The Economics of Citizenship: Is There a Naturalization Effect?

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CHAPTER 4

THE ECONOMICS OF CITIZENSHIP: IS THERE A NATURALIZATION EFFECT?

Kirk Scott

Introduction

Swedish rules regarding naturalization have changed somewhat during the past 40 years, but the fundamental principle was established in a proposition to the parliament in 1968 (Proposition 1968). This new and innovative alien policy was based on a concept of equality and the allocation of civil rights based on residence rather than nationality. The idea was that residence in Sweden should be adequate grounds for gaining rights and privileges, and full inclusion in society would no longer be the sole property of citizens. In the spirit of Sweden as a universalistic welfare state (Esping-Andersen 1990), this inclusion was expanded during the following decades to include practically all spheres with only a very few exceptions. One exception is the right to political participation. While foreign residents have been granted the right to participate in local and county elections, voting in the parliamentary elections is restricted to Swedish citizens. A second area of restriction is found in employment deemed vital to national security, with the military, police, and certain other occupations closed to non-citizens. A third, and perhaps non-trivial, right which is not granted to non-citizens is the right of stay in the country. The Swedish government may, given adequate grounds, expel non-citizens from the country, while naturalized immigrants are immune to deportation. Despite these exceptions, a recent government study found that the changes during the past 40 years have led to a dramatic reduction in the importance of citizenship (SOU 1999).

Becoming a citizen in Sweden today is a fairly straightforward issue. One basic demand is that the individual applying for citizenship be of legal age (18 years or older) and able to provide evidence of identity. Additionally, the person must have been granted permanent residence in the country prior to application. If these criteria are fulfilled and the person

has lived an "honourable" (free from convictions for major crimes) life in Sweden, then the only other obstacle is the amount of time lived in the country. Citizens of the Nordic countries must have lived in Sweden for 2 years prior to citizenship, individuals granted refugee status should have lived in the country 4 years, and all other foreign citizens must have lived in Sweden for at least 5 years.[1]

While acquisition of Swedish citizenship has become successively easier, there has existed one formal deterrent. Dual citizenship was forbidden in Sweden until 1 July, 2001. Many individuals may see uptake of a citizenship as a fairly casual act, but renunciation of a citizenship is much more serious. Prior to 2001 dual citizenship was only allowed in those cases where individuals were citizens of countries which did not allow renunciation of citizenship, and in cases where children had parents of different nationalities. With the changing of the law in 2001, no such demands were placed on applicants. Swedish citizens were free to acquire citizenship in another country and retain their Swedish citizenship as long as this was accepted in the second country. Immigrants were also free to acquire Swedish citizenship. This change in the law to allow dual, and even multiple, citizenship was far from universally approved of, with less than half of the electorate in favour, but the principle of dual citizenship received very little criticism after the fact (Gustafsson 2005).

Stylized Facts

In general, immigrants to Sweden have a fairly high naturalization rate, but this varies considerably by nationality. Country-specific details will be provided below, and we will focus here on aggregate figures for the collective immigrant population.

Figure 1 is interesting largely from the total lack of variation, and shows that the number of foreign citizens has remained roughly constant during the past decade, and the same holds for the number of naturalizations. Foreign citizens have naturalized at the rate of between 30,000 and 40,000 per year. This breaks down to roughly 8% of the foreign citizens becoming Swedish citizens in any given year. This figure is based on the total number of citizens, and not on the number formally eligible for citizenship.

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1 Foreign citizens married to Swedish citizens may naturalize after only 3 years in the country, provided that they have been married for at least 2 of those years.

Figure 1. Number of foreign citizens and naturalizations in Sweden, 1999-2005
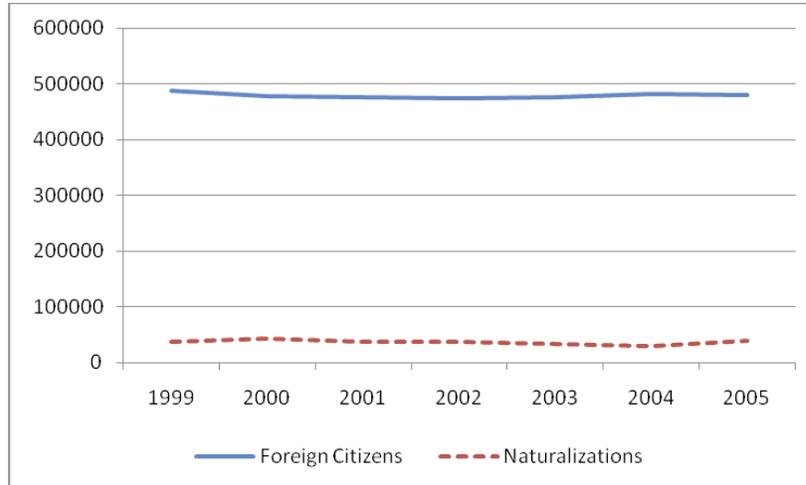
Source: Author's calculations based on Statistics Sweden register RTB.

One interesting point to note in Figure 1 is that the change in Swedish law allowing dual citizenship, which took effect July 1 2001, does not appear to have had any major impact on naturalization rates.

The temporal aspects of naturalization for different nationalities are further discussed below.

