

THE OVERLAPPING BETWEEN RACE AND IMMIGRANTS IN THE UNITED STATES: ANALYZING THE FINANCIAL WELL-BEING FROM A MORE COMPREHENSIVE WAY

Hu Yuantian

<https://doi.org/10.54922/IJEHSS.2024.0844>

ABSTRACT

This study mainly tests how immigrant identification and race/ethnicity groups affect the household's financial well-being. Previous studies usually concentrate on one aspect of financial well-being. However, this research analyzes the financial well-being of household from three aspects – wealth attainment, financial market participation, and the wealth accumulation. Using panel data from 2014 Survey of Income and Program Participation (SIPP), this study conducted the Ordinary Least Square (OLS) regression modeling and the Fixed Effect regression modeling to analyze both the cross-sectional and the longitudinal data. The study finds that Asian Americans have better financial well-being outcome than the other race/ethnicity groups. Longitudinally, age of the household reference person and the time it has stayed in the U.S. are significantly and positively related to the financial well-being outcome. Additionally, English proficiency, employment status, high school diploma, household type, and the number of children are all significantly related to the financial well-being outcomes.

Keywords: Immigrants, Race, United States, Survey of Income and Program Participation, Financial well-being, Wealth attainment, Wealth accumulation, Financial market participation, Ordinary Least Square, Fixed Effect.

1. INTRODUCTION

Immigrant history is a vital component of the past and future of the U.S. It represents a growing share of the US population (North-wood & Rhine, 2018). In 1970, immigrants represented 4.7% of the population. In 1990, they accounted for almost 8%, and by 2013, immigrants were over 13% of the US population (Batalova & Fix, 2011). According to the US Census, there are five officially recognized racial categories - White American, Black or African American, Native Americans and Alaska Native, Asian American, and Native Hawaiian and other Pacific Islanders (Bureau, 2008; Grieco & Cassidy, 2001). The US Census also identified Hispanic and Latino as an ethnicity instead of a race (Bureau, 2008; Grieco & Cassidy, 2001).

Immigrants have an important role in the economic and financial system of the U.S. Within the U.S. population, a diversity of immigrants brings a solid work ethic as well as a sense of entrepreneurship and risk taking to the mix (FocusEconomics, 2020).

Although researchers have paid substantial attention to study the financial economic behavior of different race and ethnicities in the U.S. especially when Asian-American started to show great vitality in the financial behavior outcomes, there is little concentration on the intersection between the immigrant and race groups in local communities. This study makes a contribution to the literatures on financial well-being of U.S. immigrants and race groups by analyzing the data from

4-waves of SIPP (2014-2017). Both ordinary least square and fixed effect regression modeling are adopted in this research to analyze cross-sectional and longitudinal effects of immigrant and race in a comprehensive approach in the U.S. financial well-being field.

2. LITERATURE REVIEW

The Place of Immigration

Most of the immigrants came to the US to seek for a precious opportunity for both themselves and their families. Many books and articles about immigrants incorporated “the golden door” into their titles, suggesting the high possibility for them to achieve a better life in America (Bean & Bell-Rose, 2001). When migration immigrants encounter a comprehensive racialized social structure, which redistributes resources along racial lines in the US, race started to play a more important role in immigrants’ life (Omi & Winant, 2015). The sustainability of immigrant’s future development, the host-society integration for immigrants and their descendants are essential conditions for discussing their social norms and behaviors (Agius Vallejo & Keister, 2019). Previous studies used to concentrate on one side between immigrants and race. This research will focus more on the intersection and dynamics of immigrants and race/ethnicity instead of only studying one side because immigrants affects the dynamics of racial and ethnic identity in the United States in a great way, which contributes to the ethnic diversity that distinguishes the US from the other countries (Bean & Bell-Rose, 2001).

The Components of Racial Groups in the US

Among these six race and ethnicity categories in the U.S., Black or African American, Asian American, and Hispanic and Latino are the most popular ones in terms of immigrations among the previous studies.

Research on minority groups has long focused on Blacks (S. D. Hanna, Lee, & Lindamood, 2015). In the US, African American is an easily targeted group of racial inequality. They have a higher probability to suffer poverty and lack high-level education. Charles, Roscigno, and Torres (2007) said the income gap between white and black families is .72 - nearly \$17,000 per year reported by the National Educational Longitudinal Survey. Black students are approximately 72% less likely to attend 2-year colleges and 54% less likely to attend 4-year colleges compared to their white counterparts. Besides, as far as the diversity of financial asset holdings is concerned, Sierminska and Silber (2019) observe that black headed households have statistically significantly lower asset diversity than white households.

