Waves of Immigration from the Middle East to the United States

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Abstract

Anecdotal evidence suggests that there have been three waves of immigration from the Middle East to the United States, roughly defined as a first wave from the late 1800's to 1924, then a second wave from the mid 1940's until 1965, and a third wave from the passage of the 1965 Immigration and Nationality Act until the present. How accurate are these categorizations? In what ways has immigration from the Middle East to the United States changed over the past century? This paper addresses these issues using Census data from 1980-2011, covering immigration cohorts from 1910 through 2011. I find key differences in immigration both across source countries and arrival cohorts. There has been a general downward trend in the education and income levels of immigrants since 1965, most notably for countries with large refugee populations. The effects of ethnic enclaves depend on characterisitcs of the enclaves as well as immigrant arrival cohort. In general, living in an ethnic enclave is associated with lower educational outcomes and income, though the effects are reversed for high skill enclaves as well as enclaves in which immigrants hold executive and managerial positions. Furthermore, the negative effects of ethnic enclaves depend on the arrival cohort, with enclaves having potentially positive effects for the most recent arrival cohorts, but a negative impact on immigrants who stay in the enclave years after their arrival.

Keywords: Immigration, Middle East, Ethnic Enclaves, Occupational Clustering

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1   Introduction

Anecdotal evidence suggests that there have been three waves of immigration from the Middle East to the United States. The first wave occurred between the late 1800's and mid 1920's and was predominantly Arab Christians from the Ottoman province of Syria (modern day Lebanon, Palestine, and Syria). The passage of the Johnson-Reed Immigration Act in 1924 severely limited immigration from this part of the world, effectively ending this wave. The second wave, far less numerous due to restrictive American immigration policies, occurred between the 1940's and 1960's. Motivating factors were primarily political instability in the Middle East such as the 1948 Arab Israeli War (leading to a massive displacement of Palestinians) as well as popular revolutions in places like Egypt and Iraq. Immigrants in this wave were much better educated than those in the first wave, with many immigrants being members of the established elite escaping countries that experienced popular revolutionary movements. The restrictive quota system put into place in 1924 was removed with the passage of the 1965 Immigration and Nationality Act. This opened up the doors for a massive increase in immigration from the Middle East, the third wave of immigration that continues until today. Nearly 800,000 people "officially" immigrated to the US between 1967 and 2003 (Orfalea, 2006). These immigrants had similar high levels of education to those in the second wave, but were far more numerous and a much higher percentage were Muslims. They have immigrated for a wide variety of reasons, ranging from seeking better economic opportunities to a general increase in religious, ethnic, and sectarian tensions in their homelands.

How closely does the actual data hew to these anecdotal definitions? To what extent can immigration from the Middle East be split into these three groupings, or should alternative groupings be defined? How have the characteristics of immigrant groups from the Middle East to the United States changed over time? These are the questions I address in this study.

I use US Census data from 1980 through 2011 to create a profile of immigration from fifteen source countries in the broadly defined MENA region as well as immigrants from South Asia as a comparison group.[1] I am able to identify immigrants that arrived between 1910 and 2011, over 100 years of immigrant arrivals to the US. For these immigrants, I collect data on their educational outcomes, income, occupation, marital status, and residence within an ethnic enclave. I then use this data to see how demographic and economic characteristics of these immigrant groups may have changed over time.

My study examines several characteristics of these immigrant groups. The first is educational achievement. On average, MENA migrants have higher levels of education than the average American. However, education has not remained stable across immigrant cohorts. Supporting anecdotal evidence and as shown in Figure 1, we observe a sharp rise in education up through the late 1960's immigrant cohorts. However, years of education peaks in 1969 then steadily falls until the late 1990's, where it begins to rise again. The drop in education after the 1960's is not entirely unexpected, given that the 1965 Immigration and Nationality Act made it easier to migrate to the US from the Middle East (thus opening up immigration as a viable option for a larger portion of the MENA population). The reversal of this trend may also be explained by an increasing demand for technical workers in the US or possibly more restrictive immigration policies in the wake of the September 11th attacks limiting immigration to only the most education migrants. In any event, the data indicates that lumping all migration since the late 1960's into a single wave may be flawed.

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[1] The sixteen MENA countries are Algeria, Egypt, Iran, Iraq, Israel/Palestine, Jordan, Lebanon, Libya, Morocco, Somalia, Sudan, Syria, Tunisia, Turkey, and Yemen. The South Asian countries are Bangladesh, India, Pakistan, and Sri Lanka. I also include Afghanistan in my sample, though this country does not fit neatly into the MENA or South Asia classification. It does, however, match up with countries that have sent large numbers of refugees to the US such as Iraq and Somalia. MENA countries that were not selected were left out because of a small number of migrants in the US, particularly for early immigrant cohorts.

Figure 1: Years of Immigration across Immigrant Cohorts
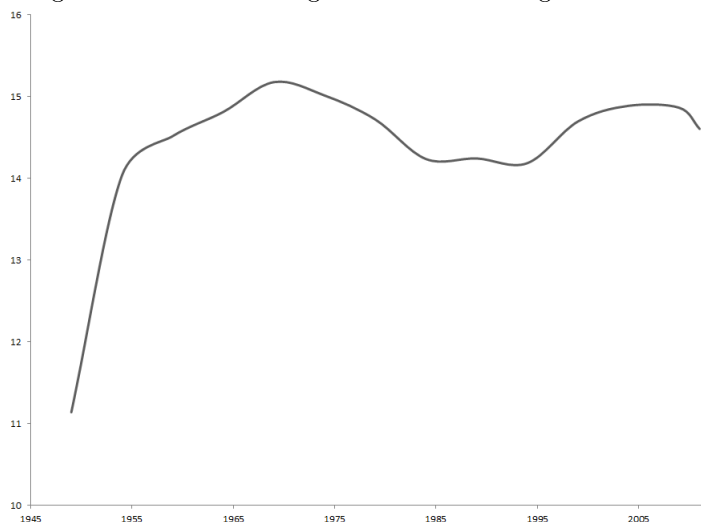
* Average years of education across all countries in the sample on the vertical axis. The horizontal axis gives the year in which an immigrant arrived in the United States. Thus, the data point for 1947 indicates that across all the immigrants who arrived in 1947, the average years of education was approximately 11.2.

More interesting results can be observed by looking at how these trends have changed across different countries. Figure 2 presents years of education across immigrant cohorts for Egypt, the Levant, and Turkey. We observe the same increase in education during the second wave of the 1940's-1960's. However, there is not the same steady decline in education after 1965. Rather, we see education levels across immigrant cohorts staying fairly stable up until the mid to late 1980's. From there we can see a steady increase in the education levels of immigrants from all countries except for Egypt, whose immigrants keep basically the same education levels from the late 1960's through the mid 2000's. There is a strong divergence in the last few immigrant cohorts, however. Strong increases in Jordan, Lebanon, and Turkey (especially) are tempered by a modest drop in Egypt and a severe decline in Syria. These declines may be indicative of refugees from these countries moving to the United States to escape dangerous situations in their home countries rather than economically motivated migration.