Background

This chapter examines the role of naturalization in the economic integration of foreign-born[2] individuals in Sweden. Many studies make use of the acquisition of citizenship as a tool to explain the economic success or failure of immigrants. These studies usually include citizenship as a binary explanatory variable under the assumption that citizenship should have some positive effect on employment, earnings, or both. Such studies rarely delve into the mechanisms behind this "citizenship premium," however.

Citizenship can affect economic integration in several ways, and the mechanism for the effects can vary. From a policy standpoint it is crucial to understand this mechanism, since it will determine the potential effects of various naturalization policies. If there is simply an unambiguous effect through which all individuals receive some sort of premium to citizenship acquisition, then liberal naturalization policies would be in order. Various

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2 Throughout this chapter the terms "immigrant" and "foreign-born" will be used interchangeably.

reasons can be found to explain this effect, such as restriction of various types of employment to citizens, or a lower propensity among natives to discriminate against immigrants who signal their "loyalty" to the host country through naturalization.

There is also the distinct possibility that there is no naturalization premium, and the observed effect is simply an effect of selection. Those who opt to receive citizenship may simply be more positively self-selected than those who do not become citizens. This paper will delve into this question.

This study will begin with a discussion of the pattern of Swedish citizenship acquisition for immigrants from 16 countries. It will then chart the effects of citizenship on employment and income, in the same way that many other studies have. Finally, it will make use of a longitudinal approach to attempt to isolate the naturalization effect from a selection effect.

Previous Studies

There has not been an overwhelming amount of work done on the effects of naturalization, especially in light of the interest in immigrant and ethnic studies in general. It can be argued that there have been more studies on the determinants of naturalization (Alvarez 1987; DeSipio 1987; Jasso & Rosenzweig 1986; Kelley & McAllister 1982; Portes & Curtis 1987; Yang 1994). In recent years this interest has, however, shifted and studies of the *impact* of naturalization have begun to appear in greater numbers.

Bratsberg *et al.* (2002) examine the effects of naturalization on wage growth in the United States. They study a longitudinal sample of young male immigrants and find that there is a positive effect of naturalization on the economic integration of immigrants. They find evidence that wage growth accelerates after naturalization, and that the occupational structure shifts towards more white-collar and public-sector employment. Unlike Chiswick (1978), who is cited as a motivation for the study, they found a naturalization effect even after controlling for time spent in the United States.

Studies of naturalization in Canada have come to mixed results, with DeVoretz and Pivnenko (2004) finding a positive impact of citizenship for Ukrainian immigrants to Canada. On the other hand, Mata (1999) finds no conclusive effect of naturalization on immigrants in general using the same cross-sectional data from the 1996 census.

European studies are rare, but one study of the experiences of migrants from the former Yugoslavia in Sweden and Austria by Kogan (2003) finds that there could be multiple processes in the different European nations. Ex-Yugoslavs in Austria showed a positive effect of naturalization

on labour market outcomes, while those in Sweden showed no real benefit. The explanation here is that the two countries have differing systems of rights for non-citizens, as discussed above.

Another study examining Sweden specifically comes to another conclusion. Using cross-sectional data from 1970 and 1990, Bevelander (2000) finds that naturalization status had negligible effects on probability of being employed in data from the 1970 census, but that naturalized immigrants did have a higher propensity to be employed than foreign citizens in the 1990 census.

Studies of the effects of citizenship all face one major obstacle. To acquire citizenship an immigrant must meet a number of criteria, one of which is almost universal: the demand that an individual live a certain number of years in the host country to be eligible for naturalization. This demand implies that there must be some sort of selection process at work, since some immigrants will return home or proceed to a third country prior to meeting the eligibility requirement. In addition, some immigrants choose to NOT become citizens in the destination country, as mentioned above, which adds another dimension of selection to the equation. The previous studies have come to varying conclusions as to the effects of naturalization, and this study will attempt to isolate some of them.

Immigrant Integration in General

Based on various sources of Swedish data, many studies have shown that labour force attachment among immigrants has been weakening over the past three decades, and the relative incomes earned by those immigrants actually in the labour force have been declining. Prior to 1970, immigrants exhibited economic performance similar to, if not better than, native-born Swedes with the same occupations. After 1970, there are indications that this shifting immigrant labour market performance is not merely a reflection of shifting quality of immigrant cohorts, but also of shifting labour market conditions which adversely affect all migrants, even those from cohorts which were fairly successful in earlier years (Bengtsson & Scott 2006; Bevelander & Nielsen 2001; Ekberg & Gustafsson 1995; Rooth 1999; Scott 1999; Rosholm *et al.* 2006).

Citizenship Acquisition in Sweden

Any study of the effect of citizenship must be based on an understanding of the *extent* of citizenship acquisition. To this end survivor plots have been calculated to show the percentage of the male immigrant population acquiring Swedish citizenship by years since migration. Figures 2.1-2.4 show the Kaplan-Meier estimates of the percentage of the immigrant stock without Swedish citizenship by years since migration for the period 1980-2001.

These figures show that the major immigrant nationalities in Sweden can be grouped into three categories of citizenship acquisition. Immigrants from Scandinavia, Germany, Italy and the United States all have relatively low rates of naturalization, and the naturalization process seems to be a fairly gradual one, with a relatively constant slope. These countries can basically be considered industrialized during the entire period and, with the exception of Finland, cannot be considered labour-surplus countries. The second category consists of the labour-surplus countries of Greece, Turkey and the former Yugoslavia. Here we can see high rates of citizenship acquisition, with a slightly faster rate in the period immediately following migration, and diminishing rates as time passes. The third category consists of the refugee-sending countries of Czechoslovakia, Poland, Iran, Iraq, Ethiopia, Chile, and Vietnam. Common for these nationalities is an extremely high rate of citizenship acquisition in the period immediately following immigration. This can most likely be explained by the desire to gain the added protection afforded Swedish citizens.

