Immigrant Farm and Agricultural Entrepreneurship

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Abstract

To strengthen and aid in the development in agricultural sector, it is important for economists and policy makers to examine immigrant owned farm activities, crop production, farm growth and other farm related activities. The main aim of this paper is to study survival and growth of immigrant farm ownership as compared to the native farm ownership. We develop a comprehensive database by combining several publicly available datasets, which will allow us to quantify the immigrant farm ownership. Through these data we study, the contribution of immigrant farmers to new farm businesses, distribution of immigrant farms across the country, and the success of immigrant farms.

Keywords: Immigrants, Entrepreneurship

Current immigrant entrepreneurship literature focuses on the role of immigrants in business development and entrepreneurship in developed countries (Borjas, 1986; Schuetze et al. 2007; Fairlie et al. 2010). For instance, immigrants to the United States are as much as ten times more likely to start a firm as compared to their native counterparts (Hunt 2011, 2015). Fairlie (2012) found that almost 10.5 percent of immigrants in United States own businesses as compared to 9.3 percent of non-immigrants. Immigrant entrepreneurship in the United States increased from 6.9 percent in 1980 to 18.4 percent in 2010 (Fairlie and Lofstrom 2015). Hence, immigrant entrepreneurship has been a point of interest to the U.S. policy makers. There are certain provisions and policies implemented to encourage and increase immigrant entrepreneurship. For instance, the availability of a special entry visa provisions for immigrant entrepreneurs (Schuetze and Antecol 2006).

However, there is little research available on the specifics of immigrant entrepreneurship in agriculture and farming in the United States. Early literature in the farm ownership is documented by Wehrwein (1922), where he found that almost 16 percent of the agricultural land in the United States was owned by foreign-born farmers. Per the American Community Survey (2006-10), only 1 percent of the immigrant, business owners are involved in agriculture or farm ownership (Fairlie et al. 2011). The Survey of Business owners shows that 5 percent of the businesses related to agriculture and farming are owned by foreign-born individuals (Census 2012).

After arriving to a new country immigrants try to minimize their adjustment cost by migrating to the parts with a higher percentage of foreign population (Zavodny, 1999). For immigrant enterprenuers it provides much needed social capital in a new country while establishing and running their business. For instance, the likelihood of success of businesses owned by Gujrati Indian immigrant enterpreneurs in the hotel industry increases when surrounded by higher number of hotels owned by people with same ethnic group (Kalnins andChung, 2006). Similarly hispanic immigrants find higher employment in areas with density of jobs pre-held by hispanics (Hellerstein, McInerney and Neumark, 2009). This evidence is supported by Patel and Vella (2013), where they find that new immigrants to the United States choose similar occupation in similar local areas to that of the natives from their country of origin.

Following this train of thought, we aim to understand if such ethnic enclaves exsit in case of immigrant farmers and land owners, the reason for the existence of these enclaves, and if these ethnic enclaves are intrumental in the success of immigrant farmers.

Data

Data for this project comes from three publicly available datasets; 1) American Community Survey (ACS) from 1900 to 2015; 2) Annual Social and Economic Supplement (ASEC) from the Current Population Survey (CPS) from 1996 to 2016; and 3) USDA's National Agricultural Statistics Service (NASS).

ACS is a yearly survey conducted by the U.S. Census Bureau and is the key source of information about the U.S. population demographics and employment characteristics. CPS-ASEC is a monthly household survey of U.S. population and provides demographic and employment information. USDA NASS is a yearly database of county level historical crop production and yield

The ACS data provides the NAICS code which allows the classification of the individuals per their employment category. We use this information to generate a dataset of farm owners as well as the country of birth and citizenship data for the farmers. This data is then merged with the county level information of the three crops with the highest productivity and yield obtained from the USDA NASS. This exercise matches the farmers in each county with the most prevalent crops produced in their geographic region. Our main assumption is that the farmers in our sample are engaged in cultivation of the most prevalent crop produced in their area. We follow the similar matching process separately with the CPS data.

Preliminary Results

Figure 1 shows that even if the percentage of immigrant population is steadily increasing over the years, reaching its peak in the 1980s, decreased over the next years, and has remained steady since the last two decades. This trend is similar for the farm ownership by the native population. On average, 28 percent of the population owned a farm until 1960 while only 1.5 percent of the population owned a farm since 2000.

