

Incomes of Arab-Americans in the United States, and in the Detroit Metropolitan Area

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Introduction

If America is a nation of immigrants, then the story of the country's economic progress is very much the combined story of the progress of its numerous constituent immigrant groups. For reasons of national import as well as local interest, this paper will investigate the incomes of Arab-Americans. Our initial question asks if Arab-Americans earn more than the average American. It will be seen that this question must be re-stated; do foreign born Arab-Americans earn above average? While it is natural to analyze income differentials in terms of country of origin of the migrants, our goal is to explain these differentials in terms of more basic income determinants, such as gender, age, urban residence, and education. About thirty percent of the inhabitants of the city of Dearborn (a city adjacent to Detroit) claim Arab ancestry, so the comparison between the national data and the local situation is most attractive.¹

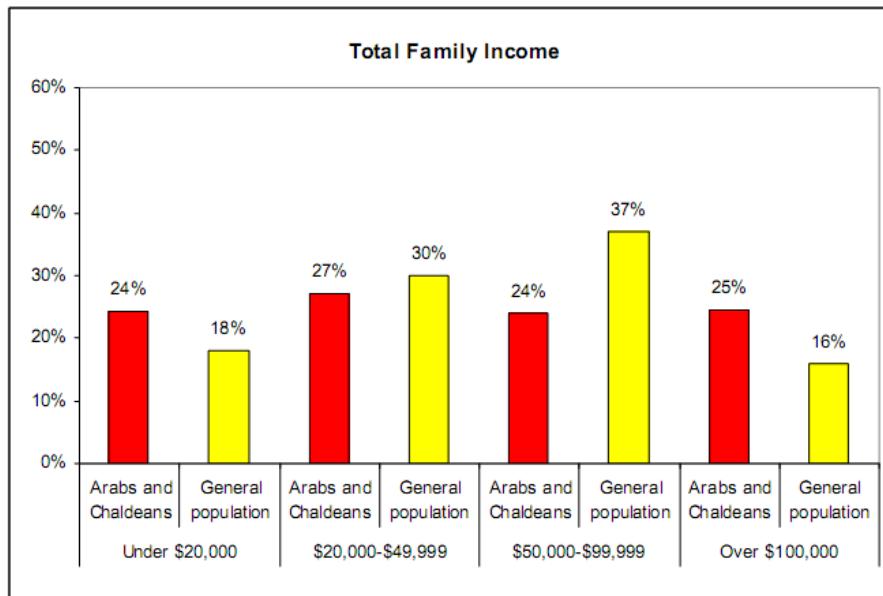
During 2003 a group of researchers affiliated with the University of Michigan conducted surveys (the DAAS) in the metropolitan area of Detroit relating to several aspects of the Arab-American population's social and demographic characteristics.² Coming soon after the 9/11 attacks, the social attitudes and experiences of this important group were the prime focus of the study. Although the level of household income was not a main focus of the DAAS study, it was recorded, and Baker et al. (2004, p. 9) comment on it that "Arabs and Chaldeans are disproportionately represented among the area's wealthiest and poorest households." They provide the following **Graph DAAS**, which shows that the distributional curve for the Arab-Americans and Chaldeans is flatter than for the general population. The graph also suggests a relatively similar level of average income between these two groups. This curious result, that this socio-geographically defined group would tend to concentrate at both ends of the income spectrum, was the initial motivation for this paper, which seeks to understand it, in a broader context of an investigation of incomes for this group nationwide.

The Arab American Institute states on its web-site that the "Median income for Arab American households in 1999 was \$47,000 compared with \$42,000 for all households in

¹ The Detroit area is of interest both because of the size of the Arab-American population – variously estimated at between 100,000 and 300,000 - and because of the density of that group.

² The DAAS contains some 1,016 interviews of Arab-Americans and Chaldeans, reflecting a response rate of 73 percent which is considered good. For purposes of comparison, a companion study of the general population of Detroit was also made – the DAS - building on the U of M's long experience of surveying in the region. A preliminary summary of the results is available as Baker et al. (2004); an edited volume is being prepared by Dr. Ronald Stockton. Technical aspects of the survey design of the DAAS are discussed in Heeringa (2004). The data file (#4413) is available to members of ICPSR institutions.

Graph DAAS: Total Family Income for Arab-Americans, and for the General Population, in Detroit, 2002



Source: Baker et al. (2004, 9), using data from the DAAS.

the United States,” citing the 2000 US Population Census. While the Detroit/DAAS result suggests relative parity between Arab Americans and the broader population without allowing a precise comparison, the national census indicates that Arab-Americans are doing twelve percent better. A publicly available summary of the 2000 census data discussing the relative economic position of Arab-Americans in the US appears in Brittingham and de la Cruz (2005), which notes:

- 1) the median earnings of both Arab American men and women are higher than the national levels (as per the AAI-cited data, above);
- 2) by country of ancestry, Lebanon, Syria, and Egypt have levels higher than the average for Arab Americans, while Moroccans, Iraqis and Palestinians are below average;
- 3) males of Arab ancestry were more likely, and women of Arab ancestry less likely, to be in the labor force than the general population.
- 4) compared to the general population, Arab-Americans had higher mean earnings, higher median family incomes, and higher poverty rates.

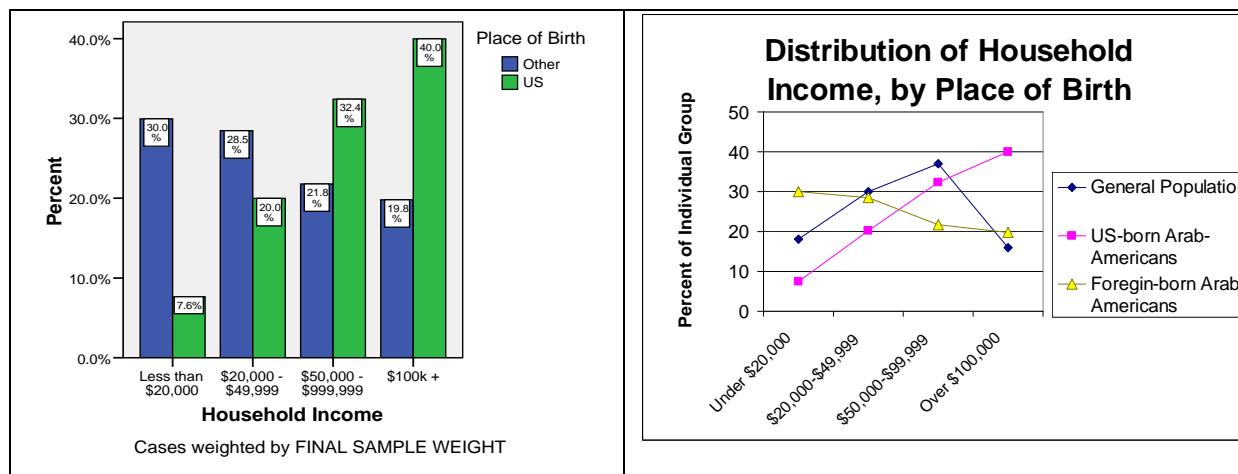
This census-based information was not, unfortunately, broken down by nativity (US-born versus foreign born), and this shall be a major focus in this paper.

The basic purpose of this paper is to expand this analysis, in two ways. The first, introductory step will be to explore in more detail the situation in Detroit, using the DAAS data, by investigating the role of the place of birth as an explanatory variable of income levels. Secondly, the attempt will be made to place the context of Detroit’s Arab-Americans into the broader

national picture of the level of income of that group, compared to national averages, while continuing the DAAS work of examining differences by Middle East country of origin.

The first step is to look at the issue of income as affected by place of birth – nativity - where the alternatives are US born or foreign born. Standard international trade theory predicts that migration will occur until the wage of the immigrant equals the level of wages in the host country, minus the cost of moving; i.e. immigrants should earn less. Breaking down by place of birth the DAAS data on the Arab-American and Chaldean population reveals contrasting patterns. For those born in the US, the percentages in each bracket grow as income rises, while for those born overseas, the percentages fall as income rises. Indeed, the rate of increase in population shares of US-born Arab Americans is stronger than that of the general population, suggesting that the average income of the US born Arab-Americans and Chaldeans is higher than that of the general population.³ Thus, the nearly equal division of the Arab-American population in the above graph by Baker et al. is seen as a composite of two variables working in opposite directions, which should be addressed separately. The following **graph** on the left illustrates this difference in the distribution of household incomes in the DAAS/DAS, with Arab-Americans and Chaldeans born abroad having a high distribution, foreign-born Arab-Americans and Chaldeans having a low distribution. The inference from the previous data, that the general population of the Detroit area lies somewhere in the middle, is illustrated by the **graph** on the right.

Graphs of Distribution of Income in the DAAS



Source: DAAS data.

We forgo a more detailed analysis of the DAS data in order to move directly into the census data.

An overview of the socio-demographic data.

It is necessary to place the importance of the factor foreign born into a broader set of variables that affect income. In this paper, some of those other variables will be age, educational level, and labor force participation rates, in addition to country of ancestry. The differences in incomes

³ This statement is an approximation, which assumes that the incomes in the highest and lowest strata are not unusually distributed. The statement in the text will be true for the entire US, but not for the Detroit area.

between men and women are quite large, but a fuller understanding of the factors determining women's income inevitably must consider child rearing and other household activities whose inclusion is beyond our current means.

Census 2000 Data, and Foreign Born.

Let us begin with the population figures from the census of 2000, using the conveniently available summaries from the ACS.⁴ People who reported Arab ancestry represented less than one half of one percent of the US population, and 1.8% of the population of the Detroit metropolitan area.⁵ It should be commented that several groups associated with Arab-Americans, particularly the Arab American Institute, assert that the census data represent a severe undercounting of this group.⁶ Nevertheless, in this paper we are forced to rely on the official census data, along with the DAAS.

The census reports that over half of Arab-Americans were born in the US. The absolute size of the Arab-ancestry populations is quite small, compared to either traditional European immigrants (e.g. Germans, Greeks, Polish), or the new immigrants from Latin America and Asia – **Table Absolute and Relative Size**. Moreover, nowadays a small fraction of the people claiming ancestry from the traditional European source countries were actually born abroad. In contrast, the fraction of Arab-Americans born abroad is closer to that of the new immigrants. Lebanon and Syria are exceptions, and the Detroit area has a higher fraction of foreign born Lebanese. Thus its small absolute size has kept Arab-American community from the major political disputes about immigration policy, while their large relative size suggests that some of the same analytical questions, developed for other groups, might also be usefully directed towards the Arab-Americans.⁷

In terms of individual Middle East countries, Lebanon has been the source of the largest group of immigrants, both for the entire US and for the Detroit area. The fraction of the population that is foreign born varies by ancestry groups; people of Lebanese and Syrian backgrounds are predominantly US-born (>70%), while other Arab groups described in the **Table Absolute and Relative Size** have higher ratios of foreign births. Notice that the distribution of the several groups differs between Detroit and the US, with Chaldeans and Iraqis (presumably non-Christian) having above average representation in Detroit, while groups such as Egyptians, Turks, and Iranians are concentrated elsewhere in the country.

⁴ The US Bureau of the Census American Community Survey (ACS) provides free tables that are based on samples from the population censuses, as well as smaller surveys in non-census years, at: http://factfinder.census.gov/home/saff/main.html?_lang=en. One advantage in using this resource is the ACS authors' presumed expertise in working with complex data sets. The generation of these tables inevitably involves decisions about definitions of categories, and resolution of inconsistent survey responses, and at a minimum the ACS describes these decisions in some detail.

⁵ See the appendix for a discussion about identifying ancestry. De la Cruz and Brittingham (2003, 8) indicate that people of Arab descent make up 30% of the population of Dearborn, MI, which is by far the highest density of Arab-Americans in any city in this country.

⁶ "Historically, only a portion of [the U.S.] population self-identifies with an Arab ancestry, resulting in a numeric undercount by a factor of about 3." <http://www.aaiusa.org/arab-americans/22/demographics> It goes without saying that an undercount of this magnitude would invalidate the income data of the census.

⁷ Camarota (2002) notes that the US immigration offices estimated that about 10% of Middle Eastern immigrants were illegal aliens in 1996, representing no more than two percent of the total illegal population.

It may be useful to pursue this topic - the comparison between national totals and those for Detroit, for the recent past – using the censuses of 1980 and 1990, which provide

Table . Absolute and Relative Size of the Foreign Born Population, 2000.
(Data in thousands)

	Population and Ancestry Groups			Foreign Born Population		Percentage of Ancestry that is Foreign Born	
	Detroit		US	Detroit		US	Detroit
	US	Metro		US	Metro		
US Total	281,422	5,456		31,107	384	11	7
Arabs	1,190	101		486	45	41	44
Egypt	143	3		92	2	64	57
Iraq	38	11		27	8	72	73
Jordanian	40	2		25	1	64	63
Lebanese	440	47		99	16	22	34
Morocco	39	1		22	0	57	26
Palestine	72	4		36	2	50	44
Syria	143	7		34	2	24	25
Yemeni	12					72	71
Armenian	385	14		171	2	44	15
Chaldeans	82	34		48	20	58	59
Iran	338	4		231	2	68	57
Israel	107	1		61	1	57	57
Turks	118	2		65	1	55	45
(Asian) Indian	1,856	50		1,353	36	73	73
China	2,858	28		1,825	19	64	68
Mexico	20,900	103		8,677	27	42	26
Nigeria	165	3		104	2	63	63
Vietnam	1,212	6		891	4	74	67
German	42,885	967		717	16	2	2
Greek	1,153	33		178	4	15	13
Irish	30,528	582		270	6	1	1
Polish	8,977	546		486	14	5	3

Source: US Bureau of the Census, American Community Service data, accessed through American FactFinder.