Asian Americans has changed from being a persecuted and disadvantaged minority to being considered a “model minority” (S. D. Hanna et al., 2015; Wong et al., 1998). There used to be limited amount of research on Asian households in the US (Hanna, S.D., Lee, Lindamood, & S, 2015). However, with the rise of some Asian countries, studies and investigations have focused more on the financial and immigration behaviors of Asian American. According to Northwood and Rhine (2018), there is a substantial increase in the proportion of Asian region immigrants, especially from India and China. Sharpe, D.L., Abdel-Ghany, and M (2006) reported that in 2000, most Asian American groups had rates of attaining professional degrees much higher than the rate of Whites (11%). For instance, 43% of Asian Indians had a professional degree, 30% of Chinese Americans, and 21% of Korean Americans (Ouyang, Hanna, & Kim, 2019). Asians also have

relatively high incomes compared to other racial/ethnic groups. In 2012, a higher percentage of Asian households than non-Hispanic White households were in the \$100,000 and over income group (Census, 2012). Despite these well off, Asian Americans still faces racial discriminations and financial burdens, relatively low home ownership rates, and a decrease in stock ownership rates between 2001 and 2004 at a time when Whites maintained stock ownership rates, etc. (Hanna, D., Lindamood, & S, 2008; S. D. Hanna et al., 2015; Herbert et al., 2005).

In the U.S., Latino immigrants' economic position worsened during the Great Recession as they suffered significant increase of unemployment and loss of wages (Agius Vallejo & Keister, 2019). Latino wealth has shrunk since the recession, with Latino median wealth decreasing by 14.3% between 2010 and 2013. A disproportionate rate of predatory subprime mortgage loans was made to Latinos prior to the Great Recession. Subsequently, Latinos experienced the highest rates of foreclosure that were exacerbated by an increase in immigration enforcement and deportations targeting Latino and Black immigrant men (Reid, K., Bocian, Li, & Quercia, 2017; Rugh & Jacob, 2015). According to (Falcón, 1995), the pattern of Latinos' job entry suggests that most Latino workers were employed in the bottom jobs in those sectors or in different industries within the broad categories. Latino immigrants and their descendants also experience inequality in educational institutions, the labor market, and financial markets (Agius Vallejo & Keister, 2019).

Financial behavior and the Well-being

US economy history went through several stages, from the end of World War II as a golden era, to signs of slowing down in the 1970s, then came the long expansion at the end of 19th century with the world globalization, and then a transition brought by the terrorist attacks, the upheaval created by the great recession from 2007 to 2009 (Kalleberg & Wachter, 2017), the recovery and the growth from mid-2009, and the sharp contraction from the onset of COVID-19 (Priorities, 2020).

Besides, Oliver, M.L., Shapiro, and T.M. (1995) mentioned in the US society, racial character itself rooted in historical and contemporary structural dynamics associated with subordination, exclusion, and discrimination. A multitude of interconnecting dynamics factors include legal status, national origin, tenure in the country of settlement, limited access to financial institutions, and discrimination contribute to an immigrant's ability to save, access conventional forms of credit, and accumulate assets (Akresh, Ilana, & Redstone, 2011; Campbell, A., & Kaufman, 2006; Keister, A., Vallejo, & Borelli, 2015; Keister, Lisa, Vallejo, & Aronson, 2016; Painter, Matthew, Holmes, & Bateman, 2016). All of the above economic stages, and problems, wealth attainment, wealth accumulation (Charles et al., 2007), financial market participation (Northwood & Rhine, 2018), and the wealth dynamics and mobility contribute most.

Wealth attainment

Wealth is an important measure of advantage and disadvantage, especially in a global context of wage stagnation, growing debt, and rising inequality (Keister & A., 2005; Killewald, Alexandra, Pfeffer, & Schachner, 2017; Picketty & Thomas, 2014; Wolff & N, 2011). Wealth attainment is the act a household or a business achieve wealth ("attainment," 2020). Scholars are increasingly turning their attention to wealth attainment as an indicator of financial well-being (M. A. Painter, 2nd, 2013). Based on a 1965 survey about of Mexican Americans in Los Angeles and its following up (Salgado, D., & Ortiz, 2019), it is found that parents more easily amass financial assets through marriage, as length of marriage increases the likelihood of owning a home and overall net worth

(Agius Vallejo & Keister, 2019). Bates, Timothy, and Robb (2013) and Cavalluzzo, Ken, and Wolken (2005) found that immigrants and people of color have higher rates of denials for mortgage and commercial loans, as immigrants and people of color pay higher interest rates and are more often denied loans than whites, even after controlling for creditworthiness. Hao and Lingxin (2007) who introduced dominance-differentiation theory pointed out that education and race/ethnicity are interdependent primary factors that shape stratification in the United States. It is associated with the financial well-being which lead to greater wealth attainment because high-quality jobs provide individuals with higher wages while also creating opportunities for upward occupational and social mobility. Wealth attainment is one of the crucial elements to reveal the well-being of the immigrants and different racial/ethnic groups since it is the key to understanding the social and economic integration of immigrants and successive generations (Agius Vallejo & Keister, 2019).