Table 1 shows that from the early to mid-twentieth century, highest percentage of immigrant farmers were from Europe followed by Latin America. However, in the recent years, highest percentage of immigrant farmers are from Latin America, followed by Asia and Europe. The demographic characteristics of the immigrant farmers seems to have remained similar over the years. The average age of the immigrant farmer in 2015 was 46 years, with 61 percent of them single, with an average farming income of almost $80,000.

Next steps for the analysis include the comparison of the immigrant and native farmers, in terms of their geographical distribution, farm sales and income and type of commodity production.

Implications

The project is significant for two fields: 1) farm ownership and 2) immigrant entrepreneurship. The main contribution of this project is creating a comprehensive county-level database which will foster academic research to study problems in growth and survival in agriculture entrepreneurship. The findings from this research will be of interest to academics in the areas of institutional research, entrepreneurship research, small farm ownership, and immigrant population research.

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Figures and Tables:

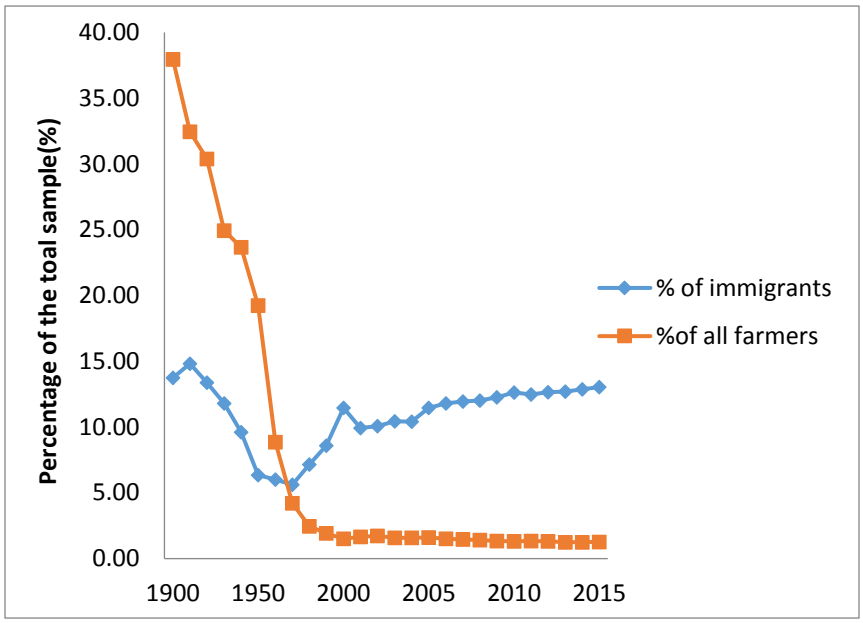

Fig1: Comparison between Immigrants and Native Farmers over the years (American Community Survey 1900-2015)

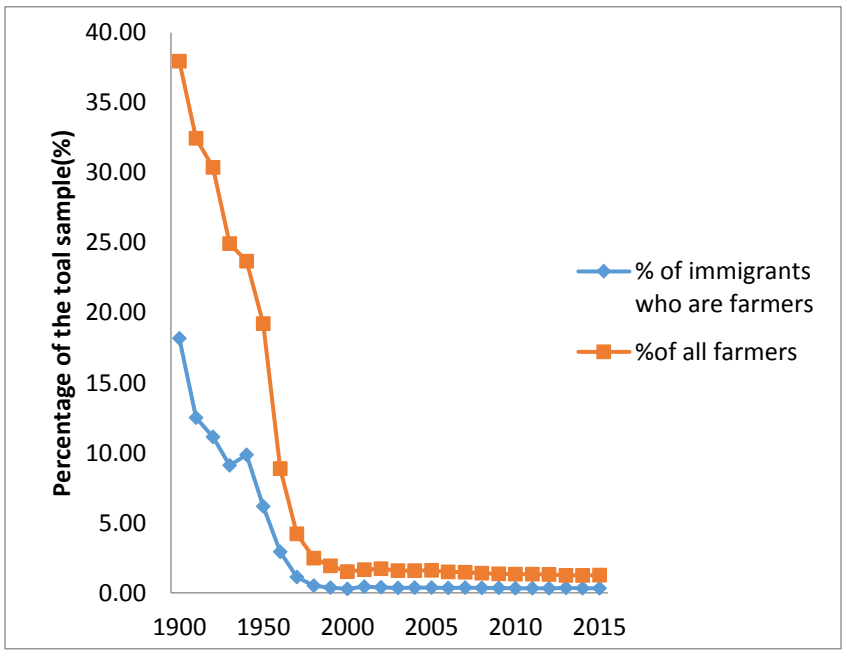

Fig 2: Trend in Immigrants and Immigrant Farmers over the years (American Community Survey 1900-2015)

