The Timing of Naturalization in the United States through 1996: The Experience of the Legal Immigrant Cohorts of 1977 and 1982¹

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Recent increases in the number of legal immigrants becoming U.S. citizens have sparked interest in whether changes are also occurring in naturalization rates. Increases in naturalization rates may reflect greater social and cultural integration among immigrants and affect future levels of immigration through the right of citizens to sponsor close relatives for admission. Relatively little information, however, is available on the propensity of immigrants to naturalize. Measures such as the proportion of the foreign-born population that is naturalized, commonly calculated from cross-sectional data, are not based on the population at risk to naturalize and therefore do not indicate the frequency at which immigrants are naturalizing.

The administrative records of the Immigration and Naturalization Service (INS) are the only source of national data on the naturalization of same-year admission or cohorts of legal immigrants. This study uses INS data to examine factors associated with the timing of the naturalization decision through 1996 of legal immigrants admitted to the U.S. in fiscal years 1977 and 1982. The naturalization experience of these cohorts, though incomplete, includes 19 years for the earlier and 14 years for the later group. By 1996, 51 percent of the 1977 cohort and 46 percent of the 1982 cohort had become U.S. citizens. The results will provide a baseline from which to compare the naturalization experiences of later immigrant cohorts.

CORRELATES OF TIMING

To naturalize, legal immigrants must meet a number of requirements. These include: having reached 18 years of age, having resided in the U.S. for at least 5 years (3 years for spouses of U.S. citizens and 4 years for

refugees), having knowledge of English, U.S. history and civics, and possessing good moral character. The benefits of naturalization include identity as an American as well as the right to sponsor close relatives for legal immigration, the right to vote and the right to work in certain jobs available only to U.S. citizens. Deterrents to naturalizing include the possible loss of foreign citizenship and the costs associated with the U.S. naturalization process — e.g., passing English language and other knowledge tests.

Immigrants who naturalize shortly after meeting the residency requirement are presumably more interested in becoming integrated into U.S. society and less attached to their country of origin than immigrants who wait longer or do not naturalize. Accordingly, immigrant characteristics expected to be associated with early naturalization include young age at immigration; English language fluency; high levels of educational attainment, occupational status, earnings and income; admission to the United States in refugee or asylee status; and coming from countries distant from the United States or with low per capita income. Conversely, the decision to naturalize late or not at all would be expected among immigrants who are less fluent in English, have lower levels of schooling and fewer job skills, or who do not want to relinquish their current citizenship.

² Refugees admitted under the Cuban Adjustment Act of 1966, including most refugees in the 1977 cohort, are estimated to have an admission date of 30 months prior to their actual date of admission which means they were eligible for naturalization in less than 3 years. Refugees admitted since the Refugee Act of 1980, including those in the 1982 cohort, are eligible to naturalize in 4 years because the one-year of residence spent prior to adjustment of status is counted toward the residency requirement.



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Jasso and Rosenzweig (1995) compared the timing of naturalization among certain immigrants admitted in 1977 based on marital status (married to U.S. citizens) and occupational skills. They found that the latter were more likely to have naturalized by 1990 than the former although the former were more likely to naturalize during the first five years after obtaining permanent resident status. These findings have limited applicability because the analysis was restricted to male immigrants from Eastern Hemisphere countries who were aged 21-59 when admitted in 1977 – less than 10 percent of all immigrants in that age range in 1977. By examining the propensity to naturalize across all categories of admission for two same-year immigrant cohorts and extending the naturalization time horizon to 1996, the results of this analysis should have greater generality.

DATA AND METHOD

Data were obtained from INS administrative records on 351,935 immigrants ages 16 and over in fiscal year 1977 and 447,854 in 1982. INS collects information each year on aliens who become legal immigrants and on legal immigrants who naturalize. Matching the immigrant and naturalization records for aliens granted legal permanent residence makes it possible to determine if an immigrant naturalized and if so, to calculate his or her duration in immigrant status. INS has updated the naturalization rates of the 1977 and 1982 cohorts every few years and published summary findings in the annual Statistical Yearbook.

For this study, personal and immigrant characteristics examined include: age at immigration, gender, marital status at immigration, region of birth, occupation at immigration, immigrant classification at admission, and the date of naturalization for those who became U.S. citizens. Country of origin characteristics include GNP per capita (Population Reference Bureau, 1978) and whether or not English was the official language (World Almanac, 1979–1984). INS does not collect data on socioeconomic characteristics, such as education or income, either at the time of immigration or naturalization.

