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The Persistence of Self-Employment Across Borders: New Evidence on Legal Immigrants to the United States

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Abstract

Using recently-available data from the New Immigrant Survey, we find that previous self-employment experience in an immigrant's country of origin is an important determinant of self-employment status in the U.S., increasing the probability of being self-employed by about 7 percent relative to an unconditional self-employment probability of about 10 percent. This effect is statistically significant and quantitatively important, being equivalent to at least 7 years of U.S.-based education. Our results improve on the previous literature by measuring home-country self-employment directly rather than relying on proxy measures.

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1. Introduction

Driven in part by the observation that self-employment rates among immigrants are higher than those of natives, a variety of recent studies examine the determinants of self-employment among immigrants (Borjas 1986, Fairlie and Meyer 1996, Lofstrom 2002). Policymakers have also become interested in self-employment, because it is perceived to be an important avenue out of poverty and unemployment. The existing empirical evidence suggests that individual characteristics such as education, age, wealth holdings, family structure, and years since migration are important in explaining the decision to enter into self-employment among immigrants.[1]

While these characteristics are relevant to the decision to enter into self-employment they do not include one of its potentially most important determinants: self-employment experience in the home country prior to migrating. This is a notable omission because previous experience in self-employment is likely to increase entrepreneurial skills, enhancing future productivity in running a business. In addition, past self-employment experience may also reduce start-up costs as immigrants may be more efficient in starting up a business and have better access to credit networks or other assets.

In this paper we investigate the relationship between home- and host-country self-employment among the foreign-born who are legal permanent residents of the U.S. Using the New Immigrant Survey (NIS), we provide evidence on the effect of self-employment prior to migrating to the U.S. on the probability to be self-employed in the U.S. Given the data available to us in the NIS, we are able to distinguish between the effect of specific self-employment human capital from general human capital acquired in the U.S. and the country of origin.

Our main contribution in this research is that we are able to provide direct evidence on the importance of pre-migration characteristics in determining employment choices in the U.S., and in particular, self-employment for immigrants. Standard datasets like the Current Population Survey or the U.S. Census can only provide demographic characteristics (age, education, family structure) for immigrants while they are in the destination country. These demographic characteristics cannot realistically be used as proxies, however, for pre-migration experiences or pre-migration employment decisions of immigrants. We examine the effect of pre-migration characteristics such as individual self-employment experience and home country educational attainment on the decision to be self-employed in the U.S.

Past self-employment experience for immigrants has been addressed only indirectly by estimating models using the average self-employment rate in the country of origin. Immigrants who come from countries with relatively large self-employed sectors, and thus are more likely to have been self-employed in their country of origin, are hypothesized to exhibit higher probabilities of being self-employed in the host country. These analyses, however, are based only on a proxy of individual self-employment experience (average country self-employment rates) and have produced mixed results: Yuengert (1995) finds a positive effect, while Fairlie and Meyer (1996) find no effect.

Previous researchers have only been able to investigate the effect of an individual's previous self-employment experience over time for non-migrants in the U.S. For example, Evans and Leighton (1989) provide evidence of a positive effect of previous self-employment

[1] Research into the determinants of entrepreneurship emphasizes borrowing constraints (Evans and Jovanovic 1989, Hurst and Lusardi 2004), human capital (Lazear 2004), and family structure (Blanchflower and Meyer 1994, Bates 1995).

experience on the probability of entering in self-employment for white males in the National Longitudinal Study of Youth (NLSY). They also find that the return to self-employment experience is higher than the return to paid employment experience for those who are currently self-employed. This might be interpreted as a productivity effect of self-employment experience although entrepreneurial abilities are unmeasured in this data and selection might be an important confounding factor. Fairlie and Robb (2006) amplify this finding, and estimate that it is work experience in a family business and not the existence of a family business itself that has a large effect on the subsequent probability of and returns to self-employment outcomes.

