

DO REFUGEES WHO BECOME ECONOMICALLY SELF-SUFFICIENT START WITH
NOTHING?

by

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ABSTRACT

Paul Brayden Scholes. How do Refugees Start from Nothing and Become Economically Self-Sufficient? (Under the direction of Dr. Stephanie Potochnick)

There are more refugees globally now than at any time since WWII. I use Phillimore's opportunity structures from the refugee studies literature with popular ideas from the sociology of immigration literature like New Assimilation Theory to examine three: different indicators of economic integration: (1) whether a refugee finds a job in their first year, (2) economic self-sufficiency— the non-use of public assistance programs, and (3) weekly working hours. Economic integration—a common concern in immigration research and refugee policy—is a multi-dimensional concept that is proof of and supports other forms of integration. The assumption is that if immigrants and refugees are able to achieve financial success, then they are capable of financing their other needs and personal goals. Research on refugees' economic integration, however, is limited by data availability. This study uses the Annual Survey of Refugees-- a representative, recently available dataset-- to test if refugees are blank slates, or if their previous experiences and human capital contribute to their economic integration. This work has implications for recent public debates, policy, and theory related to refugee resettlement. Many native-born Americans have expressed renewed concern towards foreigners and their use of public assistance programs. I found that human capital and contexts both affect economic integration, though no predictor is significant for every aspect of economic integration. With a few exceptions, I do not find evidence to suggest that refugees are blank slates when examining these outcomes.

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There were 82.5 million displaced persons on Earth at the end of 2020 (United Nations High Commissioner for Refugees 2021). The need for advances in refugee studies is clear: Sociologists have studied integration for nearly a century and have identified factors that help people integrate-- achieve parity with natives on important outcomes. While achieving economic self-sufficiency is “among the most important steps for refugees” (Office of Refugee Resettlement 2018:17), little work to date has examined the economic integration of refugees and even less work has elected to study the multi-dimensional nature of economic integration with nationally representative data (Young 2020; Bernstein 2018). Instead, most economic integration research focuses on small scale datasets (Young 2020), and public assistance program use (Nam et al. 2021), which though valuable, does not provide a complete understanding of refugees as a whole. This study addresses these limitations by using new large-scale data on incoming refugees and examines if and how different pre- and post-migration factors shape three different indicators of economic integration: time till first job, economic self-sufficiency (i.e. no public assistance use), and weekly working hours.

This study uses New Assimilation Theory (Alba and Nee 1997) and Phillimore’s opportunity structures (2020) —combined with national level data and a series of linear and logit models— to analyze the role of pre- and post-migration human capital and pre- and post-migration contexts on refugee economic integration. These theories are used to develop three main research questions: 1) How do pre- and post- migration human capital affect refugee economic integration in the U.S.? 2) How do pre- and post-migration context factors (e.g., national identity or region resettled to) shape economic integration? 3) What is the relative importance of human capital, and context factors in shaping refugee economic integration?

Pre/post migration human capital and pre- and post-migration migration context are important variables identified by the previous theories as contributing to integration. The impact of pre- and post-migration human capital and pre- and post-migration context effects across specific types of refugee economic integration are not entirely understood. Past work emphasizes either pre/post migration human capital or pre/post migration context effects. This paper will assess which is a better fit for explaining the refugee experience.

I first begin with an overview of modern-day refugees and the process of resettling to the United States. Afterward, I discuss frequently used data sources for studying refugees in the United States. Next, I discuss economic integration (assimilation is also used interchangeably) and the three outcomes focused on in this study: time until obtaining a first job in the U.S., economic self-sufficiency, and weekly working hours. Then, I discuss three main theories used to analyze economic integration—New Assimilation Theory (Alba and Nee 1997), Phillimore’s opportunity structures (2020), and Immigrant Selection theory (Feliciano and Lanuza 2017). I state the hypotheses suggested by the literature and then discuss my methods. Afterward, I present and discuss the results.

BACKGROUND ON REFUGEES & THE US FEDERAL GOVERNMENT REFUGEE RESETTLEMENT SYSTEM

There are more displaced persons in the world now than at any time since WWII (United Nations High Commissioner for Refugees 2021). People are displaced for many reasons-- for example violence, neglected infrastructure, failing markets, and/or climate change-- and few people fit neatly inside any single migration category.

Only a small proportion of these displaced people are officially recognized as refugees by the United Nations. ‘Refugee’ is a protected legal status: “someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted...” (United Nations 2010:14). U.N. recognized refugees are not asylum seekers or visa holders-- these other labels have their own definitions and uses. Potential refugees submit applications to the U.N. and are screened and processed. Then countries like the United States select some of these U.N. recognized refugees for permanent resettlement. In the United States, the President— usually with the advice of the State Department and the Department of Health and Human Services — sets the ceiling for refugee admissions in a fiscal year. Recently this has included a breakdown of how many refugees the United States would like to resettle for various continents and countries.

The current resettlement system is limited. It resettles tens of thousands of refugees a year, yet there are tens of millions of displaced people in the world right now. While limited, the current resettlement system does provide sanctuary for the thousands fortunate enough to succeed through the process.

Refugees come from unique circumstances and these circumstances preclude many strategies other migrants use to adapt to their new settlement country. Refugees struggle to build independent lives, in part due to the relative lack of resources and the impossibility of planning next steps (Ager and Strang 2008). Refugees are typically exposed to trauma and violence, resources are often destroyed or used to flee. Refugees are not told where they will be resettled until they are selected by a country. Thus, language preparation and cultural orientation is limited until a host country volunteers itself. Once a host country is found and a displaced person is

vettted and given refugee status, both host and refugee are anxious to begin resettlement (United States Office of Refugee Resettlement 2021).

During the first 90 days of a refugee's arrival to the United States, private refugee resettlement agencies partner with the State Department's Bureau of Population, Refugees, and Migration for reception and placement. Resettlement agencies are bound by the standards of the State Department, and prioritize economic wellbeing. According to the Bureau of Population, Refugees, and Migration, refugees experience the following in their first days of resettlement:

[Refugees] are taken to their initial housing, which has essential furnishings, appropriate food, and other basic necessities. The resettlement agencies assist refugees during their initial resettlement in the United States, including enrolling in employment services, registering youth for school, applying for Social Security cards, and connecting them with necessary social or language services. In coordination with publicly supported refugee service and assistance programs, resettlement agencies focus on assisting refugees to achieve economic self-sufficiency through employment as soon as possible after their arrival in the United States.

Refugees receive employment authorization upon arrival and are encouraged to become employed as soon as possible. Bureau of Population, Refugees, and Migration (2021:1)

After the first 90 days of resettlement, refugees continue to receive assistance from their refugee resettlement agency through a partnership with the Department of Health and Welfare's Office of Refugee Resettlement-- which also focuses on economic integration: "Full employment is among the most important steps for refugees... on the path to self-sufficiency and full

integration into American society” (Office of Refugee Resettlement 2018:17). Despite the importance of economic integration and its central place in resettlement strategy little work has been done to investigate its processes.

The Diverse Origins of Refugees in the U.S.

Refugees come from diverse backgrounds and situations. Most recently admitted (2011-2018) refugees to the United States come from Burma/Myanmar, Iraq, Iran, Somalia, and the Democratic Republic of the Congo (also referred to as “DR Congo”) (Annual Survey of Refugees 2016-2018). The majority (~50%) of refugee households arrived with just one member (Annual Survey of Refugees 2016-2018). Fewer than 15% of refugee arrivals had more than five people in their group (Annual Survey of Refugees 2016-2018). Most refugees are resettled into the U. S.’s “South” census region (Annual Survey of Refugees 2016-2018). The majority of refugees are usually resettled, in order of states resettling the greatest percentage of total refugees, to California, Washington, Texas, or New York (United States Department of State 2021; United States Department of Health and Human Services 2021).

The top five national identities admitted into the United States from 2011-2018 are the Iranians, the Burmese, the Iraqis, the Somalians, and people from the Democratic Republic of the Congo. These different nationalities have differing pre- and post-migration experiences.

Iranians are one of the top five main refugee groups in the United States. The initial thrust of Iranian refugees occurred after the revolution of 1978-1979. Most of the refugees arriving to the United States after this time are fleeing religious or social persecution (Koirala and Eshghavi 2017). Like many other refugees from predominantly Islamic countries, Iranian

refugees report some persecution from Americans after resettlement (Koirala and Eshghavi 2017).

Burmese refugees are also a main refugee group in the U.S. Burma's (or Myanmar) modern, ongoing conflict started in the late 1940's. This is the site of the well-known Rohingya conflict. In response to attacks on government installations, in 2017 the Burmese government began a deadly intervention on Muslims living in the Rakhine State. Most of the Burmese refugees arriving to the United States from 2011-2018 are not Rohingya (the recent Rohingya exodus started in 2017). The majority of Burmese refugees don't speak English at all or very poorly (Annual Survey of Refugees 2016-2018).

Refugees from Iraq are one of the top five refugee groups in the U.S. The conflict in Iraq is well known to Americans. In 2003 a U.S.-led coalition invaded Iraq, quickly ending the government administered by Saddam Hussein. Iraqis have harder intra-lingual and inter-ethnic boundaries than other migrant groups and so do not tend to settle together (Shoeb, Weinstein, and Halpern 2007). Iraqis tend to have similar rates of college completion as Americans but also higher rates of high school dropout (Capps et al. 2015). Probably because of their high levels of educational attainment, they tend to have higher reserve wages than other groups— or the lowest wage a person will consider working for (Tran and Lara-Garcia 2020).

Refugees from Somalia are one of the top five groups of incoming refugees to the United States. Decades of armed conflict and natural disasters such as drought have brought thousands of Somali refugees to the United States. The pre-migration context in Somalia has deteriorated to rendering many of the privileges of living in a society with a government: travel, exchange of money, and general rule of law, as rarities. In contrast with Iraqi refugees, they tend to work for

very low wages. Despite their large family sizes, the median Somali household earns \$19,061, well below the poverty threshold in the United States for a moderate family of four (Chambers 2017).