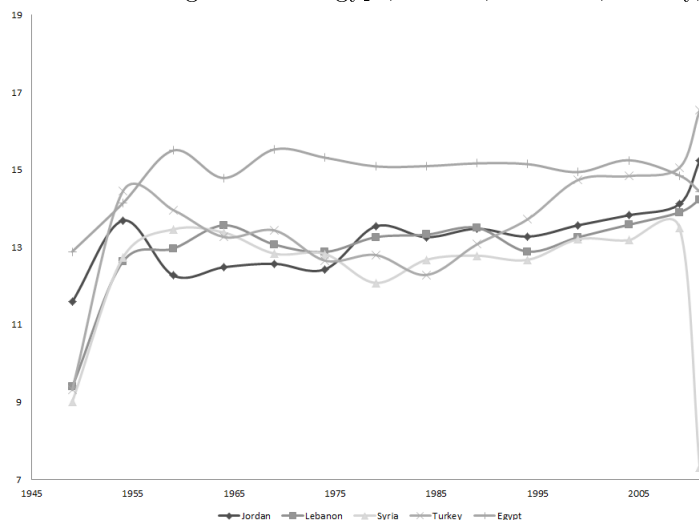Figure 2: Years of Immigration for Egypt, Jordan, Lebanon, Turkey, and Syria

Figure 3 supports this notion, showing years of immigration for countries that have, at some point, sent refugees to the United States. In Iran, for example, we observe a steady decline in years of education following the ouster of the Shah in 1979 as well as during the years of the Iran-Iraq War. Interestingly for Iraq, years of education tend to rise during this period. However, they fall again in the aftermath of the 1st and 2nd Gulf Wars. Afghanistan and Somalia exhibit this same pattern, with the education levels of migrants falling as refugees flee their native countries in the wake of wars with foreign powers (Afghanistan with the Soviet Union) or civil wars (Somalia in the early 1990's, Afghanistan pretty much for this entire time period).

Figure 3: Years of Immigration for the "Refugee" Countries
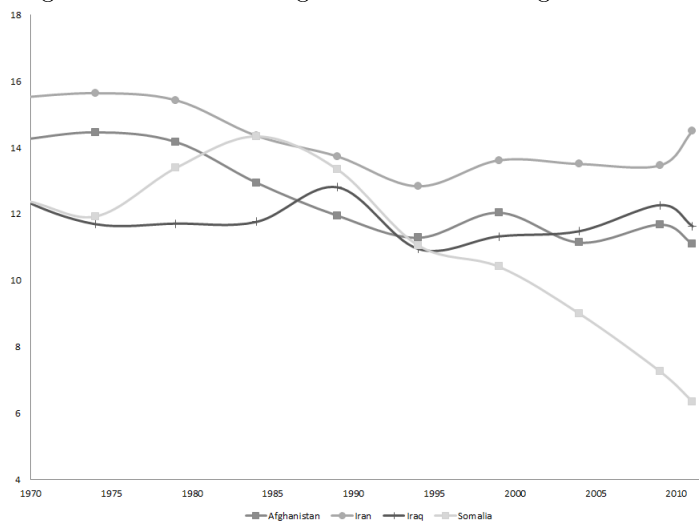
In addition to evaluating immigrants based on education levels, I will also analyze income levels, occupational concentrations, and cultural assimilation across both immigrant cohorts and source countries. The rest of the paper proceeds as follows. Section II will present a closer look at the defined waves of immigration within the context of US immigration policy and events in the Middle East. Section III discusses the construction of the datset used in this study. Section IV presents a few empirical results and their significance and Section V will conclude with an assessment of why these results matter for research into the economics of immigration from the Middle East.

2   A History of Immigration from the Middle East to the United States

2.1   The First Wave: 1870-1924

The first wave, from the 1870's to the mid 1920's consisted mostly of immigrants from the Ottoman province of Syria (comprising modern day Lebanon, Palestine, and Syria). This wave was a predominantly Christian population and pushed to immigrate due to years of infighting between the Druze and Christians in Syria as well as to avoid conscription in the Ottoman Army. The declining economic prospects in the Ottoman empire were certainly a motivating factor as well (Kayyali, 2006). This wave was fairly uneducated and worked mostly in low skill occupations. Despite their relative lack of education, this wave of immigrants were able to find success in various industries, notably the garment industry in the New York/New Jersey area. In 1924, there were 25 Syrian owned and operated silk factories in Paterson, New Jersey alone (Orfalea, 2006). According to Orfalea, immigration during this first wave was predominantly male, with men outnumbering women by a ratio of 4:1. Though my data do not support this claim, this could be due to the fact that women have longer life expectancies than men. In my sample spanning census years from 1980-2011, 49% of immigrants who arrived before 1924 are male. However, if I only look at the 1980 census (when more of the men who immigrated before 1924 would still be alive), this fraction increases to 53.3%, suggesting that a snapshot taken in the early 20th century could reveal a predominantly male immigrant population.

2.2   The Second Wave: 1948-1965

The passage of the Johnson-Reed Immigration Act in 1924 as well as the Great Depression greatly reduced migration from the Middle East from the late 1920's through the end of World War II. The Johnson Reed Act set a quota on immigration to 2% of the number of people from a country who were living in the United States in 1890 as well as restricted all immigration from Asia. This was enacted to "preserve the ideal of American homogeneity."[2] This more restrictive policy greatly limited migration from the Middle East to the United States.

Despite these severe restrictions, immigration did pick back up after World War II, albeit in much smaller numbers than in the 1st or 3rd waves. A major event was the 1948 Arab-Israeli War, sparking a massive migration of displaced Palestinians. Immigrants from Palestine made up the largest portion of immigrants during this wave, followed by Egyptian immigrants. Many immigrants who arrived during this period were members of the established elite in countries like Egypt, Iraq, and Syria who left due to popular revolutions and the new regimes that followed. For many of these migrants, the United States was their second or third destination.

Syrians," as most immigrants from the Middle East were called, were considered Asian by the US government and thus prohibited from migrating under the new immigration law. Furthermore, going

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[2]The Immigration Act of 1924 (Johnson-Reed Act). *US Department of State Office of the Historian.* Retrieved on 12/17/2013.