Figure 2.1. Kaplan-Meier estimates of the survivor function. Scandinavian males, 1980-2001
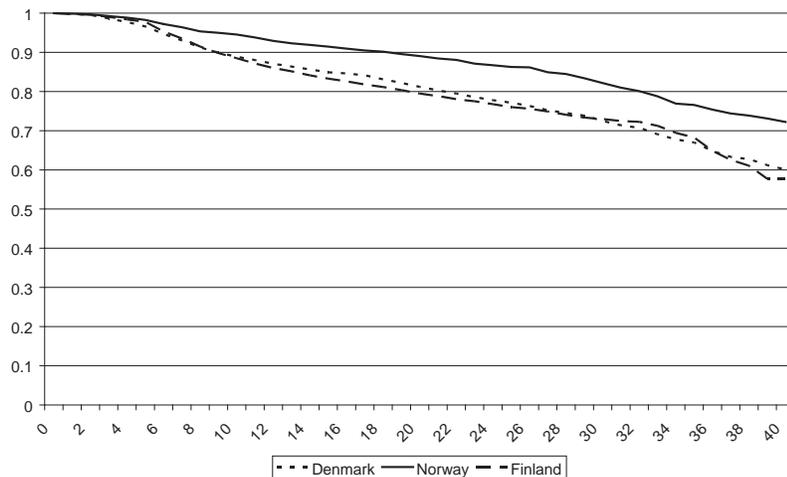
Source: Author's calculations. Swedish longitudinal immigrant database.

Figure 2.2. Kaplan-Meier estimates of the survivor function. Eastern and Northern European males, 1980-2001

Source: Author's calculations. Swedish longitudinal immigrant database.
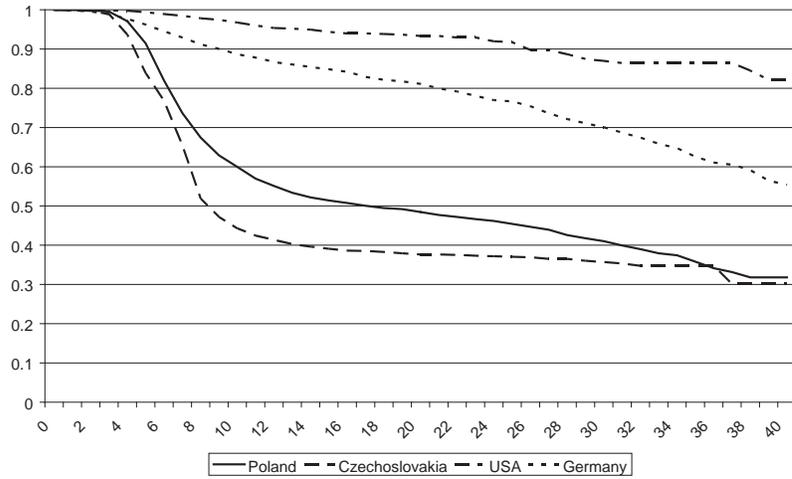
Figure 2.3. Kaplan-Meier estimates of the survivor function. Southern European males, 1980-2001

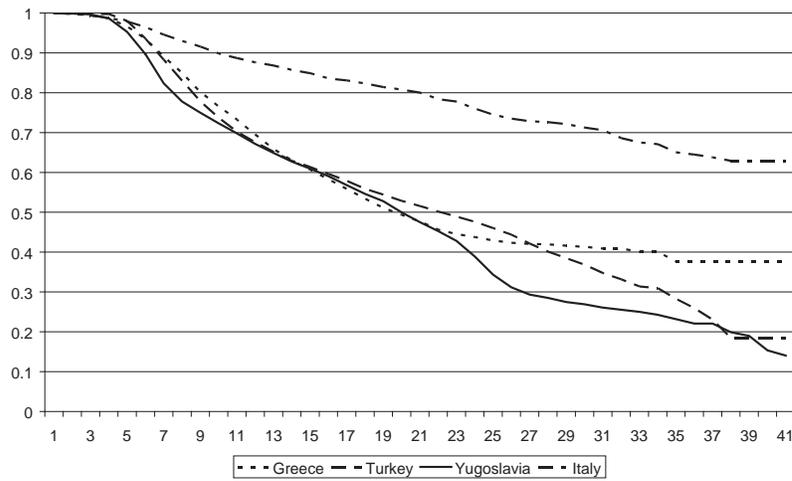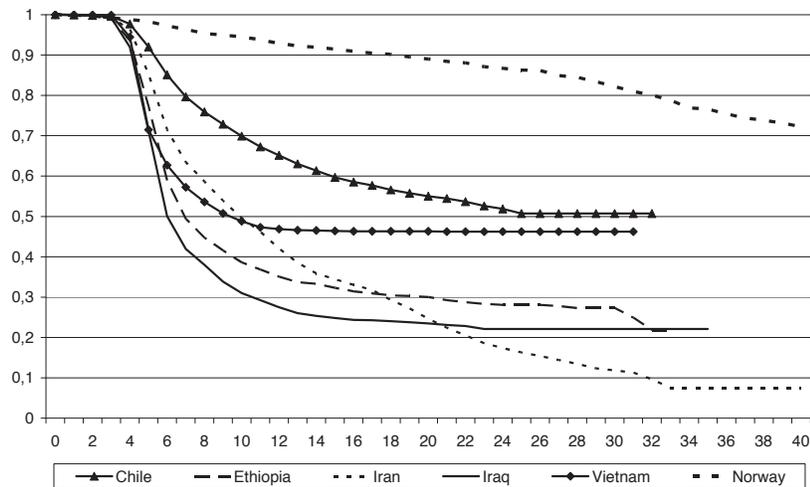*Source: Author's calculations. Swedish longitudinal immigrant database.*