American FactFinder does not provide separate data for Yemen. However, a separate listing from the Bureau of the Census on ancestry groups in the 2000 census provides the datum for Yemeni population. The data for Yemeni percentage born abroad is from the author's working of the IPUMS 1% sample, for people age 16 and over, and thus is not exactly comparable to the other numbers in those columns.

comparable data on ancestry.⁸ As **Table Foreign Born as a Percentage** shows that for the nation as a whole, the fraction of the population that is foreign born is small and growing at a relatively rapid rate, having nearly doubled in the last twenty years. That relative growth in foreign born has not occurred in Detroit area. With respect to the fraction of the Arab American population that is foreign born, three facts are noticeable in the **table**. First of all, the fraction of foreign born Arab Americans is much higher than it is for the general population, the fraction of Arab Americans that is foreign born has been growing in both Detroit and at the national level, and finally, that the percentage of the Arab-American population in Detroit that is foreign born is somewhat higher than it is for the general US population.

Table . Foreign Born as a Percentage of the Total Population, US and Detroit.

Census Year	National Total		Detroit Metro	
	Foreign Born/ Total	% Arabs who are Foreign Born	Foreign Born/ Total	% Arabs who are Foreign Born
1980	7	41	8	54
1990	9	45	7	58
2000	12	51	8	57

Source: 1% sample of the respective US population censuses, accessed through IPUMS.

The population is restricted to people of 16 years of age or older.

Population Distributions by Age

In a paper where emphasis will be placed on participation in the workforce and income levels are affected by age levels, it may be appropriate to present data on the distribution of the relevant

Table Population Distribution in 2000. Percentage of People 16 years and older.

Age	US -Total	All Foreign Born		Arab Americans:	
		Years in USA		Foreign Born	
		1-2 years	3-6 Years	Years in USA	Foreign Born
16 - 20	9	18	13	22	8
21 - 25	9	22	21	19	18
26 - 30	9	19	20	23	22
31 - 35	10	13	14	11	20
36 - 40	11	9	11	9	13
41 - 45	10	6	7	5	7
46 - 50	9	4	5	3	4
51 - 55	8	3	3	2	3
56 - 60	6	2	2	2	2
61 - 65	5	2	2	2	1
> 65	15	2	3	2	2

Source: 2000 Population Census, accessed via IPUMS

⁸ The census data is accessed via the University of Minnesota's Integrated Public Use Microdata Series (IPUMS). The author of this paper is very thankful to Lisa Neidert at the U-M Population Studies Center for her help in the early phase of accessing this data.

populations according to this variable. Not surprisingly, **Table Population Distribution** shows that immigrants are younger, on average, and the profile of Arab American immigrants closely parallels that of the other, more numerous, immigrant groups.

Country of Migration

The year of migration into the US and Detroit varies somewhat by ancestry/country of origin, as shown below in **Table Period of Migration**. The standard experience is a straightforward decline

Table Period of Migration of Populations with MENA Ancestry.

Data is percentage of total group in the US or in Detroit, that migrated during each specific period. Restricted to people 16 years or older.

		1910- 1954	1955- 1969	1970- 1979	1980- 1989	1990- 1994	1995- 1997	1998- 2000
All foreign born	US	6	14	16	27	16	10	10
	Detroit	16	17	16	18	13	10	10
Arab foreign born	US	2	8	19	29	14	15	12
	Detroit	1	5	20	28	17	19	11
Lebanon	US	4	9	24	31	15	8	9
	Detroit	1	1	23	31	11	16	17
Syria	US	5	9	18	32	17	10	9
	Detroit	0	0	16	38	40	0	7
Iraq	US	2	9	13	32	21	19	6
	Detroit	0	8	11	32	30	15	4
Palestine	US	3	17	21	29	13	12	5
	Detroit	0	32	68	0	0	0	0
Jordan	US	2	3	27	32	16	10	9
	Detroit	4	4	31	39	0	15	6
Egypt	US	1	11	21	31	12	14	10
	Detroit	0	33	17	10	0	8	32
Yemen	US	4	10	21	26	10	18	9
	Detroit	0	0	25	26	25	19	5
Other Arab	US	1	7	14	25	14	20	19
	Detroit	1	4	19	17	24	34	2
Iran	US	1	5	36	34	11	7	5
	Detroit	8	26	12	30	0	0	24
Kurd	US	0	0	18	11	26	30	14
	Detroit	none in this sample						
Chaldean	US	1	10	33	29	20	3	5
	Detroit	1	16	30	30	17	4	3
Israel	US	2	15	16	32	9	11	15
	Detroit	0	0	100	0	0	0	0
Armenia	US	3	8	20	33	23	7	5
	Detroit	35	31	29	4	0	0	0
Turkey	US	1	12	14	23	17	18	16
	Detroit	0	0	0	0	41	0	59
Non-MENA	US	6	13	17	28	16	10	10
	Detroit	16	17	15	17	13	9	12

Source: One percent sample of the 2000 Population Census, accessed through IPUMS.

periodmigrationUS_Det.

in the fraction of immigrants, as time recedes. Lebanese, Palestinians, Syrians tend to have somewhat higher fractions in the early years. The immigration of Armenians and Chaldeans peaked earlier; there was an acceleration of immigration from Turkey and Iraq in the 1990s – and also from Yemen, according to the DAAS. It would appear that the migration decision responded to well-known historical events perhaps more than differences in national levels of per capita income. Indeed, with regard to income levels, **Table GDP/cap** indicates that there is no obvious correlation between low national per capita income and migration – this is one of the topics on which the lack of information on immigrants' pre-migration decision is most acute.⁹

Table GDP/cap . GDP Per Capita in Several MENA Countries, 2000 (US\$).

Country Name	GDP/Cap
Middle East & North	
Africa	4,781
Egypt, Arab Rep.	3,706
Iran, Islamic Rep.	6,820
Israel	20,046
Jordan	3,229
Lebanon	7,380
Morocco	2,628
Syrian Arab Republic	3,304
Turkey	5,973
West Bank and Gaza	4,237
Yemen, Rep.	1,848

Source: World Development Indicators, online.

Comments: Data not available for Iraq. Datum for Turkey is not included as part of the average for the Middle East in this source. The unit for GDP data was PPP international dollars

Place of Birth and Religion

It is generally accepted that the majority of Arab-Americans are Christians. Of course, the US government does not ask about religion in the population census, so other sources must be utilized to document this. The Arab American Institute web-site presents estimates from Zogby International Survey (2002), of 35% Roman or Eastern Catholic (including Maronite and Melkite), 18% Eastern Orthodox (including Antiochian, Syrian, Greek and Coptic), 10 % Protestant, 24% Muslim (including Sunni, Shi'a, and Druze), and 13% Other religion/No Affiliation.¹⁰ One other published source is Camarota (2002), whose methodology involved discounting from the U.S. Census data those immigrants from Middle East countries who reported ancestry or a home language of primarily Christian groups (Armenians, Greeks, etc.). The DAAS estimated the breakdown in the Detroit area as 58% Christian and 42% Muslim, with two thirds of those Muslims living in the Dearborn area (Baker et al. p 1). The following **Table percentage** gives the religious breakdown by nativity of Arab Americans and Chaldeans in the Detroit metro area, indicating that the fraction of Arab-Americans and Chaldeans who are

⁹ See Borjas (2000) for various efforts at investigating the impact of various source country characteristics such as income levels, income distribution, and political stability.

¹⁰ Downloaded in June, 2008 from <http://www.aausa.org/arab-americans/22/demographics>.

Christian is higher among those who were born in the U.S. With regard to country of ancestry, we can see that of those in the Detroit area who were able to be identified, only the Yemeni were predominantly Muslim. To this must be added the important case of foreign born Lebanese, who are 75% Muslim, in contrast to the situation of U.S. born Lebanese, who were only 31% Muslim.¹¹ This change in denominational composition of the immigrants from Lebanon was dominated by political events in the country.

Table . Percentage Breakdown by of Detroit's Arab Americans, by Religion and Nativity. DAAS

	US-born		Foreign Born	
	Muslim	Christian	Muslim	Christian
All Groups	23	76	49	51
Iraq	3	97	16	84
Yemen	88	13	100	0
Palestine	0	100	23	77
Egypt/N.Africa	0	100	28	72
Lebanon/Syria	31	69	75	25

Source: DAAS. \religion.xls

For both social and political reasons, it might be assumed that migration patterns are influenced by the religious affiliations of the people involved, and therefore have economic impacts. Naff (1994) summarizes the history of two waves of Arab immigration to the U.S.: the first from 1870 to WWI came from Syria/Lebanon, and is estimated to have been 90% Christian, while the second came after WWII and is thought to be 75% Muslim. There are sizeable Christian populations in Lebanon, Iraq, Palestine, Egypt, and elsewhere, not all of whom self-identify as Arabs. Religion might also be hypothesized to affect labor force participation rates – a topic addressed below.

Income Data

Rather detailed information on household and personal income from the one and five percent samples of the decennial censuses, as well as annual sample surveys, processed by the Bureau of the Census and freely available online through American Factfinder. We will present some of that official data before presenting our own disaggregations of the census data. **Tables bigACS** - based on the population census of 2000 - are presented in the appendix, depicted in reduced form in the following **table Median personal income**,¹² and can be summarized as follows:

- 1) Individuals with Arab ancestry have higher median incomes than the general population of this country, by a margin of 15% for males, and 18% for females;

¹¹ Camarota (2002) also estimates a switch of the numerically dominant religion of Middle East immigrants, from Christian to Muslim, over the period 1970-2000.

¹² All data in this paper on income refer to current US dollars over a calendar year. The census data ask what people earned the previous year. See Welniak and Posey (2005) for an overview.

- 2) Even though Arab Americans in the Detroit metro area also have median incomes above the national average, their incomes are lower than the national level for Arab Americans, by about 4%;
- 3) Arab Americans in Detroit metro area have lower median incomes than the general population in the Detroit metro area.
- 4) Other important metropolitan areas of settlement of descendants of Arabs (New York, Los Angeles, Houston) have higher median household incomes of Arab-Americans than the national level, while that of Chicago is just slightly lower;
- 5) By country of ancestry, Lebanese, Syrians, and Egyptians are above average, while Iraq, Jordan, and Palestine are below average;
- 6) Descendants of Armenians and Iranians have median incomes above the national level for Arabs, while Chaldeans and Turks are lower.

Table . Median Personal Incomes, by Gender and Arab Ancestry, for Full Time Workers in the US and in Detroit. 1999.

	United States	Detroit Metro
Male	38,349	49,564
Female	28,135	31,478
Male Arab-Americans	44,262	42,129
Female Arab -Americans	33,421	32,686

Source: Various ACS Tables of the US 2000 Population Census.

Note. For the ACS, a 'Full Time ' worker is one who worked at least 35 hours per week over 50 weeks in the preceding year.

Note must also be made of the dramatic differences in income by gender, between one quarter and a half, although less if restricting to full-time workers. For full time workers, the female/male gap is 36% nationwide, 32% among Arab Americans, and 29% in the Detroit area. These differences are significantly larger than the other differences that are of interest in this paper; those arising from nativity, education, and ancestry. In addition, the income gap by gender among Arab-Americans is not larger than it is for the population as a whole. The gender issue is obviously an important issue and merits its own investigations; this paper will touch on certain themes, of particular interest to us will be the issue of labor force participation.¹³ For the purposes of this paper, the large gender difference requires us to report most data series broken down by gender.

Most of the results relating to ancestry, nativity, and US/Detroit differences, are repeated when the comparisons are made based on household incomes, as is suggested by the following short **table** on Median Household Income. The evidence is thus quite strong that Arab Americans do

¹³ Read (2004) investigates cultural influences on women's labor force participation, particularly among Arab-American immigrant women, whose levels are lower than those of other female groups. She places greater emphasis on religiosity than on religion per se; this conclusion is important given the relatively even split of Arab-American women between Islam and Christianity. "In contrast to the strong influences of religiosity, Muslim affiliation alone does not significantly constrain Arab-American women's labor force participation." (Read 2004, pp. 92-3). Her analysis of this phenomenon is detailed, informed, and subtle, making short summaries less helpful.

somewhat better than the average family or individual in this country. One of the hypotheses of this paper is an explanation for the anomalous result for the Detroit area in terms of two factors; the higher presence here of foreign born Arab Americans, who typically earn lower incomes, and among those foreign born, a relatively higher fraction of people from the Arab countries who, on average, earn less.¹⁴

Table . Median Household Income in the US and Detroit. 2000.