The people from the Democratic Republic of the Congo are one of the largest groups of incoming refugees to the United States. The DR Congo crisis is marked by decades of conflict and civil war, as well as numerous disease outbreaks— most notably Ebola and cholera. The brutality, duration, and impacts of sexual violence in DR Congo is extreme (Wachter et al. 2016). As such, many of the refugees arriving to the United States from DR Congo are at-risk women: “UNHCR considers a woman at risk or a girl to be at risk, if she has protection problems particular to her gender and lacks effective protection normally provided by male family members.” (UNHCR 2013). On top of the effects of sexual violence, many Congolese refugees report feeling isolated and overwhelmed (Wachter et al. 2016).

Though each of these five main refugee groups have diverse experiences, there are also many similarities in their pre/post-migration contexts. For instance, in congruence with Segmented Assimilation Theory (Portes and Zhou 1993), reports of prejudice and discrimination are prevalent among all five of the largest incoming refugee national identities, typically for religious or racial reasons. Despite the universal reports of discrimination, the employment opportunities and outcomes seem to be predicted by national identities.

REFUGEE ECONOMIC INTEGRATION: INDICATORS & DATA LIMITATIONS

Most modern investigations into refugee economic indicators start with the fear of public dependence that currently shapes American policy (Nam et al. 2021). In the 90’s researchers were concerned that the immigration system was “Importing Poverty” (Camarota 1999:1; Van

Hook, Brown, and Kwenda 2004), though fear of free-riders and public charges existed before—codified into American law in 1882 (Cincinnati and Graham 2001). Donald Trump was elected President of the United States in 2016 with “America First” rhetoric and goal to reduce the number of immigrants and refugees “abusing” public assistance programs (Trump 2015). American politics and public debates have been concerned over immigration, refugee resettlement and public assistance free-riders for decades. A challenge in addressing these contentions has been that data on refugees and their economic integration is limited.

American sociologists often use the terms integration and assimilation interchangeably to describe the adaptation process immigrants undergo when adjusting to their new host country (Phillimore 2020). Alba and Nee (1997) describe assimilation as the achievement of parity with natives in key outcomes like use of social structures, participation in leadership areas, access to upper strata of society, income and/or English language proficiency. This paper considers economic assimilation/integration as the gradual process of attaining economic self-sufficiency and similar outcomes as natives in financial matters such as number of weekly working hours. The paper also considers the speed at which first economic integration steps are taken by analyzing the factors predicting finding employment within a refugee’s first year in the United States. A major consideration for this definition and for assimilation/integration theories in general is the supposed time schedule of assimilation/integration. Many recent data and methods have allowed researchers to study different sections of the assimilation/integration time schedule.

In 2015 researchers estimated the rates of lifetime public assistance use for many refugee groups using a proxy measure to identify refugees and pooled data from the American Community Survey (Capps et al. 2015). This study found that first generation refugees usually maintain higher rates of public assistance use than natives in the United States (Capps et al.

2015). Evans and Fitzgerald (2017) found that most refugees end up paying more into the system over their residency than they took out of it by using public assistance programs. They also found that while refugee public assistance use is high initially, upon resettlement public assistance use rates fall quickly.

Though valuable, the proxy measure technique used in these studies is limited. Because refugee status is not collected in most national data, researchers often impute refugee status by using country of origin. Though innovative and effective, this technique can overestimate the number of refugees by considering all migrants who came from a certain country in a certain year as refugees. This method can also underestimate some refugee groups by not including refugees from countries with low percentages of refugees (Bernstein 2018). Other researchers have used this method and it remains a popular option because it can estimate assistance use over a lifetime (Evans and Fitzgerald 2017; Bernstein 2018).

To overcome this data limitation, other researchers have investigated economic integration using administrative datasets. Nam et al. (2021) used county data to estimate the probability of refugees being dependent on public assistance programs. Administrative data is an attractive option because of the depth of information that is available, however it is often limited by geographical region and bound by context. For instance, Nam et al. found no support for the stereotype of the welfare dependent refugee, but these findings were limited to Erie County New York. Larger-scale data would be needed to see if this finding extends to other regions.

Another data option is the Annual Survey of Refugees, which Tran and Lara-Garcia (2020) used in their recent work investigating hourly wage, working hours and education enrollment. The Annual Survey of Refugees is a nationally representative dataset of refugees

who arrived in the United States in the past 5 years. It is administered every year by the Office of Refugee Resettlement and examines a variety of outcomes such as employment, public assistance use, English proficiency, and enrollment in training programs. This source focuses on recently arrived refugees and is the best dataset available to study the first few years of the refugee experience. I use this data source for this project.

Three Indicators of Economic Integration Used in this Study

To summarize, there are many interdependent layers of economic integration that have been measured by a variety of datasets. A more holistic vision of economic integration, however, is needed to analyze predictors of economic integration. Just as there are many types of economic integration, it is assumed that these aspects have different indicators (Young 2020). This study will examine the following three indicators: Time in years to first job, economic self-sufficiency—or the ability to live in the United States without using any public assistance programs, and the natural log of weekly working hours.

The first indicator is time in years until obtaining a first job in the United States. The Office of Refugee Resettlement and the State Department’s Population, Refugee, and Migration Bureau both focus on assisting a refugee obtain a job quickly, perhaps neglecting the quality of the job obtained (Mathema and Carratala 2020; United States Department of State n.d; United States Office of Refugee Resettlement 2021; Capps et al. 2015). Integration is widely considered a multifaceted process where the evidence of integration are also contributors to further integration (Ager and Strang 2008). For example, while obtaining a job indicates some adaptation to the American system, obtaining some social capital, and language mastery, having a job gives refugees more social contacts, work training, and opportunities to master English.

Economic self-sufficiency is the ability of a refugee to live in the United States without using public assistance programs including public housing, the Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families, Refugee Cash Assistance, General Assistance, miscellaneous cash support from sponsors or religious groups, or Social Security Income. Economic self-sufficiency is fundamental to federal objectives: removing barriers to employment, accounting for the spending supporting resettlement services, minimizing tax burdens like public assistance use, and maximizing tax revenue. Besides this measure's importance in American politics, the Office of Refugee Resettlement carefully tracks this measure every year to address issues while maintaining good stewardship of their tax-payer derived funds (United States Office of Refugee Resettlement 2021). Despite economic self-sufficiency's congruence with federal priorities, stated objectives of the Office of Refugee Resettlement and the Bureau of Population, Refugees and Migration, and the concern from American citizens for welfare dependence, not enough research has been done to uncover the processes of economic self-sufficiency.

The third indicator analyzed is weekly working hours. Working more hours not only provides more income, but access to other services and skills. For instance, jobs are required to offer health insurance to employees working more than 30 hours per week. The other resources that come with more weekly working hours—like higher English proficiency for most jobs that require communication with Americans— have a protective effect: more resources can be used to mitigate, avoid, or pay off the effects of stressful or resource-loss events (Hobfoll 1989). Weekly working hours is a measure of integration for several reasons. Most importantly work is an opportunity to physically and socially integrate with other people in the host context. More work hours also predict important integration outcomes: more money, more exposure to

American culture, more social capital by working with coworkers, and better English proficiency from practice with native speakers (Ager and Strang 2008).

ECONOMIC INTEGRATION THEORY & PREDICTORS

This section highlights three main theoretical frameworks, each of which highlights how both pre- and post-migration human capital and pre- and post- migration contextual factors shape immigrant and refugee economic integration. New Assimilation Theory (Alba and Nee 1997) and Selection Theories highlight the importance of both pre- and post-migration human capital and context factors but for immigrants specifically, not refugees. In contrast, Phillimore (2020) provides unique insights into the refugee experience & suggests that post-migration context and human capital are more relevant for explaining refugee integration than pre-migration human capital and context factors.

Pre-Migration Human Capital

New assimilation theory helps inform research question 1: “How do pre- and post-migration human capital affect refugee economic integration in the U.S.?” Refugee integration research frequently assumes that refugees arrive in the United States as blank slates (Tran and Lara-Garcia 2020; Gold 1992). In contrast, Alba and Nee’s (1997) New Assimilation Theory explains how migrants (not refugees) assimilate in the host country context over time. New Assimilation Theory assumes that factors like previous human capital, reaction from host-contexts, and opportunities to interact with the mainstream should affect assimilation. Human capital is the skills, training, and experiences that a person gains over their lives. Previous human capital can include employment sector experience or educational attainment before resettlement and both of these should affect economic integration outcomes because these experiences are

valued by the market. Migrants are not refugees and have different experiences than refugees and so immigrant theories need to be assessed for their fit with refugee populations and circumstances.

In the sociology of immigration, selection is an important idea. Are those who choose to immigrate different from those who stay behind? There is evidence for selection effects, for example, those who are able to leave may have more resources than others. They may have connections in their target destination, they may have hard to measure qualities that improve outcomes like grit, creativity, or a strong work ethic. Selection is seldom accounted for, even in immigration research but refugees may be selected as well. Refugees, however, may be selected by different mechanisms: like the ability to navigate bureaucracy, interview well, or other hard to measure qualities. In Feliciano and Lanuza's (2017) recent article they measure these hard to measure qualities with "contextual attainment" (Pong and Landale 2012). Contextual attainment is the relative standing of an individual outcome to the rest of the context or country. Feliciano and Lanuza use years of education to proxy socioeconomic status. For example, if the average years of education in a country was 8, and a respondent earned 12 years, this would put them in a high contextual attainment category despite being an expected attainment for the United States.

These theories contribute to *Hypothesis A*): *Higher or more prestigious pre- and post-migration human capital—years of education, pre-resettlement English proficiency, current English proficiency, enrollment in English and employment training programs, and U.S. work sector— will each predict greater odds of achieving economic self-sufficiency, obtaining a job within the first year of resettlement, and greater weekly working hours.*

Post-Migration Human Capital

New Assimilation Theory also considers the actions of migrants after resettlement. Post-migration human capital affects integration in many of the same ways as pre-migration human capital: factors like education, training, experience, and English language ability can be developed after resettlement and high levels of these make it easier to find a good paying job and navigate a new environment. New Assimilation Theory also points out that the pursuit of human capital increases the amount of contact that host-context members and migrants have with each other and socializing both groups to each other's presence. More contact fosters closer interactions between the two groups, which makes it easier for migrants to further assimilate into the host context. For example, as migrants attend English classes, they have more opportunities to engage with members of the host context and learn about job or schooling opportunities. In the refugee studies literature, Ager and Strang (2008) also notice that different forms of integration actually assist other forms. For example, as refugees attend job trainings, they meet new people which improves their English language abilities, which furthers their qualifications for their jobs. Therefore, in the post-resettlement context, human capital like English proficiency and educational attainment should predict economic integration. These factors are examined in the post-migration aspect of *Hypothesis A*.