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Figure 2.4. Kaplan-Meier estimates of the survivor function. Non-European males, 1980-2001; Norway included for comparison

Source: Author's calculations. Swedish longitudinal immigrant database.

Table 1 shows the share of each nationality reported as having acquired Swedish citizenship in the 1990 census. One interesting aspect to note here is that females of most nationalities naturalize at approximately the same or somewhat higher rates as their male counterparts.

Table 1. Share naturalized by gender and nationality, 1990

	Male	Female
Chile	0.53	0.55
Czech	0.94	0.89
Denmark	0.54	0.59
Ethiopia	0.77	0.74
Finland	0.59	0.60
Germany	0.67	0.79
Greece	0.71	0.76
Iran	0.40	0.31
Iraq	0.69	0.75
Italy	0.48	0.62
Norway	0.43	0.45
Poland	0.80	0.73
Turkey	0.42	0.27
USA	0.42	0.41
Yugoslavia	0.40	0.32

Source: Swedish Census 1990, contingent on having lived in Sweden 5+ years.

Recent changes in naturalization patterns are illustrated in Figure 3 by showing the number of foreign-born individuals residing in Sweden, and the number of those who have retained their foreign citizenships. What is clear is that there has been an increase in propensity to become a Swedish citizen, and that this increase has occurred largely between 1990 and 2000. In 1980 approximately 2/3 of all foreign-born living in Sweden had retained their foreign citizenship, while by 2000 this figure had fallen to less than half. Note that this diagram does not account for years in Sweden, and as such includes individuals who are not yet eligible for citizenship. It does, however, show a tendency towards increasing uptake of citizenship during a period when dual-citizenship was not yet allowed.

Figure 3. Total foreign-born population and number of foreign citizens residing in Sweden, 1980, 1990 and 2000
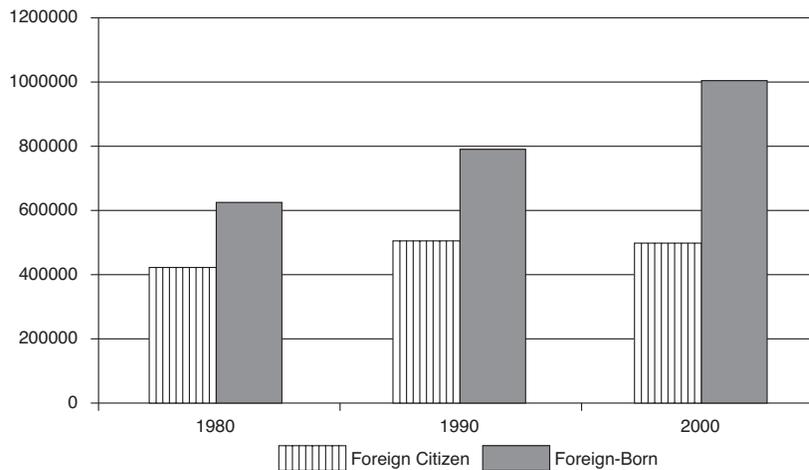
Source: Author's calculations based upon Statistics Sweden Census of Housing and Population, 1980, 1990 and 2000.

Data

This study uses two primary data sources. The first is the Swedish census of 1990, and the second is the Swedish Longitudinal Immigrant database (SLI). The SLI is a longitudinal database created through the merging of a number of registers kept by Statistics Sweden, and was the result of cooperation between Statistics Sweden, the Swedish Immigration Board, and the Research Group in Population Economics at the Department of Economic History in Lund. The database consists of a sample of immigrants from sixteen European and non-European countries. This sample begins in 1980

and extends through 2001. The sample contains detailed continual information on approximately 550,000 individuals.

The data is restricted to individuals aged 25 to 59 who have been in Sweden for at least five years. This is to ascertain that each immigrant is eligible for citizenship. This restriction implies that the first selection mechanism – remaining in the host country at least five years – has been ignored.

Although the SLI contains continual information on many variables, the economic information is reported once per year. For simplicity the database has been recoded into a series of repeated cross-sections, since the estimation techniques will not require exact timing of citizenship acquisition, allowing the use of yearly data.

Analysis

The effects of naturalization are estimated through two processes. The first is the effect of naturalization on the probability of being gainfully employed, while the second is the effect of citizenship status on earnings for those who have some type of employment.

Effects of Citizenship on Employment

If there is a naturalization effect, one would expect that immigrants gaining Swedish citizenship should have a higher probability of being employed. Using the 1990 census, the probability of being employed full-time was estimated using a logistic regression. Table 2 shows the predicted probability of having full-time employment calculated at Swedish mean values for the regressors. Since we are examining immigrants, the value for years since migration was set at ten.