Our findings suggest that self-employment experience in the home country (measured directly) increases the probability of being currently self-employed in the U.S. by about 7 percent, relative to an unconditional self-employment probability of about 10 percent. This effect is statistically significant and quantitatively important, being equivalent to at least 7 years of U.S.-based education.

2. Data

Our data are drawn from the 2003 wave of the New Immigrant Survey (NIS), for which the sample frame was the population of individuals granted legal permanent residence in the U.S. in 2003. A subsequent wave of data collection already underway will create a longitudinal dataset providing information on the changes that have occurred in new immigrant households over the course of the four years since the previous survey.[2]

The NIS sample contains information on adults who were the primary recipient of a "green card," a visa permitting permanent legal residence in the U.S.[3] The primary advantage of using the NIS is that the data provide detailed information on employment status of respondents pre- and post-migration, i.e. in the home country and in the U.S. Using this information, we construct variables that indicate whether the individuals were ever self-employed in their home country as well as whether they are currently self-employed in the U.S.[4] We restrict our analysis to the population of adult men who are not currently enrolled in school and who had employment experience in the home country or who are currently employed in the U.S.[5] We also omit individuals who have employment-based visas, which require sponsorship by a U.S. employer. Individuals entering the U.S. with an employment-based visa do not therefore have the (short-term) option of self-employment in the U.S. After omitting observations with missing values on the variables in the analysis, we are left with a sample of 1,129 observations.

In Table 1 we present means and distributions of these main variables. The first column reports the share of individuals who were ever self-employed in the home country while the

[2] The data are publicly available at http://nis.princeton.edu.

[3] The dataset also contains a separate sample for child immigrants as well as the spouses of the new legal immigrants.

[4] To identify whether individuals were self-employed in the home country, we rely primarily on questions B32 and B52 in the NIS data set. These questions ask "Were you self-employed or working for someone else at that time?" In order to identify whether an individual is currently self-employed, we rely upon question C22; this question asks "Are you self-employed or working for someone else at this job?"

[5] We do not omit individuals who are taking English language classes.

Table 1
Self-Employment in Home Country and in the U.S. by Individual Characteristics

Characteristic	Share Ever Self-Employed in Home County	Share Currently Self-Employed in the United States	Share of Sample (within characteristic)	*N*
All	0.209	0.105	1.000	1129
Age				
28 and younger	0.147	0.048	0.205	231
29-38	0.183	0.090	0.362	409
39-48	0.231	0.107	0.257	290
49-58	0.274	0.171	0.145	164
59 and older	0.429	0.314	0.031	35
Years since left home country				
Less than 10 years	0.187	0.056	0.648	732
10 years and more	0.249	0.194	0.352	397
Visa Status				
Adjustee	0.200	0.159	0.492	555
New immigrants	0.218	0.052	0.508	574
Visa Type				
Family	0.225	0.141	0.327	369
Diversity	0.169	0.054	0.314	354
Refugee	0.220	0.135	0.125	141
Other	0.234	0.106	0.235	265
Education in Home Country				
Less than 12 years in home country	0.271	0.102	0.373	421
12 years in home country	0.234	0.122	0.167	188
More than 12 years in home country	0.150	0.100	0.461	520
Education in the US				
Any	0.134	0.143	0.105	119
None	0.218	0.100	0.895	1010
Region of Birth				
Philippines and Asia	0.206	0.118	0.090	102
Europe, Canada and Oceania	0.155	0.136	0.234	264
Mexico	0.199	0.170	0.125	141
China	0.227	0.023	0.039	44
India	0.311	0.067	0.040	45
Latin America and Caribbean	0.246	0.103	0.267	301
Africa	0.209	0.037	0.119	134
Mideast and North Africa	0.204	0.061	0.087	98
Marital Status				
Married or with partner	0.222	0.122	0.765	864
Single	0.166	0.049	0.235	265
Children				
Any children under 18 in household	0.237	0.109	0.512	578
No children under 18 in household	0.180	0.100	0.488	551
English Language Abilities				
Any English Language Ability	0.157	0.118	0.434	490
No English Language Ability	0.249	0.094	0.566	639