Pre-Migration Context

New Assimilation Theory (Alba and Nee 1997) and Phillimore's Opportunity Structures (2020) inspire Research question 2 is "How do pre- and post-migration context factors (e.g., national identity or region resettled to) shape economic integration?" Refugee studies has had recent calls for theory that can bridge the gap between individual characteristics like pre- and post-migration human capital and larger structures like neighborhood and work environment (Strang and Ager 2008). Much of the research on pre-migration context effects have been

recounted for the five largest refugee groups earlier. I now introduce the studies that complicated the assertion that pre-migration human capital matters. Using the Annual Survey of Refugees, Tran and Lara-Garcia (2020) found that previous educational achievement and work experience—pre-migration human capital— does not predict outcomes like attending school, working hours, or working sector upon resettlement. They also found that national identity and area of resettlement (pre/post migration context effects) had little or no influence on their chosen integration measures. The authors note that “Refugees may not be pre-migration blank slates, but their context of reception on arrival in the United States effectively renders them so, at least in the short term.” (Tran and Lara Garcia 2020:142) feeding ongoing discussions about why and how-to best support refugee economic integration (Nam et al. 2021; Young 2020).

Any “blank slate” findings—like Tran and Lara-Garcia’s (2020)— are directly in opposition to predictions made by sociology of immigration theories. Portes and Zhou (1993) explicitly discuss the impact that national origin should have on immigrant assimilation by illustrating the differences in legitimacy between immigrant groups in the United States. For example, Cubans and those fleeing communism were seen as more legitimate than migrants fleeing poverty, thereby influencing the economic strata that immigrants assimilated into (Portes and Zhou 1993). Similarly, New Assimilation Theory (Alba and Nee 1997) emphasizes insights from Shibutani and Kwan (1965) by stating that closeness (for example, social, physical, or ideologically) between social groups will foster assimilation. Phillimore (2020) emphasizes that skills and experiences are created by contexts and are only as valuable as a refugee’s ability to translate those skills and experiences into the host-context’s preferences (Strang and Ager 2008).

Reconciling the theoretical importance from both the sociology of immigration and refugees studies on context effects with the blank slate assumption (Gold 1992) and recent

empirical findings (Tran and Lara-Garcia 2020) leads to *Hypothesis B*): *Pre- and post- migration context effects—area of resettlement, birth country, entry cohort— will affect the odds of being economically self-sufficient, obtaining a job within the first year of resettlement, and weekly working hours.*

Post-Migration Context

The encouragement from Phillimore (2020) to focus more study on host contexts leads to Research question 3 is “What is the relative importance of human capital and context factors in shaping refugee economic integration?”

Sociologically, New Assimilation Theory (Alba and Nee 1997) emphasizes insights from Shibutani and Kwan (1965) by stating that social closeness to a group will foster assimilation and that social structures such as laws, official stances on issues, media coverage, neighborhood initiatives, school curriculum choice, religious groups, and virtually any other group can affect the social distance between migrants and the host context—thereby affecting assimilation outcomes. Echoing Strang and Ager (2008), resources will be used to further assimilate into virtually every aspect of society, including the economic sphere. Portes and Zhou (1993) explicitly identify host-context racism and perceived legitimacy of migrants as factors that contribute to assimilation into the middle class, cultural segregation, or assimilation into an economic and counter-cultural underclass (Zhou 1997).

In refugee studies, Phillimore (2020) also stresses the importance of context, though they also emphasize that contexts are more foundational-- and are more influenceable—than refugee’s pre- and post-migration human capital. They argue that there are five domains of context affecting refugee integration: Locality, Discourse, Relations, Structure and Initiatives/Support.

Locality is the possibilities reflected by a particular location. Different resettlement options will have more resources and more resources will be used to integrate. The factors such as the presence of large employers, a competitive wage market, or specific work sectors all influence the ability of an individual to integrate.

Discourse is the conversations the host context has about refugees. Discourse may be affecting individuals of the host-context's perceived legitimacy of a refugee group and this may shape interactions between refugees and host-contexts through processes recognized by legitimacy and justice theories; refugees may begin to expect less remuneration and respect than natives and host contexts may dominate over less legitimate, lower status groups (Cook and Hegtvedt 1983; Della Fave 1980; Walker, Thomas, and Zelditch 1986).

Several assimilation opportunity structure mechanisms, including discourse, can be outlined through legitimacy and/or justice theory. Della Fave (1980) and Cook and Hegtvedt (1983) recognize that legitimacy affects "just" distributions of resources, prestige, and treatment of others. Walker, Thomas, and Zelditch (1986) identify the endorsement of peers as one of three sources of legitimacy and as members of the host context discuss refugees this legitimacy is affected.

There are power dynamics when considering the effect of the discourse amongst the host context and assimilation. Walker, Thomas, and Zelditch (1986) also identify how the "authorization" of those with more power or prestige can shape legitimacy. In this study's context, authorization may occur from Donald Trump, the Republican Party, and several news networks pursued an "America First" agenda to "crack down on abuses [of the refugee admissions and immigration systems]" (Trump 2015); or Joe Biden, the Democratic party, and several news networks to increase the refugee admission ceiling to 20-year highs (United States

Department of State 2022). Esses, Medianu, and Lawson (2013) ran experiments to see how exposure to different types of refugee media shaped perceptions of refugee deserving or undeservingness. They found that even un-remembered exposure to negative views shapes perceptions of refugee deservingness and dehumanization—perceiving people similarly to animals or objects.

While discourse is the sentiment of conversations about refugees in the host context, relations are the relationships between refugees and host-contexts. The causal mechanism behind this opportunity structure is likely legitimacy and justice theories—similarly to discourse—though using a different legitimacy pathway: propriety. “Propriety” is the individual actor’s judgements of a person, position, or act (Walker, Thomas, and Zelditch 1986). Similarly, Putnam identifies interactions with others as critical components of “[Creating] physical and civic health” and “[interaction’s] fundamental power in creating a society that is happy, healthy, and safe” (Putnam 2001; synopsis on book cover).

The procedures required of refugees, called structure by Phillimore (2020), can foster or inhibit integration. Practices like forcing refugees to wait months before being eligible for work—as is done in the U.K. and other European countries—frustrates refugee efforts to be self-sufficient by preventing them from accessing resources they need to assimilate. Changes to U.S. resettlement procedures from 2016-2018 were modest. The number of refugees selected for resettlement and the nationalities of selected refugees changed a good deal by Trump’s America first policies and Muslim Travel Ban (enacted sporadically throughout 2017).

The last host-context that theoretically affects integration is the support structures, people, and programs in place to assist refugees. The resources given here are holistic and could include social, educational, cultural, physical, spiritual, and/or emotional resources. Due to

budget cuts caused by admission of fewer refugees, the U.S. lost about 38% of its local resettlement offices from 2017-2020 (Mathema and Carratola 2020). There were no significant national-level changes to American initiatives or support offered to refugees from 2016-2018.

Phillimore (2020) concludes by discussing the main take away from their article: Researchers should focus on opportunity structures, and by extension, the host context. Host contexts change presidents, enact new policy, and set the tone for resettlement. This begs research question 3: What is the relative importance of human capital, and context factors in shaping refugee economic integration? If context characteristics matter more than individual characteristics, we expect to see evidence in support of *Hypothesis C) Context level variables should be stronger predictors of economic self-sufficiency, obtaining a job within the first year, and greater weekly working hours than human capital variables.*

METHODS

Data Source

The Annual Survey of Refugees is the only publicly available dataset that is representative of refugees who have arrived in the United States during the past five years. It is administered at the beginning of each year (so the 2016 survey is collected at the beginning of 2017). The sampling frame is the Office of Refugee Resettlement's Refugee Arrivals Data System. The 2016-2018 data surveys about 1500 households each year. Though each survey year sample is different, they have a response rate that fluctuates mildly around 20- 25%. Included with the data are individual level weights and household level weights. The analyses done here will use the household level weights, thus this data does not represent every refugee in the United States, but every household. The survey is available in 16 languages including English and thus covers about 75% of the incoming refugee population in any given year.

The Annual Survey of Refugees is a cross-sectional survey. It draws an entirely new sample every year, but follows the same cohort till the cohort has been in the United States for more than five years. For example, refugee cohorts arriving in 2015 are surveyed till 2021, but the same individual will not be surveyed twice. The strength of this dataset is that it is the only national-level database on U.S. refugees and it has comprehensive measures on economic integration as well as pre- and post-migration experiences and resources.

Measures Overview

A list of all variables and how they are measured are provided in Table 1 toward the end of this section. The table also highlights key literatures used to justify the use of these measures and, when applicable, the hypothesis that aligns with each measure.

Dependent Variables

There are three main dependent variables in this project: Does a refugee obtain a job in the first year in the U.S.?, economic self-sufficiency, and the natural log of weekly working hours. Below I describe how each is measured.

Did R find a job within their first year in the U.S.? The Annual Survey of Refugees asks respondents “What month and year did (INSERT NAME) enter the U.S. to stay?” The month the respondent indicates is censored in the public version of the dataset but the year remains. Respondents are also asked “When did (INSERT NAME) get his/her first job in the U.S.? Again, responses to this question are censored to only include the year in the public version of the dataset. Time in years till obtaining a first job can then be calculated by subtracting the year a respondent obtained their first job from the year a respondent arrived in the United States and then *Did R find a job within their first year in the U.S.?* can be dichotomized from there.