Figure 4: Fraction of Immigrants Marrying American-Born Spouses by Cohort
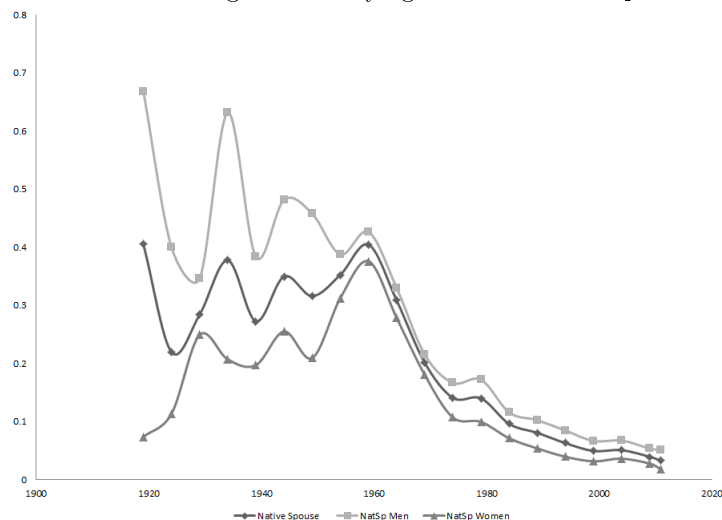
back to 1870, only people classified as White or of African descent could be naturalized citizens and thus obtain the right to vote. From 1905 to 1923, Arab groups lobbied and sued for a change in their racial classification to White. (Samhan, 1999). This same pursuit was made by immigrants from the Indian subcontinent. In the 1923 court case, United States vs. Bhagat Singh Thind, US Supreme court ruled that Indians, though anthropologically Caucasian, were to be racially classified as Asian and thus barred from naturalization and immigration.

To avoid this fate, many MENA immigrants attempted to actively assimilate into American society. They Americanized their names, did not teach Arabic to their children, and did not actively try to preserve their heritage (Suleiman, 1999). Evidence of this result in my data is the percentage of MENA migrants who have American born spouses. Figure 4 presents the fraction of immigrants by arrival cohort who have native-born spouses. For both men and women, we see a clear trend that earlier cohorts were much more likely to marry American born spouses than later cohorts. For the 1960 cohort, 40% of immigrants from the MENA and South Asia were married to American born spouses.[3] After this peak, we see a precipitous decline in the fraction of immigrants married to American-born spouses. The patterns for men and women are similar, with men being slightly more likely to marry an American born wife, though this difference is much less pronounced in later cohorts.

As measured by intermarriage, it appears that cultural assimilation has significantly decreased during the third wave of immigration as compared to the 1st and 2nd waves. This result is reinforced when we consider the ancestry of the American-born spouse of immigrants from the MENA and South Asia over time. Table 1 presents the fraction of American-born spouses that have the same ethnicity as the immigrants they marry. For all groups, we observe a large increase in the same-ancestry spouses, suggesting a reduction in cultural assimilation.[4] For example, virtually none of the American born spouses of Iranian immigrants arriving between 1910 and 1944 had an Iranian ethnicity. For the most recent cohort (2005-2011), this fraction had increased all the way to 35%. Of course, this could also be a reflection of a maturing ethnic community in the US. As an ethnic community grows and becomes more established, there will be larger pool of available spouses, both native born and immigrant. Either

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[3]This represents 40% of immigrants who were ever married at one point (i.e. excludes those who have never been married).

[4]Perlmann (2001) finds that those entering the United States at the latter part of an immigrant wave are more likely to native-born spouses of the same ancestry, supporting this result.

way, the results indicate that more recent migrants are more likely to stay within their communities.[5] This result also holds in the popular perception of the American public. A study by Timberlake and Williams (2012) surveyed registered voters in the state of Ohio and found that those surveyed felt that immigrants from the Middle East were the least likely group of immigrants to assimilate into American culture. That said, the same study did find that Middle Eastern immigrants were perceived as being on average more successful and less of a drain on public resources than most other immigrant groups.

Table 1: Fraction of Native-Born Spouses with the Same Ethnic Background

Immigrant Cohort	Middle East	Iran	South Asia	Somalia/Sudan
All Cohorts	*14.1%*	*7.2%*	*4.4%*	*7.2%*
1910-1944	6.1%	0%	0%	0%
1945-1964	5.6%	1.6%	1.1%	0%
1965-1974	4.9%	1.4%	8.4%	3.9%
1975-1984	6.3%	3.9%	16.7%	0%
1985-1994	9%	8.4%	22.6%	2.2%
1995-2004	11.9%	13.2%	28.3%	22.2%
2005-2011	15.7%	35.4%	30.4%	10.9%
All	7.2%	4.4%	14.1%	7.2%

Interestingly, the patterns presented in Table 1 vary across source country when we consider gender differences. Table 2 gives the fraction of same-ethnicity American-born spouses for both men and women. For migrants for South Asia and Somalia/Sudan, a much higher percentage of the American-born spouses of immigrant women share the same ethnicity as their wives. This may be due to cultural norms from these regions in which it is much less socially acceptable for a woman to marry outside of her ethnic group. There is almost no difference between men and women for immigrants from the Middle East. For the most recent cohort for Iran, immigrant women are much more likely to marry outside of their ethnic group. These results suggest that later cohorts of immigrants are quite different from their predecessors and these differences do in fact vary across source country.

Table 2: Fraction of Native-Born Spouses with the Same Ethnic Background by Gender

Immigrant Cohort	Middle East		Iran		South Asia		Somalia/Sudan	
	Men	Women	Men	Women	Men	Women	Men	Women
All	*6.6%*	*6.7%*	*4.2%*	*4.8%*	*15.2%*	*19.4%*	*4.6%*	*10.6%*
1910-1944	6.7%	5.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1945-1964	6.2%	4.7%	2.1%	0.4%	0.7%	1.8%	0.0%	0.0%
1965-1974	4.9%	5.0%	1.8%	0.1%	7.1%	11%	9.2%	0.0%
1975-1984	6.0%	6.9%	3.9%	4.0%	14.1%	20.5%	0.0%	0.0%
1985-1994	8.8%	9.3%	8.1%	9.0%	22.3%	23.2%	3.0%	0.5%
1995-2004	10.6%	15.0%	11.7%	15.0%	26.3%	32.0%	14.1%	31.2%
2005-2011	15.5%	16.2%	44.4%	24.3%	23.5%	39.0%	0.0%	16.3%

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[5]This may actually be a positive for these communities in terms of the educational outcomes of 2nd and 3rd generation immigrants. Results in a previous study (Foad, 2013) found that the educational and income outcomes of children who have one immigrant parent and one native born parent (Generation 2.5) are actually lower than those with two immigrant parents. This may be due to stresses in family environment due to cultural differences. This result was specific to Middle Eastern migration to the US, however. Ramakrishnan (2004) looks at immigrants to the US from all source countries and finds that Generation 2.5 does a little bit better than Generation 2.0. He argues that having one native-born parent gives children an advantage in terms of knowledge about entry into the mainstream economy and greater access to educational and employment opportunities. Why the results are different for Middle Eastern immigrants is a very interesting question that merits further research.

2.3 The Third Wave: 1965-present

The third wave of immigration began with the passage of the 1965 Immigration and Nationality Act. This law abolished the restrictive quota system that had been in place since 1924 as well as allowed for the naturalization of immigrants from Asia. With the passage of this law, the doors were opened for large scale immigration from regions of the world that had been previously denied. Currently about 12% of the US population is foreign born, about the same fraction as a century ago. However, there has been a tremendous shift in the composition of the foreign born population. In 1900, about 80% of the immigrant population were from Europe. By 2000, the European share had fallen down to 16% (Timberlake and Williams, 2012). A significant portion of this shift has been an increase in immigration from the Middle East. For example, Camarota (2002) estimates that the number of immigrants from the Middle East has increased more than sevenfold since 1970.