	United States	Detroit Metro
Total population	41,994	49,160
Arab-Americans	47,459	43,606

Source: Various ACS Tables of the US Population Census of 2000, accessed through FactFinder.

Note: Detroit Metro refers to Detroit-Ann Arbor-Flint

Income by Place of Birth

We will now combine our analysis of differences by ancestry, with data on place of birth, using the data from the population census. Based on the 1% sample of the 2000 census, the following **table** Mean Incomes indicates the following for the entire US:

- 1) Arab Americans earn more than the general population;
- 2) Foreign-born workers have lower median incomes than their US born neighbors, with the differential for foreign born males being forty percent;
- 3) That foreign born Arab-Americans have higher median incomes than other foreign born groups;
- 4) Foreign-born Arab American males earn more than the general average for US males, while foreign-born females earn less than the general average for US females.

Furthermore, when we isolate data corresponding to the area of metropolitan Detroit, we can see in the table that:

- 1) the gap between the incomes of US-born and foreign-born is much smaller, especially for males;
- 2) Arab-Americans in Detroit earn less than others in the area (as was seen above);
- 3) Foreign born Arab-Americans in Detroit earn less than immigrants from elsewhere, which is the reverse of the situation for the entire US;
- 4) US-born Arab-American males earn more than the region's average, and the opposite is true for women.

¹⁴ Note that these tables on population and income, by ancestry, can be further disaggregated by city – Dearborn, Warren, Livonia, Sterling Heights, etc, for several categories in which the number of cases is sufficient. There is a marked regionalization in the areas of metropolitan Detroit where families of immigrants have settled. Lebanese and Yemeni in Near S.W. Detroit (Dearborn?), Palestinian/Jordanians in Western suburbs, with Iraqis along with US born Arab-Americans/Chaldeans in the northern suburbs.

These patterns are repeated when the ‘measure of central tendency is mean instead of median, and when the samples are restricted to full time (35 hours or more) workers.

The apparent differences between Detroit and the general US in the relative income levels of Arab-Americans and the general population are not specific to the year 2000. In the three decennial census years for which information on ancestry is available, it has always been the case that Arab-Americans have had above average income at the national level. See the **Graphs** in the appendix. In addition, median incomes of Arab Americans in the Detroit metropolitan area are slightly below the overall population median in that area. Median incomes of US born Arab-Americans are slightly higher than the median incomes of the region. It might also be noted that the incomes of foreign born in the Detroit area tend to be as high (2000) or even higher (1980, 1990) than those of native born in Detroit, which contrasts the relatively lower incomes of Detroit’s Arab-American immigrants, compared to their other foreign born neighbors, who have done especially well.

Table. Median Incomes for the US and Metropolitan Detroit, by Nativity and Ancestry, 1999.

	All US		Detroit	
	Male	Female	Male	Female
All	29,000	16,800	35,000	18,200
US-Born	30,000	17,000	35,000	18,400
Foreign Born	22,000	14,000	33,000	16,600
Arab	32,000	18,900	30,000	12,000
Non-Arab	29,000	16,800	35,000	18,300
US-born Arab	34,600	20,800	39,300	14,900
US-born Non-Arab	30,000	17,000	35,000	18,400
Foreign-born Arab	30,000	15,000	25,000	9,500
Foreign-born Non-Arab	22,000	14,000	35,000	17,000
Full Time Workers				
US-born Arab	50,000	32,800	50,000	33,000
Foreign-born Arab	32,000	26,000	32,000	16,000

Source One percent Sample of the 2000 Census, accessed via IPUMS.
Data refer to people over 16 years of age, with positive incomes.

TableMedian/NewIncomeUS_Det

What explains this apparently inconsistent result in the relative income levels of Arab-Americans in the US, compared to Detroit? Like many (most?) metropolitan areas, the median income in metropolitan Detroit is higher than that for the entire country, and one might expect that the incomes of Detroit’s Arab-Americans would be similarly higher. One contributing factor is that a slightly higher fraction of the Detroit Arab-American community is foreign born.

The key question is why do Detroit's foreign-born Arab-Americans earn below average, when the comparison group is either foreign born Arab-Americans throughout the country, or all foreign-born in Detroit. Three contributing factors can be identified. The average years of education of Detroit's Arab-American immigrants is less than that for the country at large. Secondly, fewer of Detroit's Arab-Americans work full-time. Thirdly, Detroit's Arab-Americans have fewer years residence in this country. The validity of these explanations will be established in the econometric exercises below. What is less clear is the degree to which specific countries of emigration are also a contributing factor.

The next sections of the paper will present the basic data on several of the explanatory variables: age/experience, years in the US, labor force status, unemployment, wage, and education. After that, we present some regressions that attempt to combine the effects of the several variables.

Income by Age

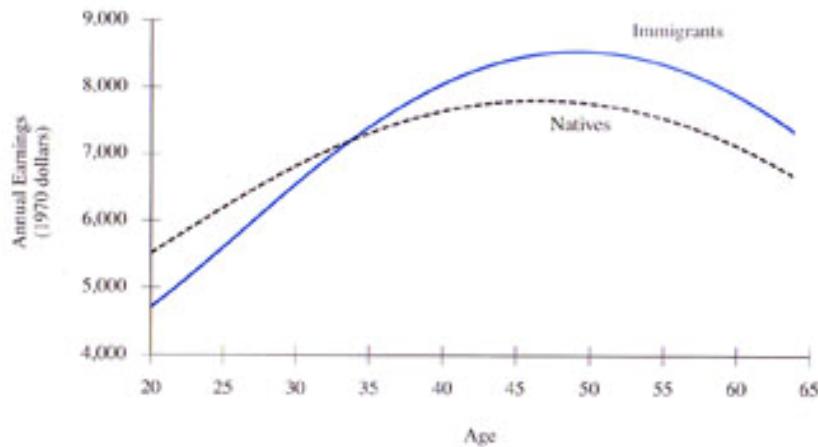
Economists studying the determination of personal income levels often utilize the so-called age-earnings profile, a graph of annual income over a life-span. A relevant example is the following graph, taken from the textbook of George Borjas *Labor Economics 3rd ed*, depicting the results of an econometric study by Barry Chiswick (1978) of the census data for 1970.

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FIGURE 9.4

The age-earnings profiles of immigrant and native men in the cross section

Source: Barry R. Chiswick, "The Effect of Americanization on the Earnings of Foreign Born Men," *Journal of Political Economy* 86 (October 1978): Table 2, Column 3.



Source: George Borjas *Labor Economics*, (3rd edition) page 328.

Several aspects of this graph can be noted:

- 1) The personal incomes of both natives and immigrants experience these "life cycles" - a rapid increase in earnings during the early years, and an actual decline eventually;
- 2) The growth of incomes during the first couple of decades of adult life is more rapid for immigrants than that for native born;
- 3) In this graph, personal income peak sooner for natives than for immigrants;
- 4) In this graph, the earnings of immigrants actually reach higher levels than those of native-born, by an amount of perhaps ten percent. The reader is cautioned that this result is based on a projection using one of the equations estimated by Chiswick (1978). It is

not clear exactly how that projection was generated,¹⁵ and this result will not be observed in our working of Census data for this or subsequent years

The above graph reports estimates for males – it is generally accepted that the essentials of this story are also true for women. Furthermore, this inverted-U shape of personal incomes is actually more accentuated for the combined incomes of households (or families), as older folks leave the labor force and young adults leave to start their own families, lowering household income for seniors.

What factors contribute to the inverted-U shape of personal earnings over the life cycle? The standard textbook analysis, influenced especially by the work of Jacob Mincer, explains the early increases in wages as an accumulation of “human capital” - pointing to education and on-the-job training in the early years – while the decline represents a depreciation of that human capital in later years, decreased physical and mental abilities, increased costs to the firm of employing older people, due to the cost of health care, and earlier retirement among those with higher incomes. One explanation for the more rapid rise of incomes of immigrants is their more rapid investment in training, education – especially English proficiency – which is assertedly more attractive to them because some of their personal skills have not been fully realized due to the problems of assimilation. An alternative explanation asserts that those who immigrate tend to be more enterprising and hard working.¹⁶

Why might the peak of immigrants’ incomes arrive later in their lives? Any number of hypotheses come to mind; this author is not aware of attempts at explaining this finding, and indeed the pattern for the general population has not been exhaustively studied (see Johnson and Neumark (1996). The delays in one’s life plans caused by the migration process might be an answer. One could also hypothesize that immigrants start off life in this country with less savings, and hence need to work longer to accumulate enough for retirement. Perhaps immigrants remit more money back to their home countries, and desire to do so for longer periods of time. The data from the population census hardly gives any information on the situation the immigrants experienced in their home countries of birth, making the answer to this question very difficult to capture.

Borjas’s portrayal of Chiswick’s finding of the peak of immigrants’ incomes surpassing that of native born in 1970, by a margin of ten percent, is not supported by this paper’s working of that year’s census data. It is indeed the case that the median incomes of foreign born in 1970 were higher than those of US-born in that year, see **Table 1970**, but by less than two percent. However, as shown in the following **graph median personal income**, the 1970 age-earnings profile of immigrants does not surpass the profile of the US-born until workers’ late 50s, when incomes of

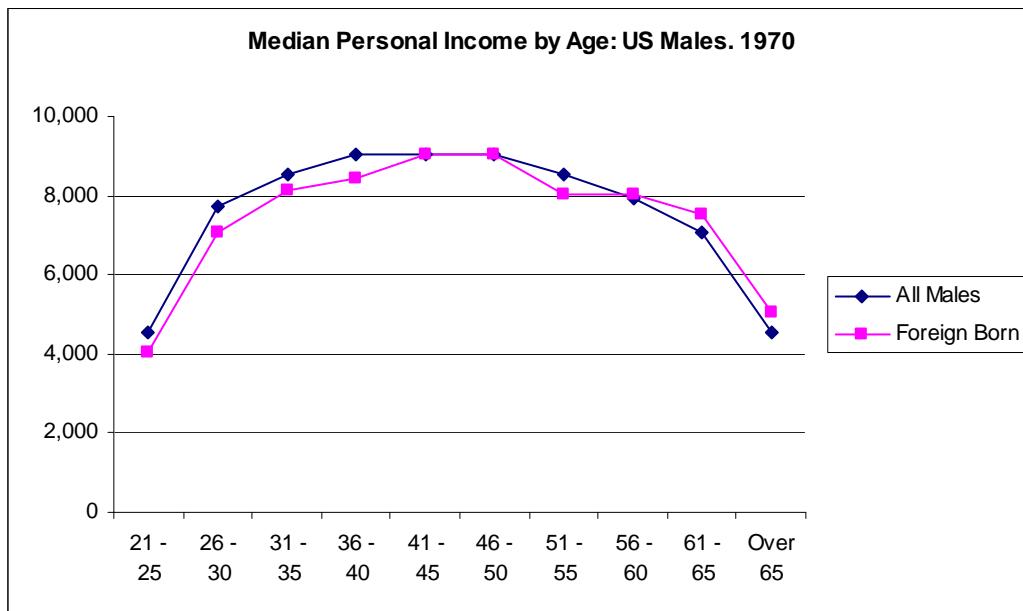
¹⁵ For example, with regard to the variable different from age (and experience) such as education, weeks worked, etc., did Borjas use the means over all age levels, or the means for each age level. Additionally, does this large difference between peak earnings (~10 %) also occur if one of Chiswick’s other regression results is used?

¹⁶ These issues gain more relevance in the context of debates over US immigration policy, given that source countries for legal immigration have switched from Canada and western Europe to Mexico and other Latin America, and China and India. Borjas and others affirm that the average level of skills of arriving immigrants is declining. One argument in favor of allowing immigration is that the economic situation of these people will quickly improve after arrival, and therefore they will not be a burden on the national society.

both groups are falling. The median disguises important differences by age in earnings and labor force participation.

Table 1970. Median Incomes of Working Men and Women, by Nativity, 1970.

	Males	Females
US-Born	7,050	3,050
Foreign Born	7,150	3,550



Source: 1970 Form 2 Metro sample, from the Population Census. Accessed via IPUMS.

Moreover, it may be more important for our purposes that the relative position of foreign born – relative to US-born - has declined in the censuses after 1970, as shown in the appendix's **Graphs of median income by age**.¹⁷ The more recent age-specific personal (and household) incomes of the US-born are now clearly higher than those of the foreign born. An obvious explanatory factor is the growing gap between educational levels of these groups, indicated earlier.

Years in the US

The growing gap between US-born and foreign born has also entered a standard undergraduate textbook: see **Graph Ehrenberg**. That graph also suggests that the speed with which immigrants catch up to the native born population has accelerated over time¹⁸, even if the long run level still appears to be some ten percent below that of US-born.¹⁹

¹⁷ This point is made by Borjas in his textbook, as well as by him and others in many articles. From the perspective of immigration policy, the major question would seem to be how well immigrants can overcome any temporary income reductions due to their change in country.