Source: Authors' calculations from the New Immigrant Survey
Note: Sample size is 1,129. We restrict the analysis to men and individuals appear once in home country columns and once in United States columns. All characteristics are measured as of the survey date.

second column shows the share of observations that are self-employed in the U.S. at the time of the survey. The third column presents the overall share of the total number of observations (within categories, e.g. age) and the fourth column provides the number of observations with that characteristic. Overall, we find that about 20 percent of our sample had some self-employment experience in their home countries, while about 10 percent are currently self-employed in the U.S.

We find that self-employment both at home and in the U.S. increases monotonically with age, although the older age cohorts are a smaller share of the data, so that absolute number engaged in self-employment is dominated by the three youngest age cohorts. We find that time since left home country is monotonically increasing in self-employment in the home country and in the U.S. In fact, men who have left their home country for 10 years or longer are nearly four times more likely to be self-employed in the U.S.

As is true with the full sample of NIS data, Table 1 indicates that our sample is roughly equally divided between immigrants adjusting their status from a temporary to a permanent visa and new entrants to the U.S. New immigrants are slightly more likely to be self-employed in their home countries, but are one-third as likely to be self-employed in the U.S., most likely due to having spent less time in the U.S. There are relatively small differences in self-employment incidence across different visa types, with the exception of diversity admissions, who are less likely to be self-employed.[6] This persists in the U.S. as well, where diversity immigrants are less than half as likely as other green card recipients to be self-employed.

As with self-employment status, the NIS allows us to distinguish between education obtained in the home country and in the U.S. We find that educational attainment in the home country is negatively related to self-employment in the home country, while the incidence of self-employment in the U.S. is essentially the same across different home-country education groups. Almost half of the immigrant group in our sample has more than 12 years worth of education in the home country, however. Very few immigrants (10 percent) have any education in the U.S., likely due to the short amount of time they have spent in the U.S., on average, as well as our omitting individuals who are currently attending school from the sample. Those that do have some U.S.-based education, however, are more likely to be self-employed in the U.S. than in the home country.

We also find substantial variation in the incidence of self-employment across regions of birth. Individuals from India were most likely to be self-employed before coming to the U.S. Once arriving in the U.S., however, they are substantially less likely to be self-employed than individuals from Europe, Canada and Oceania, or Mexico. Individuals from China also have a relatively high degree of self-employment prior to migrating, but a very low incidence in the U.S., although this is based on a relatively small number of individuals in the sample.

In terms of household characteristics, over three fourths of our sample is currently married. Among married men there is a somewhat greater than average incidence of self-employment in both the home country and the U.S. Single individuals, however, are substantially less likely to be self-employed in the U.S. Households with children had a higher probability of being self-employed in the home country, but the incidence of self-employment in the U.S. is exactly the same for households with and without children.

Our focus in this paper is on the relationship between self-employment in the home country and self-employment in the U.S. Table 2 provides descriptive evidence on this

[6] See Jaeger (2007) for a detailed description of the different visa types as well as the process by which individuals obtain these visas.

relationship through a transition matrix.[7] This matrix indicates that the people who are currently self-employed in the U.S. tend to be disproportionately drawn from those with self-employment experience in the home country. Seventeen percent of individuals with home-country self-employment experience are self-employed in the U.S., as compared to only 8 percent among those who worked only in paid employment in the home country. A strong persistence is also observed within paid employment with ninety percent of those individuals who were only in paid employment in the home country being currently in paid employment in the U.S.[8] We can easily reject the null hypothesis that the choice of self-employment versus paid employment in the home country and in the U.S. are independent of one another.