Table 1: Immigrant Farmers Region of Origin (American Community Survey 1900-2015)

Year	North America(exclude USA)	Latin America	Africa	Europe	Asia	Oceania and Others	total immigrant farmers
2015	5.52	43.90	1.96	22.28	25.54	0.80	1378
2014	7.38	37.95	2.28	21.37	29.58	1.44	1315
2013	6.65	41.92	4.29	20.53	25.75	0.86	1398
2012	7.38	37.56	2.01	22.39	29.29	1.36	1246
2011	6.32	37.93	3.00	22.77	29.09	0.89	1234
2010	8.35	40.05	2.58	24.28	23.89	0.86	1281
2009	7.51	41.10	2.01	22.99	25.93	0.46	1292
2008	6.55	41.02	3.64	21.93	25.57	1.29	1236
2007	8.34	39.07	1.62	23.09	26.56	1.31	1295
2006	7.48	39.07	3.05	25.00	23.87	1.53	1244
2005	6.88	35.92	2.64	25.60	27.52	1.44	1250
2004	5.94	35.88	1.27	27.60	28.87	0.42	471
2003	11.03	34.51	1.88	22.54	29.34	0.70	426
2002	11.84	31.64	1.21	24.15	30.19	0.97	414
2001	8.41	32.68	0.98	29.94	26.81	1.17	511
2000	8.35	47.40	0.78	28.26	13.87	1.34	4622
1990	10.29	36.28	0.95	32.71	13.63	6.13	4093
1980	11.32	22.81	0.84	46.20	9.81	9.01	4,160
1970	13.79	16.65	0.39	55.54	6.27	7.36	1291
1960	10.02	12.73	0.06	66.57	4.52	6.10	3165
1950	10.15	11.73	0.09	74.61	3.13	0.29	6928
1940	8.91	7.44	0.03	79.86	2.84	0.91	12801
1930	8.30	9.17	0.02	77.98	3.11	1.43	13112
1920	9.15	6.33	0.04	81.44	2.68	0.37	15661
1910	9.45	1.89	0.04	87.45	1.01	0.16	17103
1900	10.68	0.87	0.02	87.72	0.45	0.25	96255

Table 2: Demographic Characteristics of Immigrant Farmers (American Community Survey 1900-2015)

Years	Age (years)	Percent Unmarried	No. of Generations in a household	Household Income($)	Farming Income ($)	Personal Earned Income ($)	Wages and Salary ($)
2015	46.43	0.61	1.85	108312.8	83310.41	25620.81	109944.5
2014	46.34	0.62	1.82	98464.6	86450.43	26010.11	115224.9
2013	44.57	0.61	1.82	91238.34	88038.85	22888.99	112246.2
2012	45.67	0.64	1.78	88790.85	87449.92	24332.66	113447.6
2011	45.58	0.63	1.85	82981.28	77492.82	20310.16	102460.6
2010	45.91	0.63	1.82	90044.91	84522.73	22941.06	109378.3
2009	44.66	0.65	1.79	85176.65	78412.24	21674.34	106574.6
2008	43.53	0.62	1.81	94848.17	96393.57	23775.19	113465.6
2007	43.27	0.63	1.72	87706.24	100449.1	23320.98	120555.1
2006	43.38	0.62	1.81	84159.86	105633.4	21825.28	130821.9
2005	44.41	0.64	1.78	82637.37	94283.16	24538.34	121455
2004	42.06	0.61	1.89	72636.23	127853.7	19222.04	150391.4
2003	43.11	0.65	1.82	82886.04	83665.13	20000.38	112391.4
2002	42.51	0.66	1.82	81970.4	69243.41	20882.77	91735.84
2001	41.62	0.62	1.79	80570.29	87320.3	24718.43	107652.4
2000	40.25	0.62	1.80	65001.28	123076.1	16046.54	131827.9
1990	40.19	0.61	1.77	43075.35		10710.39	145317.2
1980	44.08	0.63	1.74	21802.31			140512.7
1970	50.06	0.64	1.75				95941.5
1960	53.90	0.68	1.73				53220.91
1950	52.22	0.71	2.04				758606.3
1940	46.24	0.62	1.92				118243.4
1930	48.59	0.71	1.91				
1920	45.78	0.70	1.94				
1910	45.68	0.68	1.96				
1900	44.39	0.67	1.99				