ECONSTOR Make Your Publications Visible.

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Akee, Randall Kekoa Quinones; Jaeger, David A.; Tatsiramos, Konstantinos

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

CReAM Discussion Paper Series, No. 17/07

Provided in Cooperation with: Rockwool Foundation Berlin (RF Berlin)

Suggested Citation: Akee, Randall Kekoa Quinones; Jaeger, David A.; Tatsiramos, Konstantinos (2007) : The Persistence of Self-Employment Across Borders: New Evidence on Legal Immigrants to the United States, CReAM Discussion Paper Series, No. 17/07, Centre for Research & Analysis of Migration (CReAM), Department of Economics, University College London, London

This Version is available at: https://hdl.handle.net/10419/295297

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



WWW.ECONSTOR.EU





Discussion Paper Series

CDP No 17/07

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

Randall Kekoa Quinones Akee, David A. Jaeger and Konstantinos Tatsiramos

CReAM Discussion Paper No 17/07

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

Randall Kekoa Quinones Akee*, David A. Jaeger⁺ and Konstantinos Tatsiramos^{*}

* IZA

⁺ College of William and Mary, University of Bonn, and IZA

Non-Technical 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 their self-employment status in the U.S., increasing the probability of being self-employed by about 7 percent. Our results improve on the previous literature by measuring home-country self-employment directly rather than relying on proxy measures. We find little evidence to suggest that home-country self-employment has a significant effect on U.S. wages in either paid employment or self employment.

Keywords: Self-employment, entrepreneurship, New Immigrant Survey

JEL Classification: J61, J21

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

Randall Kekoa Quinones Akee IZA

David A. Jaeger* College of William and Mary, University of Bonn, and IZA

> Konstantinos Tatsiramos IZA

> > December 2007

*Corresponding Author. Address: d.jaeger@uni-bonn.de; IZA, Schaumburg-Lippe Str. 5/9, D-53113 Bonn, Germany.

The authors gratefully acknowledge financial support from the Volkswagen Foundation for the IZA program on "The Economics and Persistence of Migrant Ethnicity." The authors thank Lily Gataullina for outstanding research assistance.

Abstract

Using recently-available data from the New Immigrant Survey, we find that previous selfemployment experience in an immigrant's country of origin is an important determinant of their self-employment status in the U.S., increasing the probability of being self-employed by about 7 percent. Our results improve on the previous literature by measuring home-country self-employment *directly* rather than relying on proxy measures. We find little evidence to suggest that home-country self-employment has a significant effect on U.S. wages in either paid employment or self employment.

Keywords: Self-employment, entrepreneurship, New Immigrant Survey

JEL Classification: J61, J21

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 selfemployment 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. In addition, we investigate the effect of previous self-employment experience on earnings in the U.S. controlling for the sector of employment. 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.

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).

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 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 selfemployment experience and home country educational attainment on the decision to be selfemployed 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 US. For example, Evans and Leighton (1989) provide evidence of a positive effect of previous self-employment 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 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. We also find that home-country self-employment does not have a statistically significant effect on wages in the U.S., nor does it enhance the positive (and statistically significant effect) of U.S. self-employment on wages. We also find no significant effect of home-country self-employment on wages in either the paid-employment or self-employment sectors in the U.S. when we allow the choice of sector to be endogenous in a switching regression context. Overall our findings suggest home-country self-employment is more important on the extensive margin of self-employment than on subsequent productivity.

I. 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

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

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. 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.⁴ 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 1,220 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 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-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

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

⁴ We do not omit individuals who are taking English language classes.

number engaged in self-employment is dominated by the three youngest age cohorts. We find that time spent in the U.S. is monotonically increasing in self-employment in the home country and in the U.S. In fact, men who have been in the U.S. 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.⁵ 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.

 $^{^{5}}$ See Jaeger (2007) for a detailed description of the different visa types as well as the process by which individuals obtain these visas.

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 relationship through a transition matrix.⁶ 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. Sixteen 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. 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.

⁶ As noted previously, we omit individuals who were out of the labor force in the home country or in the U.S.

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. It is possible, however, to investigate the effect of past employment choices on current earnings. If state dependence, through accumulation of skills, explains the observed persistence in employment status then we would expect those individuals with self-employment experience in the home country to be more productive compared to their counterparts who were only in paid employment. We explore these issues in a multivariate context below. Although this analysis is still descriptive and does not provide a behavioral interpretation it is still very useful in describing the association between entrepreneurial selection and earnings.