Demographically, the immigrants that arrived during this period were similar to those that came in the last wave, but they were far more numerous. Many left because of increased political instability in their native countries; a general increase in religious, ethnic, and sectarian tensions in their homelands. The Lebanese Civil War had a big effect, with an estimated 120,000 Lebanese immigrating after the Civil War began in 1975. Between the first and second Gulf Wars, an estimated 53,000 Iraqis immigrated to the US, a large percentage of them Chaldean Christians. This trend has continued with increased migration from places like Afghanistan, Somalia, and Syria. So just how different are these immigrants from those that arrived in previous years? The rest of this paper is devoted to answering this question.

3 The Data

To assess the changing characteristics of MENA and South Asian immigrants, I utilize data from the US Census. I gather data from the 1980, 1990, and 2000 decennial censuses as well as the 2001-2011 American Community Survey. I restrict my sample to people over the age of 25 who were born in the Middle Eastern countries of Algeria, Egypt, Iran, Iraq, Israel/Palestine, Lebanon, Libya, Jordan, Morocco, Somalia, Sudan, Syria, Tunisia, Turkey, and Yemen. I also add in Afghanistan as well as the South Asian countries of Bangladesh, India, Pakistan, and Sri Lanka as immigrants from these countries share some of the characteristics of MENA migrants. For these individuals, I collect data on demographic characteristics, education, income, occupation, place of residence, marital status, birthplace and ancestry of their spouse, and year of immigration among others. Table 3 presents selected summary statistics across these groups for the Census years 1980, 1990, 2000, and 2010.

Looking first at education, we can see that MENA and South Asian migrants have higher rates of college graduation than the general US population. The exception are the Somalis and Sudanese, who have seen a large decline in their college graduation rates with the influx of refugees from these war stricken countries. For the other three groups, there has been a general upward trend, with graduation rates rising most strongly for the MENA group, displaying a 53% increase between the 1980 and 2010 Census samples compared to a 26% increase for Iranians and a 7% increase for South Asians. That said, the general US population experienced a 72% increase in college graduates over this same period, suggesting that the educational advantage these groups have enjoyed may be eroding.

The results for income are in line with the higher educational outcomes of migrants from the MENA and South Asia. On average, these groups have higher incomes than the general US population, but again the average income for the Somali/Sudanese group is lower. Interestingly, it appears that the income gap between these groups and the general US population has been growing. Between 1980 and 2000, total personal income increased by a factor of 2.4 for the general US population (in nominal terms!). Over this same period, income increased by a factor of 2.7 for the MENA group, 3.7 for Iranians, and 2.5 for South Asians. Incomes for Somalis and Sudanese only increased by a factor of

Table 3: Selected Characteristics of Immigrant Groups Relative to the US Population

College Graduates

Census Year	US Pop.	MENA	Iran	South Asia	Somalia/Sudan
1980	16.4%	28.8%	42.8%	65.0%	42.6%
1990	19.8%	35.3%	50.2%	61.4%	46.4%
2000	24.6%	39.9%	50.7%	64.2%	23.5%
2010	28.2%	44.1%	54.0%	69.5%	16.6%

Total Personal Income

Census Year	US Pop.	MENA	Iran	South Asia	Somalia/Sudan
1980	$10,960	$11,496	$10,588	$14,953	$8,949
1990	$20,465	$23,829	$23,987	$26,803	$17,689
2000	$31,860	$35,506	$41,690	$40,434	$18,792
2010	$37,605	$42,038	$49,837	$52,242	$20,324

Divorce Rate

Census Year	US Pop.	MENA	Iran	South Asia	Somalia/Sudan
1980	10.1%	6.5%	7.1%	3.0%	3.0%
1990	12.8%	7.7%	9.8%	3.0%	11.0%
2000	14.2%	8.0%	12.1%	3.5%	14.6%
2010	15.7%	9.7%	11.2%	3.5%	13.2%

Veteran Status

Census Year	US Pop.	MENA	Iran	South Asia	Somalia/Sudan
1980	20.7%	5.4%	4.9%	1.9%	6.7%
1990	18.9%	3.1%	1.3%	1.1%	2.0%
2000	14.5%	2.7%	1.7%	1.1%	1.1%
2010	10.5%	1.4%	0.8%	0.5%	1.7%

1.3, suggesting a widening income gulf. To put these numbers in real terms, the ratio of the CPI in 1980 to the CPI in 2010 is 0.374. Deflating the 2010 income figures yields a 28% increase in purchasing power for the general US population over the past 30 years. Compare this to a 31% increase for South Asians, a 37% increase for the MENA group, and a whopping 76% increase in purchasing power for Iranian immigrants in 2010 relative to 1980. By contrast, immigrants from Somalia and Sudan have actually seen their purchasing power decline by 15%.

There has been a general upward trend in divorce rates in the United States over the past 30 years. In this, MENA immigrants are no different. Though divorce rates overall for this group are lower than for the general population, they have been increasing in roughly the same proportion. In 1980, only 6.5% of MENA immigrants in my sample were divorced. By 2010, this number had increased to nearly 10%. This result is especially interesting given the increasing trend for these immigrants to marry non-native spouses. Only for the South Asian group do we observe little change in divorce rates over time.

Finally, consider veteran status. Since 1980, the fraction of the American population that has served in the armed forces has declined considerably. This is expected, given the movement away from the draft during the Vietnam War and toward an all volunteer army. That said, MENA and South Asian immigrants are seriously underrepresented in the US Military. The largest percentage declines are for the MENA and Iranian group, dropping from around 5% of immigrants to 1% in 2010. Limited military service is an especially relevant statistic given that such service is often a way to integrate im-

migrants into society. In fact, the US Military actively recruits immigrants, offering extended benefits to immigrants and their family. This recruitment drive has been successful among some immigrant groups, as 8% of active duty military were born abroad and 12% are not US citizens (Stock, 2009). Clearly, their push has not been as successful among MENA and South Asian migrants. Whether this is due to US foreign policy in many of these migrants native countries or simply because these migrants tend to be better educated (and thus likely to enlist), an important aspect of the American immigrant story is being missed here.

A common pattern among immigrant groups to the United States is occupational clustering, where immigrants tend to be more heavily represented in specific occupations than the general US population. For example, Toussaint-Comeau (2006) finds that Hispanic immigrants tend to cluster in low skill occupations such as food service and farming occupations, partially explaining their relatively low earnings. A similar result is found for migration to the UK by Elliott and Lindley (2008), albeit with less of an effect on the immigrant wage penalty. Occupational clustering appears to be occurring for MENA and South Asian migrants as well. Table 4 presents the fraction of the general US population as well as immigration groups employed in various occupations. Compared to the general population, migrants from the MENA and Iran tend to be more represented in high skill occupations like Math/Computer Science, Engineering, and Healthcare. The same pattern holds for South Asian migrants, with a significant portion employed in Math/Computer Science. These trends reflect the higher education levels of these migrants relative to the general population. This is reinforced by the relatively low skill jobs that Somali/Sudanese immigrants are concentrated in, production and transportation. Interestingly, migrants from the MENA region also tend to be more heavily employed in sales occupations than the general population. This may be due to sales jobs often working on commission and thus represent relatively low risk hires for employers of immigrants with few local connections.