Financial market participation

Household financial market participation affects asset prices and household welfare (Cole & Shastry, 2009). Based on results from a sample of US adults, Prawitz, D., Cohart, and J. (2016) find that controlling over financial circumstances are more important for financial wellness than the resources available to the household. Under the definition of financial market participation, financial market participants are the people and organizations that do business in a financial market, from banks and other lenders to individual investors. There are two basic financial market participant categories – investor v speculator, and institutional v retail ("Financial market participants," 2020). If extending the definition range of financial market participation to some financial decisions made by households, the choice of banking system is also under the consideration (Northwood & Rhine, 2018). It is expected that immigrants from countries that have similar financial systems and bank participation rates to the United States will find it easier and more straightforward to financially integrate into the banking system than immigrants from countries that have dissimilar financial structures and bank participation rates (Northwood & Rhine, 2018). As for the financial risk tolerance, an important factor of the financial market participants, the life-cycle theory, which study asset allocation for an individual with finite lifespan in various age periods, predicts that financial risk tolerance in life-cycle models is declining with age (Chiang & Xiao, 2017). Besides, health status, education, gender, ownership of foreign assets, and marital status are also factors influence the financial risk tolerance level (Chiang & Xiao, 2017). Financial transactions are important for wealth accumulation, and rely on trust and confidence in institutions, the financial market behavior of immigrants can provide important insights into the assimilation process (Osili & Paulson, 2004). A central question facing researchers and policymakers is the extent to which immigrants will assimilate to economic, social, and political life in United States, which is known as the process of integration into a new country, which is the foundation of acquiring a stable living and improving the well-being.

Wealth accumulation

Wealth attainment and the financial market participation are relatively dynamic than the wealth accumulation. The first two explains the household's actions and behaviors. While wealth accumulation is a gradual and continual increase over time rather than overnight (Total wealth, 2018), the sum of the wealth attainment and financial market participation. Valdez and Zulema (2011), Vallejo, Jody, and Canizales (2016) and Zhou and Min (1992) said that the accumulation

of tangible assets, such as home and business ownership, often hold particular significance for immigrants, suggesting that wealth accumulation closely approximates immigrants' own conceptions of mobility and sense of belonging in the host country. Feldstein and M (1995) notes that in general, households may rationally accumulate capital to smooth consumption, considering both expected income fluctuations such as re-tirement, and unexpected fluctuations, such as unemployment. The literature finds that although almost all households hold transaction accounts, those with higher income, higher financial wealth and higher education are more likely to invest in other type of financial assets, such as risky assets. These households are also more likely to invest in a wider range of assets and pay lower fees, thus having higher expected returns and being able to move quicker up the accumulation ladder (Sierminska & Silber, 2019). Besides the wealth accumulation, the accumulation of assets and debts also signals integration into host-country financial structures (Agius Vallejo & Keister, 2019). Wealth accumulation is an embodiment of the financial well-being since wealth, which comprises a range of resources that may be liquid (e.g. savings and retirement accounts) and illiquid (e.g. home equity, jewelry, cars, and business assets), an important measure of long-term class stability and well-being that is passed across generations (Agius Vallejo & Keister, 2019).

Wealth dynamics and mobility

In the book "Poor Economics: A Radical Re-thinking of the Way to Fight Global Poverty", the authors put forward a crucial point of view – the surface cause of poverty is the lack of treasures. However, the underlying cause for that is the inequality of social opportunity. And this inequality of opportunity will make the poor who might change their economic conditions by wisdom and ability lose important opportunities for poverty alleviation (Banerjee & Duflo, 2011). (Blau, P., Duncan, & O., 1967; Farkas & G, 1996; Tomaskovic-Devy & D., 1993; Wilson & W.J, 1987; Wilson & W.J., 1996) mentioned attending college is a critical step on the path toward upward social mobility, providing more and better labor market opportunities, and economic and social well-being over the life-course. Education involves both financial education and knowledge and skill-based education (Hanna et al., 2015). Research on racial group differences in educational attainment and achievement has been, and continues to be, informed by a more general literature on family processes (Charles et al., 2007). The gap is noteworthy and warrant serious attention given their consequences for social mobility, the likelihood of poverty, and the more general perpetuation of racial stratification across generations (Cancio et al., 1996; Tomaskovic-Devy & D., 1993). It is suggesting that household socioeconomic status (SES)—usually measured as parental income and/or education—is critically important for achievement (Alexander et al., 1987; Lareau & A., 1989; Mehan & H., 1992; Parcel, T., Meneghan, & E.G, 1994). Differences in family structure (i.e., the presence of parents and of siblings) are also important in shaping educational outcomes. Family structures that deviate from the traditional two-parent form may experience turmoil or disruption, have fewer resources, and have an inconsistent socializing environment. Each of these differences can be detrimental to educational outcomes (Charles et al., 2007). With variations lying in their living circumstances, immigrants will not enjoy equivalent opportunities to achieve upward mobility and enhance their financial well-being (M. A. Painter, 2nd, 2013). Learning the lives of different racial/ethnic groups in a more comprehensive and tridimensional way