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

We first focus our attention on the determinants of individuals entering selfemployment versus paid employment, with particular attention paid to the effect of selfemployment in the 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 regressor is an indicator variable for whether individuals had selfemployment experience in their home country. 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 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 0.082.

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 21 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. Education in the U.S. has a statistically significant (at the 10 percent level) effect on being self-employed, with each year increasing the probability of being self-employed by about 1 percentage point. 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 0.067.

In the last column of Table 3 we add to the specification in column (2) variables relating to the immigrant's time in the U.S., 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-ofbirth variables substantially reduces the coefficients on education in the U.S., however, with both education variables now being insignificant, but of similar magnitude. 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 their 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 3.3 percent. Adjustees, who are primarily changing their status from temporary employment and student visas, are significantly more likely to be self-employed than new immigrants.⁷ 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.⁸ Lastly, we find that selfemployment in the home country continues to increase the probability of being self-employed in the U.S. by about 7.4 percent, even when controlling for demographics and entry conditions.

We have also estimated these models using self-employment rates in the country of origin as a regressor.⁹ It is possible that different countries have varying cultures regarding

⁷In 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 (0.074 for new immigrants and 0.063 for adjustees).

⁸ For example, using the Survey of Income and Program Participation, which almost certainly includes illegal immigrants, Georgarakos and Tatsiramos (2007) find that self-employment is used as a stepping stone from unemployment or inactivity to paid employment.

⁹These 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.

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 selfemployment 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 direct evidence on the individual effect of self-employment experience without relying on proxies that produce mixed results and are sensitive to various assumptions.

IV. The Effect of Self-Employment on Wages

In this section we report cross-sectional estimates of self-employment and wage earnings taking into account the selection into self-employment. There is a large literature on estimates of self-employment selection and earnings models including Borjas and Bronars (1989), Evans and Leighton (1989), Lofstrom (2002) among others. No previous study, however, has investigated the effect of self-employment experience for immigrants in the home country on their current wages. The results of this estimation are reported in Table 4.¹⁰

In the first column we include only indicators for self-employment in the home country, current self-employment in the U.S., and the interaction effect of these two variables. We find that only the main effect for self-employment in the U.S. is statistically significantly different from zero and somewhat implausibly high. These variables explain little of the variation in wages, however, with an R^2 value of less than 0.01. In column (2) we include both the demographic and entry characteristics as in Table 3. We find here that none of the coefficients on the self-employment variables are statistically significantly different from zero, although their magnitudes are relatively large. These results are at least suggestive that self-employment in the home country has little effect on wages in the U.S.

We are naturally concerned that selection into self-employment or paid employment may be endogenous in the wage equation. To address this issue, we estimated an endogenous switching regressions model similar to that in Lee (1978), essentially an application (twice) of Heckman's (1974) selection model. These results are presented in Table 5. The first column shows the marginal effects from the first-stage probit estimation, repeating the model from the third column of Table 3, restricted to only those with reported income and wage data. The second column shows estimates from the wage equation for those who choose paid employment and the third column shows the estimates from the wage equation for those who choose self-employment. We nominally identify the selection equation by excluding marital status, the indicator for children, and household size from the wage regressions, although these variables are not individually or jointly significantly different zero.

¹⁰ All income reported are purchasing-power-parity-adjusted annualized amounts. For salaried workers, we use their self-reported annual income. For hourly workers we create an annual income from the self-reported information on the number of hours worked per week and the number of weeks worked per year. Finally, for the self-employed we combine the business' net profits and any reported salary paid to themselves for the year. Missing data accounts for the smaller sample size for the regressions with log annual income as the dependent variable.

In both wage equations we find that home-country self-employment does not have a statistically significant effect on wages. However, the estimated coefficient in the (admittedly quite small) self-employment sample is 23 times larger than the estimated coefficient in the paid-employment sample. In neither equation is the coefficient on the inverse Mills' ratio term statistically significant. But the small samples, particularly for individuals in self-employment, make us cautious about placing too much weight on these results. Nevertheless, they are suggestive that home-country self-employment is more important in determining whether individuals enter self-employment in the destination country rather than in determining the wages they earn.

V. 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 find little evidence to suggest that home-country self-employment has a significant effect on U.S. wages in either paid employment or self-employment, however.

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.