Table 4: Occupational Clustering of Immigrant Groups

Occupation	US Pop.	MENA	Iran	S. Asia	Somalia/Sudan
Executive/Management	11.2%	11.7%	13.1%	13.1%	5.9%
Administrative	9.8%	6.6%	6.1%	6.3%	7.2%
Management Support	6.9%	4.5%	5.2%	5.7%	3.9%
Sales	6.9%	11.8%	12.0%	8.8%	5.9%
Production	5.1%	4.6%	2.8%	3.7%	10.6%
Transportation	4.2%	3.7%	2.4%	3.2%	12.5%
Construction	3.8%	1.9%	1.8%	0.6%	0.9%
Primary/Secondary Teachers	3.4%	2.9%	2.3%	1.9%	2.1%
Nursing	2.7%	1.3%	1.7%	2.5%	2.9%
Household Service	2.6%	1.2%	0.5%	0.7%	5.1%
Food Service	2.6%	3.5%	2.1%	2.0%	3.0%
Mechanics	2.3%	1.9%	1.7%	0.7%	1.7%
Personal Service	1.9%	1.9%	2.6%	0.8%	4.1%
Math/Computer Science	1.4%	2.0%	2.4%	11.8%	1.6%
Protection Service	1.3%	0.6%	0.4%	0.5%	1.8%
Health/Science Technicians	1.3%	1.2%	1.8%	1.9%	1.2%
Engineers	1.2%	2.6%	4.3%	4.3%	1.1%
Writers/Entertainers	1.2%	1.6%	1.6%	0.8%	1.2%
Social Workers	1.0%	0.7%	0.4%	0.5%	1.5%
Doctors	0.8%	2.9%	3.9%	4.7%	0.7%
Farmers	0.7%	0.1%	0.1%	0.2%	0.2%
College Professors	0.6%	1.8%	1.7%	2.1%	0.7%

Table 5 presents changes in occupational clustering over time for these immigrant groups. For the

MENA and Iran groups, we see an increase in the percentage of migrants in Managerial positions from the earliest cohorts. However, the fraction in these managerial positions starts to decline in the mid-1980's. This continues until managerial occupations are not even in the top three for these groups for the most recent immigrant cohorts. Part of this pattern can certainly be explained by the fact that it takes time and experience to obtain managerial positions and newer immigrants lack this experience. However, there may also be a reflection of a downward trend in high profile occupations among the most recent waves of these immigrant groups. For South Asian migrants, the most notable trend is the explosion of Math and Computer Science as an occupation in more recent cohorts. Nearly a quarter of South Asians who immigrated since 2005 are employed in this industry, supporting the anecdotal evidence that Indian immigration is concentrated in high tech fields. The trends for Somalia and Sudan reflect the shift in migration from these countries toward lower skill refugees. Whereas managerial positions are in the top three up until the early 1990's, immigrants who have arrived in the past two decades have been increasingly concentrated in lower skill occupations such as production and transportation.

Table 5: Top Three Occupational Clusters across Immigrant Cohorts

Wave	MENA	Iran	South Asia	Somalia/Sudan
1910-1944	Sales (6.9%)	Management (6.7%)	Management (8.0%)	.
	Management (5.3%)	Sales (2.9%)	Doctors (3.1%)	.
	Admin (4.9%)	Admin (2.7%)	Mgt Support (2.5%)	.
1945-1964	Management (11.0%)	Management (13.6%)	Management (14.0%)	Management (10.9%)
	Sales (9.6%)	Sales (11.4%)	Engineers (8.1%)	Sales (10.8%)
	Admin (7.2%)	Admin (7.0%)	Admin (5.9%)	Admin (5.8%)
1965-1974	Management (12.4%)	Management (16.1%)	Management (16.5%)	Sales (12.7%)
	Sales (12.0%)	Sales (13.3%)	Doctors (9.7%)	Management (9.1%)
	Admin (7.1%)	Engineers (5.5%)	Engineers (8.7%)	Admin (6.3%)
1975-1984	Sales (13.5%)	Management (16.1%)	Management (14.9%)	Sales (12.8%)
	Management (13.3%)	Sales (13.3%)	Sales (10.1%)	Management (12.1%)
	Admin (6.5%)	Mgt Support (6.1%)	Admin (8.6%)	Admin (7.8%)
1985-1994	Sales (12.7%)	Management (10.7%)	Management (13.6%)	Sales (11.4%)
	Management (12.0%)	Sales (10.6%)	Sales (10.5%)	Management (8.5%)
	Admin (6.2%)	Admin (6.3%)	Comp. Science (8.2%)	Transport (7.3%)
1995-2004	Management (10.8%)	Sales (10.2%)	Comp. Science (19.8%)	Transport (12.6%)
	Sales (10.4%)	Management (7.4%)	Management (12.3%)	Production (10.1%)
	Admin (6.4%)	Admin (6.2%)	Sales (8.1%)	Admin (7.3%)
2005-2011	Sales (9.5%)	Sales (9.3%)	Comp. Science (24.4%)	Production (14.9%)
	Admin (6.7%)	Admin (5.0%)	Management (5.9%)	Transport (9.8%)
	Food Service (5.8%)	Professor (4.9%)	Sales (5.9%)	Sales (5.5%)

In addition to occupational clustering, immigrants tend to concentrate in ethnic enclaves, locations in which immigrants are more prevalent than the general US population. Several studies have examined the impact of living in an ethnic enclaves on the earnings and education of immigrants. On the positive side, living in an ethnic enclave should reduce the cost of immigration and limit the discrimination in labor markets that many immigrants face. Furthermore, the returns to pre-immigration human capital should be higher (i.e. native country language skill may be more valuable when surrounded by people who speak that language.) Edin et. al. (2003) examine the effects of ethnic enclaves of refugees in Sweden, finding that immigrants living in enclaves have wages 13% higher than those outside the

enclaves. Further support for the positive effects of ethnic enclaves is given by Gang et. al. (2000), who find that living in an ethnic enclave has increases the educational outcomes of 2nd generation immigrants in Germany.

There are several reasons to believe that living in an enclave could have negative effects. The need to assimilate is reduced, which could lower human capital investments. The skill set that is acquired for life in the enclave may also not be as transferable to life outside the enclave. For example, a child living in an ethnic enclave will not have as much pressure to learn English, which is fine within the enclave, but harmful if that child were to ever leave. Grönqvist (2006) looks at immigrants in Sweden and finds that for second generation immigrants, living in an ethnic enclave reduces the probability that they will graduate from high school. Further evidence of the negative effect of enclaves on educational outcomes is given by Chiswick and Miller (2001), who find that living in an ethnic enclave is negatively related to English language proficiency for immigrants to Canada.