Economic self-sufficiency. The Annual Survey of Refugees asks refugees a series of questions about their public assistance usage and income. Heads of households report whether they or anyone in their household has used the Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families, Refugee Cash Assistance, General Assistance, Social Security Income, public housing, or Miscellaneous cash assistance from their sponsor/sponsor agency, religious group, charitable organization in the past 12 months. Based on this, I created a

dichotomous variable that indicates whether a refugee is living independently of public assistance programs or uses at least one of them.

Natural log of weekly working hours. The Annual Survey of Refugees asks respondents “How many hours did this person work at his/her primary job last week?”. The measure ranges from 0-96. Because weekly working hours are not normally distributed, I take the natural log of this number. To handle the few people who had jobs, but worked zero hours in the past week, I follow the method proposed by Stahel (2008) and add a constant to every reported value of weekly working hours. The constant is the squared first quartile divided by the third quartile Stahel (2008). In the pooled data for weekly working hours, this constant results in $(33^2)/40=27.225$.

Independent Variables

Pre- and post-migration human capital variables. Pre-migration human capital variables include: Years of education is a continuous variable ranging from 0 years and capped at 20 years.

Also included are dichotomous pre-resettlement enrollment in English or employment training programs. Pre-resettlement English proficiency is estimated by the respondent at the time of interview on a four item Likert scale: 1-Very well and 4- Not at all.

Post-migration variables include: Present enrollment in English or employment training programs is measured dichotomously enrolled/not enrolled. I test present enrollment in English or training programs as both a context and a human capital variable because the presence, quality, and accessibility of the training programs are controlled by the context, even though the skills gained from these programs are human capital. The time spent enrolled in these programs

will be short, does this reflect the quality of the program or the capital available to the individual? I will run the hypothesis tests both ways and report the results.

I combine the different work environments refugees take up in the United States into 4 categories: service, blue collar, professional/health/education/social services, and then general logistics: maintenance, transport, general products and goods. I will run the work sector variables as context variables as well when I assess their relative importance.

Pre- and post-migration context-level variables. Information is available on the pre-resettlement occupation and I collapse these occupations into four sectors—professional, sales, service, or blue collar. National origin is collected where possible and as mentioned earlier, when this data is not available, I use country of citizenship or ethnicity to approximate sending-context. U.S. census region of resettlement is listed as either Northeast, South, West, or Midwest. This will allow for comparisons among the different regions of the United States. I track the year the survey takes place so I can control for changes between 2016-2018, again by comparing them together. The post migration context changes a good deal during this time period, for example the Trump Muslim Travel ban was implemented in 2017.

Demographics/controls. I include several demographic variables to capture key differences across refugees. Age is measured using six ordinal intervals: 0-17, 18-24, 25-39, 40-54, and 55 or older. Sex is dichotomous male/female. Number of people in the household is capped at 5, families larger than 5 are listed as having 5 members. I include the total number of household members that “have a physical, mental, or other health condition that has lasted for 6 or more months” which prevented them from working a job or prevented them from working at certain kinds of jobs, it ranges from 0-5.

Marital status is collapsed for simplicity as married, divorced/legally separated/widowed, never married, and child (as in the respondent is a child), or other. Respondents indicated how many people in their household had conditions that affected employment—up to 5.

Analytical Strategy

I propose three modeling strategies to test these hypotheses. I will use a series of binary logit models to analyze economic self-sufficiency because these measures are dichotomous. I will then use a series of ordinary least squares regression models to analyze the natural log of working hours. Finally, I will conclude with a series of binomial logit regression on the pooled survey data to analyze the factors that predict whether a refugee can integrate into the labor market in the United States within a year. Note that I do not include post-capital predictors because there is no way to assess which post-capital was gained in the first year of resettlement. The OLS and logit models will be used to on the pooled survey years.

For each dependent variable, I first estimated a control model, a model with pre-context variables included, then I added the post-context variables, next I estimated a model with all previous variables plus the pre-human capital variables and finally I estimated a model with the pre- and post- resettlement context variables, the pre- and post-resettlement human capital variables, and the applicable forms of economic integration included.

Note that not all forms of economic integration are applicable variables for other models. Chronologically, economic self-sufficiency cannot reasonably be used as a predictor of obtaining a job in the first year because obtaining a job has to happen before one can be economically self-sufficient. Similarly, I do not use economic self-sufficiency as a predictor of weekly working hours because working creates economic self-sufficiency for refugees, it is impossible for

economic self-sufficiency to exist first and predict future weekly working hours for newly employed refugees.

To allow for better comparisons between my findings and the findings of Tran and Lara-Garcia's (2020) also using the Annual Survey of Refugees, I use multiple imputation to address missing data from the MICE (Multivariate Imputation via Chained Equations) package in R. The imputation process uses predictive mean matching for continuous variables, logistic regression for dichotomous variables, proportional odds model for ordinal variables, and multinomial logistic regression for categorical variables. The predictors used in the imputation equation will be the variables included in the analytical models that have a correlation larger than .1, but I excluded each individual public assistance program variable (they are colinear), time to job/job sector (because these are created by values in the dataset), country of birth (there are too many levels to be helpful in imputation, and marriage status (there are too many levels to be helpful). I weight the data according to the household level weights provided with each year of the Annual Survey of Refugees (Triplett and Vilter 2020).

Code for the entire process is available in a Rmarkdown script at <https://github.com/scholesp2/refugee-thesis>.

RESULTS

Summary Statistics

Below in Table 2 are the descriptive statistics of every variable considered. I discuss only a few variables of interest here. Generally speaking, the three years of survey data are very similar to each other, with similar estimates and variances. Certain groups of migrants only arrive in certain years—for example, refugees from Bhutan only arrive in 2016. Education had a lot of variation; the standard deviations are nearly 5 years of education wide. Sizable portions of the incoming refugees have recently enrolled in an English or employment training program when they are surveyed. Also of note are numbers of refugees who are unable to work because of a condition or reason—22.3% of households in the pooled data indicated they had at least one dependent household member.

Of concern is the propensity for the 2018 cohort to indicate they have an “other” pre-resettlement work history. As this may affect the performance of some predictors, I constructed yearly models to evaluate the consistency of the analysis. The results of this analysis are not presented here but in the Appendix.

Note that for the binary logit models, I report the results using odds ratios (OR) for convenience and interpretability. Odds ratios are the probability of an event happening divided by the probability of an event not happening. An odds ratio higher than 1 indicates greater association with economic self-sufficiency or obtaining a job within a year. An odds ratio lower than 1 indicates a negative association. Odds ratios follow an exponential scale which becomes

more severe at the edges of the range. In other words, the .01 difference between .99 and 1 is a smaller gap than between .02 and .03. I will report typical beta estimates for the OLS regression, though the log transformation of the dependent variable should be considered.

The economic integration measures are interesting. Of the refugee households that had jobs, most got their first job somewhat early. The average time to a first job is about half a year, though the standard deviation is about $\frac{3}{4}$ of a year. A relatively small percentage of newly arrived refugees were economically self-sufficient.

TABLE 1. Descriptive Statistics from the Annual Survey of Refugees

Var Name and Heading	2016	2017	2018	2016-2018
<i>Economic Integration</i>				
Time in years to first job	.51 years (.72)	.49 years (.74)	.56 years (.82)	.52 years (.76)
Economic Self-sufficiency	13%	12.10%	12.40%	12.50%
Last week's working hours (Range: 0-96)	37.89 (12.73)	38.10 (13.08)	38.958 (13.57)	38.34 (13.13)
<i>Key independent variable</i>				
<i>Pre-Human capital</i>				
Years of Education	10.13 (5.03)	10.03 (4.99)	9.99 (4.99)	10.05 (5)
Pre-Displacement Economic sector (Professional, Sales, Service, or Blue Collar)				
Professional	27.10%	23.90%	1.80%	17.50%
Sales	9.10%	10.40%	0.90%	6.80%
Service	21.80%	23.60%	1.10%	15.50%
Blue Collar	19.90%	20.30%	0.70%	13.60%
Student	10.70%	12.90%	0%	7.80%
Other	10.80%	8.90%	95.40%	38.40%
None	0.70%	0.20%	0%	0.30%
English Proficiency at arrival (Range: 1-4)	3.08 (.86)	3.07 (.88)	3.25 (.83)	3.13 (.91)

Pre and Post Contextual Effects

Region of resettlement				
South	31.50%	16.30%	30.60%	26.10%
Northeast	15.90%	14.20%	16.90%	15.70%
Midwest	28.20%	29.50%	29.30%	29%
West	24.40%	40%	23.10%	29.20%
National Origin				
Bhutan	3.70%	0%	0%	1.20%
Burma	7.60%	5.50%	3.40%	5.50%
Cuba	8%	5.50%	0%	4.50%
DR Congo	4.20%	6%	6.40%	5.50%
Eritrea	0%	0%	4.60%	1.50%
Iran	4.90%	5.70%	4.90%	5.20%
Iraq	33.10%	31.70%	30.40%	31.80%
Somalia	6.80%	10.80%	9.40%	9%
Syria	0%	4.40%	10.10%	4.90%
Ukraine	0%	0%	2.10%	0.70%
US	9.40%	4.80%	4%	6%
None	9.20%	10.90%	6.30%	8.80%
Other	13%	14.60%	18.50%	15.40%

Post-migration Human Capital (Note: These cannot be used in event history analysis)

Current enrollment in English Training programs	26.90%	31.80%	29.50%	29.40%
Current enrollment in Employment Training programs	14.60%	15.70%	15.00%	15.10%
English Proficiency now (Range: 1-4)	2.46(.93)	2.41 (.93)	2.49(.89)	2.45 (.92)

Control Variables

Sex: Male	72.80%	66.10%	68.20%	69%
Age	39.72 (12.7)	39.23(12.44)	39.5 (12.44)	39.70 (12.49)
How many people in Household?	3.18 (1.5)	3.35 (1.48)	3.47 (1.51)	3.34 (1.51)
Marital Status				
Married	64.40%	61.80%	65.20%	63.80%
Divorced/Separated/Widowed	10.10%	12.60%	11.90%	11.50%

Never Married	24.30%	24.80%	21.30%	23.50%
Other	1.10%	0.90%	1.50%	1.20%
Yearly Income?				
Number of Dependents (Those who cannot work for money because of a condition or reason)	.45 (.71)	.46 (.71)	.49 (.77)	.47 (.73)
Year Survey is conducted				
Total n (Households)	1500	1515	1514	4529

Economic Self-Sufficiency

I begin by presenting the results from the pooled (2016-2018) model shown in Table 2.