References

- Bates Timothy (1995) "Self-Employment Entry Across Industry Groups", Journal of Business Venturing", 10: 143-156.
- Blanchflower, David G. and Bruce D. Meyer (1994) "A Longitudinal Analysis of the Young Self-Employed in Australia and the United States. *Small Business Economics*, 6:1-19.
- Borjas, George J. (1986). "The Self-employment Experience of Immigrants," *Journal of Human Resources*, 21(4):485-506.
- Borjas, George J. and Stephen G. Bronars (1989) "Consumer Discrimination and Self-Employment", *Journal of Political Economy*, 97(3):581-605.
- Evans, David. S., and Boyan Jovanovic (1989) "An Estimated Model of Entrepreneurial Choice under Liquidity Constraints," *Journal of Political Economy*, 97(4): 808:27.
- Evans, David. S., and Linda S. Leighton (1989) "Some Empirical Aspects of Entrepreneurship," *American Economic Review* 79:519-535.
- Fairlie, Robert W., and Bruce D. Meyer (1996) "Ethnic and Racial Self-Employment Differences and Possible Explanations," *Journal of Human Resources*, 31:757-793.
- Fairlie, Robert W., and Alicia Robb (2006) "Families, Human Capital, and Small Business: Evidence from the Characteristics of Business Owners Survey," *Industrial and Labor Relations Review*, 60(2): 225-245
- Georgarakos Dimitris and Konstantinos Tatsiramos (2007) "Entrepreneurship and Survival Dynamics of Immigrants to the U.S. and their Descendants," IZA Discussion Paper Series No. 2792.
- Heckman, James J. (1974) "Shadow Prices, Market Wages, and Labor Supply," *Econometrica*, Vol. 42(4): 679-694.
- Heckman James J. (1981) "Heterogeneity and State Dependence," in S. Rosen (ed.), *Studies in Labor Markets*, (University of Chicago Press, 1981), 91-139.
- Hurst, Erik and Annamaria Lusardi (2004) "Liquidity Constraints, Household Wealth, and Entrepreneurship", *Journal of Political Economy*, 112: 319-347.
- Jaeger, David A. (2007) "Green Cards and the Location Choices of Immigrants in the United States, 1971-2000," *Research in Labor Economics*, 27:131-183.
- Lazear Edward (2004) "Balanced Skills and Entrepreneurship", *American Economic Review*, 94(2):208-211.

- Lee, Lung-Fei (1978) "Unionism and Wage Rates: A Simultaneous Equations Model with Qualitative and Limited Dependent Variables," *International Economic Review*, 19(2):415-433.
- Loxley, John and Vali Jamal (1999) "Structural adjustment and agriculture in Guyana: From crisis to recovery" International Labor Organization Working Paper 143, http://www.ilo.org/public/english/dialogue/sector/papers/agrguyan/index.htm
- Pagán, José A. (2002) "Gender Differences in Labor Market Decisions in Rural Guatemala," *Review of Development Economics*, 6(3), 428-441.
- Pisani, Michael J. and José A. Pagán (2004) "Self-employment in the Era of the New Economic Model in Latin America: A Case Study from Nicaragua," *Entrepreneurship and Regional Development*, 16(4), 335-350.
- Sletten, Pal and Willy Egset (2004) "Poverty in Haiti". Fafo-paper 2004:31, http://www.fafo.no/pub/rapp/755/755.pdf
- Yuengert, Andrew M. (1995) "Testing Hypotheses of Immigrant Self-Employment", *Journal* of Human Resources, 30:194-204.
- Zissimopoulos, Julie M. and Lynn A. Karoly (2007). "Transitions to self-employment at older ages: The role of wealth, health, health insurance and other factors" *Labour Economics*, 14(2) pp.269-295.

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

Characteristic	Share Ever Self- Employed in Home County	Share Ever Currently Self- Employed in the United States	Share of Sample (within characteristic)	N
All	0.208	0.101	1.000	1,220
Age		0.046		• 4 0
28 and younger	0.142	0.046	0.197	240
29-38	0.187	0.089	0.369	450
39-48	0.225	0.101	0.251	306
49-58	0.277	0.164	0.145	177
59 and older	0.383	0.255	0.039	47
Years since left home country		0.5-1	a	
Less than 10 years	0.190	0.054	0.657	801
10 years and more	0.243	0.191	0.343	419
Visa Status				
Adjustee	0.194	0.157	0.486	593
New immigrants	0.222	0.048	0.514	627
Visa Type				
Family	0.219	0.135	0.340	415
Diversity	0.171	0.052	0.298	363
Refugee	0.218	0.141	0.116	142
Other	0.233	0.093	0.246	300
Education in Home Country				
Less than 12 years in home country	0.270	0.100	0.361	441
12 years in home country	0.234	0.100	0.168	205
More than 12 years in home country	0.152	0.098	0.470	203 574
	0.132	0.070	0.470	574
Education in the US	0.127	0.142	0.102	120
Any	0.127	0.143	0.103	126
None	0.218	0.096	0.897	1,094
Region of Birth	0.551	0.05.5	o 4	
Philippines and Asia	0.221	0.086	0.115	140
Europe, Canada and Oceania	0.151	0.140	0.228	278
Mexico	0.196	0.169	0.116	142
China	0.227	0.023	0.036	44
India	0.311	0.067	0.037	45
Latin America and Caribbean	0.240	0.097	0.270	329
Africa	0.204	0.042	0.116	142
Mideast and North Africa	0.210	0.060	0.082	100
Marital Status				
Married or with partner	0.219	0.118	0.764	932
Single	0.174	0.045	0.236	288
Children				
Any children under 18 in household	0.234	0.101	0.512	625
No children under 18 in household	0.182	0.101	0.488	595

