed to this result, because Mr. Matthews and his siblings migrated from a large city.

On the other hand, the analysis found that individuals living in unidentifiable cities were much less likely to migrate. I did not necessarily see this borne out in the interviews, as Mr. Hudson migrated from a rural area that was not identifiable as a city.

The variable for age had a negative impact on propensity to migrate in my regressions, indicating that older individuals were more content to stay home or less able to migrate. Both Mr. Matthews and Mr. Hudson migrated for the first time as teenagers, so the qualitative analysis seems to support the quantitative analysis on this variable.

The variable that had the most significant impact on an individual's propensity to migrate in my econometric analysis was veteran status. This led me to believe that an individual was less likely to return to his home state after serving in the military. As we saw in the case of Bernard Matthews, he did return to his home state for his college education after his service. However, he later moved to the Midwest and the Southwest for employment. Similarly, William Hudson returned to his home state for a brief time after his service. He, too, migrated to the Midwest for better employment opportunities. Therefore, while veteran status seemed to play a role in these particular migrants' propensity to migrate from the South, their veteran status did not inhibit them from returning to the South after a period away, thus becoming "reverse migrants." This was contrary to what I had expected, based upon the quantitative analysis.

While I did not include family size as a variable in my quantitative work, it appears to have played a role in influencing propensity to migrate. Mr. Matthew's father was one of nine children, seven of whom migrated. Mr. Matthews himself was one of eight children, seven of whom migrated. Mr. Hudson was one of four children, all of whom migrated. As Mr. Matthews

theorized, “Migration is an opportunity for the person who migrates, but it’s also an opportunity for the person who stays because there is less competition for whatever resources were left behind.” In each of these cases, the large family size likely contributed to individuals migrating because of the competition for resources and space. Mr. Matthews’ theory certainly presents an interesting topic for further research on the issue of mass migration.

As noted at the outset, one of the goals of my research was to identify factors which help predict a propensity to migrate, focusing on the American “Great Migration,” but with an eye toward identifying factors that might be applicable across cultures. Mass migration has been one of the hallmarks of all human existence, and therefore, any information which helps us understand why people migrate can also help us understand how to predict mass migrations, and then to prepare for them. On the other hand, we must avoid assuming that all factors are universal. One of my goals was to advance the research incrementally, by studying factors related to a single period of time in a single culture (*i.e.*, the American “Great Migration”), with the hope that my research might give a point of comparison for another researcher in another part of the world, studying mass migrations in other cultures and times.

The most pertinent thing I learned from my research, however, was not a mere analysis of numbers and data. Rather, my research has led me to understand the human element which lies behind each number – the story of a person’s life, the sometimes gut-wrenching reality of the decisions made, the family members left behind, the sadness and the joy, the opportunity and the angst. I believe and hope that I will be less callous about merely “counting people” and putting them in categories depending upon what motivated them, and that I will be more sympathetic and understanding of the personal reasons and impacts behind each motivation. While my

research may have only advanced our knowledge in this field incrementally, it has helped shape my views and my knowledge of the human condition in an immeasurable way.

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