Demographic/control variables. Overall, the basic model shows that years in the U.S. and basic demographic factors are important predictors of economic self-sufficiency

We see in this model statistically significant, moderately positive effects for the duration of time a household has been in the United States, $p < .001$, Odds Ratio (OR) was around 1.2, across every model. This is highly significant and indicates a positive direction—contributing to economic self-sufficiency. 1.2 is a substantial increase in the odds because the estimated association can be multiplied by the five possible years of residing in the United States for the sample. Having never having been married was also associated with positive contributions to economic self-sufficiency (p was around .05, OR was about 1.27). This is a substantial association that increases the odds of economic self-sufficiency, though not as substantial as more time in the United States because there is only one opportunity to experience the increase in odds for never being married.

There were a few control variables that indicated decreased odds of a household being economically self-sufficient. The results indicated that households with older heads of the house struggle slightly ($p < .001$, OR was around .98) to be economically self-sufficient, though this finding is significant until I control for the pursuit of post-human capital. Perhaps this is because age of household head is correlated with being a good candidate for an English training program. After controlling for enrollment for English training, the predictive power of age disappears entirely.

The number of people in the household also decreased the odds a household was financially independent, ($p < .001$, OR floated around .6). In addition to the statistical significance, this is a substantial effect, indicating that large families have a large reduction in the odds of being economically self-sufficient. The larger family size of many refugee households compared to Americans means this is likely an issue that many households encounter.

The number of household members who had a condition that affected working also naturally made it harder for refugee households to be economically self-sufficient ($p < .001$, OR floated around .5). This is another statistically significant, large association that reduces the odds of economic self-sufficiency. The number of dependents in a household has greater predictive power than the number of people in the household.

Pre-resettlement context variables. The second model adds pre-context factors and shows differences in economic self-sufficiency across birth country, though only two origins remain significant across every model. Despite this, the birth countries of refugees were some of the strongest predictors of the model.

In general, refugees from countries with a large Muslim population (i.e. Iraq, Syria, and Somalia) had lower levels of economic self-sufficiency in most the models. The exception to this trend was Iran Refugees from countries in Africa generally had lower odds of economic self-sufficiency, though refugees from DR Congo were not significantly less likely than Cubans to be economically sufficient. Bhutanese households were statistically different from zero only until controlling for human capital in later models. Perhaps the exceptionally low wages that some, like Somalians, are working for and the higher reserve wages that, some like Iraqis, have as evidence that the pre-resettlement context socializes a certain minimum standard of living.

Refugees from Somalia and Eritrea had extremely low odds of being economically self-sufficient—the strongest predictors of reduced odds in the whole model— and these are the only countries of origin that continued to be statistically significant throughout every model ran ($p < 01$).

Also of note are the relatively large standard errors of the log-odds for every country of origin. More precision would illustrate if these non-significant, yet seemingly meaningful point-estimates are actually non-significant or simply have large confidence intervals.

There were no significant predictors among the previous work histories of refugees. This is limited to the economic self-sufficiency models however.

Post-resettlement context. Overall, the post-migration context models show that region of settlement and survey year predict economic self-sufficiency, but that only survey year remains robust in the full model. Refugees resettled to the Southern region of the United States had higher odds of being economically self-sufficient ($p < .05$, OR was around 1.35) until accounting for post-resettlement human capital variables. Then region of resettlement was no longer a

significant predictor. An artifact of this dataset is that in 2018, 95% of non- missing households indicated they had a “other” work history (Triplett and Vilter 2020). This may contribute to the narrower, and only marginally significant, estimates shown by the pooled (2016-2018) data for the “other” category.

Year in which the survey is administered controls for aggregate context effects through 2016-2018, years during which the Trump administration settles into its power. These effects were positively associated with economic self-sufficiency until the complete model and then survey year is only a marginally significant predictor ($p < .1$, OR = 1.22). This is a positive contributor to the odds of economic self-sufficiency and a meaningfully moderate relationship, similar to the relationship of staying in the United States for a longer period of time.

Pre-resettlement human capital. Among pre-resettlement human capital variables, only years of education contributed to the predicting economic self-sufficiency in the full model. Education was one of the few predictors of increased economic self-sufficiency in the model. For a single increase of a year of education, the odds of a refugee household being economically self-sufficient improves by 4% ($p < .05$, OR=1.04). The size of the relationship is quite large because it is compounded with each of the 20 potential years of education.

Post-resettlement human capital and other measures of economic integration. Being enrolled in an English training program is the only post-resettlement human capital category variable that predicted less economic self-sufficiency. It is very possible that those who attend English training do so in lieu of a job, or receive other assistance from the organization that provides English training. Being enrolled in an English training program reduced the odds of economic self-sufficiency ($p < .001$, OR = .52). This is a highly significant, substantial reduction in the odds

of economic self-sufficiency. Being enrolled in an English or employment training program did not predict economic self-sufficiency, nor did English proficiency at the time of being surveyed ($p > .1$).

Both measures of economic integration were statistically significant predictors of economic self-sufficiency. Refugee households that had more working hours had higher odds of being economically self-sufficient ($p < .001$, OR = 1.02). This is highly significant, and indicates an increase in the odds of economic self-sufficiency. The size of the relationship is moderate because the estimate is multiplied against every working hour and the average is close to 40 hours. Lastly, refugees that waited longer to find a job had higher odds of being economically self-sufficient ($p < .05$, point estimate OR = 1.24). This is a very strong effect—similar to simply residing in the United States longer— and also multiplied by the 4 potential years to gain a first job.

Comparing the relative importance of human capital and context effects. Because refugee studies and the sociology of immigration put different emphasis on different families of variables, I examine Hypothesis C: human capital versus context effects in predicting economic integration. I ran two assessments to discern the relative importance of human capital and contexts for each dependent variable.

There are both inferential and non-inferential methods of assessing the relative fit of variables in non-nested models. I use the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) to assess model fit. These information criteria are similar and can be interpreted in the same way. A lower information criterion indicates greater effectiveness of the independent variables in predicting the dependent variable. A key limitation to this method is

the lack of hypothesis testing with confidence intervals; in other words, there is no way of knowing if the differences observed would likely be seen in a different sample.

To overcome this limitation, I also estimate the predicted probabilities of a pair of hypothetical, typical respondents who differ on a few indicators of interest. These individuals were identical except for the pre- and post- resettlement human capital variables and the pre- and post-resettlement context variables. One was average (or modal) on all variables except the human capital variables, in which case they were given the most advantaged characteristics in the sample. This hypothetical person understood English very well, had 20 years of education, and obtained a professional/education/healthcare/social services job in the United States. The other was average on all variables except context variables, in which case they were given characteristics that would increase their odds of economic self-sufficiency. The predicted probability of someone with maximal human capital would come from an advantaged background like Iran or Cuba, have a professional work history, be resettled to the south and be surveyed in 2018.

The result of these predicted comparisons is that the maximum human capital person had a predicted probability of 54% (standard error =.081) for being economically self-sufficient. The maximum contextually advantaged person had a predicted probability of 22% (standard error =.033). These results support the idea that human capital versus context is the better predictor of economic self-sufficiency. I ran a supplementary analysis using work history as a human capital variable and this only increased the gap. Note that due to functionality limitations, I was not able to get predicted probabilities on the multiple imputed data, only weighted complete-case was available.

I found more evidence for the superiority of human capital variables in predicting economic self-sufficiency when comparing a human capital model with a context variable model. The AIC and the BIC favored the human capital model (AIC=3071.677, BIC=3011.656) over the context model (AIC=3337.631, BIC=3491.357).

TABLE 2. Predicting Economic Self-Sufficiency with Pooled Data (2016-2018)

<i>Variables</i>	Basic Model Odds Ratio	Pre-Context Odds Ratio	Post- Context Odds Ratio	Pre-Capital Odds Ratio	Complete Odds Ratio
Years in U.S.	1.21***	1.22***	1.20***	1.21***	1.17**
Female (Versus Male)	1.13	1.12	1.09	1.07	1.36
Age	0.99***	0.98***	0.98***	0.97***	1.00
Size of Household	0.65***	0.61***	0.60***	0.58***	0.53***
Divorced/Widowed (REF=Married)	0.70*	0.71~	0.70~	0.83	0.72
Never Married (REF=Married)	1.26*	1.27~	1.28~	1.20	1.23
Other Marital Status (REF=Married)	1.07	0.70	0.64	0.45	0.40
Number of Dependents in the Household	0.47***	0.47***	0.48***	0.52***	0.60***
Birth Country (REF=Cuba)					
Bhutan		0.48*	0.54*	0.53~	0.74
Burma/Myanmar		0.85	0.89	0.90	1.05
DR Congo		0.60	0.59	0.54~	0.81
Eritrea		0.06***	0.05***	0.05***	0.04**
Iran		1.06	1.13	1.02	1.03
Iraq		0.45**	0.50*	0.40**	0.58
Somalia		0.12***	0.13***	0.13***	0.23**
Syria		0.40*	0.38*	0.36*	0.96
Other		0.61~	0.65		0.95
Pre-Migration Job Sector (REF=Blue-collar)					
None		0.12~	0.13	0.57	0.10
Professional		1.11	1.14	0.96	0.91
Sales		0.63~	0.64~	0.62~	0.64
Service		0.77	0.76	0.78	0.71
Student		1.12	1.15	1.10	1.53
Other		1.00	0.69*	0.72	0.65~
Area of Resettlement (REF=West)					
Northeast			0.94	1.04	0.89
South			1.40*	1.39*	1.23
Midwest			1.11	1.22	1.09
Year of the Survey			1.37***	1.34**	1.22~
Years of Education				1.02	1.05*
English at Arrival (REF=Not at all)					
Not Well				0.96	0.90
Well				1.07	0.79
Very Well				2.60***	1.65
Current Enrollment in English Training					0.52***
Current Enrollment in Job Training					1.23
Current English (REF=Not at all)					

Not Well	0.67
Well	0.64
Very Well	0.81
U.S. Economic Sector (REF=	
Blue collar)	
None	0.78
Retail/Sales	1.10
Professional/ED/Health/Social	
Services	0.77
General Support	0.79
Time until First Job in Years	1.24*
Weekly Working Hours	1.02**

NOTE: *** for $p < 0.001$, ** for $p < 0.01$, * for $p < 0.05$, ~ for $p < 0.1$

Estimates account for the complex sampling for the Annual Survey of Refugees. Data was imputed using the MICE package in r, number of imputations =21. Variables may be dropped after initial introduction to prevent collinearity.