Finally, there may be significant neighborhood effects that could have both positive and negative impacts. If those living in the ethnic enclave tend to be well educated and have high incomes, then living in the enclave should have positive effects. If the enclave is of low socio-economic status, then it could have a negative impact on the educational and labor market outcomes of its residents. A recent paper by Pedace and Rohn Kumar (2013) supports this result, finding that the effect of ethnic enclaves across immigrant groups depends upon the characteristics of the enclave. For example, Indian males and Mexican women living in high skill enclaves tend to earn higher wages than their counterparts outside of enclaves, while Filipino males and Puerto Rican females in low-skill enclaves tend to have lower wages.

I use a unique methodology to define an ethnic enclave. I construct an agglomeration index (AI) for each ethnic group and US county. The agglomeration index for ethnic group j living in county i is defined as the fraction of ethnic group j living in county i divided by county $i's$ share of the US population:

$$AI_j^i = \frac{Pop_i^j/Pop^j}{Pop_i/Pop}$$

For example, 1.58% of MENA migrants in my sample live in Hudson County, New Jersey. This county represents only 0.2% of the US population, however, meaning that MENA migrants are $1.58/0.2 = 7.8$ times more likely to live in Hudson County than the average American. An agglomeration index less than 1 means that a member of the diaspora is less likely to live in that county than the average American, while an index over 1 suggests that they are more likely. An advantage of this measure is that it is scale free. For example, would expect there to be a large number of ethnic Middle Easterners in New York City, simply because there are a lot of people that live in New York City. But how significant is the MENA community? Is it tightly organized with services offered for its residents such as Arabic language schools and ethnically owned businesses? The agglomeration index measures the relative importance of the community in a particular county and is thus more likely to be correlated with the features of an ethnic enclave that would affect educational attainment.

Table 6 presents the top 10 counties in the US across immigrant groups based off the agglomeration index (conditional upon there being at least one immigrant in a county). The results are fairly consistent with anecdotal evidence on ethnic enclaves across these immigrant groups. MENA migrants cluster in the New York/New Jersey area as well as Michigan, while Iranians are heavily concentrated around the Los Angeles and San Francisco metropolitan areas. South Asians are heavily concentrated in New York as well as Silicon Valley in California, while the distribution of Somali/Sudanese immigrants hews to the large refugee communities of these populations around Minneapolis and Columbus, Ohio.

Table 6: Top Ten Ethnic Enclaves

MENA		Iran	
Hudson County, New Jersey	7.8	Los Angeles County, California	11.0
Passaic County, New Jersey	7.7	Santa Clara County, California	8.9
Bergen County, New Jersey	7.1	Orange County, California	7.8
Oakland County, Michigan	7.0	Stanislaus County, California	7.7
Kings County, New York	6.4	Marin County, California	7.6
Macomb County, Michigan	6.4	Nassau County, New York	5.7
Wayne County, Michigan	6.1	San Mateo County, California	5.5
Richmond County, New York	5.7	Collin County, Texas	5.2
New York County, New York	4.7	Contra Costa County, California	5.1
Queens County, New York	4.7	Alexandria city, Virginia	4.5
South Asia		Somalia/Sudan	
Middlesex County, New Jersey	14.1	Hennepin County, Minnesota	37.2
Queens County, New York	8.9	Alexandria city, Virginia	23.2
Santa Clara County, California	8.8	Franklin County, Ohio	22.4
Fort Bend County, Texas	7.9	Olmsted County, Minnesota	22.4
Hudson County, New Jersey	7.8	DeKalb County, Georgia	18.0
DuPage County, Illinois	7.3	Ramsey County, Minnesota	17.4
Somerset County, New Jersey	7.1	Androscoggin County, Maine	15.9
Alameda County, California	6.2	Cass County, North Dakota	15.0
Harford County, Maryland	5.7	King County, Washington	14.1
Morris County, New Jersey	5.1	Davidson County, Tennessee	13.1

Given the results in the existing literature regarding the importance of enclave characteristics, I define two variables to capture the effects of living in an ethnic enclave. The variable *Enclave* is equal to 1 if the agglomeration index for a particular community in a county is greater than 3 (i.e. immigrants from that group are at least three times more likely to live there than the average American). From this variable I then create a subcategory for high skill enclaves. The variable *HiEnclave* is equal to 1 if the average years of education amongst immigrants in an enclave is at least half a standard deviation above the average across all enclaves for that immigrant group in a specific census year. Across my sample, high skill enclaves represent 25% of all enclaves. Within enclaves, the average years of education is 14.4. In highly skilled enclaves, immigrants average 15.9 years of education.

4   Empirical Model and Results

4.1   The Determinants of Education

To assess the factors that influence immigrant education, I estimate the following baseline model:

$$YrsEd = \beta_0 + \beta_1 YrImmig + \beta_2 Age + \beta_3 Enclave + u$$

Education is a function of the immigrant's arrival cohort, their age, and whether or not they live in an ethnic enclave. To this baseline model, I add dummy variables for the following regions of origin: Iran, South Asia, Afghanistan, and Somalia/Sudan (MENA is the control group). I also estimate a model in which these region dummies are interacted with ethnic enclaves to assess how different enclaves influence education as compared to MENA enclaves. Table 7 presents these estimates.

Holding age and enclave status constant, it appears that average years of education are falling with immigrant cohort. In other words, immigrants who have arrived in more recent years of my sample

Table 7: The Determinants of Education

	Model 1	Model 2	Model 3
yrimmig	-0.033	-0.045	-0.044
	[0.000]	[0000]	[0000]
age	-0.090	-0.089	-0.089
	[0000]	[0000]	[0000]
enclave	-0.411	-0.279	-0.270
	[0000]	[0000]	[0.916]
iran	.	1.238	1.207
	.	[0000]	[0000]
sasia	.	1.908	1.447
	.	[0000]	[0000]
afghan	.	-0.923	-1.147
	.	[0000]	[0000]
ssafr	.	-1.899	-1.377
	.	[0000]	[0000]
enclave*yrimm	.	.	0.000
	.	.	[0.871]
enclave*iran	.	.	0.080
	.	.	[0.167]
enclave*sasia	.	.	0.670
	.	.	[0000]
enclave*afghan	.	.	0.324
	.	.	[0.064]
enclae*ssafr	.	.	-0.605
	.	.	[0.001]
R2	484,695	484,695	484,695
Obs	0.08	0.133	0.135

Heteroskedasticity consistent p-values in brackets. Enclave is equal to 1 if immigrants from a a given source region are at least three times more likely to live in a county than the average American, as defined by the agglomeration index discussed in Section 3. The control group for the regional dummies are the MENA countries (excluding Iran).

tend to have less education than those that arrived earlier. This result supports the observation in Figure 1 that immigrants from these regions have been increasingly less educated since 1965.[6] In fact, when this regression is run on individual countries, the strongest negative coefficients for year of immigration are for the "refugee" countries of Afghanistan (-0.11) and Somalia/Sudan (-0.16). When the regional dummy variables are added, we get some interesting comparisons to the MENA control group. Specifically, immigrants from Iran and South Asia have on average 1.2 and 1.9 more years of education than their MENA counterparts. Immigrants from Afghanistan and Somalia/Sudan have 1 to 2 fewer years of education, all else equal.