Source: Authors' calculations from the New Immigrant Survey

Note: Sample size is 1,220. 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.

Table 2

	Current Employment Status in the U.S.						
Employment Status in	Paid	Self	Total				
Home Country	Employment	employment					
Only paid employment	885	81	966				
(row percentage)	91.6	8.4	100.0				
(column percentage)	80.7	65.9	79.2				
Ever self-employed	212	42	254				
(row percentage)	83.5	16.5	100.0				
(column percentage)	19.3	34.2	20.8				
Total	1,097	123	1,220				
(row percentage)	89.9	10.1	100.0				
(column percentage)	100.0	100.0	100.0				

Persistence of Employment Status between Home Country and the United States

Source: Authors' calculations from the New Immigrant Survey

		(1)	(2)	(3)	
Variable	Marg.	Std. Err.	Marg.	Std. Err.	Marg.	Std. Err.
Ever self-employed in the home country	0.082	0.025	0.067	0.024	0.074	0.023
Age						
28 and younger			r	ef.	r	ef.
29-38			0.041	0.029	0.025	0.024
39-48			0.057	0.035	0.035	0.029
49-58			0.113	0.046	0.066	0.038
59 and older			0.207	0.083	0.149	0.079
Education						
Years in home country			-0.001	0.002	0.002	0.002
Years in U.S.			0.010	0.006	0.003	0.005
Married or with partner			0.064	0.017	0.028	0.017
Children in household younger than 18			-0.012	0.019	-0.011	0.015
Household size			-0.008	0.005	-0.002	0.004
Years since left home country					0.003	0.001
Adjustee					0.070	0.021
Visa Type						
Family					r	ref.
Diversity					-0.010	0.023
Refugee					-0.018	0.019
Other					-0.026	0.015
Region of Birth						
Philippines and Asia					r	ref.
Europe, Canada and Oceania					0.042	0.033
China					-0.048	0.021
India					-0.033	0.026
Latin America and Caribbean					-0.012	0.023
Africa					-0.041	0.019
Mideast and North Africa					-0.041	0.019
Mexico					0.029	0.036
Log-likelihood	-39	2.19	-37	3.57	-33	32.94

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

Source: Authors' calculations from the New Immigrant Survey

Note: Entries in table are marginal effects and standard errors from probit estimation,

estimated at sample means. Sample size is 1,220. Mean of dependent variable is 0.101.

	((1)	(2)		
Variable	Coeff.	Std. Err.	Coeff.	Std. Err.	
Self-Employment Experience					
Ever in home country	-0.096	0.180	0.008	0.173	
Currently in U.S.	0.626	0.251	0.139	0.248	
Interaction	0.055	0.486	0.429	0.489	
Age					
28 and younger			r	ef.	
29-38			0.134	0.171	
39-48			-0.204	0.203	
49-58			-0.061	0.226	
59 and older			-0.928	0.397	
Education					
Years in home country			-0.004	0.017	
Years in U.S.			0.176	0.044	
Married or with partner			0.171	0.170	
Children in household younger than 18			0.083	0.146	
Household size			-0.072	0.039	
Years since left home country			0.020	0.008	
Adjustee			0.961	0.217	
Visa Type					
Family				ef.	
Diversity			0.089	0.232	
Refugee			0.334	0.197	
Other			-0.033	0.200	
Visa Categories?	1	No	Y	Yes	
Regions /Countries?	l	No	У	Yes	
R^2	0	.008	0.	159	

 Table 4

 Effect of Self-Employment Experience on Annual Log Earnings in the United States

 Table 5

 Effect of Home-Country Self-Employment on Log Annual Earningsin the United States, by Employment Sector