The post-immigration period was divided into 5 segments (4 for the 1982 cohort). Each segment represents the difference between the year of naturalization and the year of admission to legal permanent residence:

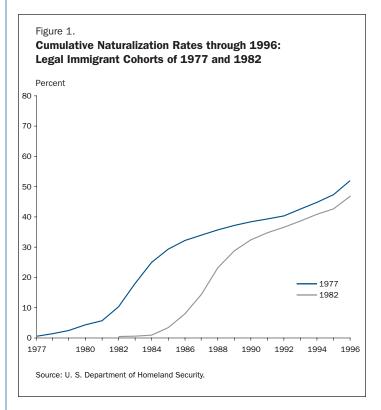
- 1) 5 years or less,
- 2) 6 to 10 years,
- 3) 11 to 15 years,
- 4) 16 or more years (1977 cohort only),
- 5) never naturalized (not naturalized by the end of 1996).

For each cohort, a multinomial logit model was used to estimate the effect of the personal, immigrant, and country of origin characteristics, all dummy variables except GNP per capita, on the odds of naturalizing within each post-immigration interval.³ Response categories included naturalizing: in 5 years or less compared to not naturalizing, in 6-10 years compared to not naturalizing, in 11-15 years compared to not naturalizing, and, for the 1977 cohort, in 16 or more years compared to not naturalizing.

FINDINGS

Overview

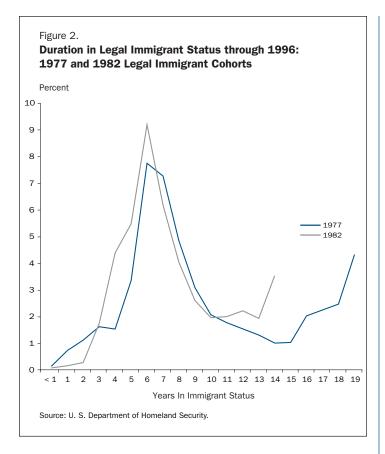
The cumulative naturalization rates for the 1977 and 1982 cohorts follow a similar pattern. About one-third of each cohort naturalized after ten years in immigrant status (see Figure 1). Many observers agree that the acceleration in naturalization rates during the 1990s is at least partly attributable to legislative efforts to reduce public benefits for legal immigrants.



The median duration in immigrant status in 1996 was 7 years for the 1977 cohort and 6 years for the 1982 cohort (see Figure 2). The slightly higher duration for the 1977 cohort may be due to its greater number of years of naturalization eligibility. The medians for both cohorts will rise until naturalizations eventually cease. Cumulative naturalization rates for each cohort are limited primarily by emigration. Annual estimates of emigration for immigrants in 1973 range from a low of 2 percent for Chinese to a high of nearly 17 percent for Colombians (Liang, 1994).

The distribution of personal characteristics by time spent in each post-immigration interval is generally similar for the two cohorts. The leading country of birth was Cuba (16 percent) for the 1977 cohort and Vietnam (11 percent) for the 1982 cohort. The second and third leading countries for both cohorts were the Philippines and Mexico (Tables 1 and 2). Family and employment preference

³The Cox proportional hazard model is an alternative procedure that can be used to estimate the timing of naturalization. A central assumption of this technique is that the ratio of the estimated hazard functions for two observations with particular values on the independent variables remain constant over time. Diagnostic testing, however, revealed that this assumption was violated for both cohorts covered by this analysis. For this reason, the multinomial logit model, which does not rely on a proportionality assumption, was preferred.



immigrants accounted for a greater proportion of the total in 1982 than 1977 (42 percent vs. 32 percent) probably because up until 1978 few preference visas were available for Western Hemisphere immigrants.

Multinomial Logit Estimates

Naturalized versus not naturalized. Consistent with expectations, the probability of having naturalized by 1996 was greatest among 1977 immigrants who were refugees, under age 45 at admission, born in Asian countries, and employed at the time of immigration, especially in professional, managerial, sales or clerical positions (Table 3). Refugees admitted in 1977 were nearly five times as likely to become citizens as were immediate relatives of U.S. citizens.

With few exceptions, similar patterns are observed for the 1982 immigrant cohort, thus suggesting some constancy across cohorts in factors associated with the naturalization decision (Table 4). Partly due to changes in the class of admission categories between 1977 and 1982, refugees in 1982 were only slightly more likely to naturalize than immigrants admitted under other categories. ⁴ And, European born immigrants (many from the former Soviet Union) were nearly as likely as Asians to naturalize.