Ethnic enclaves appear to lead to negative educational outcomes, with an average of 0.4 fewer years

[6]My data under-samples the earliest immigration cohorts, so the positive trend in immigration education prior to 1965 is getting washed out here. I have tried adding a squared term for year of immigration, but the resulting estimate is not significantly different from zero.

of education for immigrants living in these enclaves. There is almost certainly some reverse causality here, though, as less educated immigrants may choose to live in these enclaves due to a higher cost for these immigrants of assimilating outside an enclave. Of course, not all enclaves are the same. Adding interaction terms with the regional dummies allows us to compare how these enclaves act as incubators of human capital relative to the MENA control group. In model 3, we see that MENA enclaves neither increase or decrease educational outcomes. There is also no discernible difference between MENA enclaves and Iranian enclaves. Immigrants living in South Asian enclaves appear to have 0.7 more years of education, while Afghan enclaves also appear to be doing a better job of fostering education. On the other side, Somali and Sudanese enclaves appear to be dragging down the educational outcomes of their residents, with 0.6 fewer years of education. One possible explanation for the better performance of South Asian enclaves is that there are better economic opportunities in these enclaves. For example, 15% of South Asians living in enclaves work as executives or managers, compared to 9% working in these positions outside of enclaves. This suggests that there are a greater number of South Asian owned businesses and opportunities for advancement in these enclaves. With better prospects, more educated South Asians will choose to live in an enclave rather than seek their fortunes elsewhere. While the fraction of immigrants holding executive positions is higher within enclaves for other immigrant groups is also higher than without, the difference is not nearly as large as it is for the South Asian group. Furthermore, MENA and Somali/Sudanese enclaves have a greater proportion of low paying occupations such as food service, production, and sales.

How do the determinants of education vary across immigrant wave? Table 8 presents these results by running separate regressions for seven different waves of immigration. First consider the impact of ethnic enclaves on education. For early immigrant waves, enclaves had a strong and negative effect. This is consistent with a relatively new immigrant community that has yet to establish roots and provide viable economic opportunities for skilled workers within enclaves. Over time, however, the negative effect of enclaves diminishes, eventually becoming insignificant for the most recent immigrant cohorts. Looking across the regional dummies, it appears that relative to other immigrant groups, the education levels of MENA migrants (the control group) reached its nadir in the 1965-1974 immigrant cohort. For this cohort, Afghan, Iranian, and South Asian migrants had between 1-3 more years of education than MENA migrants, who were no more or less educated than migrants from Somalia/Sudan. For more recent cohorts, Iranian and South Asian migrants still tend to be better educated, though the gap is not as large. For migrants from Afghanistan and Somalia/Sudan, the effect of refugee populations in more recent cohorts is quite stark. For example, the most recent cohort of Somali/Sudanese migrants has on average 5 fewer years of education than a MENA migrant in this cohort.

4.2   The Return to Education

Having evaluated differences in education across immigrant groups and arrival cohorts, our attention turns to evaluating the return to immigrant education. I estimate the following model:

$$\ln Income = \beta_0 + \beta_1 YrsEd + \beta_2 YrImmig + \beta_3 Enclave + \beta_4 HiEnclave + \beta_5 Age + \beta_6 Age^2 + u$$

For this semi-log model, an approximation of the return to education is that for every year of education, income increases by β_1%. I also control for immigrant cohort, residence in an ethnic enclave, residence in a high-skill ethnic enclave and a non-linear relationship between age (proxying for experience) and income. I then augment this model with dummy variables for immigrant source region as well as interactions between years of education and source dummies to see if education returns differ across these regions.[7]

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[7] A clear flaw in this methodology is the well documented omitted variable bias in this kind of Mincer wage equation. Namely, we are omitting an immigrant's ability, which is clearly positively correlated with both education and earnings, leading us to overestimate the return to education. A future revision of this paper will address this issue. As I am more

Table 8: The Determinants of Education across Immigrant Waves

	1910-1944	1945-1964	1965-1974	1975-1984	1985-1994	1995-2004	2005-2011
age	-0.15	-0.08	-0.03	-0.07	-0.10	-0.11	-0.12
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
enclave	-0.74	-0.53	-0.29	-0.32	-0.18	-0.17	-0.01
	[0.02]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.87]
iran	0.26	1.64	2.24	1.83	0.56	0.70	0.61
	[0.59]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
sasia	1.44	2.79	2.97	1.76	1.44	1.62	1.53
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
afghan	-2.65	0.07	0.96	-0.04	-1.57	-1.81	-2.00
	[0.00]	[0.88]	[0.00]	[0.79]	[0.00]	[0.00]	[0.00]
ssafr	3.27	0.35	-0.15	0.89	-0.98	-2.68	-5.08
	[0.00]	[0.39]	[0.67]	[0.00]	[0.00]	[0.00]	[0.00]
Obs	1,437	35,025	70,692	129,501	118,881	107,329	21,830
R2	0.13	0.13	0.13	0.10	0.13	0.19	0.25

The dependent variable is the years of education for an immigrant

Looking at the baseline model, I estimate a return to education of 12%. This is not too far from the 10.8% return to education estimated by Aly and Ragan (2010) for MENA migrants to the US in the 2000 Census. The year of immigration has a significantly negative effect on income, with income falling by 0.3% for every successive year that an immigrant arrived. Finally, incomes within enclaves overall are lower than those outside. However, incomes in high skill enclaves are significantly higher than either other kinds of enclaves or for those immigrants living outside enclaves. Keep in mind that we are controlling for years of education, so this result is not just picking up better educated immigrants in these enclaves. Rather, there do appear to be some positive neighborhood effects in these enclaves.

Adding in the immigrant source dummies, a similar pattern to the determinants of education regression emerges. Relative to MENA migrants, South Asian incomes are 10.2% higher, while Afghan and Somali/Sudanese incomes are 15.4% and 19.7% lower. The third column of Table 9 gives the return to education across different source regions relative to the MENA. The return to education for Iranian and South Asian migrants are 1.2% and 3.2% above that for MENA migrants, while those for Afghan and Somali migrants are 3.3% and 2.6% lower.

Table 10 presents estimates of the return to education regression across immigrant waves. The same seven waves defined in Table 8 are used here. As before, incomes tend to be lower in immigrant enclaves, though the effect of enclaves on income is insignificant for the most recent wave of migrants. This may suggest that enclaves have a positive effect on wages for newly arrived immigrants, but those immigrants that stay in these enclaves long after they arrive in the US tend to have lower income. Of course, the type of enclave matters too. Hi skill enclaves generate higher incomes across all arrival cohorts.