Table 2

Persistence of Employment Status between Home Country and the United States

	Current Employment Status in the U.S.		
Employment Status in Home Country	**Paid Employment**	**Self employment**	**Total**
Only paid employment	816	77	893
(row percentage)	91.38	8.62	100
(column percentage)	80.71	65.25	79.1
Ever self-employed	195	41	236
(row percentage)	82.63	17.37	100
(column percentage)	19.29	34.75	20.9
Total	1,011	118	1,129
(row percentage)	89.55	10.45	100
(column percentage)	100	100	100

Source: Authors' calculations from the New Immigrant Survey

Note: Pearson's χ^2 for independence of rows and columns is 15.27 (*p*-value of < 0.0001).

3. The Effect of Home-Country Self-Employment on the Current U.S. Self-Employment

We focus our attention on the determinants of individuals entering self-employment versus paid employment, with particular attention paid to the effect of self-employment in the

[7] As noted previously, we omit individuals who were out of the labor force in the home country or in the U.S.

[8] Since Heckman (1981) it has been well known that this type of persistence in the labor market outcomes over time can be due to true state dependence, with past choices affecting future choices due to the experience of being in the state (e.g. entrepreneurial human capital), or due to correlation of unobserved traits such as preferences. With cross-section data it is not possible to distinguish between these two different factors.

home country. This provides direct evidence on the extent to which past self-employment experience of immigrants determines the employment choice in the U.S. A positive correlation between self-employment in the home country and in the U.S. is consistent with the hypothesis that home-country self-employment provides "entrepreneurial human capital" and thus workers possessing such human capital will have a comparative advantage in self-employment.

In Table 3 we present the marginal effects and standard errors from probit regressions of current employment status in the U.S. (1=self-employed, 0=paid employment). In the first column the only regressors are an indicator variable for whether individuals had self-employment experience in their home country and their ability in English language. Not surprisingly, this regression confirms the results in Table 2 that individuals who have home-country self-employment experience are more likely to be self-employed currently in the U.S. Relative to the unconditional probability of being self-employed in the U.S. of about 0.10, home country self-employment has a very substantial effect on U.S. self-employment of about 0.093.

In column 2 we add to the base specification demographic characteristics: age, education, marital status, children, and household size. We find a strong relationship between age and self-employment in the U.S., with individuals who are age 59 or older being nearly 29 percent more likely to be self-employed than individuals who are 28 or younger. This age pattern is consistent with evidence of rising self-employment rates at the end of the labor market career, which might reflect higher rates of retirement out of wage and salary work compared to self-employment as well as transitions to self-employment at older ages (Zissimopoulos and Karoly, 2007) Individuals who are married are also significantly more likely to be self-employed than to work in the wage sector. We find no effect of education in the US on immigrants' self-employment probabilities. With the inclusion of these characteristics, however, the coefficient on self-employment in the home country remains statistically significant, with its magnitude relatively unchanged at 0.070.

In the last column of Table 3 we add to the specification in column (2) variables relating to the immigrant's time since left the home country, region of birth, and the process by which they came to the U.S. Unfortunately, the publicly-available NIS data only identify countries-of-birth that have sufficiently large numbers of observations in order to preserve confidentiality. We nevertheless find some differences across countries-of-birth, with Chinese immigrants being the least likely to be self-employed and "Western" immigrants (those from Europe, Canada, and Oceania) being the most likely to be self-employed. Inclusion of the country-of-birth variables substantially reduces the coefficients on education in the U.S., however, with both education variables now being insignificant, but of similar magnitude.[9] More important, perhaps, is the amount of time spent in the U.S., measured both directly (as "years since left home country") and also by the dummy variable indicating that an individual was adjusting his status from a temporary visa. Both of these variables strongly indicate that the longer an immigrant is in the U.S., the more likely he is to become self-employed. For each decade away from the home country, the probability of being self-employed increases by 3 percent. Adjustees, who are primarily changing their status from temporary employment and student visas, are significantly

[9] Evans and Leighton (1989) find a similar result when looking exclusively at natives in the NLSY data. In their study, the coefficients on education become insignificant in their results once they add in previous self-employment experience; see Table 4 in their paper. Previous self-employment experience, as in our study, is a very large and statistically significant determinant of current self-employment.