Arrow, Dasgupta, Goulder, Mumford, and Oleson (2012) develop and apply a consistent and comprehensive theoretical framework for assessing whether economic growth is compatible with

sustaining wellbeing over time. This is the study of the sustainability of the human development which usually apply the longitudinal measurement. In this paper, we will focus on the well-being more horizontally between different racial/ethnic groups. We also deepen our research by analyzing cross-sectionally. And the cross-sectional measurements are the intersection between immigrants and race in the US, and the inter-generational wealth dynamics.

3. DATA AND MEASURES

Overview

This study analyzes the 2014 panel of Survey of Income and Program Participation (SIPP), four waves from 2014 to 2017. The Survey of Income and Program Participation (SIPP) is a longitudinal household survey conducted by the U.S. Census Bureau (Bureau, 2019). The 2014 SIPP sample is a multistage stratified sample of 53,070 housing units from 820 sample areas designed to represent the civilian, noninstitutionalized population of the U.S. The sampling universe is based on addresses from multiple sources, chiefly the 2010 Decennial Census, and contains approximately 304.4 million individuals. 2014 panel is the latest (except the 2018 panel data wave 1 released on August 18, 2020) and an integrated panel data which uses a 12-month, calendar-year reference period instead of the previous 4-month reference period of 2008 panel (Bureau, 2019). SIPP is a suitable dataset for this immigrant-related study for it contains a relatively large sample of immigrants, which allows for comparison with both immigrants' U.S.-born same-race/co-ethnic peers and U.S.-born whites (M. A. Painter, 2nd, 2013). SIPP has also been previously used to analyze immigrant wealth attainment because of its extensive financial and migration information (M. A. Painter, 2nd, 2013). In addition, the SIPP includes information on immigrant status, immigrant country of origin, and year of arrival in the United States (Seto & Bogan, 2013).

The data are collected by interviewing all individuals in sample households and provide detailed information on their background, household structure, family relationships, and economic experiences, including their holdings of financial assets such as stocks, mutual funds, bonds, and retirement plans (Seto & Bogan, 2013). The unit of analysis in this study is a household (Bureau, 2019). And I used a household-level data to capture income resources shared by people who live together because SIPP's definition of a family excludes household members who have a nonmarital relationship with the family reference person and the collective household decisions instead of individuals can help avoid artificial variation that may be caused by an individual-level analysis (Chang, 2020; Seto & Bogan, 2013). Within the household unit, race, age, US duration, employment status, and high school graduation are measured by the information of reference person of a household.

Table 2 lists the descriptions and basic parameters of the independent variables, control variables, and the response variables. After transforming the data from long to wide, and disposing the missing values, 12,605 household-level observations (N= 12,605) are available to this study. In this study, I conducted two types of model, the ordinary least square regression (OLS) and the fixed effect model. I used the ordinary least square regression to analyze the cross-sectional relationship between race, immigrants, and financial well-being and the fixed effect model to generate the longitudinal relationship among these three dominant objects - race, immigrants, and financial well-being by using the panel dataset of 2014 SIPP panel data. Table 5,7 and Table 6,8

represent the regression results of the OLS model and the fixed effect model respectively. In terms of nearly 13 response variables, I divided them into three groups – wealth attainment, financial market participation, and the wealth accumulation to conduct the main models. As for the models of each specific dependent variables, they are listed in the Appendix.

Descriptive Statistics

Household level analysis of investment behavior is widely accepted in the literature (Rosen & Wu, 2003; Seto & Bogan, 2013). As mentioned before, it is suggesting that household socioeconomic status (SES)—usually measured as parental income and/or education—is critically important for achievement (Alexander et al., 1987; Lareau & A., 1989; Mehan & H., 1992; Parcel et al., 1994). Given the study objects, race and immigrants, it is more suitable and more precise to study on the level of household instead of the individual levels. Seto and Bogan (2013), a study of “immigrant household investment behavior and country of origin”, conducted a test of sensitivity, in which it repeated the main analysis of this paper at the individual level and found that significant results are consistent with those found at the household level. In this study, I used the “reshape” command to transform the “long” form data to “wide” form dataset in order to turn the data into the household-level. In the 2014 SIPP panel data, it interviewed the question “Person number of the family reference person” as the reference person of a household. I generate the variable of reference person by virtue of the condition that “personal number in a household” = “Person number of the family reference person”. We no longer or hardly see and use the description “household head” as it can sometimes be described as a bias to certain household members. Therefore, when there processing some variables like race, employment status, we take the answers from the household reference person.