	Dependent Variable: Currently Self Employed in the U.S. (1)		Log Earnin those in Wag	nt Variable: 1gs in U.S. for 1e Employment (2)	Dependent Variable: Log Earnings in U.S. for those who are Self- Employed (3)		
Variable	Marg. Eff.	Std. Err.	Coeff.	Std. Err.	Coeff.	Std. Err.	
Ever self-employed in the home country	0.068	0.026	0.053	0.223	1.215	1.538	
Age							
28 and younger							
29-38	0.015	0.026	0.236	0.186	0.024	0.946	
39-48	0.030	0.032	-0.115	0.212	0.594	1.214	
49-58	0.061	0.044	0.145	0.275	-0.168	1.756	
59 and older	0.155	0.091	-0.781	0.556	1.395	3.000	
Education							
Years in home country	0.002	0.002	-0.004	0.018	0.082	0.091	
Years in U.S.	0.001	0.005	0.183	0.056	-0.045	0.225	
Time in U.S.							
Years since left home country	0.003	0.001	0.021	0.013	0.064	0.085	
Adjustee	0.056	0.021	1.160	0.238	1.579	1.884	
Household characteristics							
Married or with partner	0.017	0.019					
Children in household younger than 18	-0.015	0.017					
Household size	< 0.001	0.004					
Inverse Mills Ratio			-0.452	1.327	3.124	3.871	
Visa Categories?	Y	es	Y	Yes	Y	les	
Regions /Countries?	Y	es	Y	Yes	Ŋ	les	
Ν	9.	34	8	355		79	

Source: Authors' calculations from the New Immigrant Survey

Note: Sample size is 936. All characteristics are measured as of the survey date.

Appendix Table 1 Determinants of Immigrants' Self Employment in the United States, by Adjustee Status

	New Im		Adjustees (2)		
	(1)			
Variable	Marg. Eff.	Std. Err.	Marg. Eff.	Std. Err.	
Ever self-employed in home country	0.074	0.021	0.063	0.043	
Age					
28 and younger	re	ef.	re	f.	
29-38	0.004	0.011	0.035	0.051	
39-48	0.018	0.016	0.024	0.056	
49-58	0.019	0.019	0.089	0.073	
59 and older	0.099	0.071	0.146	0.125	
Education					
Years in home country	0.002	0.001	0.003	0.004	
Years in U.S.	0.006	0.004	-0.004	0.011	
Married/partner	0.005	0.008	0.059	0.039	
Children in household younger than 18	-0.003	0.007	-0.036	0.035	
Household size	-0.004	0.002	0.009	0.009	
Years since left home country	0.001	0.000	0.005	0.002	
Visa Categories?	Yes		Yes		
Regions /Countries?	Yes		Yes		
Log-likelihood	-240	.703	-78.284		

Source: Authors' calculations from the New Immigrant Survey **Note:** Entries in table are marginal effects and standard errors from probit estimation, estimated at sample means. Mean of dependent variable is .048 for new

Appendix Table 2 Determinants of Immigrants' Self Employment in the United States, with Regional Self-Employment Rates and Own Previous Self-Employment

	(1)		(2)		(3)		(4)	
	Marg.		Marg.		Marg.		Marg.	
Variable	Eff.	Std. Err.						
Home region self-employment rates	-0.246	0.074	-0.234	0.066	-0.283	0.105	-0.273	0.100
Ever self-employed in the home country							0.073	0.023
Age								
28 and younger			r	ef.	r	ef.	1	ef.
29-38			0.020	0.025	0.029	0.025	0.024	0.023
39-48			0.025	0.029	0.043	0.032	0.035	0.029
49-58			0.071	0.039	0.084	0.042	0.067	0.038
59 and older			0.161	0.083	0.180	0.085	0.145	0.078
Education								
Years in home country			0.001	0.002	0.001	0.002	0.001	0.002
Years in U.S.			0.001	0.005	0.001	0.005	0.002	0.005
Married or with partner			0.042	0.017	0.030	0.017	0.029	0.017
Children in household younger than 18			-0.008	0.017	-0.008	0.016	0.011	0.015
Household size			-0.002	0.004	-0.001	0.004	0.001	0.004
Years since left home country			0.003	0.001	0.003	0.001	0.003	0.001
Adjustee			0.072	0.017	0.065	0.021	0.071	0.021
Visa Categories?	1	No	No		Yes		Yes	
Regions /Countries?]	No	1	No	Yes		Yes	
Log likelihood	-39	94.25	-34	46.17	-33	7.76	-32	.9.76

Source: Authors' calculations from the New Immigrant Survey

Note: Entries in table are marginal effects and standard errors from probit estimation, estimated at sample means. Sample

size is 1,218 (four individuals are dropped due to missing home region self-employment information). Mean of dependent variable is .101.