Table 3
Determinants of Immigrants' Self Employment in the United States

	(1)		(2)		(3)	
	Marg. Eff.	**Std. Err.**	**Marg. Eff.**	**Std. Err.**	**Marg. Eff.**	**Std. Err.**
Ever self-employed in the home country	0.093	0.027	0.070	0.025	0.076	0.025
Any English Language Ability	0.032	0.019	0.047	0.020	0.027	0.018
Age						
28 and younger			*reference*			
29-38			0.041	0.030	0.023	0.025
39-48			0.066	0.037	0.038	0.031
49-58			0.133	0.050	0.074	0.041
59 and older			0.290	0.101	0.216	0.099
Education						
Years in home country			-0.002	0.002	0.002	0.002
Years in U.S.			0.006	0.006	0.000	0.006
Married or with partner			0.057	0.019	0.026	0.019
Children in household younger than 18			-0.005	0.019	-0.005	0.017
Household size			-0.006	0.005	-0.001	0.005
Years since left home country					0.003	0.001
Adjustee					0.066	0.023
Visa Type						
Family					*reference*	
Diversity					-0.013	0.024
Refugee					-0.023	0.020
Other					-0.022	0.017
Region of Birth						
Philippines and Asia					*reference*	
Europe, Canada and Oceania					0.021	0.030
China					-0.058	0.016
India					-0.051	0.018
Latin America and Caribbean					-0.027	0.023
Africa					-0.059	0.016
Mideast and North Africa					-0.049	0.017
Mexico					0.007	0.033
Log-likelihood	-369.730		-351.100		-315.836	

Source: Authors' calculations from the New Immigrant Survey
Note: Dependent variable is self-employed in current job in the U.S. (mean=0.104).
Entries in table are marginal effects and standard errors from probit estimation, evaluated at sample means.
Sample size is 1,129.

more likely to be self-employed than new immigrants.[10] These results suggest that self-employment is *not* used primarily as a transitional state upon entry. This is intuitive as the sample consists of legal immigrants who are less likely to face barriers to enter in paid employment as may be the case for illegal immigrants.[11] Lastly, we find that self-employment in the home country continues to increase the probability of being self-employed in the U.S. by about 7.6 percent, even when controlling for demographics and entry conditions.

Table 4 presents a similar analysis using two alternative measures of self-employment in the US. In Panel A, we use self-employed in the first job in the US as the dependent variable and report only the estimated coefficient on ever self-employed in the home country. Across all three specifications, the coefficients are all statistically significant at the 5% level. In Panel B, we regress ever self-employed in the US on the same set of covariates as in the previous panel. We report the estimated coefficient on ever self-employed in the home country in all three regressions. It should be noted that the dependent variable here is inclusive of any individuals who were self-employed in the first job in the US, current job in the US or self-employed in the past 12 months in the US. The estimated coefficients in Panel B are much larger in absolute magnitude than in Table 3 or Panel A of this table. The result indicates that any previous experience in self-employment in the home country increases the marginal probability of self-employment in the US by about 27%.

We have also estimated these models using self-employment rates in the country of origin as a regressor.[12] It is possible that different countries have varying cultures regarding self-employment, and that this would affect self-employment probabilities in the U.S. These results are available in Appendix Table 2. We find that home-region self-employment rates have a large *negative* effect on current U.S. self-employment, which is robust to the inclusion of both demographic and visa-type controls. This finding is in contrast to Yuengert (1995) who finds a positive effect and to Fairlie and Meyer (1996) who find no effect. There are several possible explanations for these differences. First, our samples are substantially different – we have only legal immigrants who received their green cards in fiscal year 2003. Thus, our sample does not include illegal immigrants (as the other studies likely do) and is also constrained in terms of entry cohorts. Second, our measure of home-country self-employment rates is from groups of countries rather than individual countries (with the exceptions of China, India, Mexico). Thus, we are wary of placing too much emphasis on these results. From our perspective what is important is that inclusion of the region level variables does not affect the magnitude or statistical significance of the individual-level home-country self-employment. Our data provide