Obtaining a Job within the First Year of Resettlement

Obtaining a job in the first year of resettlement proved to have radically different predictors than economic self-sufficiency. In fact, very few of the predictors included in the model predicted obtaining a job within the first year. The pooled model (2016-2018) can be seen in Table 4 below.

Demographic/control variables. None of these variables were significant predictors of finding a job within the first year of resettlement.

Context factors. There were two context variables that strongly predicted obtaining a job within the first year of resettlement. The strongest predictor of not obtaining a job in the first year was having no pre-resettlement work experience ($p < .001$, OR =0.00). This is a huge reduction in the odds of finding a job within the first year. It is also significant at even stricter confidence levels than the traditional 95% confidence level.

Secondly, certain countries have higher odds of having a first job in under a year. Iraqi households had 113% higher odds of being employed during their first year than Cubans ($p < .05$, $OR = 2.13$). This is a large effect, statistically significant, and it indicates high odds of obtaining a job within the first year. However, care should be exercised in this model—there are many variables included and we can expect 1 in 20 of the variables included to be statistically significant simply from chance alone.

Tellingly, there were no other significant predictors of find a job quickly. This indicates that the equation used to generate the model is likely not the same equation that determines whether a refugee finds a job within the first year. In other words, the predictors of economic sufficiency or weekly working hours are not good predictors of finding a job within the first year.

Human capital factors. Only context factors were associated with finding a job within the first year. Not even demographic variables or the strongest human capital predictor of economic self-sufficiency— years of education— were associated with higher odds of finding a job within the first year. While the job sector employed in the United States could not predict finding a first job (because obtaining a work history happens after obtaining a job), the largest positive point estimate of getting a job within the first year was having no job in the American economy later when surveyed. This result was only marginally significant ($p < .1$, $OR = 4.16$). This is potentially a large effect, but the p value does not meet the 95% confidence level threshold of .05.

Comparing the relative importance of human capital variables with context variables. Again, I constructed hypothetical individuals and models to assess the relative importance of human capital and context variables. I found evidence for a tie. When I compared the maximum human

capital hypothetical individual with the maximum context individual, the confidence intervals overlapped. The human capital individual had a 58.1% predicted probability (standard error= 4.9%). The context individual had a predicted probability of 58.5% (8%). The context model had an AIC of 2987.55, BIC was 3134.57. The human capital model had an AIC of 2853.23, BIC of 2983.47. The predicted probabilities are the strongest evidence and indicate a tie between human capital and context effects. However, the information criteria favor human capital.

TABLE 3. Predicting Finding a Job within the First Year with Pooled Data (2016-2018)

<i>Variables</i>	Basic Model Odds Ratio	Pre-Context Odds Ratio	Post- Context Odds Ratio	Complete Odds Ratio
Female (Versus Male)	1.08	0.96	0.95	0.93
Age	0.99	1.00	1.00	1.00
Size of Household	1.02	0.98	0.98	0.99
Divorced/Widowed (REF=Married)	1.20	1.22	1.19	1.18
Never Married (REF=Married)	1.09	1.17	1.16	1.16
Other Marital Status (REF=Married)	0.81	1.53	1.17	1.02
Number of Dependents in the Household	1.08	1.12	1.12	1.09
Birth Country (REF=Cuba)				
Bhutan		1.74~	1.58	1.81~
Burma/Myanmar		1.54	1.41	1.41
DR Congo		1.42	1.37	1.48
Eritrea		2.27	2.16	1.58
Iran		1.71~	1.62	1.88~
Iraq		1.91*	1.71~	2.13*
Somalia		1.92*	1.77~	1.88~
Syria		1.37	1.29	1.33
Other		1.26	1.21	
Pre-Migration Job Sector (REF=Blue-collar)				
None			1.26	0.00***
Professional			0.84	0.89
Sales			0.83	0.83
Service			0.95	0.90
Student			0.75	0.87
Other			1.00	1.06
Area of Resettlement (REF=West)				
Northeast			0.81	0.78
South			0.84	0.92
Midwest			1.12	1.16
Survey Year			.97	0.97
Years of Education				0.98
U.S. Economic Sector (REF= Blue collar)				
None				4.16~
Retail/Sales				0.86

Professional/ED/Health/Social Services	0.90
General Support	1.03
Other	0.90
English at Arrival (REF=Not at all)	
Not Well	0.93
Well	0.80
Very Well	0.94

NOTE: *** for $p < 0.001$, ** for $p < 0.01$, * for $p < 0.05$, ~ for $p < 0.1$

Estimates account for the complex sampling for the Annual Survey of Refugees. Data was imputed using the MICE package in r, number of imputations =21. Variables may be dropped after initial introduction to prevent collinearity.

Predictors of Weekly Working Hours

Demographic/control variables. About half of the variables included in this section were significant. Year of being in the United States started out as a significant predictor until till I incorporated human capital variables. Having a female head of the household decreased the weekly working hours reported by a sizable 9.48% ($p < .001$). Moving up in one of the age categories had a small negative association with weekly working hours: about .14% ($p = .045$). For every dependent in the household, weekly working hours decreased by about 2.7% ($p = .002$).

Pre-resettlement context variables. Context variables generally were significant predictors of weekly working hours. Iraqis worked about 8.8% fewer hours than Cubans did ($p = .003$). Syrians had an estimated 7.9% fewer weekly working hours than Cubans ($p = .03$).

Work history also predicted weekly working hours. Those without a work history had 28.9% fewer hours than those with a blue-collar history, though this large estimate is only marginally significant ($p = .073$). Those with a professional work history had 4.5% fewer weekly working hours than a blue-collar worker ($p = .011$). Similarly, though probably for different reasons, those with a history of working in the service sector also received an estimated 4.09% fewer hours of work a week ($p = .009$). The history with the largest impact on weekly working

hours was students, with about 6.14% fewer weekly working hours than blue collar workers (p=.03).

Pre- and post-resettlement human capital. There were some surprising findings in the effects of human capital. Not only were the effects of education only marginally significant, those who could report not speaking English well had on average 3.3% fewer weekly working hours **than those who reported not speaking English at all**. This is a puzzling finding and may represent labor preferences or employer (perhaps co-ethnic) selection effects between those who do not speak any English and those with weak English proficiency.

Those few who end up in a U.S. work role I collected together as a general support category (“Transport”, “Maintenance”, “General Products” and “Goods”) by the Annual Survey of Refugees received an estimated 4.4% fewer weekly working hours than blue collar workers (p=.021).

Comparing the relative importance of human capital and context variables. The comparisons of variables saw similar results to previous models. The human capital model had lower AIC and BIC’s (AIC=-20,154.49, BIC=280.12) than the context variable only model (AIC=-22,995.82, BIC= 312.83). The human capital hypothetical individual had a predicted log working hours of 4.13 (standard error=.017). The context hypothetical individual had a predicted log working hours of 4.13 (standard error=.035). These results are mixed in predicted probabilities though the information criteria again favor human capital as the more explanatory factor.

TABLE 4. Predicting the Natural Log of Weekly Working Hours with Pooled Data (2016-2018)

<i>Variables</i>	Basic Model Estimate	Pre-Context Estimate	Post- Context Estimate	Pre-Capital Estimate	Complete Estimate
Years in U.S.	0.008**	0.007*	0.006~	0.005	0.003
Female (Versus Male)	-0.109***	-0.104***	-0.108***	-0.100***	-0.100***
Age	-0.001	-0.001*	-0.001*	-0.002**	-0.001*
Size of Household	0.000	-0.001	-0.001	-0.004	-0.001
Divorced/Widowed (REF=Married)	0.018	0.018	0.022	0.002	-0.003
Never Married (REF=Married)	0.013	0.016	0.016	0.006	0.016
Other Marital Status (REF=Married)	0.008	-0.014	-0.019	-0.018	-0.010
Number of Dependents in the Household	-0.039	-0.032***	-0.031***	-0.028***	-0.028***
Birth Country (REF=Cuba)					
Bhutan		-0.033	-0.035	-0.013	-0.011
Burma/Myanmar		-0.043~	-0.048*	-0.024	-0.022
DR Congo		-0.035	-0.041	-0.030	-0.025
Eritrea		-0.026	-0.036	-0.024	-0.017
Iran		-0.072*	-0.076*	-0.070*	-0.050
Iraq		-0.093***	-0.095***	-0.090***	-0.092***
Somalia		-0.036	-0.040	-0.024	-0.023
Syria		-0.098**	-0.107***	-0.100**	-0.083*
Other		-0.073**	-0.077**		
Pre-Migration Job Sector (REF=Blue-collar)					
None		-0.032	-0.025	-0.201	-0.341~
Professional		-0.010	-0.010	-0.035*	-0.046*
Sales		-0.002	-0.004	0.000	0.007
Service		-0.018	-0.018	-0.033*	-0.042**
Student		-0.039~	-0.039~	-0.062*	-0.063*
Other		-0.010	-0.029	-0.048**	-0.030
Area of Resettlement (REF=West)					
Northeast			0.002	0.012	0.011
South			0.006	0.014	0.014
Midwest			0.010	0.017	0.019
Year of the Survey			0.015~	0.018~	0.009
Years of Education				0.003*	0.003~
English at Arrival (REF=Not at all)					
Not Well				-0.028*	-0.034*
Well				-0.002	0.009
Very Well				-0.003	-0.007
Current Enrollment in English Training					-0.039**
Current Enrollment in Job Training					0.008
Current English (REF=Not at all)					
Not Well					-0.004
Well					0.008

Very Well	0.010
U.S. Economic Sector (REF=	
Blue collar)	
None	-0.022~
Retail/Sales	-0.032
Professional/ED/Health/Social	
Services	-0.014
General Support	-0.046*
Time until First Job in Years	0.010

NOTE: *** for p<0.001, ** for p<0.01, * for p<0.05, ~ for p<0.1

Estimates account for the complex sampling for the Annual Survey of Refugees. Data was imputed using the MICE package in r, number of imputations =21. Variables may be dropped after initial introduction to prevent collinearity.