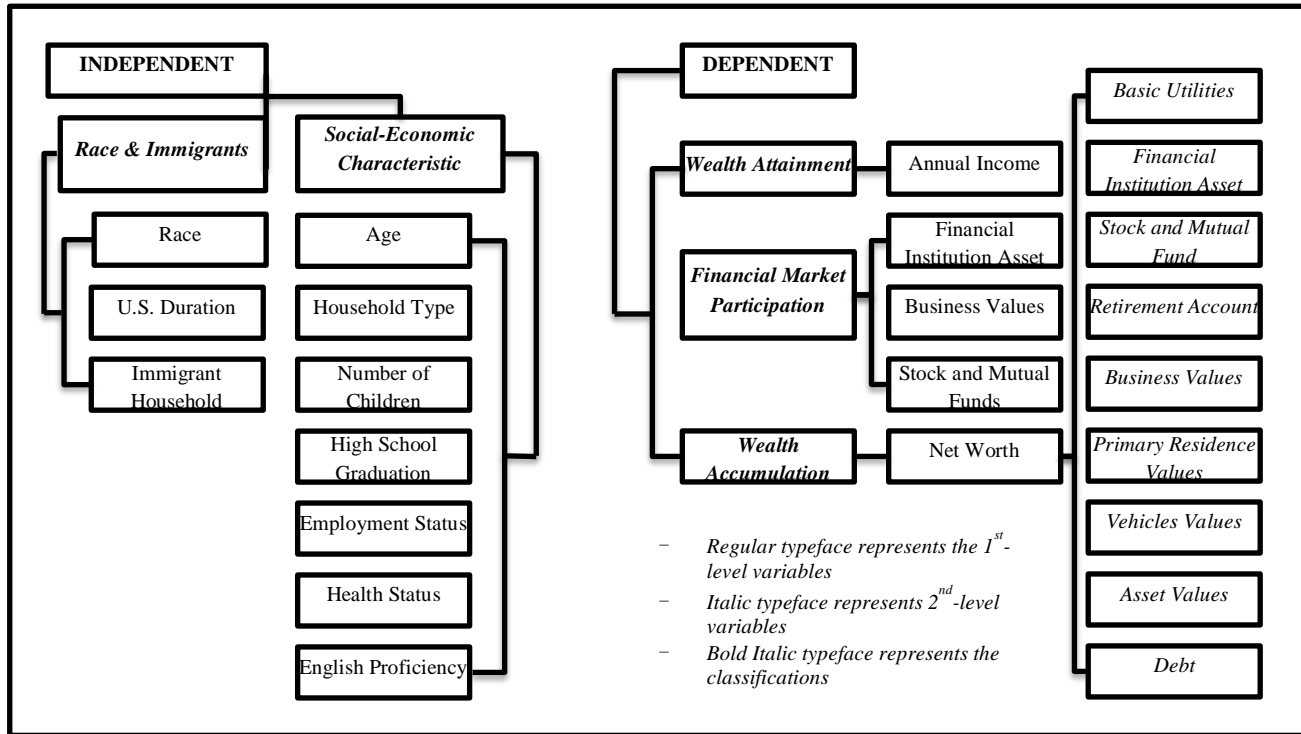


Figure 1. Relationship between social-economic characteristic variables and financial outcomes

Within a household variable group, there are three ways to conduct the household level data. For explanatory variables – race, age, immi-grant household identification, US duration, household type, number of children, high school diploma, and employment status, we choose the value of the reference person as the value of household because it can be better represented by a reference person. For explanatory variables – health status, English proficiency, we average the value of all family members and reached the mean values. As to the response variables – basic utilities, earning from stock and mutual fund, asset in financial institutions, sum in business, sum of retirement account, sum of vehicle value, sum of primary residence, sum of all debt, level net worth, sum of all asset values, sum of income/month, annual total income, SIPP provides interview questions on household-level of these variables. The concat of household ID “ssuid” and the person number “pnum” can be used to uniquely identify one person. Among this household-level study, “fid_n” which is generated from household ID “ssuid” can be uniquely identify one household.

For the dummy variable of “immigrant household identification”, it is not included within the original SIPP dataset. Therefore, I create this variable by firstly creating the “foreign born identification” dummy variable which identified the native- and foreign-born for individuals. According to the Organization for Economic Co-operation and Development, in which the United

States is one of the founder members, under the terms of the more restrictive definition of “immigrant household”, all those responsible for the household are immigrants. In general, up to two people can be responsible for a household. Therefore, the condition for judging if a household is an immigrant household in this paper is whether there are two or two more people in this household are foreign-born (if foreign-born ≥ 2) (OECD & Union, 2015). The dummy variable is to give a value of 1 if the respondent reported that he or she was foreign-born, whether naturalized or not naturalized. The variable is 0 otherwise.