¹⁸ See Funkhouser (2000) for detailed analysis of this for the 1980 and 1990 censuses.

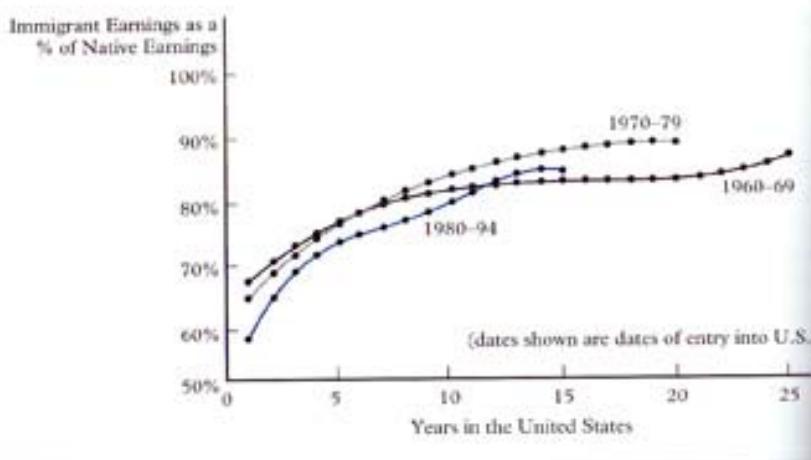
¹⁹ The paper which is the source of that graph, Lubotsky (2000) – subsequently published in JPE (2007), also contains tables that estimate that the earnings gap in the 1990s for immigrants who arrived in the 1960s, ultimately became positive – i.e., favorable to the foreign born. A similar result appears in Blau et al. (2002).

Nevertheless, for our interests in this paper, it is especially noteworthy in the graphs in the appendix that the age-earnings profiles of Arab-Americans are higher than that of the general population, and that in several cases even foreign born Arab Americans do better than the general US population.²⁰

Graph Ehrenberg. Male Immigrant Earnings Relative to US-Born, by Immigrant Cohort. Different Census

FIGURE 10.1
Male Immigrant
Earnings Relative to
Those of the Native-
Born with Similar
Labor-Market
Experience, by
Immigrant Cohort

Source: Adapted from Darren Lubotsky, "Chutes or Ladders? A Longitudinal Analysis of Immigrant Earnings," Working Paper no. 445, Industrial Relations Section, Princeton University, August 2000, Figure 6.



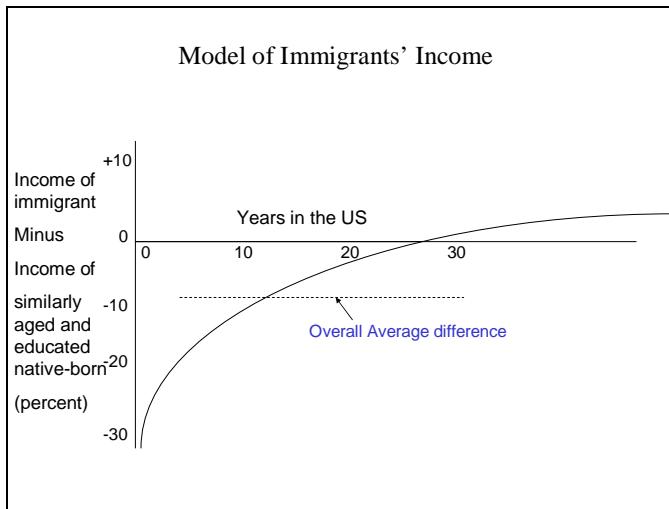
Source: Ehrenberg and Smith *Modern Labor Economics* (6th ed.) p. 332

A summary of our model of immigrants' income is given in the following **Graph Model of Immigrants'**. Although the average income of immigrants will be lower than that of native-born, the gap between immigrants and native born will be large for those recently arrived, will decline over time, and may even be positive for older immigrants. This framework allows for the inverted U profile of income over the life cycle of both groups. It also suggests that the question of average difference in incomes may be less important than the size of the 'immigrant discount' in the first five or ten years. A major unresolved problem with this framework – and the following empirical work - is that it does not take into consideration the age at immigration, which presumably has an impact on the process of assimilation, and therefore the income of the immigrant.

Labor Force Patterns

An important determinant of household income is the number of people from the household who are working. Census data can be used to measure the employment status of the population, divided by gender, ancestry, and nativity, but of course the resulting information will not exactly agree with the official US government data from the Bureau of Labor Statistics, because of methodological differences. The data indicate that being "unemployed" is far less important in determining income, than is a person's participation in the labor force. And even more important

²⁰ The 1970 census did not ask about ancestry, so this comparison is not possible for that year.



than that, there is a clear ‘assimilationist’ process affecting immigrants, in which the percentage labor force participation grows with increasing years spent in the US.

Let us first look at what fraction of those 16 years of age and older who are not in the labor force. **Table Labor** Force shows first of all dramatic differences by gender. For males, the labor force participation rate is rather similar for immigrants and native born, with foreign born Arab-Americans having slightly higher labor force participation. US-born Arab American men and women have higher labor force participation rates than the general US population. Amongst the foreign born, the fraction of newly arrived (1-2 years) Arab-Americans who are not in the labor force is half again higher than for the US as a whole. Moreover, that fraction drops with time spent in this country, so that after 30 years, a higher fraction of Arab-Americans are in the labor force, compared to other immigrants, or to the national population as a whole.

The story for women in **Table Labor** force is quite distinct. Foreign born women have lower labor force participation rates, overall, and foreign born Arab-Americans have even lower rates. The convergence of this ratio for female, foreign-born Arab-Americans is slower than that of other foreigners.

The other information in **Table Labor** force refers to unemployment rates—that is, the fraction of those reported to be in the labor force, who were not working at the time of the census. The differences in unemployment between foreign born and US-born are not as high as are the differences in labor force participation. In terms of unemployment rates, one can still see catch up by the foreign born Arab American males, as also by the females, but it involves lower levels of magnitude, implying fewer people.

We might add that these results also hold if the comparison is restricted to the Detroit Metro area.

Table Labor Force Status in 1999, by Gender, Nativity, and Years Residing in the US. (%)

	Not in Labor/Total		Unemployed	
	Males	Females	Males	Females
US Total	29.3	42.5	6.1	6.1
All Foreign Born	28.9	49.7	6.5	8.9
Arab, US-born	26.6	35.6	4.1	5.6
Arab, Foreign- Born	26.7	58.7	5.6	6.8
Foreign Born, by years in US:				
1-2				
Non-Arab	28.4	57.0	7.3	15.3
Arabs	43.9	65.3	13.8	18.3
3-6				
Non-Arab	27.2	50.1	6.8	11.8
Arabs	34.1	67.8	7.7	9.6
7-15				
Non-Arab	26.7	46.1	6.8	9.6
Arabs	19.8	56.0	3.9	5.4
16-30				
Non-Arab	25.0	39.8	5.8	6.5
Arabs	18.2	54.8	4.6	6.6

Source: 2000 census IPUMS 1% sample. Restricted to people 16 years and older.
unemployment.xls

It is of some interest to see how these labor force participation rates vary by age and gender. The following **Graph** presents the data. The overall ratios for the different groups of males are virtually identical – 79% do participate, 21% do not, although the ratios for what is inevitably the reference group, non-Arab US born males, has a slightly lower LFPR of 76%. There are, however, important differences over the life cycle; specifically Arab men, especially immigrants, work more into their sixties, and fewer of them work in their twenties.

The diversity of labor force participation rates among women is greater. Fewer immigrant women work than among the US born, and while a higher fraction of the US born Arab women work more than the general population, a lower fraction of foreign born Arab women work than the general population. These differences seem to be consistent across age-groups.

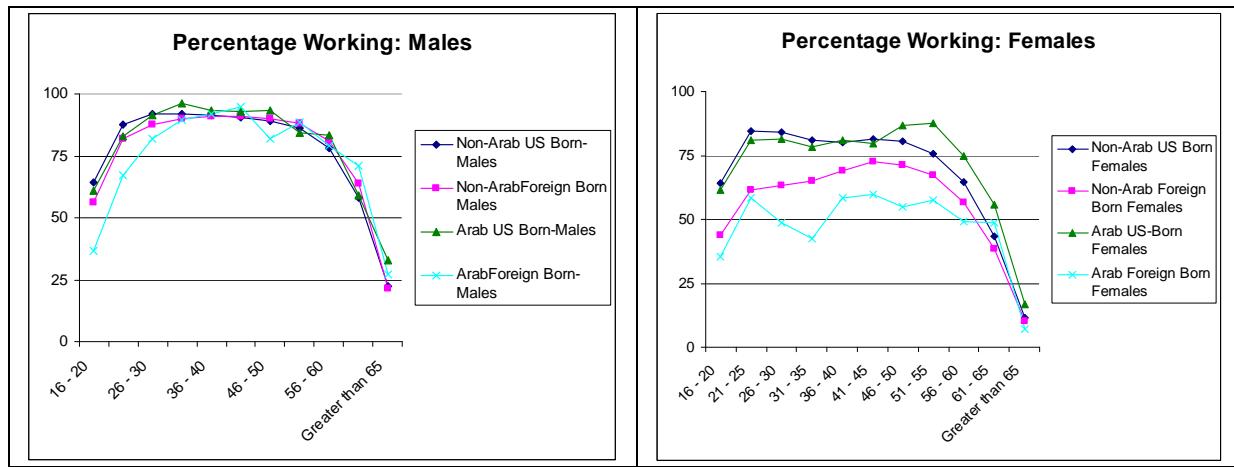
It should be clear that these differences in labor force participation would translate into differences in household incomes, with opposite effects for Arab-American men and women. This is another task we leave to future work.

Wages and Hours

Complementing the above table is the following information about the number of hours per week that are spent working²¹, and the average wage that is received. **Table Time** repeats several of the conclusions of the above table: the comparison of averages for US-born and foreign-born

²¹ The census asked two questions: the number of hours per week that the respondent usually worked (UHRSWORK), reports the number of weeks that the respondent worked for profit, pay, or as an unpaid family worker during the previous year (WKSWORK1). In this author's opinion, these questions hardly do justice to the

Graphs . Labor Force Participation by Age and Gender, 1999.



Source: Author's calculations, using US 2000 Population Census IPUMS 1% sample.
LPPR_2000

Table Time. Mean Hours and Wages, by Gender, Nativity, and Years Residing in the US.

	Yearly Hours		Wages		
	Males	Females	Males	Females	
US Total	1,964	1,620	US Total	19.8	15.1
All Foreign			All Foreign		
Born	1,939	1,613	Born	17.8	14.8
Arab-US born	1,957	1,580	Arab-US born	22.8	17.2
Arab-Foreign			Arab-Foreign		
Born	2,064	1,536	Born	22.8	15.9
Foreign Born, by years in US:			Foreign Born, by years in US:		
1-2			1-2		
Non-Arab	1,636	1,330	Non-Arab	14.8	12.6
Arabs	1,550	1,113	Arabs	15.0	12.4
3-6			3-6		
Non-Arab	1,876	1,530	Non-Arab	15.3	12.9
Arabs	1,915	1,437	Arabs	17.0	11.7
7-15			7-15		
Non-Arab	1,921	1,599	Non-Arab	16.5	14.4
Arabs	2,105	1,531	Arabs	21.0	17.2
16-30			16-30		
Non-Arab	2,019	1,708	Non-Arab	19.4	15.9
Arabs	2,235	1,678	Arabs	24.8	16.5

Source: 2000 Census, 1% sample, accessed via IPUMS.

Comment: Hours worked was calculated as the product of hours per week (UHRSWORK) and weeks per year (WKSWORK1). Wages were calculated as the ratio of wage and salary income (INCWAGE) divided by hours worked per year. The means were calculated on data filtered to include only those with positive hours, and with positive wages.

\unemployment\hourswages.xls

complexity of the issue. Wages are calculated as the ratio of wage and salary income (INCWAGE) to yearly hours worked. There are evident problems relating to self-employment.

Let us attempt to summarize the conclusions up to here. The comparison of incomes between Arab-Americans and the general population must first and foremost distinguish by nativity, because typically the US born earn more than foreign born. Secondly, when discussing differences between foreign born and natives, we should not overlook the significant catching up achieved by immigrants, after some years. The biggest differentials exist between those recently arrived, and the local population. These differentials involve three proximate causes: participation in the labor force, hours worked (per week or per year) and wage received.

Educational Levels

The level of education is an important determinant of income, and it plays a key role in a study such as this which does not have access to measures of other factors that also affect income. The **Table Mean Years** shows that, in general, foreign-born have about one and a half years less of

Table Mean Years of Education, by Ancestry and Nativity, US and Detroit Metro. 2000.