This table shows that those immigrants who have been naturalized tended to see a modest increase in the probability of having full-time employment in 1990. Some nationalities, particularly the Scandinavians, Chileans and Germans, saw almost no difference between the naturalized and non-naturalized groups. The Czechoslovakian men saw the greatest increase in probability of almost 24 percentage points, while American men and Greek women experienced considerable negative effects of citizenship.

Table 2. Estimated probability of being full-time employed in 1990 using census data. Calculated at Swedish means, YSM=10. Logit contingent on YSM≥5, ages 25-59*

	Men			Women		
	Foreign	Naturali-zed	"Naturali-zation Effect"	Foreign	Naturali-zed	"Naturali-zation Effect"
Chile	0.75	0.75	0.00	0.61	0.59	-0.02
Czech	0.42	0.66	+0.24	0.42	0.48	+0.05
Denmark	0.77	0.74	-0.02	0.40	0.50	+0.10
Ethiopia	0.64	0.69	+0.06	0.55	0.52	-0.04
Finland	0.75	0.71	-0.04	0.56	0.56	0.00
Germany	0.78	0.76	-0.02	0.43	0.49	+0.07
Greece	0.59	0.65	+0.06	0.50	0.38	-0.11
Iran	0.61	0.64	+0.03	0.39	0.44	+0.05
Iraq	0.47	0.62	+0.15	0.40	0.49	+0.09
Italy	0.71	0.68	-0.03	0.47	0.43	-0.04
Norway	0.71	0.77	+0.05	0.39	0.52	+0.12
Poland	0.61	0.68	+0.07	0.44	0.53	+0.09
Turkey	0.56	0.54	-0.01	0.36	0.41	+0.06
USA	0.69	0.57	-0.12	0.34	0.30	-0.04
Yugo.	0.68	0.63	-0.05	0.54	0.53	+0.00

* Control for age, age squared, marital status, year since migration, years since migration squared, educational level. YSM = Years since migration.
Source: Swedish Census 1990.

Many studies would take the results of Table 2 as evidence of some type of naturalization premium, but cross-sectional data such as this do not allow for any real examination of selection effects. To this end this study turns to the longitudinal data available in the SLI (see data section). Using data from 1980 to 2001 two separate analyses of employment were carried out. The dependent variable in these regressions is a dichotomous variable signifying the acquisition of employment paying at least 3 base amounts[3] in a given year. The lower income-bound set in this analysis was necessary, since we do not have information on hours worked, and can thus not identify full-time employment in the SLI. This income term should be considered more along the lines of an employment rate.

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3 "Many of the benefits within social insurance are linked to the so-called base amount. The base amount is also used to calculate the pensionable income, pension points and maximum levels within social insurance. It is an index of price movements, which means that benefits follow price trends. Price trends are measured in the consumer price index." National Social Insurance Board web page: http://www.rfv.se/english/social/base_k.htm

The data is then subjected to two analyses, one with all immigrants included, and one where the dataset is restricted to individuals who *at some time* acquire citizenship. Both datasets include only those having been in the country for 5 or more years. By only examining those that eventually become citizens we are violating a fundamental prohibition of estimating models conditioned on future events, but this approach can hopefully isolate some of the effects of selection into citizenship. Since we have data on individuals during multiple observation points the estimation technique should take account of unobservable individual characteristics as well as those which we can identify. As such this study employs a random effects logit as the estimator of choice.

Table 3 shows the results of the model, including both citizens and those who never become citizens. The probabilities presented are calculated at Swedish mean values for the independent variables, with years since migration set at 10. Using longitudinal data the naturalization premium appears at first glance to be even more widespread than using the cross-sectional data. The only nationality which does not have a positive or neutral effect of naturalization is the USA.

This effect could still be one of selection, however. If the increased probability of obtaining employment is a function of increased opportunities available to citizens or the decreased effect of discrimination on naturalized immigrants then we should expect to see a similar effect of citizenship in a sample selected on the prospective knowledge that the individuals will eventually become citizens. If, however, the naturalization effect is simply the result of naturalization serving as a variable identifying unobservable selection characteristics, then the effect of citizenship on employment should be lower than in the full sample.

Table 4 shows the predicted probabilities for individuals in a sample restricted to those who at some point become citizens. This table shows that much of the naturalization effect noticeable in both the census data and an initial look at the longitudinal data is in fact a selection effect. When the sample is restricted to those who we know will become citizens the effect of naturalization becomes much smaller, and in roughly half of the cases actually becomes zero or *negative*.

Table 3. Estimated probability of being full-time employed in 1990 using longitudinal data. Calculated at Swedish means, YSM=10. Logit contingent on YSM≥5, ages 25-59*