Table 1. Survey Questions and Category Labels of Social-Economic Characteristics

Variable	Survey Questions	Labels
Race	What race(s) does the reference person consider herself/himself to be?	1=White only 2=Black only 3=Asian only 4=Residual
Age	Age of the reference person as of last birthday	Continuous Variable
U.S. Duration	How long have the reference person been in the United States?	Continuous Variable
Immigrant Household	Are you in an immigrant household?	1=Yes 2=No
Household Type	Is the reference person currently married, widowed, divorced, separated, or never married?	1= Married, spouse present 2= Married, spouse absent 3= Widowed 4= Divorced 5= Separated 6= Never married
Number of Children	How many children in this household is born/fathered?	Continuous Variable
High School Graduation	Did reference person complete high school by diploma or GED?	1= Graduated from high school 2= GED or other tests 3= No diploma or GED
Employment Status	What is the employment status of household reference person?	0=Unemployment 1=Employment
Health Status	What is mean value health status of the all the household members?	1=Excellent 2=Very good 3=Good 4=Fair 5=Poor
English Proficiency	What is the mean value of the English proficiency in a household?	1= Very well 2=Well 3=Not well 4=Not at all

Table 2. Survey Questions of Dependent Variables

Variable	Survey Questions
Basic Utilities	Amount the household paid for basic utilities in December of the reference year
Financial Institution Asset	Household-level sum of value of assets held at financial institutions
Retirement Account	Household-level sum of value of retirement accounts
Business Values	Household-level sum of value of businesses
Primary Residence Values	Household-level sum of value of primary residence
Vehicles Values	Household-level sum of value of all vehicles
Asset Values	Household-level net worth
Debt	Household-level sum of all debt
Net Worth	Household-level net worth
Sum of Earning Income	Sum of all earnings and income received by a household

Table 2. (continued)

Variable	Survey Questions
Stock and Mutual Funds	Household-level sum of income earned over the reference period from stocks and mutual funds
Annual Income	Household annual income received by all household members
Financial Market Participation	The household-level sum of income earned over the reference period from stocks and mutual funds, value of businesses, and the value of retirement accounts

The “employment status” is also the variable I created based on the exist related variables. In the SIPP panel data, it asked the “Flag indicating the presence of job 1 during the reference year”. I generate the employment status, recoding the value to 1 if there is a presence of job during the reference year, otherwise, 0. I repeated this conditional judgement 7 times for the 7 places of a person’s job records space. Besides, 2014 SIPP released questions about the entry year to the US if born outside US to non-citizen parents. I generate the variable “US duration” by subtracting the entry year from the panel data year, such as 2014 (wave 1) or 2017 (wave 4), recode missing value

to 0 in order to make this variable valid, which mostly represent people who is not born outside US to non-citizen parents. In order to construct the fixed effect model for longitudinal analysis, I create another dataset using a “reshape” command, reshaping the wide data to long data form, using panel data based on year – 2014, 2015, 2016, and 2017.

Owing to some irresistible factors such as absent of the interviewers or refusing answer a question, there are a number of missing values need to be processed. This study mainly used three ways to deal with the missing values. Firstly, I directly drop the observations if the reference person is missing, which is unavailable to conduct the imputation method. After that, for the continuous variables, such as the number of children in a family, I used the mean of the variable values to impute the missing values. For the categorical variables which is not approachable to the numerical methods, I used the prior (n-2) non-missing values to impute them.

Empirical Analysis

Our study looks at the relationship between race/immigrants’ status such as the race groups, duration of staying in the US, other social-economic characteristics and the financial behaviors with their outcome, such as household annual income, household debt and household sum asset (Seto & Bogan, 2013). Since each financial asset outcomes can have different representation towards the social-economic characteristics, and they share similarities among asset variables. Therefore, I firstly conduct each ordinary least square regression model and fixed effect model separately and conduct three models to divide these assets variables into three groups, wealth attainment – household annual total income, financial market participation – the sum variables values of sum asset in financial institutions sum asset of business, and the sum value of retirement account, and the wealth accumulation – household-level net worth. The ordinary least square (OLS) regression are calculated using the following formula (Pohlmann & Leitner, 2003):

$$Y_i = \beta_0 + \sum_{j=1...p} \beta_j X_j + \varepsilon,$$

where Y_i is the financial asset outcome variables, the response variables which can reflect the well-being of different race groups, β_j are the regression coefficients, X_j are column vectors for the independent variables, the social-economic characteristics, and ε is a vector of errors of prediction.