	Entire US				Detroit Area			
	Male		Female		Male		Female	
	All	12.9		12.8		13.0		12.9
Arab		14.1		13.3		12.9		11.6
	Male		Female		Male		Female	
	US-Born	Foreign Born	US-Born	Foreign Born	US-Born	Foreign Born	US-Born	Foreign Born
All	13.1	11.3	13.0	11.3	13.0	12.7	12.9	11.9
Arab	14.0	14.2	13.7	12.8	13.8	12.4	13.1	10.2
Lebanon	14.2	14.2	13.9	12.4	13.7	12.4	13.1	10.0
Syria	13.8	13.8	13.6	12.5	13.1	17.3	12.9	7.0
Iraq	15.5	13.1	13.6	11.9		11.6	11.9	9.7
Palestine	14.2	14.4	13.9	14.0	14.7	11.3	13.2	14.0
Jordan	14.5	14.3	14.1	13.2	16.0	14.5	13.4	12.7
Egypt	14.6	15.6	13.6	14.3		15.3	12.3	16.2
Yemen	14.4	11.2	12.9	9.9	14.7	10.9	12.0	8.4
Other Arab	13.4	13.8	13.4	12.5	13.4	11.7	13.9	9.3
Iran	14.0	15.5	13.7	13.8		16.0	13.5	17.9
Kurd	12.0	13.1		11.5				
Chaldean	13.0	11.9	13.1	10.2	12.2	10.9	12.6	9.2
Israel	14.0	14.5	14.8	14.7	13.5	9.5		
Armenia	14.4	12.9	14.1	12.3	14.4	11.7	14.4	10.2
Turkey	14.4	14.5	13.9	14.0	7.3	18.0	13.1	16.0
Non-MENA	13.1	11.2	13.0	11.2	13.0	12.9	12.9	12.2

Source: 2000 census IPUMS 1% sample. NewEducation_2000.xls

hides the significant disadvantage of all recently arrived foreign born. Of the foreign-born Arab-Americans, both the men and - to a lesser extent – the women end up doing better than the average US born.

Of related interest is the issue of how this ‘recently arrived’ disadvantage has evolved over time. In **Table History** the data on wages are presented for the last three population censuses, for the entire population, and for recent immigrants. In the subsequent table **History Relative** it can be seen that there is a slight tendency for a decline in relative wages for recent immigrants, but that the tendency for immigrants from the Middle East, Arab and non-Arab, has been for an increase in relative wages. Although the wage data suffer from significant measurement problems, as well as small sample size, this message of a slight relative improvement in starting wages is consistent with the story in **Table Educ1** below, of an improvement in education levels of recent MENA immigrants.

Table history relative Wages of Recent Immigrants Relative to US Average Wage =100

Recent Immigrants	2000		1990		1980	
	Male	Female	Male	Female	Male	Female
All Foreign Born	61	70	62	75	68	85
Non-Arab	61	70	62	75	70	88
All Arab	79	70	72	90	73	80
Lebanon	111	63	63	90	73	79
Syria	72	79	92	56	88	88
Iraq	69	129	23	.	77	157
Palestine	50	63	82	129	73	77
Jordan	46	49	101	58	372	.
Egypt	59	69	88	109	67	72
Yemen	52	70	.	.	87	327
Other Arab	84	74	62	92	70	78
Iran	82	67	74	63	73	99
Kurd	65	44	.	.	79	.
Chaldean	65	88	124	81	61	90
Israel	140	112	102	100	75	117
Armenia	108	90	56	85	88	82
Turkey	90	96	52	106	83	142
Non-MENA	61	70	71	81	77	90
Mexico	48	55	46	59	55	73
China	89	86	67	74	64	90
India	139	93	69	81	81	101

/wageRecentImmig.xls

Source: Author's calculations, using data from the corresponding US population censuses, accessed via IPUMS.

Table History. Average Hourly wage in the US, 1980-2000.

	2000		1990		1980			
	Male	Female	Male	Female	Male	Female		
All	14.4	11.4	All	10.8	7.7	All	6.9	4.3
US-Born	14.8	11.5	US-Born	11.1	7.7	US-born	6.9	4.3
Foreign Born	11.8	10.1	Foreign Born	9.3	7.3	Foreign Born	6.3	4.3
Immigration 1997-2000			Immigration 1987-1990			Immigration 1975-79		
All Foreign Born	8.8	8.0	Born	6.7	5.8	Foreign Born	4.7	3.6
All Arab	11.5	8.0	Arab	7.8	6.9	Arab	5.0	3.4
Lebanon	16.0	7.2	Lebanon	6.8	6.9	Lebanon	5.0	3.4
Syria	10.4	9.0	Syria	10.0	4.3	Syria	6.1	3.8
Iraq	9.9	14.8	Iraq	2.5	.	Iraq	5.3	6.7
Palestine	7.1	7.2	Palestine	8.9	9.9	Palestine	5.0	3.3
Jordan	6.6	5.6	Jordan	10.9	4.5	Jordan	25.6	.
Egypt	8.5	7.9	Egypt	9.5	8.4	Egypt	4.6	3.1
Yemen	7.5	8.0	Yemen			Yemen	6.0	14.0
Other Arab	12.2	8.4	Other Arab	6.7	7.1	Other Arab	4.8	3.4
Iran	11.8	7.6	Iran	8.0	4.8	Iran	5.0	4.3
Kurd	9.4	5.0	Kurd			Kurd	5.4	.
Chaldean	9.4	10.0	Chaldean	13.5	6.3	Chaldean	4.2	3.8
Israel	20.2	12.8	Israel	11.0	7.7	Israel	5.2	5.0
Armenia	15.6	10.3	Armenia	6.1	6.5	Armenian	6.0	3.5
Turkey	13.0	11.0	Turkey	5.7	8.1	Turkey	5.7	6.1
Non-MENA	8.8	8.0	Non-MENA	7.7	6.3	Non-Mena	5.3	3.8
Mexico	6.9	6.3	Mexico	5.0	4.5	Mexico	3.8	3.1
China	12.8	9.8	China	7.2	5.7	China	4.4	3.9
India	20.0	10.7	India	7.4	6.3	India	5.6	4.3

Source: Author's calculations, using data from the corresponding US population censuses, accessed via IPUMS.
 Wage is calculated as the ratio of Wage and salary income divided by a computed annual number of working hours.
 /WageRecentImmig

education than US born. Arab Americans –both US born and also foreign-born – actually have higher educational achievements than the general population.²² With regard to differences by gender, the data for the total population is driven by that for US-born people, and the gender gap is small or non-existent. In contrast there is an appreciable gap in the educational attainment of foreign born Arab females, of over one year in the entire US, and almost three years in the Detroit area. This is much larger than the corresponding difference between US-born and foreign born males of Arab ancestry. Foreign-born Yemenis reported the lowest levels. People tracing their ancestry to Egypt and Iran had higher education among their foreign born than those who were born in the US - interestingly, neither group is strong in the Detroit area. More generally, the education data parallels the income data in that: 2) the educational levels are slightly higher in Detroit than the US, while the levels for Arab Americans are higher in the US than in Detroit.

Baker et al. (2004, p. 9) present their educational data for Detroit Metro broken down by the variable US born/not-US born, and subsequently argue that for immigrants, business ownership is the key correlate of higher incomes, while “Among the American-born,... higher incomes are associated with higher levels of education rather than with business ownership.” (p 13). Emphasis on immigrants’ self-employment as a prominent route to economic success is prominent in the literature on immigration, see Bradley (2004). We leave for future work the analysis of census data in weighing the relative strength of two stories; hard work lifting oneself by one’s own bootstraps, suffering discrimination and so preferring to work independently, versus that these successful immigrants are professionals who immigrated with marketable training which allowed them to attain high incomes, and so the self-employment is relatively insignificant.

There are two refinements of this specific topic that merit inclusion. There is a need to focus on those recently arrived, which reflects educational levels brought in from overseas. Secondly, it is possible to analyze the data²³ from three censuses – 1980, 1990, and 2000 – to see if any trends emerge. The data in **Table educ1** suggest the following conclusions:

- 1) the growth in years of schooling for the overall population has been increasing at about one half year per decade for both men and women;
- 2) educational levels for recent immigrants have also been growing (faster for women), but at a slower rate than the general population;
- 3) In terms of recently arrived immigrants, the average number of years of schooling for men has fluctuated around 10.7 years, while it has grown for women at 0.4 years per decade;
- 4) Immigrants claiming Arab ancestry have been doing slightly better than the average immigrant, in terms of growing levels of educational achievement.

²² See also the corresponding **graphs** in the appendix which illustrate that although the level of attainment for all these groups has increased over time, the relative dominance of Arab-Americans in this area has nevertheless been maintained

²³ The Census data provided by IPUMS appears in categorical levels, rather than strictly nominal. To convert to nominal data, we used mid-points for the categories (e.g. 2.5 for the category 1-4 years). The 1990 and 2000 censuses provided more extensive data on educational attainment (edu99) compared to the variable reported consistently for all three censuses (edurec), but the results are quite consistent for the overlap periods.

Table EDUC1. Average Number of Years of Education, 1980-2000.

	Year 2000			Year 1990			1980	
	Male	Female	All	Male	Female	All	Male	Female
All	12.7	12.7	All	12.4	12.3	All	11.6	11.4
US-Born	13.0	12.9	US-Born	12.6	12.5	US-Born	11.7	11.6
Foreign Born	11.1	11.2	Foreign Born	11.0	10.8	Foreign Born	10.4	9.9
US-born Arab	13.8	13.6	US-born Arab	13.5	13.3	US-born Arab	12.7	12.3
Foreign Born Arab	13.7	12.6	Foreign Born Arab	13.5	11.9	Foreign Born Arab	12.6	10.7
Years in US LE 2								
All Foreign Born	10.7	11.2	All Foreign Born	10.9	10.7	All Foreign Born	10.6	10.0
Non-Arab	10.7	11.2	Non-Arab	10.8	10.7	Non-Arab	10.4	10.0
Foreign Born Arab	13.4	12.3	Foreign Born Arab	13.2	12.2	Foreign Born Arab	13.0	10.9
Lebanon	11.6	10.9	Lebanon	13.0	12.1	Lebanon	12.6	10.6
Syria	13.3	13.5	Syria	12.8	10.2	Syria	11.6	11.4
Iraq	13.2	11.3	Iraq	14.4	6.5	Iraq	11.7	10.4
Palestine	14.7	12.2	Palestine	13.0	13.3	Palestine	12.7	10.0
Jordan	13.9	13.8	Jordan	12.5	10.4	Jordan	13.1	10.7
Egypt	14.2	13.6	Egypt	13.3	13.0	Egypt	14.0	13.6
Yemen	8.2	12.1	Yemen	6.5	.	Yemen	11.3	7.7
Other Arab	13.5	12.4	Other Arab	13.8	12.9	Other Arab	13.2	10.3
Iran	13.4	13.0	Iran	13.4	11.9	Iran	13.7	12.6
Kurd	14.2	6.6	Kurd			Kurd	14.7	.
Chaldean	11.7	10.5	Chaldean	12.2	12.6	Chaldean	9.9	8.9
Israel	14.3	14.1	Israel	13.7	14.2	Israel	13.6	13.3
Armenia	12.4	12.5	Armenia	10.8	9.7	Armenia	10.6	9.6
Turkey	14.4	14.3	Turkey	14.5	14.5	Turkey	12.4	8.9
Non-MENA	10.6	11.2	Non-MENA	10.8	10.7	Non-MENA	10.3	9.9
Mexico	8.4	8.6	Mexico	8.1	7.8	Mexico	6.9	6.8
China	13.7	13.3	China	12.6	11.5	China	12.0	10.7
India	14.8	14.1	India	14.1	12.9	India	14.0	12.5

Source: Author's calculations based on data from the corresponding population censuses, accessed via IPUMS.
EdRecentImmig.xls

- 5) This table does not support a story of a declining trend in immigrants' educational levels. Data are reported for three important non-MENA source countries/ancestry groups (Mexico, China, India), which also suggest the same conclusion.

A topic that is currently beyond our capabilities is that raised by Duleep and Regets (1999), referring to higher human investment by immigrants. Their writings have a clear 'convergence' tone, but careful work would be needed to get a clear view of how Arab-Americans compare to other immigrant groups that have been included in their studies.

Regressions

The previous sections of this paper have presented tables discussing how separate variables affect income, on basically a one by one basis. We now turn to our attempt to study the combined effects of these variables, using straightforward OLS techniques. Three major groups of variables are included; education and experience, Arab ancestry, and being foreign born. The regression equations were estimated on the national data for males. With over half a million observations, almost all of the 't' statistics were very high, and the F test was significant at any level. The dependent variable is the log of personal income, which means that the impact of a dummy variable with a value of unity and an estimated coefficient of z will be $\exp(z)$ multiplied by the value of income.

Let us preview the results for the separate groups. The experience and educational variables have the expected signs; experience has the expected inverted U shape, and the impact of education gets larger as the level of schooling becomes higher. Most of the ancestry variables have estimated coefficients that are significant, although they might be considered small in absolute size. The immigration variables also have the expected sign and relative sizes: being foreign born lowers income, by an amount that decreases over time. Inclusion of education, experience, and nativity will reduce, but not eliminate the impact of ancestry.