Gender, marital status, and country of origin had little effect on the probability of naturalization for either cohort. However, 1982 immigrants born in countries where English was the official language were more likely to naturalize than immigrants from other countries. **Early versus late naturalization.** For each cohort, the selectivity associated with naturalization faded (odds ratios approach 1.00) as the post-immigration interval increased. This suggests that factors determined by the time of immigration – all the variables in this analysis--have less impact on the decision to naturalize than experiences in the U.S. when that decision occurs many years later. The 'fade' effect is also consistent with the view that legislative efforts to reduce public benefits for legal immigrants may have increased the naturalization rate of older immigrants.

For the most part, the factors associated with naturalization timing in this paper are similar for the two cohorts with odds-ratios in the expected direction. Age at immigration greatly increased the odds of naturalizing early. For both cohorts, immigrants ages 16–24 were more than 7 times as likely as immigrants ages 45 and over to naturalize within the first five years of immigration. Refugees were more likely to naturalize early than immigrants admitted under other categories. This effect was pronounced among the 1977 cohort. As noted, the results for the 1982 cohort are not entirely comparable because of changes in the composition of the admission categories. For both cohorts, immigrants born in Asian countries were three times as likely to naturalize within the first 10 years as North American born immigrants. The Asian effect is less noticeable for immigrants who naturalized later (after 10 years), many of whom were Mexican born.

Immigrants in professional, managerial, sales and clerical occupations were more than twice as likely to naturalize early relative to nonworkers as those employed in precision production, operative, laborer occupations, and service occupations. This presumably reflects the effects of higher education and income among the former than the latter.

The country of origin variables had smaller effects on naturalization timing. Immigrants from countries where English was the official language were more likely to naturalize than other immigrants up until the early 1990s (16 or more years duration for the 1977 cohort and 11-15 years for the 1982 cohort). GNP per capita had almost no effect but this may be partly attributable to its collinear relationship with English as the official language.

Gender and marital status generally had little impact on the timing of naturalization. Married immigrants in the 1977 cohort were more likely than other immigrants to naturalize early probably because many were spouses of U.S. citizens with a 3-year residency requirement.

CONCLUSIONS

This study examined factors affecting the timing of naturalization through 1996 for the legal immigrant cohorts of 1977 and 1982. The results indicate that immigrants in the late 1970s and early 1980s were most likely to naturalize, and naturalize early, if they were admitted as refugees, were young, and born in Asian countries. While these findings do not contradict those of Jasso and

⁴Most of 'other' in 1977 was allocated to employment and family preferences by 1982. This left 'other' as a very small category in 1982; close to one-half were foreign medical doctors of whom 85 percent had naturalized by 1996.

Rosenzweig (1995), they suggest that the employment versus family basis for admission for legal permanent residence is but one of many factors affecting naturalization propensities. Analysis of more recent immigrant cohorts will shed light on whether the current results hold despite compositional shifts in the legal immigrant population toward aliens of Mexican origin. The fact that the odds of naturalizing for factors included in this study faded as time in the post-immigration period increased clearly points to the need for additional data on the U.S. portion of immigrant experience to more fully explain the decision to naturalize.

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Table 1.

Characteristics of 1977 Legal Immigrant Cohort by Timing of Naturalization through 1996