	Men			Women		
	Non-Natura-lized	Natura-lized	"Naturali-zation Premium"	Non-Natura-lized	Natura-lized	"Naturali-zation Premium"
Chile	0.92	0.93	+0.01	0.91	0.92	+0.01
Czech	0.84	0.90	+0.06	0.82	0.88	+0.06
Denmark	0.95	0.97	+0.01	0.89	0.90	0.00
Ethiopia	0.77	0.86	+0.09	0.78	0.88	+0.10
Finland	0.94	0.94	0.00	0.93	0.93	0.00
Germany	0.93	0.95	+0.03	0.82	0.85	+0.03
Greece	0.81	0.81	0.00	0.73	0.69	-0.05
Iran	0.68	0.78	+0.09	0.58	0.72	+0.13
Iraq	0.69	0.78	+0.09	0.67	0.78	+0.11
Italy	0.89	0.92	+0.03	0.77	0.74	-0.03
Norway	0.93	0.94	+0.02	0.89	0.93	+0.04
Poland	0.88	0.91	+0.03	0.86	0.89	+0.03
Turkey	0.77	0.80	+0.04	0.66	0.71	+0.06
USA	0.73	0.70	-0.03	0.52	0.67	+0.15
Yugo.	0.91	0.94	+0.02	0.90	0.91	0.00

*Control for years since migration, years since migration squared, age, age squared, citizenship, educational level, year of measurement. Full regression results available upon request. YSM = Years since migration.
Source: SLI.

Table 4. Estimated probability of being full-time employed in 1990 using longitudinal data. Calculated at Swedish means, YSM=10. Logit contingent on YSM≥5 and Swedish citizenship at some point, ages 25-59*

	Men			Women		
	Non-Naturalized	Naturalized	"Naturalization Premium"	Non-Naturalized	Naturalized	"Naturalization Premium"
Chile	0.94	0.94	0.00	0.93	0.93	-0.01
Czech	0.88	0.92	+0.04	0.86	0.89	+0.03
Denmark	0.97	0.97	0.00	0.91	0.90	-0.02
Ethiopia	0.80	0.87	+0.07	0.86	0.92	+0.06
Finland	0.95	0.94	-0.01	0.94	0.92	-0.01
Germany	0.95	0.96	+0.01	0.90	0.88	-0.02
Greece	0.92	0.88	-0.04	0.89	0.80	-0.08
Iran	0.77	0.82	+0.05	0.67	0.76	+0.09
Iraq	0.74	0.80	+0.06	0.73	0.81	+0.08
Italy	0.94	0.92	-0.03	0.89	0.83	-0.06
Norway	0.98	0.98	-0.01	0.88	0.92	+0.04
Poland	0.92	0.92	0.00	0.90	0.91	0.00
Turkey	0.81	0.82	+0.01	0.65	0.68	+0.03
USA	0.89	0.73	-0.16	0.81	0.86	+0.05
Yugo.	0.94	0.94	+0.01	0.91	0.92	0.00

*Control for years since migration, years since migration squared, age, age squared, citizenship, educational level, year of measurement. Full regression results available upon request. YSM = Years since migration.
Source: SLI.

Effects of Citizenship on Earnings

Once employment has been secured, it is possible that a naturalization effect could also exhibit itself in earnings. The argument here is similar to the argument for a naturalization premium in employment. Jobs with higher wages or better career opportunities may be limited to citizens, or employers may choose to hire those who have demonstrated a desire to stay in the country. If this is so, then we should see a positive effect of citizenship on earnings. Table 5 shows the effects of citizenship on earnings in the 1990 census. Many nationalities exhibit earnings premiums of the magnitude of only a few percent, while others see large increases in income for those with citizenship.

Table 5. Effects of naturalization on income, ages 25-59, 1990, contingent on YSM≥5 and full-time employment

	Male	Female
Chile	0.07***	0.06**
Czech	0.27***	0.14**
Denmark	0.00	0.05***
Ethiopia	0.22***	0.14*
Finland	0.01***	-0.02***
Germany	0.04***	0.06***
Greece	0.05**	0.04
Iran	0.19***	0.43***
Iraq	0.08*	0.28**
Italy	0.03	-0.01
Norway	0.00	0.07***
Poland	0.15***	0.13***
Turkey	0.02	-0.04
USA	0.10**	-0.04
Yugo.	0.07***	0.00

Note: * - 10%, ** - 5%, *** - 1%. YSM = Years since migration.
Source: Swedish Census 1990.

Again we have the question of if these increases are actually due to citizenship itself, or to the fact that those who eventually become citizens are positively selected and, therefore, some other characteristic is driving the results. As with the examination of employment, longitudinal data is needed to answer this question.

Table 6 presents the results of a random effects generalized-least-squares regression using data from the SLI. The table presents the effect of naturalization on income for two different samples of men. The first sample consists of all men in Sweden more than 5 years, while the second sample is restricted to men who receive citizenship at some point between 1980 and 2001. The idea here is similar to the employment equations: to separate selection and citizenship effects. The difference between these two figures is also reported. Here we can see that the selection effect on wages seems somewhat ambiguous.

Table 6. Effects of naturalization on income, males, ages 25-59, 1980-2001, contingent on YSM≥5*

| | Men | | | Women | | |
	Total Sample	Naturalized Sometime	"Naturali-zation Premium"	Total Sample	Naturalized Sometime	"Naturali-zation Premium"
Chile	0.02	-0.01	-0.03	0.01	-0.01	-0.02
Czech	0.03	0.09	+0.06	0.08	0.09	+0.01
Denmark	0.00	0.03	+0.03	-0.03	-0.04	-0.01
Ethiopia	0.04	0.06	+0.02	0.03	0.02	-0.01
Finland	-0.01	-0.02	-0.01	0.00	0.00	0.00
Germany	-0.01	0.03	+0.04	0.03	0.04	+0.01
Greece	0.02	-0.02	-0.04	-0.06	-0.08	-0.02
Iran	0.02	0.02	0.00	0.02	0.02	0.00
Iraq	0.03	0.04	+0.01	0.01	0.00	-0.01
Italy	0.05	0.03	-0.02	0.04	0.04	0.00
Norway	-0.02	-0.04	-0.02	0.02	0.03	+0.01
Poland	0.01	0.01	0.00	0.01	0.00	-0.01
Turkey	-0.01	0.00	+0.01	0.00	0.00	0.00
USA	-0.08	-0.08	0.00	0.06	0.07	+0.01
Yugo.	0.01	0.00	-0.01	-0.02	-0.02	0.00

*Control for years since migration, years since migration squared, age, age squared, citizenship, educational level, year of measurement. Full regression results available upon request. YSM = Years since migration.
Source: SLI.