In **Table Results1**, Regression 1 is simply that of log income on the ancestry variables. Not surprisingly the adjusted R² is low, but the estimated coefficients are statistically significant at standard levels. The regression indicates that males whose ancestry is Israeli, Iranian, Lebanese, Turkish, etc. have above average incomes²⁴. Similarly, the groups doing significantly worse than average are the Kurds, Chaldeans, and Jordanians.

The next step is to include the factor of being foreign born. In Regression 2, it will be seen that this variable has the expected negative sign, and that foreign born have an income that is, other things the same, $\exp(-0.21) = 0.81$ or 81% of the level of others. The difference of 19% is somewhat larger than the medians we had seen above. Additionally, it should be noticed that the inclusion of the foreign born variable affected the magnitudes of several of the ancestry variables, and in some cases even the signs of the coefficients.

Let us now proceed to insert into this regression the standard variables corresponding to the Mincer formulation. As can be seen in Regression 3 in Table Results1, the coefficients of those

²⁴ The omitted dummy is that of "others," which would be the dominant group numerically.

Table Results1. The Dependent Variable is the Natural Log of Income, for Males.

	R2=		R2=		R2=	
Reg 1	0.000	Reg 2	0.004	Reg 3	0.311	
(Constant)	Estimated Coefficient	t	(Constant)	Estimated Coefficient	t	(Constant)
(Constant)	10.12	high	(Constant)	10.14	high	8.53
Other Arab	-0.09	-26.34	Other Arab	0.05	12.99	Other Arab
Lebanon	0.26	90.25	Lebanon	0.30	high	Lebanon
Syria	0.17	32.08	Syria	0.21	38.27	Syria
Iraq	0.09	9.03	Iraq	0.25	26.56	Iraq
Palestine	0.07	10.09	Palestine	0.11	12.73	Palestine
Jordan	-0.06	-6.36	Jordan	0.08	8.32	Jordan
Egypt	0.16	31.12	Egypt	0.30	59.62	Egypt
Yemen	-0.07	-4.40	Yemen	0.07	4.78	Yemen
Iran	0.24	75.97	Iran	0.42	high	Iran
Kurd	-0.24	-11.92	Kurd	-0.05	-2.43	Kurd
Chaldean	-0.19	-28.66	Chaldean	-0.04	-6.51	Chaldean
Israel	0.44	72.95	Israel	0.59	96.83	Israel
Armenia	0.05	16.35	Armenia	0.13	42.16	Armenia
Turkey	0.16	28.88	Turkey	0.27	48.78	Turkey
	Non-US Born			-0.21	high	Non-US Born
						Exper.
						Exper.2
						Educational Levels:
						1_to 4th
						5_to 8th
						9 th
						10 th
						11 th
						12 th
						HSG
						1-3Year
						College
						Assoc Deg
						BA
						MA
						Prof.
						Degree
						PhD

The country names represent dummy variables with a value of 1 for that reported ancestry. "high" represents 't' statistics over 100.

new variables are all significant, they have the expected signs, and higher levels of education lead to higher incomes, as expected.²⁵ Notice, however, that

²⁵ The negative coefficients on 9th and 10th grade education reflects the importance of the 'parchment effect,' suggesting a decline in income for those who did not graduate from high school.

the magnitude of the foreign birth variable has fallen in absolute size, and the new magnitude of the impact of being foreign born is now $\exp(-0.04)$ minus one = -0.04, which is much closer to the size of the differentials that we saw earlier.²⁶ A way of re-phrasing this is to say that the more important factor is not being foreign born, but rather having less education and experience.

Let us move on, breaking down the foreign effect in terms of number of years spent in the US. **Table Results2** does not list the estimated coefficients for the variables on ancestry, experience and education. Regression 4 indicates that the negative impact declines sharply in the first period, and then more gradually over time. Indeed, this particular estimation implies that a foreign born male who has been in the US for over thirty years will actually earn a couple percent more than his native born peers. It should be commented that the positive coefficient on the long term immigration variable (yrs in USA over 30) echoes the finding of Chiswick, mentioned above.²⁷ This result occurs in either of the two specifications in **Table Results2**.

Table Results2.

Reg 4 R2 = 0.310		Reg 5 R2 = 0.312			
	Estimated Coefficient	t	Estimated Coefficient		
Years in USA 1-2	-0.32	-351.	Years in USA 1-2	0.05	-16.31
Years in USA 3-6	-0.10	-135.	Years in USA 3-6	0.17	56.78
Years in USA 7-15	-0.06	-118.	Years in USA 7-15	0.22	72.55
Years in USA 16-30	-0.03	-58.	Years in USA 16-30	0.23	78.36
Years in USA Over 30	0.004	6.54	Years in USA Over 30	0.27	89.96
			Non-US Born	-0.25	-83.42

The dependent variable is log income for males. Estimated coefficients for the other variables – as in Regression 3 – are not reported.

An alternative specification attempts to capture the above table's result of a non-linearity of experience in the US, by using the variable '1/Years in the US', which is assigned a value of zero for those who are US born. The resulting hyperbola has maximum negative impact in the period immediately after arrival, and then this effect diminishes over time. The results, in **Table Results3**, are supportive of this specification, although one must acknowledge that further work would be needed to understand better the empirics of the decline in the negative impact. The coefficient on this variable in regression 6 suggests that a male who has been in the country for one year has an income only 37% of his similarly qualified native cohort, and that this disadvantage is 21% after two years, 14% after three years, etc. Regression 7 recalls the result from Graph Ehrenberg, repeated above, that in the long run immigrants will earn more than US born; in this case by a factor of just 2%.

²⁶ If a dummy variable for urban residence is included, it is positive and significant, and implies that urban incomes are 10% higher than non-urban. If in addition a separate variable for Detroit is also included, it is also positive, of a slightly lower magnitude, for which I do not have an explanation.

²⁷ This factor is investigated more thoroughly in Blau et al. (2002).

Table Results3

Reg 6 R2 = 0.310

Reg 7 R2 = 0.312

	Coefficient	t		Coefficient	t
1/Yrs.USA	-0.46	-431	1/Yrs.USA	-0.44	-334.
Non-US Born	0.02	51.88			

Comment. The dependent variable is log income. Estimated coefficients for the other variables are very much the same as those in Regression 3, and hence are not reported.

One limitation of this treatment of years spent in the US is that it does not take into account the age at which the individual immigrated. It stands to reason that someone who came here at a very young age would have few assimilationist problems, and that these might be most serious when someone migrated at around the age of twenty, just starting his or her working career. To date, our empirical work has not verified this hypothesis. Looking for a U-shaped impact of age of migration on incomes, the above regressions were run with age and age squared. Unfortunately, both estimated coefficients were negative. We leave this topic for future work.

Can we identify differences in the impact of being foreign born, by country of ancestry? We saw above that different Middle East countries experienced different peak times of emigration to the US, and one suspects that there would be significant differences by country in education and other variables. The regression was run similar to Regression 3, inserting ‘1/years in the US’ times the various ancestry variables. The **Table Coefficients** reports a comparison of our initial regression 1, together with the results of an equation (Regression 8) including both the initial country dummies and the products of those dummies times ‘1/years in US’. This specification attempts to separate the effect of nativity, for each ancestry group. All of the ‘t’ coefficients were greater in absolute value than 3, so they are not reported. The expectation is that the estimated coefficients for Regression 8 will be a weighted average of those in Regression 1, and this is borne out. There were two further expectations, which might be called aggressive assimilationism, that met with mixed results. The first was that the coefficients for the ancestry variables for the US born would be small and of the same general order of magnitude, as ancestry influences disappear in the ‘melting pot.’ Evidently this did not work. Our second expectation was that the coefficients on the foreign born * ancestry variable would be negative, along the lines already elaborated. This hypothesis was supported for all but Palestine, which is a curious exception. It should also be noted that the magnitude of the coefficients on the other countries are not readily explained by the levels of socio-economic development in the source countries.

For completeness, regression 3 is also reported for the Detroit metro area in **Table Regression 9**, and it is reassuring that its results are quite comparable.

Table Coefficients on Ancestry Variables, with a Separate Dummy for Foreign-Born, in regressions of log income for males.

Reg 1 R2 = 0.000

Reg 8 R2 = 0.31

	Estimated Coefficients		Estimated Coefficients		Estimated Coefficients
Other		Other		G*Other	
Arab	-0.09	Arab	-0.03	Arab	-0.61
Lebanon	0.26	Lebanon	0.10	G*Lebanon	-0.58
Syria	0.17	Syria	0.07	G*Syria	-1.25
Iraq	0.09	Iraq	0.12	G*Iraq	-1.04
Palestine	0.07	Palestine	-0.04	G*Palestine	0.16
Jordan	-0.06	Jordan	-0.08	G*Jordan	-0.75
Egypt	0.16	Egypt	-0.22	G*Egypt	-0.27
Yemen	-0.07	Yemen	0.33	G*Yemen	-2.28
Iran	0.24	Iran	-0.08	G*Iran	-0.60
Kurd	-0.24	Kurd	-0.14	G*Kurd	-0.49
Chaldean	-0.19	Chaldean	-0.02	G*Chaldean	-0.55
Israel	0.44	Israel	0.26	G*Israel	-0.14
Armenia	0.05	Armenia	-0.01	G*Armenia	-1.58
Turkey	0.16	Turkey	0.15	G*Turkey	-1.43

Dependent variable is log income. Other estimated coefficients not listed. The variable G has the value 0 if the person was born in the US, and 1/Years in the US, for those who are foreign born. Degrees of freedom > 670,000.

Table Regression 9. Income Equation for Detroit Area Males, 1999.

Data from the population Census. Dependent Variable is log(income).

R2=.31

	Estimated Coefficient	t		Estimated Coefficient	t
(Constant)	8.57	high	NewA_OtherArab	-0.43	-34.56
ExperNew	0.07	high	NewA_Lebanon	0.04	4.74
ExperNew2	-0.001	high	NewA_Syria	0.00	0.07
Ed_1_to_4th	0.26	15.86	NewA_Iraq	-0.03	-1.77
Ed_5_to_8th	0.22	21.53	NewA_Palestine	-0.15	-5.49
Ed_9th	-0.15	-14.31	NewA_Jordan	-0.51	-18.14
Ed_10th	-0.09	-8.73	NewA_Egypt	-0.89	-29.45
Ed_11th	-0.01	-0.66	NewA_Yemen	0.04	1.48
Ed_12th	0.37	35.92	NewA_Iran	0.12	3.62
Ed_HSG	0.63	65.34	NewA_Chaldean	-0.23	-24.64
Ed_1_3YrCollege	0.89	92.62	NewA_Israel	0.40	9.00
Ed_AssocDeg	1.06	high	NewA_Armenia	0.04	2.58
Ed_BA	1.37	high	NewA_Turkey	0.34	6.59
Ed_MA	1.56	high	Years_in_USA_le2	-0.24	-30.61
Ed_Professional	1.89	high	Years_in_USA_3_6	0.00	0.42
Ed_PhD	1.75	high	Years_in_USA_7_15	-0.02	-2.92
			Years_in_USA_16_30	0.08	14.94
			Years_in_USA_Over_30	0.11	20.53

To return to the source from which we began this investigation, it might be of interest to compare the above regression with one for the DAAS. The major caveat that should be mentioned beforehand is that these data refer to household income, which obviously lessens comparability. Nevertheless, the estimated coefficients in **Table Regression 10** for experience and educational levels are of the expected size, although it is unusual that Experience would not be significant. There is also nothing newsworthy for the variables reflecting ancestry, except that most of the coefficients are not significant. One item of interest is the positive signs on the migration variables for the pre-1970 period, and the sharper loss to recent immigrants, implying a loss over 60% of income for the most recent immigrants. Note also that the parallel regression on the census data did not return many significant coefficients, perhaps because limiting to cases of Arab-American males in Detroit Metro who were working full time, leaves only 163 observations. Evidently, the DAAS provides more observations on Detroit's Arab-Americans than does the 1% sample from the census.⁶³

Finally, the unique contribution of this DAAS dataset is that it allows us to consider specifically religion as a factor affecting income. The estimated coefficient suggests that Muslims earn about 30% less, on average. The census data do not provide directly information on religion, but there

Table . Regression Ten. Log Household Income for Detroit Area, using DAAS data.

Adjusted R² = 0.33

	Coefficients	t
Constant	12.161	59.818
Experience	0.002	0.322
Experience ²	0	-2.706
ed1	-1.262	-10.49
ed2	-0.941	-7.871
ed3	-0.795	-7.038
ed4	-0.527	-4.3
Iraqi	-0.004	-0.023
Yemen	-0.032	-0.157
Palestine/Jordon	-0.002	-0.011
Lebanon/Syria	0.056	0.319
Egypt/N. Africa	0.068	0.272
Migr_pre_55	0.071	0.289
Migr_55_69	0.184	1.26
Migr_70s	-0.097	-0.917
Migr_80s	-0.325	-3.106
Migr_90s	-0.753	-7.827
Migr_2000s	-1.167	-7.809
Muslim	-0.329	0.084

is an identification of Chaldeans and Armenians; two important Christian groups. In our previous regressions, these groups had higher incomes, which is consistent with this result in **Table Regression 10**. Needless to say, this could be investigated more thoroughly in future work.