	Naturalized-years in immigrant status				Not		
Characteristic at immigration	5 or less	6 to 10	11 to 1 5	16 or more	Total	naturalized	Total
Total	29,315	87,541	22,973	39,998	179,827	172,108	351,935
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Age							
18 to 24 years	31.3	31.3	34.4	20.6	29.3	23.9	26.7
25 to 34 years	35.8	39.9	36.8	25.9	35.7	30.1	33.0
35 to 44 years	17.3	15.5	15.1	21.9	17.2	14.2	15.7
45 to 54 years	9.4	7.6	8.7	18.4	10.4	10.1	10.3
55 to 64 years	4.0	4.2	3.8	9.9	5.4	9.9	7.6
65 years and over	2.2	1.5	1.1	3.3	2.0	11.9	6.8
Gender							
Female	55.0	52.2	53.2	59.4	54.4	54.2	54.3
Male	45.0	47.8	46.8	40.6	45.6	45.8	45.7
Country of birth							
Vietnam	38.1	7.6	12.7	33.1	18.9	13.4	16.2
Philippines	12.4	15.7	8.8	2.8	11.4	6.5	9.0
Mexico	1.3	3.6	6.9	10.0	5.1	12.7	8.8
Korea	7.9	8.4	5.0	4.1	6.9	4.3	5.6
India	3.0	6.4	5.5	4.3	5.2	3.2	4.3
Other	37.2	58.3	61.1	45.7	52.4	60.0	56.1
Class of admission							
Employment preference	4.6	8.6	5.0	3.0	6.2	3.7	5.0
Family preference	14.2	40.9	30.5	19.2	30.4	23.1	26.8
Immediate relative of USC ¹	33.2	18.1	22.2	16.8	20.8	31.5	26.0
Refugee/Asylee	40.7	11.6	14.8	33.8	21.7	14.5	18.1
Other	7.3	20.9	27.4	27.2	20.9	27.1	24.0
Occupation							
Executives, managers	5.2	6.8	5.9	4.2	5.8	5.5	5.7
Professionals	9.7	11.7	8.5	5.3	9.6	6.5	8.1
Technical support workers	4.4	6.0	3.7	2.1	4.6	2.5	3.5
Sales workers	2.3	1.6	1.6	1.4	1.7	1.5	1.6
Administrative support	8.7	7.3	6.6	4.8	6.9	4.6	5.8
Precision production	4.9	5.7	6.3	6.8	5.9	6.2	6.0
Operatives, laborers	13.4	10.3	13.2	20.2	13.4	13.0	13.2
Service workers	5.8	6.9	7.9	8.1	7.1	7.1	7.1
Nonworkers	41.8	40.5	43.4	43.4	41.7	48.5	45.1
Farming, forestry, fisheries	0.8	1.3	1.3	1.3	1.2	3.1	2.1
Missing/Unknown	3.0	1.8	1.6	2.3	2.1	1.5	1.8

⁻ Figure rounds to 0.0.

¹ U.S. citizens

Source: U.S. Department of Homeland Security.

Table 2. Characteristics of 1982 Legal Immigrant Cohort by Timing of Naturalization through 1996

	Naturalized-years in immigrant status					
Characteristic at immigration	5 or less	6 to 10	11 to 15	Total	Not naturalized	Total
Total	53,524	106,680	44,234	204,438	243,146	447,584
Percent	100.0	100.0	100.0	100.0	100.0	100.0
Age						
16 to 24 years	35.7	34.4	31.6	34.1	26.9	30.2
25 to 34 years	41.0	39.9	36.0	39.4	31.5	35.1
35 to 44 years	13.7	14.7	16.0	14.7	15.6	15.2
45 to 54 years	5.5	6.4	9.4	6.8	9.6	8.3
55 to 64 years	2.9	3.5	5.3	3.7	8.4	6.3
65 years and over	1.2	1.1	1.7	1.3	8.0	4.9
Gender						
Female	45.7	46.4	50.1	47.0	49.3	48.2
Male	51.9	49.3	46.4	49.4	46.5	47.8
Missing	2.5	4.2	3.5	3.6	4.2	3.9
Country of birth						
Vietnam	28.5	11.9	13.6	16.6	6.5	11.1
Mexico	2.1	3.2	7.9	3.9	13.9	9.4
Philippines	12.4	13.6	4.7	11.4	5.3	8.0
China	4.6	8.2	3.8	6.3	4.3	5.2
Korea	4.1	5.0	4.0	4.5	5.6	5.1
Other	48.3	58.2	66.0	57.3	64.3	61.1
Class of admission						
Employment preference	4.7	12.9	8.7	9.9	7.9	8.8
Family preference	12.7	42.7	36.7	33.6	33.2	33.4
Immediate relative of USC ¹	30.5	22.5	23.7	24.9	39.2	32.7
Refugee/Asylee	51.1	19.9	29.6	30.2	18.2	23.6
Other	0.9	2.0	1.3	1.6	1.4	1.5
Occupation						
Executives, managers	3.1	5.1	3.7	4.3	4.6	4.4
Professionals	10.9	12.5	7.5	11.0	6.8	8.7
Technical support workers	2.4	1.7	1.1	1.7	0.9	1.3
Sales workers	1.2	1.3	1.2	1.3	1.2	1.2
Administrative support	5.3	5.5	4.8	5.3	4.2	4.7
Precision production	4.4	4.1	4.9	4.3	4.8	4.6
Operatives, laborers	9.2	8.5	12.0	9.5	12.4	11.1
Service workers	6.1	6.6	7.3	6.6	6.7	6.7
Nonworkers	49.9	45.7	49.7	47.6	49.0	48.4
Farming, forestry, fisheries	1.5	2.5	2.0	2.1	3.2	2.7
Missing/Unknown	6.0	6.5	6.0	6.3	6.2	6.2

⁻ Figure rounds to 0.0.