While the employment analysis showed a clear difference in predicted probabilities of employment between the full and restricted samples, the income analysis shows very little difference. To gain a further understanding of the effect on naturalization we calculate earnings profiles for individuals taking years since citizenship into account, following Bratsberg *et al* (2002). If citizenship itself is actually an important factor in income development then we should expect to see an upward shift in the slope of the earnings profile at the point of citizenship. Tables 7 and 8 present the percentage change in income from ages 25 to 45 in fixed prices for various standard individuals, having primary school education, being married, and entering Sweden at age 25. The calculations were then made with two variations. One where the individual received Swedish citizenship after 10 years in Sweden, and one where the individual did not receive Swedish citizenship. These calculations were carried out on the entire sample available in the SLI, and on a restricted sample conditioned on having received Swedish citizenship at some time between 1980 and 2001. To clarify, a

counterfactual probability is predicted for the restricted sample, showing their estimated earnings growth in the absence of naturalization.

Table 7. Percentage difference in income between ages 25-45. Estimated at becoming citizens at YSM=10 & Never Becoming Citizen. Males*

| | Pooled Sample, All Individuals | | | Restricted Sample, Become Citizens | | |
	Never Citizens	Citizens after 10 Years	Difference	Never Citizens	Citizens after 10 Years	Difference
Chile	1.22	1.35	0.14	1.26	1.31	0.05
Czech	1.54	1.55	0.01	1.60	1.56	-0.04
Denmark	1.26	1.18	-0.08	1.17	1.12	-0.05
Ethiopia	1.15	1.34	0.19	1.14	1.34	0.20
Finland	1.13	1.14	0.02	1.13	1.11	-0.02
Germany	1.42	1.36	-0.06	1.29	1.36	0.08
Greece	1.12	1.13	0.01	1.27	1.24	-0.03
Iran	1.20	1.81	0.61	1.25	1.85	0.60
Iraq	1.07	1.42	0.35	1.13	1.49	0.35
Italy	1.32	1.48	0.17	1.41	1.56	0.15
Norway	1.35	1.35	0.00	1.60	1.59	0.00
Poland	1.28	1.31	0.03	1.42	1.39	-0.03
Turkey	1.16	1.24	0.07	1.19	1.25	0.05
USA	1.50	1.63	0.13	1.63	1.79	0.16
Yugo.	1.09	1.13	0.05	1.07	1.13	0.06

*Control for years since migration, years since migration squared, age, age squared, citizenship, educational level, year of measurement. Full regression results available upon request. YSM = Years since migration.
Source: SLI.

Table 8. Percentage difference in income between ages 25-45. Estimated at becoming citizens at YSM=10 & Never Becoming Citizen. Females*

| | Pooled Sample, All Individuals | | | Restricted Sample, Become Citizens | | |
| | | Citizens | | | Citizens | |
	Never Citizens	after 10 Years	Difference	Never Citizens	after 10 Years	Difference
Chile	1.25	1.19	-0.06	1.33	1.15	-0.18
Czech	1.35	1.24	-0.10	1.57	1.24	-0.32
Denmark	1.20	0.83	-0.37	1.37	0.83	-0.54
Ethiopia	1.09	1.16	0.07	1.03	1.20	0.17
Finland	1.28	0.95	-0.33	1.28	0.92	-0.36
Germany	1.25	1.00	-0.25	1.24	1.02	-0.23
Greece	1.15	0.94	-0.21	1.25	1.05	-0.20
Iran	1.19	1.59	0.40	1.19	1.62	0.42
Iraq	1.14	1.24	0.10	1.15	1.27	0.11
Italy	1.16	1.28	0.12	1.19	1.25	0.07
Norway	1.28	0.91	-0.37	1.39	1.13	-0.26
Poland	1.31	1.10	-0.21	1.39	1.16	-0.23
Turkey	1.15	1.15	0.00	1.27	1.15	-0.11
USA	1.30	1.30	-0.01	0.72	1.44	0.72
Yugo.	1.19	1.00	-0.20	1.35	0.98	-0.37

*Control for years since migration, years since migration squared, age, age squared, citizenship, educational level, year of measurement. Full regression results available upon request. YSM = Years since migration.
Source: SLI.

The results in Tables 7 and 8 show somewhat more than those in the regressions using citizenship as a dummy. These tables can generally be interpreted in the following manner: if the percentage point difference reported for the pooled sample is negative, then there is a negative selection into citizenship. Negative selection in this respect means that individuals attaining citizenship after 10 years will on average have a slower income progression than those who never attain citizenship. The column showing the differences for the restricted sample then becomes important. If there is a negative effect of citizenship for the entire sample, how does this affect those who will eventually obtain citizenship? If this value is positive we can assume that for this negatively selected group, citizenship *does* seem to improve earnings. For the case where the difference is positive for the pooled sample, the effect in the restricted sample can give us some idea of the importance of citizenship versus selection. If the difference is lower in

the selected sample than in the pooled sample, we can assume that there *is* a naturalization premium, but that this effect is blurred with selection effects in the pooled sample.