Conclusions

At a very general level, the first impression this analysis provides is that Arab-Americans are doing a bit better than average in the US today. Moreover, in the empirical work, we have seen that the standard variables – gender, age/experience, education and urban location – have the expected impacts. Turning to place of nativity, a rather surprising finding as that being foreign born did not produce a below-average income of Arab-American males, while the average income of Arab-American females was rather lower than might otherwise have been expected. We have also argued that an examination of average incomes is less important than a closer study of the short run dynamics of income after immigration – how quickly the ‘immigration discount’ gets reduced. In this regard, Arab-Americans seem to recover quickly from a disadvantage that is quite large.

Although access to the population census provides an incredibly large number of observations, after a bit of work one longs to have fuller information on each case. In particular, we know little about the work situations of the immigrants back in their home countries, and because the population census does not specify where education occurred, this variable is rather suspect. For example, it might well be the case that the reason why the Arab-American male immigrants earn more is that they already had better skills, etc. before leaving, and that their immigration decision was not determined by economic goals, but was motivated by political persecution.

The long term goal was to explain income differentials in terms of socio-economic variables separate from country of origin, or religion. It is clear that inclusion of education and other variables reduces, but does not eliminate, the impact of country of origin. One of the oft-mentioned considerations in debates on immigration policy is how hard immigrants work. The above average performance of Arab-American males is certainly consistent with that story, but our empirical analysis has not been able to contribute positively to that discussion.

Please allow a few comments to address more straightforwardly some issues for further work. The explanation of the differences in rankings of Arab-American incomes in Detroit, compared to the US, in terms of Detroit having higher numbers of more recent immigrants with less education, from poorer countries, needs to be fleshed out more. The issue of incomes of Arab-American women similarly demands specific work. Age at the time of migration needs separate inclusion, and this author has not seen this addressed in the literature. Finally, we would hypothesize that speed with which a recent immigrant overcomes the ‘immigration discount’ is a partially a function of the social cohesion of that immigrant group in the area of residence in this country. The Dearborn/Detroit area would be a prime example. Yet it is curious that the discussion in Baker et al. (2004) suggests that this region’s Arab-Americans have lower social capital than their neighbors. Is this correct?

Appendix

Definitions and Specifications.

Nativity. The census asked where people were born. This paper excludes the cases of those born in the Puerto Rico, Guam and other island protectorates, because it is not clear that these people have the same prospects in terms of education and employment, as those born in the 48/50 states.

Ancestry. The census reports no more than two responses to ancestry. This paper considers someone to be of Arab ancestry if the first response on the census form indicated a specific Arab country, or “Arab,” or “Other Arab.” Thus someone who identified as Chaldean first and Arab second is here classified as Chaldean, i.e. not Arab. It is clear that this specification is open to question, and indeed such issues are also discussed – but not completely resolved - in the two Census Bureau publications by De la Cruz and Brittingham. For the DAAS household data, ancestry was identified as that of the “householder,” which of course is also problematical. The attribution of ancestry for Chinese and Indians is done on the basis of self-identification by race, as reported in the census. Evidently there are issues with the concept of Israeli (as opposed to Jewish) ancestry, as well.

This work also excluded those who reported living in ‘Group Quarters’ – which could be college dormitories, the armed forces, or in prisons.

Comparison of ancestry and place of birth indicates good correspondence of the answers, with inconsistencies centering in the cases of Syrians/Lebanese, and Palestinian/Jordanians, as would be expected from the political history.

Full time. People were considered working full time if they reported that they usually worked at least 36 hours per week. The ASC/Factfinder tables report on the Census data using more elaborate criteria, which I was not able to implement.

Employment Ratio: For the purpose of this indicator, an individual was considered working if s/he reported positive number of weeks worked (wkswork1). This measure makes no attempt at distinguishing full from part-time employment.

Education. The IPUMS data provide this information in terms of a set of categories, instead of annual levels. This was alleviated by assigning to each category the mid-level number of years.

Weights: the 1% and 5% samples provide weights for personal and household census. Cases were excluded if income (individual or household) were zero or negative.

Bibliography

- Baker, Wayne et al. (2004) "Preliminary Findings from the Detroit Arab American Study," downloaded in April, 2008 from www.umich.edu/news/Releases/2004/Jul04/daas.pdf
- Bauman, Kurt J. and Nikki L. Graf (2003) "Educational Attainment: 2000," Washington, D.C. US Census Bureau Census 2000 brief.
- Blau, Francine D. et al. (2002) "The Role of the Family in Immigrants' Labor Market Activity: Evidence from the United States," NBER Working Paper 9051.
- Borjas, George J. (2000) "The Economic Progress of Immigrants," in George J. Borjas (ed.) *Issues in the Economics of Immigration* Chicago, University of Chicago Press.
- Borjas, George J. (2005) *Labor Economics* 3rd edition. Boston, McGraw-Hill.
- Bradley, Don E. (2004) "A Second Look at Self-employment and the Earnings of Immigrants," *The International Migration Review* 38:2: pp. 547-583
- Brittingham Angela and G. Patricia de la Cruz (2005) "We the People of Arab Ancestry in the United States," Washington, D.C. US Census Bureau: Census 2000 Special Report
- Camarota, Steven A. (2002) "Immigrants from the Middle East: A Profile of the Foreign-born U.S. Population from Pakistan to Morocco," *The Journal of Social, Political, and Economic Studies* 27:3 315-340
- Chiswick, Barry R. (1978) "The Effect of Americanization on the Earnings of Foreign Born Men," *Journal of Political Economy* 86:5 pp. 897-922
- De la Cruz, Patricia and Angela Brittingham (2003) "The Arab Population: 2000" Washington, D.C. US Census Bureau Census 2000 Brief www.census.gov/prod/2003pubs/c2kbr-23.pdf
- Duleep, Harriet Orcutt and Mark C. Regets (1999) "Immigrants and Human-Capital Adjustment," *American Economic Review* May 89:2 186-191
- Ehrenberg, Ronald G. and Robert S. Smith (2006) *Modern Labor Economics* (6th ed.) Boston: Pearson/Addison Wesley.
- Funkhouser, Edward (2000) "Convergence in Employment Rates of Immigrants," in George J. Borjas (ed.) *Issues in the Economics of Immigration* Chicago, University of Chicago Press.
- Heeringa, Terry Adams (2004) "Technical Documentation: 2003 Detroit Arab American Study (DAAS)," downloaded in April, 2008 from webuser.bus.umich.edu/wayneb/DAASTechicalReport.pdf

Johnson, Richard W. and David Neumark (1996) "Wage Declines among Older Men," *Review of Economics and Statistics* 78:4 740-747

Lubotsky, Darren (2000) "Chutes or ladders? A Longitudinal Analysis of Immigrant Earnings," Working Paper #445 Industrial Relations Section, Princeton University. Subsequently published in *The Journal of Political Economy* October, 2007 115:5 pp. 820-867

Naff, Alixa (1994) "The Early Arab Immigrant Experience," in Ernest N. McCarus (ed.) *The Development of Arab-American Identity*, Ann Arbor: University of Michigan Press.

Read, Jen'nan Ghazal (2004) "Cultural Influences on Immigrant Women's Labor Force Participation: The Arab-American Case," *The International Migration Review* 38:1 pp. 52-77.

Read, Jen'nan Ghazal (2004) *Culture, Class, and Work among Arab-American Women* New York, LFB Scholarly Publishing LLC.

Read, Jen'nan Ghazal and Philip N. Cohen (2007) "One Size Fits All? Explaining U.S.-born and Immigrant Women's Employment across 12 Ethnic Groups," *Social Forces* 85:4 pp 1713- .

Welniak, Ed and Kirby Posey (2005) *Household Income: 1999: Census 2000 Brief* Washington D.C. US Census Bureau

APPENDIX

Tables BIG ACS

PCT89. MEDIAN HOUSEHOLD INCOME IN 1999 (DOLLARS) [1] - Universe: Households

	United States	Detroit CMSA	Chicago CMSA	Houston CMSA	Los Angeles CMSA	New York-CMSA
Total US	41,994	44,667	49,160	51,046	44,761	45,903
Arabs	47,459	43,870	43,606	47,082	50,120	51,096
Egypt	50,241	41,905	45,042	63,333	46,897	56,153
Iraq	41,001	33,544	33,352	45,888		60,147
Jordan	41,282	41,995	45,121	32,356	50,368	50,852
Lebanon	52,575	47,290	46,857	60,861	64,677	55,958
Palestine	46,462	48,047	49,219	39,886	43,953	49,583
Syria	51,904	58,327	59,145	60,871	47,880	42,422
Morocco	37,495	40,179	38,750			60,885
Armenia	48,010	56,784	60,136	59,974	80,905	36,422
Chaldean	46,680	45,482	45,485	49,343		59,870
Iran	58,912	66,619	77,608	66,193	54,522	47,333
Turkey	46,548	41,352	49,758	54,196	52,153	67,820
					47,297	50,633

U.S. Census Bureau Census 2000. FactFinder .

PCT133. MEDIAN INCOME IN 1999 (DOLLARS) BY SEX BY WORK EXPERIENCE IN 1999 FOR THE POPULATION 15 YEARS AND OVER WITH INCOME

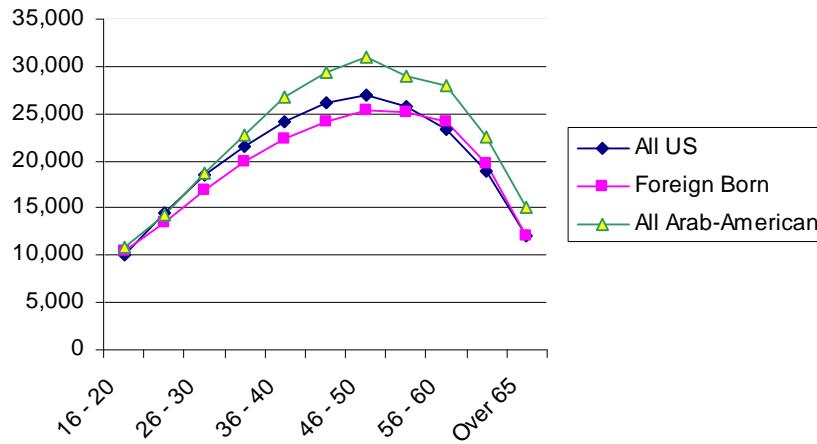
			United States	Michigan	Detroit CMSA	Chicago, CMSA	Houston CMSA	Los Angeles	New York CMSA
Total US	Male	Total	27,932	30,963	34,926	32,618	29,714	26,487	32,316
		Full	38,349	42,962	49,564	45,502	40,402	40,020	46,586
	Female	Total	16,327	16,300	17,867	19,496	18,015	16,587	19,917
		Full	28,135	29,256	31,478	31,936	29,987	31,724	35,582
All Arabs	Male	Total	31,022	28,453	28,750	29,136	35,475	32,462	30,856
		Full	44,262	41,874	42,129	40,925	46,567	48,165	45,094
	Female	Total	17,346	13,201	12,813	16,855	22,036	17,805	19,922
		Full	33,421	32,057	32,686	34,319	37,017	36,435	40,430
Iraqi	Male	Total	24,385	21,875	21,705	25,233		32,428	42,500
		Full	37,483	34,216	34,321	36,215		40,458	80,832
	Female	Total	12,129	10,020	9,583	14,500		14,776	21,696
		Full	31,652	23,618	23,553	30,208		35,729	47,500
Jordanian	Male	Total	27,236	20,609	23,500	27,354	35,625	28,953	24,577
		Full	39,951	36,484	36,797	40,570	42,083	46,250	38,832
	Female	Total	11,472	11,953	12,850	11,194	31,125	10,200	10,646
		Full	29,842	26,050	25,800	22,344	78,857	32,619	33,438
Lebanese	Male	Total	36,179	31,700	31,792	40,257	45,838	38,504	41,212
		Full	50,381	46,728	47,000	55,653	55,435	52,359	55,802
	Female	Total	19,783	14,957	14,953	25,245	26,163	19,353	26,609
		Full	34,396	34,445	35,350	40,274	40,300	37,230	44,366
Palestinian	Male	Total	30,593	32,483	33,967	26,707	27,601	31,050	28,741
		Full	41,121	41,776	41,360	36,282	36,447	45,833	40,024
	Female	Total	15,305	11,801	11,780	11,801	16,908	12,298	22,188
		Full	35,486	34,107	35,114	35,040	25,625	50,667	41,630
Syrian	Male	Total	34,308	35,946	35,484		39,750	30,127	37,762
		Full	48,722	51,042	54,063		50,216	48,438	55,968
	Female	Total	19,177	19,116	19,171		14,712	17,535	20,865
		Full	34,900	36,796	41,404		44,219	39,345	41,132
Armenian	Male	Total	30,066	40,068	40,984	40,103	61,372	19,859	41,003
		Full	48,013	55,794	56,641	51,957	76,835	40,151	56,266
	Female	Total	15,474	21,084	22,049	24,780	20,741	9,958	23,858
		Full	24,620	21,151	21,086	26,818		27,556	51,141
Chaldean	Male	Total	37,980	35,032	34,939	35,947		48,095	71,623
		Full	11,915	9,604	9,508	15,318		13,681	21,000
	Female	Total	26,619	22,756	22,715	26,147		27,454	47,125
		Full	40,003	51,005	55,729	40,401	36,590	35,274	47,122
Iranian	Male	Total	56,121	65,240	70,671	60,208	50,625	54,587	61,500
		Full	16,175	12,770	12,556	20,903	14,841	12,930	20,250
	Female	Total	38,762	40,682	41,364	40,972	35,074	36,957	47,612
		Full	31,843	28,095	31,923	41,490	35,815	33,568	32,405
Turkish	Male	Total	46,436	51,458	65,147	47,325	45,156	51,981	45,460
		Full	17,908	18,125	20,662	25,000	31,182	20,027	18,750
	Female	Total	35,260	34,181	36,250	46,042	43,092	43,934	38,997

Detroit is the Detroit-Ann Arbor-Flint CMSA; Chicago, Houston, Los Angeles and New York also include various adjoining areas.