Source: U.S. Department of Homeland Security.

Table 3.

Multinomial Logit Estimates of Timing of Naturalization through 1996 for 1977 Legal Immigrant Cohort

	Odds Ratios							
Characteristic at immigration ¹	Naturalized 0-20 years vs. not naturalized	Naturalized in 0-5 years vs. not naturalized	Naturalized in 6-10 years vs. not naturalized	Naturalized in 11-15 years vs. not naturalized	Naturalized in 16 years or more vs. not naturalized			
Age		'						
16 to 24 years	3.16	6.46	3.92	4.19	1.26			
25 to 34 years	2.51	5.03	3.03	3.02	1.15			
35 to 44 years	2.18	3.38	2.34	2.41	1.59			
45 years and over								
Class of admission								
Refugee	4.81	8.33	4.35	2.68	3.66			
Employment preference	1.64	0.59	2.16	1.43	1.66			
Family preference	1.44	0.37	1.89	1.46	1.65			
Other	1.34	0.33	1.80	1.40	1.49			
Immediate relative of USC ²								
Region of birth								
Asia	2.42	3.54	4.14	1.56	0.83			
Europe	1.12	1.04	1.96	0.98	0.48			
Other	1.65	1.56	2.15	1.60	1.20			
North America								
Gender								
Male	0.82	0.86	0.88	0.89	0.67			
Female								
Marital Status								
Married	1.21	1.53	1.16	1.12	1.24			
Other								
Occupation								
Professionals, managers	1.70	2.09	1.84	1.55	1.22			
Sales, clerical	1.65	2.14	1.76	1.48	1.27			
Production, operatives, laborers	1.34	1.17	1.31	1.25	1.52			
Service	1.44	1.32	1.53	1.42	1.41			
Nonworkers, unknown								
Country of origin								
GNP/capita ³	<1.00	<1.00	<1.00	<1.00	<1.00			
English official language	1.27	1.27	1.47	1.40	0.80			
Number of cases								
Naturalized	178,187	29,091	86,754	22,594	39,613			
Not naturalized	169,786	169,786	169,786	169,786	169,786			

 $^{^{\}mbox{\tiny 1}}$ Reference categories shown in italics.

Note: The bar denotes two separate analyses, one for ever vs. never naturalized immigrants and the other for early to late naturalized vs. never naturalized immigrants. All odds-ratios are significant at the .001 level.

² U.S. citizen.

 $^{^{\}rm 3}\,\text{Odds-ratios}$ round to 1.00.

Table 4.

Multinomial Logit Estimates of Timing of Naturalization through 1996 for 1982 Legal Immigrant Cohort

	Odds Ratios						
Characteristic at immigration ¹	Naturalized in 0-15 vs. not naturalized	Naturalized in 1-5 years vs. not naturalized	Naturalized in 6-10 years vs. not naturalized	Naturalized in 11-15 years vs. not naturalized			
Age							
16 to 24 years	3.65	5.73	3.99	2.01			
25 to 34 years	3.11	5.02	3.24	1.84			
35 to 44 years	2.09	3.04	2.11	1.46			
45 years and over							
Class of admission							
Refugee	1.68	1.89	1.11	2.56			
Employment preference	1.57	0.47	2.28	1.81			
Family preference	1.19	0.33	1.61	1.55			
Other	1.60	0.68	2.22	1.47			
Immediate relative of USC ²							
Region of birth							
Asia	2.70	5.27	3.54	1.02			
Europe	2.39	7.23	2.25	0.94			
Other	2.02	2.39	2.35	1.49			
North America							
Gender							
Male	0.96	0.97	1.00	0.87			
Female							
Marital Status							
Married	1.09	1.04	1.07	1.17			
Other							
Occupation							
Professionals, managers	1.70	2.49	1.61	1.24			
Sales, clerical	1.54	2.11	1.49	1.19			
Production, operatives, laborers	1.04	1.10	1.00	1.03			
Service	1.27	1.31	1.29	1.17			
Nonworkers, unknown							
Country of origin							
GNP/capita ³	<1.00	<1.00	<1.00	<1.00			
English official language	1.40	1.42	1.49	1.12			
Number of cases							
Naturalized	201,370	53,065	104,900	43,226			
Not naturalized	233,912	233,912	233,912	233,912			

¹ Reference categories in italics.

Note: The bar denotes two separate analyses, one for ever vs. never naturalized immigrants and the other for early to late naturalized vs. never naturalized immigrants. All odds-ratios are significant at the .001 level.

² U.S. citizen.

³ Odds-ratios round to 1.00.