A summary of the results of every analysis' complete model appears in Table 5 below. Of note is that no variable is a significant predictor in every model.

Only three variables are significant across at least two models. Number of dependents in the household and current enrollment in English training programs are both significant negative predictors of economic self-sufficiency and weekly working hours. Iraqis have higher odds of obtaining a job within the first year of resettlement and tend to work fewer hours per week.

<i>Variables</i>	Economic Self-Sufficiency Odds Ratio	Finding a job within a year Odds Ratio	Weekly Working Hours Estimate
Years in U.S.	1.17**	-	0.003
Female (Versus Male)	1.36	0.93	-0.100***
Age	1.00	1.00	-0.001*
Size of Household	0.53***	0.99	-0.001
Divorced/Widowed (REF=Married)	0.72	1.18	-0.003
Never Married (REF=Married)	1.23	1.16	0.016
Other Marital Status (REF=Married)	0.40	1.02	-0.010
Number of Dependents in the Household	0.60***	1.09	-0.028***
Birth Country (REF=Cuba)			
Bhutan	0.74	1.81~	-0.011
Burma/Myanmar	1.05	1.41	-0.022
DR Congo	0.81	1.48	-0.025
Eritrea	0.04**	1.58	-0.017
Iran	1.03	1.88~	-0.050
Iraq	0.58	2.13*	-0.092***

Somalia	0.23**	1.88~	-0.023
Syria	0.96	1.33	-0.083*
Other	0.95	-	-
Pre-Migration Job Sector (REF=Blue-collar)			
None	0.10	0.00***	-0.341~
Professional	0.91	0.89	-0.046*
Sales	0.64	0.83	0.007
Service	0.71	0.90	-0.042**
Student	1.53	0.87	-0.063*
Other	0.65~	1.06	-0.030
Area of Resettlement (REF=West)			
Northeast	0.89	0.78	0.011
South	1.23	0.92	0.014
Midwest	1.09	1.16	0.019
Year of the Survey	1.22~	0.97	0.009
Years of Education	1.05*	0.98	0.003~
English at Arrival (REF=Not at all)			
Not Well	0.90	4.16~	-0.034*
Well	0.79	0.86	0.009
Very Well	1.65	0.90	-0.007
Current Enrollment in English Training	0.52***	1.03	-0.039**
Current Enrollment in Job Training	1.23	0.90	0.008
Current English (REF=Not at all)			
Not Well	0.67	0.93	-0.004
Well	0.64	0.80	0.008
Very Well	0.81	0.94	0.010
U.S. Economic Sector (REF= Blue collar)			
None	0.78	-	-0.022~
Retail/Sales	1.10	-	-0.032
Professional/ED/Health/Social Services	0.77	-	-0.014
General Support	0.79	-	-0.046*
Time until First Job in Years	1.24*	-	0.010
Weekly Working Hours	1.02**	-	-
Economic Self-Sufficiency	-	-	-

NOTE: *** for $p < 0.001$, ** for $p < 0.01$, * for $p < 0.05$, ~ for $p < 0.1$

Estimates account for the complex sampling for the Annual Survey of Refugees. Data was imputed using the MICE package in r, number of imputations =21.

DISCUSSION

This study had three main research questions: 1) How do pre- and post- migration human capital affect refugee economic integration in the U.S.? 2) How do pre- and post- migration context factors (e.g., national identity or region resettled to) shape economic integration? 3) What is the relative importance of human capital, and context factors in shaping refugee economic integration?

Generally speaking, each dependent variable was predicted by pre- and post- resettlement human capital and pre- and post- resettlement contexts. However, no variable proved to be a consistent predictor in every model. The processes are likely different for each form of assimilation. If one was to view only one model at a time, they may conclude that the blank slate hypothesis was true for certain forms of human capital or contexts.

Despite the emphasis of the Office of Refugee Resettlement and the Population, Refugee, and Migration Bureau of the State Department, little is known about the factors that predict obtaining a job quickly in the United States. Many of the conventional predictors of economic self-sufficiency such as previous human capital and English ability did not predict obtaining a job within the first year very well. In contrast, the variables used predicted weekly working hours and economic self-sufficiency much better.

In congruence with the literature (Strang and Ager 2008; Tran and Lara-Garcia 2020; Phillimore 2020), most of the studied aspects of economic integration predicted each other. Refugee households that had more working hours had higher odds of being economically self-

sufficient. This result reinforces the importance of examining number of hours worked since it is a good indicator of other benefits like economic self-sufficiency and presumably health insurance coverage. Those who waited longer—presumably to achieve a better fit— but obtained a first job had higher odds of being economically self-sufficient.

The time to first job as an independent variable (dichotomized into a “obtaining a job in the first year” dependent variable) is peculiar. Refugees that waited longer had higher odds of being economically self-sufficient. This is likely, as many such as Capps et al. (2015) suggest, because the refugee is able to find a job that fits their experience and salary needs better than if they rushed and attained a job in the first year. This is a sizeable relationship; it contributes more to increasing the odds of economic self-sufficiency than being in the United States for a longer time. To supplement this finding, I ran the economic self-sufficiency model with a dichotomous indicator comparing those who obtained a job in their first years with those who did not and those who obtained a job in their first year did not have statistically higher odds of being economically self-sufficient. Both of these results are direct evidence against prioritizing finding a job as quickly as possible. This is evidence against the fundamental goals of the Office of Refugee Resettlement and the Population, Refugee, and Migration Bureau of the State Department. Even when we only examine the first five years of resettlement, those who found their first job after their first year had higher odds of being economically self-sufficient.

Refugees may wait longer to obtain a job in order to find a job that meets a family’s needs and/or where the worker is a good fit for the company (Capps et al. 2015; Methema and). There is some evidence from the employee/occupation mismatch literature to suggest that those who are under a lot of pressure may obtain jobs that are not optimal in the long run (Minicozzi 2005). Research done with college students who are under pressure from large school loans

indicates that the pressure and vulnerability from large college loans encourages them to allocate their expertise into jobs that are not financially optimal—neither for them nor for the economy. It is possible that refugees are responding to pressure from federal programs, resettlement centers, and their vulnerable position in similar ways (Ng and Johnson 2020).

Hypothesis A) Pre- and post- Resettlement Human Capital and Economic Integration in The U.S.

The blank slate hypothesis is this: that the previous experiences and skills that make refugees unique do not assist them upon arrival to the United States (Gold 1992). There is weak support for this hypothesis in this study. For example, the distribution of pre-resettlement work sectors looks nothing like the U.S. work sectors that refugees occupy after resettlement. Tran and Lara-Garcia (2020) find similar results in their own work causing them to conclude “Refugees may not be premigration blank slates, but their context of reception on arrival in the United States effectively renders them so, at least in the short term.” However, generally I do not find support for this blank slate hypothesis instead I find modest support for my hypotheses A and B: the importance of human capital and contexts respectively.

The findings for years of education were direct evidence against the “blank slate” hypothesis and support for the pre-resettlement portion of Hypothesis A. Along the same lines, previous work sector history also contributed to weekly working hours and finding a job within the first year. I tried to use contextual attainment—the raw deviation of achieved years of education from the average years of education for a refugee’s origin country—but this was too correlated with years of education to assist prediction ($r=.88$).

In contrast and curiously, English language proficiency was not a significant predictor of any completed model of economic integration. Because of the large standard errors, high point estimates, and centrality of English in American society, I hesitate to call this finding evidence for the blank slate hypothesis.

The weekly working hours and economic self-sufficiency results on current enrollment in an English training program also contributes to the peculiar results of English proficiency. Those who enroll in English training programs seem to invest many hours into it and there is evidence to suggest that those enrolled have 3.8% fewer weekly work hours and a nearly half the odds of being economically self-sufficient. the theorized advantage of increasing English proficiency after arrival to the United States may be unobservable in a 5-year span.

Pre-resettlement human capital (or rather the lack of any work history) is one of two significant factors predicting finding a job within the first year. This weakly supports Hypothesis A. The key take way, however, is that the predictors which functioned well for economic self-sufficiency did not contribute much to predicting finding a job within the first year.

The weekly work hour findings weakly supported Hypothesis A. Notably for the blank slate hypothesis, none of the human capital factors predicted more working hours, only less. Even for English proficiency, those who had more English ability worked less hours that those who did not. A limitation for this finding is the inability to conclude whether this increase of working hours was beneficial to those who do not speak English or if these longer working hours were necessary to support the household because of the low-quality of jobs available to one who does not speak English “at all”.

Despite this evidence, Hypothesis A was only partially supported. Few variables were significant in more than one model. Human capital generally contributed, but no human capital variable was a reliable predictor of economic assimilation.

Hypothesis B) Pre/post- Resettlement Context and Economic Integration in the U.S.

The significance of pre-and post-resettlement context results support both the pre- and post- resettlement portions of Hypothesis B. Context effects were significant predictors of economic self-sufficiency, time to first job, and weekly working hours. The largest effects were seen in country of origin. This directly goes against the “Blank Slate” hypothesis. This likely illustrates structural issues that refugees face in the United States, such as racism or differences in the perceived legitimacy of a refugee crisis, as theorized by Portes and Zhou (1993) and Alba and Nee (1997). This strengthens the theoretical camp of Ager and Strang (2008) and other refugee studies scholars and justifies the context-emphasized approach argued by Phillimore (2020).