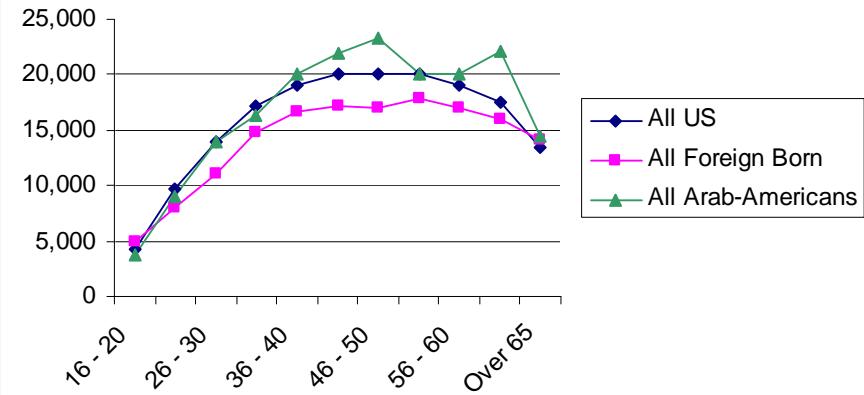
Chaldean = Chaldean /Assyrian /Syriac Full = Full Time

Median Incomes by Age, 1980

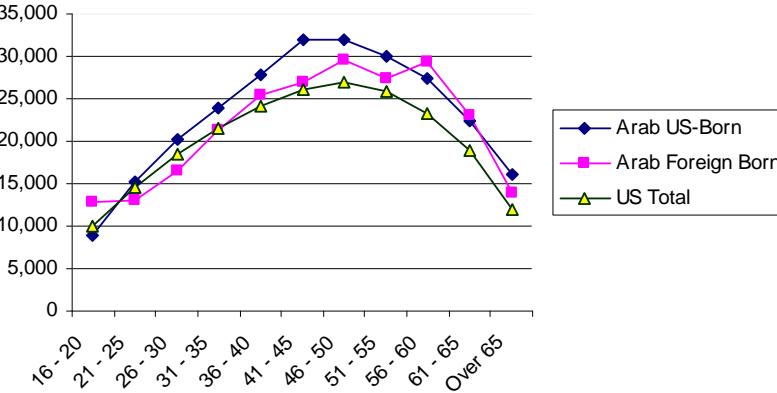
Median Household Incomes by Age: All US, Foreign Born, and Arab-Americans, 1980



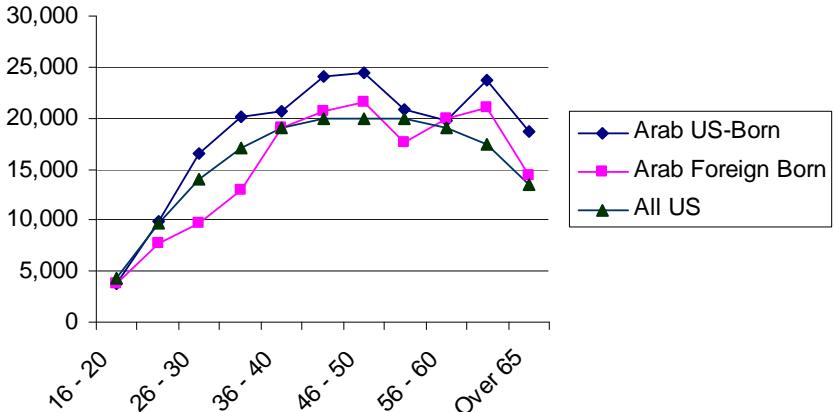
Personal Income of US Males Working Full Time, 1980



Median Household Incomes by Age of Arab-Americans, by Nativity, 1980



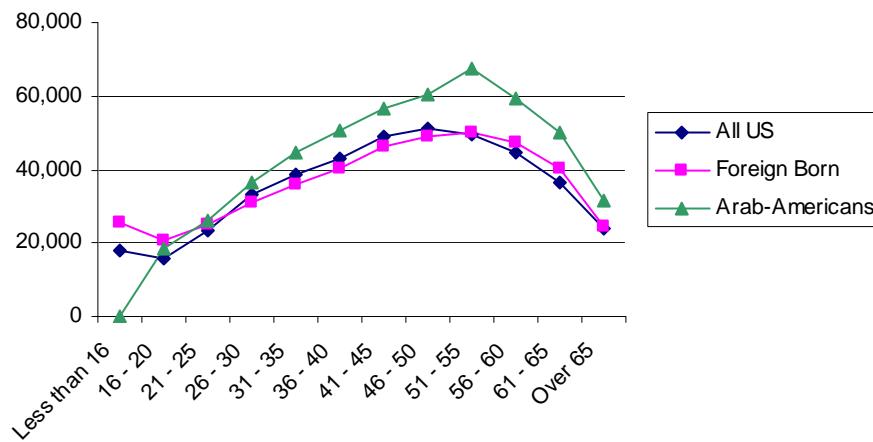
Personal Income of Arab American Males Working Full Time, by Age and Nativity, 1980



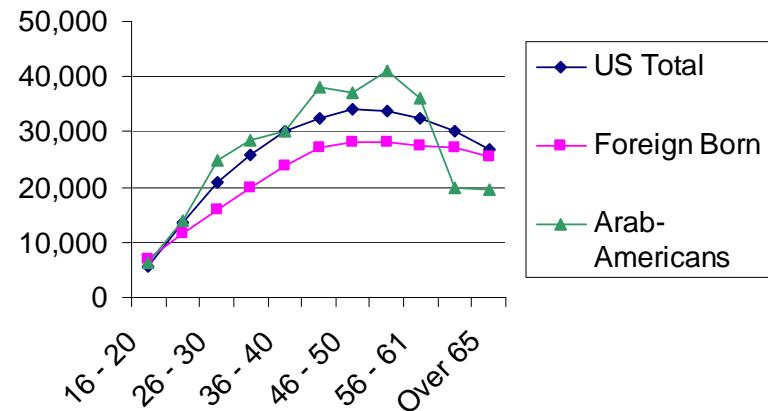
Save19Income_1980 and Save18_HH_Income.

Median Incomes by Age, 1990

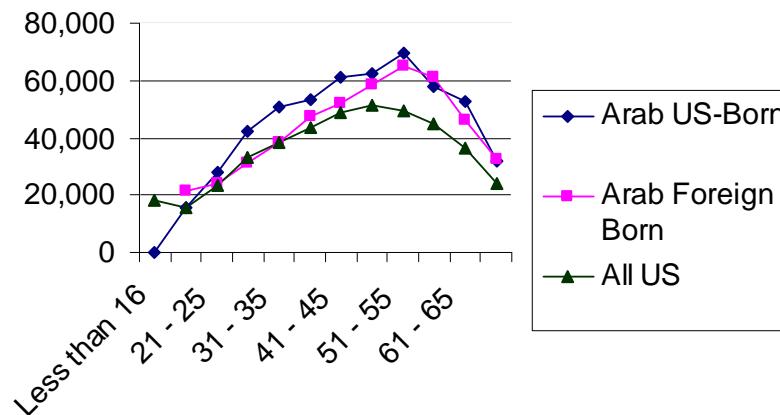
Median Household Incomes by Age: All US, Foreign Born, and Arab Americans. 1990



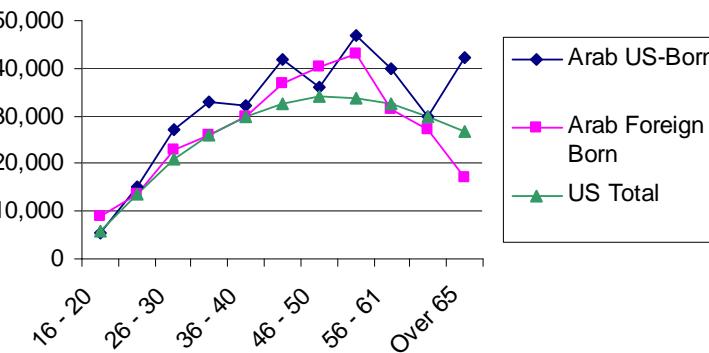
Median Personal Income of Full Time Males, by Age, 1990



Household Incomes of Arab Americans by Age and Nativity, 1990

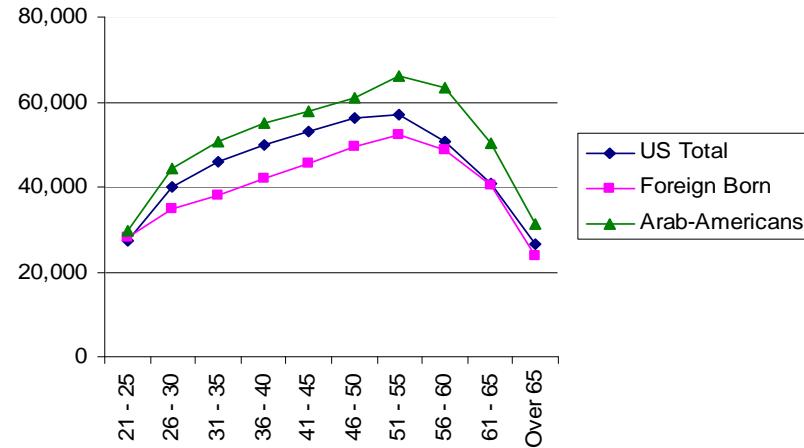


Personal Income by Age and Nativity: Arab-American Males Working Full Time. 1990

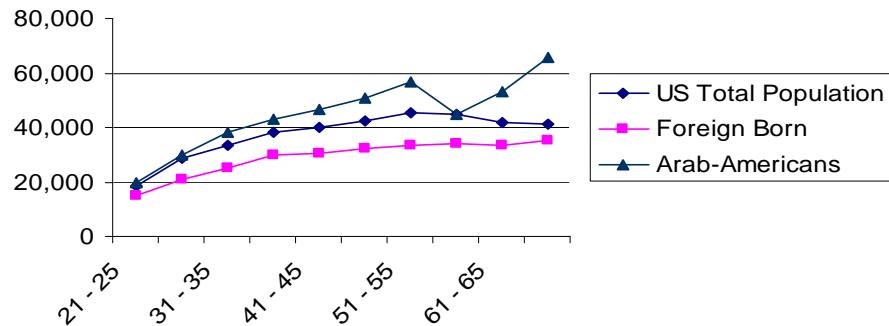


Median Incomes by Age, 2000

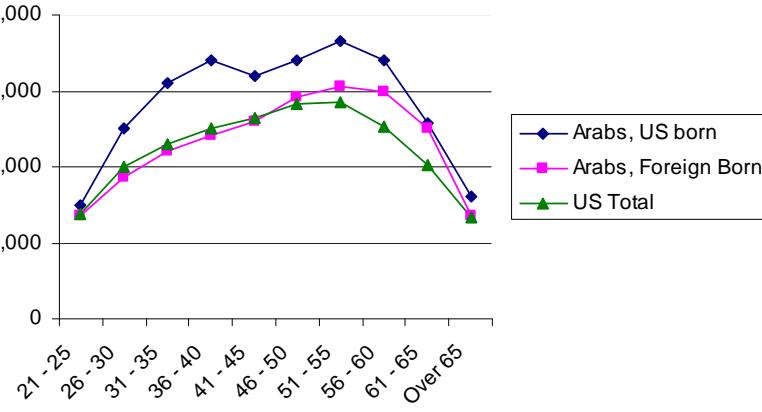
Median Household incomes by Age: All US, Foreign Born, and Arab-Americans. 2000



Median Personal Income of Males Working Full Time, by Age: US Total, Foreign Born, and Arab Americans. 2000



Median Household Incomes by Age and by Nativity: Arab-Americans. 2000



Median Personal Income of US Males Working Full Time, by Age: Arab-Americans by Nativity, Compared to Total US Population. 2000