[10]In Appendix Table 1 we present results where we estimate the models separately for new immigrants and adjustees, allowing the coefficients on all of the covariates to vary between groups. For both groups we continue to find that self-employment in the home country is a statistically significant determinant of current U.S. self-employment. The estimated coefficients are also similar (0.076 for new immigrants and 0.059 for adjustees).

[11] For example, using the Survey of Income and Program Participation, which almost certainly includes illegal immigrants, Georgarakos and Tatsiramos (2009) find that self-employment is used as a stepping stone from unemployment or inactivity to paid employment.

[12]These data come primarily from the International Labor Organization (ILO) web page on labor statistics, http://laborsta.ilo.org/, which contains information on total employment by labor force status for the years 1995-2000. Additional data for missing countries not contained in the ILO data were obtained from the Chinese National Statistics web page, Sletten and Egset (2004), Pagan (2002) for Guatemala, Kenyan Labor Force Survey, Pisani and Pagan (2004) for Nicaragua, Loxley and Jamal (1999) for Guyana, and the National Sample Survey for India 61st Panel.

direct evidence on the individual effect of an immigrant's self-employment experience without relying on proxy variables that have yielded mixed results in the past.

Table 4
Determinants of Immigrants' Self Employment in the United States
Using First Job or Ever Self-Employed in US

	(1)		(2)		(3)	
	Marg. Eff.	**Std. Err.**	**Marg. Eff.**	**Std. Err.**	**Marg. Eff.**	**Std. Err.**
A. Dependent Variable: Self-Employed in First Job in the U.S. (Mean=0.048)						
Ever self-employed in the home country	0.053	0.021	0.045	0.020	0.039	0.016
Log-likelihood	-201.439		-184.117		-156.797	
B Dependent Variable: Ever Self-Employed in the U.S. (Mean=0.202)						
Ever self-employed in the home country	0.271	0.035	0.251	0.036	0.265	0.037
Log-likelihood	-531.259		-513.120		-492.609	
Control Variables						
Any English Language Ability	**x**		**x**		**x**	
Age, Education, Household Variables			**x**		**x**	
Visa Type, Region of Birth					**x**	

Source: Authors' calculations from the New Immigrant Survey
Note: Entries in table are marginal effects and standard errors from probit estimation, evaluated at sample means. Sample size is 1,028 in Panel A and 1,129 in Panel B. The dependent variable in Panel B includes first job in US, current job in US and last 12 months.

4. Conclusion

Using recently-available data from the New Immigrant Survey, we find that previous self-employment experience in an immigrant's country of origin is an important determinant of

their self-employment status in the U.S. Our results improve on the previous literature by measuring home-country self-employment *directly* rather than relying on proxy measures.

We also find that self-employment in the U.S. is substantially greater for immigrants who have been away from their home country for some period of time as well as for individuals who are adjusting their status from a temporary visa to a permanent visa. Both of these results suggest that self-employment is not solely the domain of newly-arrived immigrants. To the extent that immigrant entrepreneurs create jobs for natives and for other immigrants, encouraging individuals with prior self-employment experience to come to the U.S. might be a sensible policy, although the ultimate effects might take some years to be felt.

While the association between home-country self-employment and self-employment in the U.S. is robust, we are cautious about interpreting this result as a causal effect of prior self-employment. Our finding could, of course, be the result of state dependence or preferences for self-employment. Subsequent waves of the NIS will permit us to address these issues. With only cross-sectional data at our disposal, however, we must for now be content to document a strong relationship with superior data.

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