As a general rule, those from the Middle East tended to work fewer hours than Cubans. Iranians had negative estimates compared to Cubans till the final model. Iraqis worked about 8.8% fewer hours than Cubans did. Syrians had an estimated 7.9% fewer weekly working hours than Cubans. This may illustrate cultural differences work/life balance or a propensity for American employers to give fewer hours to Middle Easterners. We did not see this effect for those from African countries.

Pre-resettlement country of origin is one of two significant factors predicting finding a job within the first year. This weakly supports Hypothesis B—as there is a context variable

predicting obtaining a job within the first year, however there was only one significant context variable among all the variables chosen for the model.

Despite this evidence, Hypothesis B was only somewhat supported. Few variables were significant in more than one model. Contexts generally were unreliable predictors of economic integration and even the rich variation and strong relationship sizes of countries of origin yielded no consistent predictor away from the average.

Hypothesis C) Context level variables should be stronger predictors of economic self-sufficiency, obtaining a job within the first year, and greater weekly working hours than human capital variables.

Human capital appeared to be a more powerful predictor of economic integration than context. When examining weekly working hours, Hypothesis C received some support in favor of human capital from the information criteria, though the predicted probabilities did not favor either category of predictors as more explanatory. Similarly, when comparing predicted probabilities for finding a job within a year of resettlement for Hypothesis C, the prediction confidence intervals overlapped, though the information criterion slightly favored human capital.

In contrast to the lukewarm findings in the other two models, when I examined economic self-sufficiency, the human capital advantaged individual had nearly double the probability of being economically self-sufficient. Extending this meaningful finding, the information criteria also favored human capital. In short, every assessment I devised either tied human capital and contexts or indicated that human contexts were more influential in economic integration than contexts.

In summary, if we had to focus only one family of indicators to target for interventions, we should pick human capital, specifically years of education and those with blue-collar work experience. There is not a lot of evidence to support focusing on English proficiency, though those who do not need to enroll in an English training program do have higher odds of economic self-sufficiency and greater weekly working hours.

In conclusion, Hypothesis C) was not supported and human capital appeared to be the stronger predictor. By extension, human capital is the best candidate (from those considered) for intervention. However, no form of human capital proved to be a good predictor for every form of economic integration and so interventions should consider which aspects of economic assimilation are being encouraged.

LIMITATIONS

This study has limitations. It is limited by its focus on recently arrived refugees, because of this the trajectories of refugees after the first five years cannot be analyzed here. I cannot account for differences in income requirements for public assistance programs, cultural differences beyond what is aggregated by the census region, or analyze the nuanced micro-level interactions between incoming refugees and local communities. Another important limitation is the inexact survey year variable. While there is good reason to assume that there are Trump presidency effects captured by this measure, it also measures everything happening in the United States at the time.

CONCLUSION

Despite these limitations, this study makes an important contribution to the literature on refugee economic integration and has important policy implications. I found specific areas where the blank slate hypothesis seemed to hold true, but mostly found exceptions to this assumption that is frequently made in refugee studies (Gold 1992; Tran and Lara-Garcia 2020). I discovered that human capital and context effects predicted at least some of every form of economic integration I studied. I provide evidence supporting the ideas and work of other researchers (Capps et al. 2015; Mathema and Carratala 2020): encouraging refugees to get a job as soon as possible did not help them become economically self-sufficient, or increase their working hours. Those who waited longer to obtain their job actually had higher odds of being economically self-sufficient.

This study is interesting because on the one hand, the data support the predictions made by New Assimilation Theory (Alba and Nee 1997) and Segmented Assimilation Theory (Portes and Zhou 1993): human capital and contexts can be used to predict every form of economic integration studied. On the other hand, there were no consistent predictors for three forms of economic integration. Theoretically favored predictors like English proficiency were not good predictors. This may indicate large standard errors or ignorance of the processes that affect economic integration for refugees. Refugees may not be blank slates, but sometimes for reasons unknown and at least in the short term, certain human capital and context predictors are unable to differentiate between different refugees.

These results encourage both refugees and the contexts they inhabit to maximize the potential of incoming refugees by utilizing their backgrounds, growing their skills, growing the supports offered them. By so doing, we increase the tax revenues of host countries such as the United States, reduce the tax burden for public assistance programs, and assist refugees in

translating their skills and talents for the betterment of the communities in which they become citizens.

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TABLE 1

Table 1. List of Variables from the Annual Survey of Refugees				
Variable Name and Heading	Variable Description	Justification /Literature	The Survey Question	Correlating Hypothesis
<i>Economic Integration</i>				
Time in years to first job	Range from 0-5 years; May make a binary indicator: Did R get a job in the first year or not?	ORR Annual Reports to Congress; Population, Refugee, and Migration Annual Reports; Ager and Strang 2008	Q1j: What month and year did (INSERT NAME) enter the U.S. to stay? Q18d: When did (INSERT NAME) get his/her first job in the U.S.	
Self-sufficiency (UI_SOI)	This is a 3-category variable: (1) Self-sufficient (2) Mixed (3) Dependent. Typically thought of as a binary indicator: Is R sufficient or not?	Capps et al. 2012; Evans and Fitzgerald 2017; Nam et al. 2021	(1) Refugees are counted as self-sufficient if they reported earning at least \$800 a year, and answered that they did not use any public assistance programs asked: Food Stamps, Social Security, TANF, Medicaid, Refugee Cash Assistance, Refugee Medical Assistance or Public Housing.	

Number of public assistance programs used	Ranges from 0-7	Capps et al. 2012; Evans and Fitzgerald 2017; Nam et al. 2021	How Many public assistance programs does the Refugee household utilize?	
Natural log of last week's working hours (Q6a)	Ranges from 0-96 and then I take the natural log of this number.	Tran and Laura-Garcia 2020; Ager and Strang 2008	How many hours did this person work at his/her primary job last week?	
<hr/> Key independent variables <hr/>				
<i>Pre-migration Human Capital</i>				
Years of Education (Qn2)	Range from 0-20. 20 is used when $x \geq 20$ years.	Tran and Laura-Garcia 2020.	How many years of schooling did this person complete before coming to the U.S.?	Hypothesis A) Pre- and post-migration Human capital should each predict economic integration outcomes. For Hypothesis C) this is a human capital variable Hypothesis B) Those with high contextual attainment should integrate better than those who do not. For Hypothesis
Contextual educational achievement (Created from Qn2)	Raw deviation from UN average data. Created from Qn2 (row 11). Ended not being included because of a strong correlation with education. (r=.88)	(Feliciano and Lanuza 2017)	Not asked	

C) this is a human capital variable

English Proficiency at arrival (qn4a)	This is a 4 option Likert that goes from 1-Verywell to 4-Not at all	(Salvo and Williams 2017)	At the time of arrival in the U.S., how well did this person speak English?	Hypothesis A-- More human capital should predict better integration outcomes. For Hypothesis C) this is a human capital variable
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Pre and Post Contextual Effects

Region of resettlement Q1k	1= Northeast, 2= South, 3= Midwest, 4= West	Tran and Laura-Garcia 2020 found that this didn't matter much.	In what State did (INSERT NAME) originally resettle?	Hypothesis C) Pre- and post-migration context effects should affect economic integration. For Hypothesis C) this is a context level variable
National Origin (Qn1h)	This is a country name, i.e. Iraq.	Tran and Laura-Garcia 2020 found that this didn't matter much.	What is this person's country of citizenship?	Hypothesis C) Pre- and post-migration context effects should affect economic integration.

Pre-Displacement Economic sector (Qn3b) (Professional, Sales, Service, or Blue Collar)	Professional Sector, Sales sector, Service Sector and Blue-Collar Sector.	Portes and Zhou 1993; Zhou 1997; Sanders 2002	What kind of work (activities) did this person perform before coming to the U.S.	For Hypothesis C) this is a context level variable Hypothesis A) Pre- and post-migration Human capital should each predict economic integration outcomes.
Year Survey is conducted	2016, 2017, 2018	(Kalleberg and Marsden 2013; Firebaugh 1997)	Not asked	For Hypothesis C) this is a context level variable Hypothesis C): Context variables should predict integration better than individual level variables.
				For Hypothesis C) this is a context level variable

Post-migration Human Capital (Note: These cannot be used in finding a job within the first year analysis)

Current enrollment in English Training programs (qn4j)	0= Not enrolled 1=Enrolled	Tran and Laura Garcia found that this predicted education and work enrollment pretty well.	Is this person currently enrolled in an English language training program?	For Hypothesis C) this is a human capital variable
Current enrollment in Employment Training programs (qn24a)	0= Not enrolled 1=Enrolled	Tran and Laura Garcia found that this predicted education and work enrollment pretty well.	Within the past 12 months, has this person attended any job training program	For Hypothesis C) this is a human capital variable
English Proficiency now (qn4b)	This is a 4 option Likert that goes from 1-Verywell to 4-Not at all	(Salvo and Williams 2017)	How well does this person speak English now?	For Hypothesis C) this is a human capital variable
Control Variables				
Sex (qn1f)	Measured as Male or Female.	A standard control.	Is this person male or female?	
Age (qn1d)	Goes from 0-75, when $x > 75$, value is recorded as 75. The public data collapses this data into the following categories: 55 or older 40 to 54 years 25 to 39 years 18 to 24 years 0 to 17 years	A standard control.	What was this person's age at last birthday?	

How many people in Household? Q1a	Ranges from 1-5; when family is larger than 5, 5 is recorded.	A standard control.	Let us start with the person who has overall responsibility, which is the person in whose name your home is rented, owned, or is being bought: the head of the household. What is the name of the Head of the household, and of each of the other members of the household
Marital Status (Q1c)	Married divorced, legally separated, Never married, widowed, child, or other.	A standard control.	What is this person's current marital status?
Yearly Income?	Note that those who report "married" may not live with their spouse. 0-99999; rounded	Tran and Laura-Garcia didn't control for this... Should they have?	What were (INSERT NAME)'s total earnings before taxes from all jobs in the past 12 months?
Number of Household Members with a Work Disability (Qn28) (Those who cannot work for money because of a condition or reason)	Ranges from 0-5	I don't think anyone else uses this variable, but it will bias our estimates if we don't include it.	Does this person have a physical, mental, or other health condition that ha