Table 3. Summary Statistics of Social-Economic Characteristics

Variable	Mean	Std. Dev.	Min	Max
Race				
Black only	0.141	0.348	0	1
Asian only	0.031	0.174	0	1
Other	0.028	0.166	0	1
Age	54.148	16.871	16	87
U.S. Duration	51.273	19.197	3	87
Immigrant Household				
Yes	0.027	0.162	0	1
Household Type				
Married couple, spouse absent	0.017	0.13	0	1
Widowed	0.12	0.325	0	1
Divorced	0.185	0.389	0	1
Separated	0.029	0.167	0	1
Single/never married	0.189	0.392	0	1
Number of Children	1.932	1.61	0	7
High School Graduation				
GED or other tests	0.08	0.266	0	1
No diploma or GED	0.13	0.336	0	1
Employment Status				
Employment	0.57	0.494	0	1
Health Status	2.491	1.027	1	5
English Proficiency	1.027	0.291	0.111	4

Notes: N=12,605

Table 4. Summary Statistics of Dependent Variables

Variable	Mean	Std. Dev.	Min	Max
Basic Utilities	448.508	1060.677	0	27400
Financial Institution Asset	29305.064	97959.524	0	1794000
Retirement Account	76144.973	191746.22	0	2774000
Business Values	54807.219	1459484.9	0	1.09E+08
Primary Residence Values	135078.86	223537.73	0	3230000
Vehicles Values	13065.618	15536.389	0	233900
Asset Values	423714.85	1679783	0	1.11E+08
Debt	82782.711	183347.07	0	4630000
Net Worth	340932.14	1636136.8	-1875300	1.10E+08
Sum of Earning Income	5380.272	6562.427	-78163	123847
Annual Income	130508.07	149091.9	-723150	2377978
Stock and Mutual Funds	1301.78	9869.151	0	435600
Financial Market Participation	85414.063	1465017.6	0	1.09E+08

Notes: N=12,605

After conducting the cross-sectional relationship between the social-economic characteristics variables (concentrating on race and immigrants) and the financial asset outcomes variables, we are conducting the panel data to observe the change of the immigrant’s factors given the race and other time-invariable factors remain the same. Therefore, we will be able to find out the intersection influence between the race and the immigrant identity. Thus, we have:

$$Y_{it} = \sum_{k=1...p} \beta_k X_{k,it} + \alpha_i + u_{it},$$

where Y_i is the dependent variable where i equals entity and t equals panel year, $X_{(k,it)}$ represents one independent variable, β_k is the coefficient for that variable, α_i is the unknown intercept for each entity, and u_{it} is the vector of errors of prediction. The specification allows us to concentrate on the causes of the future development of an immigrant household. Subsequently, using the panel component of the data, we check whether, as a result of a change of immigrant time, people change their financial behaviors and outcomes.

4. RESULTS AND DISCUSSION

Results

Descriptive

Table 1 and Table 2 shows survey questions and its label values of the variables used as independent variables and dependent variables respectively. Table 3 and Table 4 shows the basic statistics, the mean, standard deviation, min and the max values of the independent and dependent variables. It is found that the mean value of the annual income is \$130,508.07, the max value of the asset values is $\$1.11 \times 10^8$, the min value of the asset values is $-\$1,875,300$, which mean this household has a total net debt of \$1,875,300. According to the net values, there is a huge gap ($=\$1.11 \times 10^8 - \$1,875,300 = \$112,875,300$) between the richest and the poorest in the U.S. society who responded during the 2014 Survey of Income Participation Program. It should also be noticed that average value of income from the stock and mutual fund market is only \$1301.78, it has a max value of \$435,600. This, along with other variables whose mean and max value exhibits a huge gap, shows the sources centralization to a certain amount of people.

In Table 3, 5 out of 10 variables are categorical variables, the dummy variables. It should be noticed that for the US Duration variable, respondents who were not born outside of the United States to non-U.S. citizen parents are coded as the value of age of the reference person. The average number of children a household has is around 2; the average health status is around 2.5, between good and very good; and the average age of household reference people is around 54, but it has a standard deviation of around 17, meaning that the age span can be large in the U.S. society.

Ordinary Least Square Regression Modeling

Table 5 represents several main results of the Ordinary Least Square Regression Modeling of the dependent variables, some main financial behavior outcomes. Table 7, which is in the Appendix, contains the whole results of the Ordinary Least Square Regression Modeling of the dependent variables. To show the financial well-being of a household in a more precise and comprehensive way, I studied three main aspects – wealth attainment, financial market participation, and the wealth accumulation. I use the household-level net worth to measure wealth accumulation.

Table 5. OLS Result on Main Social-Economic Characteristics for the Financial Behaviors Outcomes