The return to education peaks in the 1945-1964 wave, with each year of education leading to approximately a 12.5% increase in earnings. For each successive immigrant wave, the return to education falls,

concerned with differences in the return to education across groups and arrival cohort, then this omitted variable bias may be less important if the magnitude of the bias is the same across these categories.

Table 9: The Return to Education

	Model 1	Model 2	Model 3
yrsed	0.119	0.116	0.144
	[0.00]	[0.00]	[0.02]
yrimmig	-0.003	-0.003	-0.003
	[0.00]	[0.00]	[0.00]
enclave	-0.060	-0.047	-0.052
	[0.00]	[0.00]	[0.00]
HiEnclave	0.249	0.227	0.226
	[0.00]	[0.00]	[0.00]
iran	.	-0.016	-0.177
	.	[0.11]	[0.00]
s asia	.	0.102	-0.367
	.	[0.00]	[0.00]
afghan	.	-0.154	0.251
	.	[0.00]	[0.00]
ssafr	.	-0.197	0.080
	.	[0.00]	[0.21]
yrsed*yrimmig	.	.	0.000
	.	.	[0.69]
yrsed*iran	.	.	0.012
	.	.	[0.00]
yrsed*sasia	.	.	0.032
	.	.	[0.00]
yrsed*afghan	.	.	-0.033
	.	.	[0.00]
yrsed*ssafr	.	.	-0.026
	.	.	[0.00]
age	0.074	0.074	0.076
	[0.00]	[0.00]	[0.00]
age2	-0.001	-0.001	-0.001
	[0.00]	[0.00]	[0.00]
Obs	397,326	397,326	397,326
R2	0.179	0.181	0.184

The dependent variable is the log wage for an immigrant

dropping down to 7% for the most recent wave. Looking across immigrant groups, the return to education for South Asians is higher than that for the MENA. This gap has been rising across arrival cohorts, with the largest difference occurring for the two most recent cohorts. This may reflect the increasing concentration of South Asian migrants in the high paying IT industry. Afghan and Somali/Sudanese education returns are lower than MENA migrants, though the gap for the Sub-Saharan African group only becomes significant for the cohorts that arrived in the mid 1980's on. Finally, the pattern for Iranian migrants displays a non-monotonic relationship across arrival cohorts. Iranians immigrating in the mid 1960's to mid 1980's had a higher education return than their MENA counterparts. How-

ever, this relationship with Iranians arriving between 1984 and 2005 having a lower return on education.

Why would the return to education differ across migrant groups? Aly and Ragan (2010) find that an immigrant's return to education is a function of economic development and the quality of schooling in their home country.[8] This is significant as, average educational attainment has nearly tripled in sub-Saharan Africa and more than quadrupled in the MENA between 1960 and 2000 (Barro and Lee 2001). That said, there is large variation in the quality of schooling across the MENA. For example, in 1970, the pupil/teacher ratio in primary school ranged from 22 in Iraq to 51 in Yemen (Aly and Ragan, 2010). The results in my study may be picking up some of these effects.

Table 10: The Return to Education across Immigrant Waves

	1910-1944	1945-1964	1965-1974	1975-1984	1985-1994	1995-2004	2005-2011
Enclave	-0.012	-0.094	-0.060	-0.070	-0.004	-0.090	0.044
	[0.87]	[0.00]	[0.00]	[0.00]	[0.70]	[0.00]	[0.09]
HiEnclave	1.147	0.198	0.225	0.142	0.158	0.287	0.308
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
Yrsed	0.084	0.125	0.112	0.106	0.097	0.080	0.070
	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
YrsedIran	-0.055	0.003	0.023	0.011	-0.008	-0.012	-0.011
	[0.08]	[0.66]	[0.04]	[0.01]	[0.10]	[0.08]	[0.40]
YrsedAsia	0.085	0.014	0.030	0.020	0.026	0.046	0.043
	[0.03]	[0.04]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
YrsedAfghan	-0.051	-0.100	-0.030	-0.033	-0.041	-0.022	-0.027
	[0.05]	[0.04]	[0.04]	[0.00]	[0.00]	[0.02]	[0.33]
YrsedSSAfr	-0.195	-0.009	0.009	-0.006	-0.024	-0.016	-0.034
	[0.02]	[0.68]	[0.76]	[0.78]	[0.02]	[0.03]	[0.03]
Iran	0.540	0.087	-0.303	-0.119	-0.011	0.095	0.028
	[0.13]	[0.38]	[0.09]	[0.08]	[0.87]	[0.38]	[0.88]
S Asia	-1.421	-0.261	-0.482	-0.339	-0.329	-0.457	-0.176
	[0.02]	[0.03]	[0.00]	[0.00]	[0.00]	[0.00]	[0.21]
Afghan	0.109	1.520	0.375	0.238	0.278	0.033	0.250
	[0.69]	[0.04]	[0.10]	[0.04]	[0.00]	[0.82]	[0.53]
SSAfr	2.724	-0.068	-0.350	-0.066	0.057	-0.082	0.173
	[0.05]	[0.82]	[0.41]	[0.85]	[0.68]	[0.40]	[0.35]
Age	-0.155	0.091	0.135	0.124	0.081	0.069	0.058
	[0.05]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
Age2	0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	[0.05]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
Obs	1,337	31,807	62,295	109,754	97,258	80,525	14,350
R2	0.195	0.249	0.213	0.197	0.214	0.173	0.157

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[8]Other authors have also found this result for other immigrant groups. See for example Borjas (1987) or Bratsberg (2002).

5   Conclusion

The results in this study suggest that immigration from the Middle East and South Asia varies across both source countries and the year of immigration. While immigrants from these regions tend to be better educated than the general US population, there has been a general downward trend in both immigrant education and the immigrant wage premium for arrival cohorts since the passage of the 1965 Immigration and Nationality Act. Thus, grouping all immigrants who arrived in this period into a common "third wave" may be flawed. One thing these later migrants do have in common, however, is a lower degree of cultural assimilation as measured by the percentage who marry American-born spouses. This percentage, around 40% just before the 1965 shift, has steadily fallen an now sits well below 10%. Furthermore, those immigrants who do marry American-born spouses are increasingly marrying spouses within their own ethnic group.

The effect of ethnic enclaves on educational outcomes and years of education depends on the characteristics of the enclave as well as how long the immigrants have been living in these enclaves. In general enclaves tend to have negative effects, though there is evidence that South Asian enclaves attract more highly skilled immigrants. This may be due to the higher percentage of immigrants employed in high paying occupations such as executives and managerial occupations within those enclaves. When enclaves are separated by the skill level of the immigrants living there, we see that the high-skill enclaves have a significantly positive effect on education and earnings, suggesting the presence of neighborhood effects. Finally, the negative effects of enclaves in general tends to fall for more recent immigrants, even becoming positive for the incomes of the most recent arrival cohort. This suggests that enclaves may be helpful for the newest arrivals, but those that stay in enclaves tend to be less educated and have lower incomes. Given the nuances in these immigrant groups, a better understanding of how they very over source country and arrival cohort is critical to both policymakers and researchers.

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