An examination of the data is not easy. If one examines those nationalities with a positive effect of naturalization in the full sample, there appears to be a tendency for a lower effect in the restricted sample. This indicates that the citizenship "premium", while not non-existent, may not be as strong as suspected. This pattern is strongest for men, and it also appears that men have the most positive effect of naturalization, with 12 nationalities seeing positive or neutral effects in the full sample, and 10 in the restricted sample. Women appear to have a different pattern, with the majority of the nationalities showing negative effects in both samples. In addition, there tends to be a process whereby those nationalities exhibiting negative effects of nationality in the full sample show even greater negative effects when the sample is restricted to those who will eventually naturalize.

Conclusion: Selection or Citizenship Effect?

After examining the tables above, it is time to confront the actual question: Is there a naturalization premium the form of labour market advantages for immigrants who acquire Swedish citizenship? The answer from the above must be a resounding "maybe."

It seems that there really is no citizenship premium on obtaining employment. In fact, when eliminating some selection effects by restricting the sample to those who do actually naturalize at some point, we can see that the effects of citizenship are negligible or even negative in many cases. The effect of citizenship that turns up in cross-sectional data appears to be caused by characteristics inherent in the group which naturalizes, and not in the state of citizenship itself. This could be caused by aspiring citizens investing more in country-specific human capital with the intent of remaining in the country. This investment seems to pay off regardless of actual attainment of citizenship, however, which points against hypotheses which state that citizenship may be used as a device to signal intent to stay in the host country.

The fact that citizenship often shows a negative relationship to employment probability is something that requires future examination. The Swedish social system is constructed in such a manner that very few benefits require citizenship. Examples do exist, however, and they are often related to the ability to take Swedish benefits to another country. Certain portions of the Swedish pension system fell into this category during the examination period, as did disability insurance. It may be that the results in those countries exhibiting negative effects of citizenship are driven by

people desiring to take their benefits back to their home country. Speaking against this, however, is the fact that Sweden did not allow dual citizenship during this period, which could make return to the home country difficult. More research is needed on this topic, with emphasis on labour market status such as pension, sickness benefits, etc.

The study of income development following citizenship, on the other hand, shows that there is indeed some premium associated with naturalization. This premium is, however, generally small in terms of differential income development, with those who naturalize showing earnings growth of only a few percentage points higher than non-naturalized immigrants over a twenty-year period. In addition, this effect seems to be largely confined to male immigrants.

The final conclusion of this paper is that the naturalization "premium" is largely a question of selection on the part of the individual, not a question of rights to employment or differential discrimination based on citizenship. This is clear from the fact the effects of "citizenship" are evident even prior to the actual naturalization itself.

Going out on the policy implication limb, it seems that there are few incentives for the government to ease access to citizenship. Instead, indicators point to the need for increased access to training programs which provide the foreign-born with Swedish-specific human capital. This conclusion is in line with the results of most economic studies of immigrant integration in Sweden.

An American Narrative[1]

I was born in Saigon in 1968, the sixth of nine children. Before 1975, I can describe my life as a good life, because my father was in the army, and he [was] one of the high-ranking officers in the military… And my family can be described as middle-class income. So I didn't see much difficulty… we were very fortunate.

It became hard right after 1975 when the Communists took over, because my father [was taken] away to prison, what they called "re-education." And he passed away a year after…my family [has] to answer many questions to the government, and they wanted to isolate us to another, very wild, place. Also, with the way the Communists do it, especially for men, they wanted to destroy three generations.

I [finally] left Vietnam in 1986, December of 1986 [after 19 tries]. Spent about eight days on the boat. We ended up in Thailand. I stay[ed] at first in a coconut farm for about three months, waiting for the American Embassy to get involved. After the paperwork is done, they send us to one of the refugee camps. …I stayed there a little bit over a year. You go through all the interview process, and because my father was in the army for the American and Vietnamese Republics, the American Embassy took a look into my application. And fortunately I was passed with all five different interviews. And [they] promised me to come to the United States. But before you go to the United States, the Americans will transfer you to another refugee camp, which is in the Philippines for about six months.

We only meet with the INS at the end of the time. So they sit down, interview you, so they can figure out where you will be staying when you come to United States. I say, "I'm free. You know, my goal – the reason I left Vietnam—is for two reasons. First, for the freedom. I wanted to pursue freedom. And the second, important for me, is to continue with education." …they come back, and they tell me, "How about Boston?" I say in answer, "Any state. Wherever [I can] pursue my goals." And in March of 1988, I arrived to Logan Airport [in Boston].

…

By law, if you are [an] immigrant, you have to wait for five years to become a citizen. And I wait for every single day to become [one]. I mean, until five years. I became a citizen right away. It take me only three minutes to pass the test. Even though I studied for day and night to prepare for [the] hundred questions and learn about history. But most fortunately, because

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1 Adapted from an interview reported in Irene Bloemraad's *Becoming a Citizen: Incorporating Immigrants in the United States and Canada* (UC Press, 2006). With author's permission.