Variable	-1 Basic Utilities	-2 Financial Institution Asset	-3 Retirement Account	-4 Asset Values	-5 Debt
Race					
Black only	118.222***	-17183.557***	-27717.58***	-119902.72***	-19497.485***
	-28.194	-2535.86	-4801.844	-43993.083	-4684.798
Asian only	-6.445	14922.474***	14039.281	12318.994	45926.527***
	-58.886	-5296.298	-10028.943	-91882.221	-9784.484
Others	-2.609	-4846.768	-19875.461**	-98307.041	-4264.891
	-57.045	-5130.725	-9715.417	-89009.792	-9478.601
Age	-2.139	849.478***	1712.602***	12105.495***	-971.37***
	-1.471	-132.282	-250.487	-2294.886	-244.381
US Duration	3.254**	415.417***	1149.799***	2785.736	786.823***
	-1.273	-114.478	-216.774	-1986.017	-211.49
Immigrant Household					
Yes	209.66***	18026.83***	35856.873***	566460.42***	47129.045***
	-66.64	-5993.756	-11349.633	-103982	-11072.983
Household Type					
Married couple, spouse absent	-179.344**	3279.543	-39388.137***	-114348.84	-56876.503***
	-74.055	-6660.647	-12612.441	-115551.47	-12305.01
Widowed	-96.808***	-18403.839***	-93483.207***	-378733.12***	-52631.534***
	-33.274	-2992.762	-5667.022	-51919.586	-5528.887
Divorced	-143.75***	-17726.123***	-69760.537***	-315048.01***	-46832.656***

-26.353 -2370.232 -4488.214 -41119.695 -4378.813

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

The net worth variable in 2014 SIPP is the difference between sum of asset values, including asset hold in financial institutions, retirement account, business values, primary residence values, vehicles values, etc., and the sum of debt values. For the wealth attainment, I used the household annual income received by all household members as the measurement by add up the 12 monthly values. For financial market participation, I generated a new variable the “financial market participation” by adding up three variables together – household-level sum of income earned over the reference period from stocks and mutual funds,

Table 5. (continued)

	-6	-7	-8	-9
Variable	Stock and Mutual Funds	Net Worth	Annual Income	Financial Market Participation
Race				
Black only	-878.503***	-100405.23**	-18950.578***	11193.487
	-261.316	-42973.546	-3522.08	-39049.844
Asian only	-229.252	-33607.533	29267.152***	-135194.62*
	-545.775	-89752.857	-7356.078	-81557.968
Others	-757.227	-94042.15	-10331.939	-32658.904
	-528.713	-86946.997	-7126.111	-79008.297
Age	46.961***	13076.865***	23.908	5432.973***
	-13.631	-2241.702	-183.728	-2037.024
US Duration	11.133	1998.913	1120.618***	-1567.533
	-11.797	-1939.991	-159	-1762.86
Immigrant Household				
Yes	427.054	519331.38***	38336.952***	415925.26***
	-617.647	-101572.22	-8324.784	-92298.166
Household Type				

Married couple, spouse absent	-928.133	-57472.334	-75565.733***	-75716.346
	-686.369	-112873.58	-9251.035	-102567.65
Widowed	-837.095***	-326101.59***	-85193.506***	-105849.97**
	-308.399	-50716.353	-4156.675	-46085.694
Divorced	-921.189***	-268215.35***	-82740.092***	-84706.162**
	-244.249	-40166.75	-3292.037	-36499.322

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

household-level sum of value of assets held at financial institutions, and the sum of business values. The assets held at the financial institutions is a suitable representation of the use of bank or non-bank system for the immigrants and native citizens. The investment in the stock and mutual fund market and the business owned are parts of the definition of the financial market participants therefore can display the characteristics of race/ethnicity and immigrants

According to the Table 5, basic utility represents the amount the household paid for basic utilities in December of the reference year. Compared to white people, holding other independent variables, black people are significantly associated to all the dependent variables. Asian people are significantly associated to Financial Institution Asset, Debt, Annual Income, Financial Market Participation. People belong to other categories of race/ethnicity are only significantly associated to Retirement Account. meaning that these differences between race groups can explain the mentioned financial behavior outcomes. Since all the race groups show insignificant sign to the “financial market participation”, it can be sketchy concluded that in general, variations across race groups do not explain distinctive outcomes of the financial market participation.

It is found that the age is significantly related to most of the dependent variables except the basic utilities and the annual income. Similar to age, US Duration investigates the year people stay in the U.S., has significant relationship with basic utilities, asset in financial institutions, retirement account, debt, and annual income. While other values staying the same, if the US Duration increase by one year, the annual income is likely to increase \$1,120, retirement account increase \$1,150, debt increase \$787, annual income increase \$ 1,121. Increase in retirement account and annual income are at the same level. As for the Immigrant Household, except the income earned over the reference period from stocks and mutual funds, it shows positive relationships with other financial behavior outcomes if this household is an immigrant household rather than a native household.

For the household type, in general, married couples have higher retirement income, asset values, debt, and annual income than the household with other types. The presence of a married couple can increase the income and the debt as well. The significant increase in the net worth shows that

presence of a married couple can, in general, increase the financial attainment and accumulation for a household. The increase in the number of children will apparently lead significant decrease in the wealth accumulation and attainment but shows no obvious relationship with the growth of debt.

High school graduation is a strong significant independent variable related with the financial behavior outcomes, since if the reference person did not have a high school graduation diploma, the annual income of this household will decrease by around \$36,508 and the net worth by \$196,985, compared to high-school graduated peers. And for household who has an employment reference person, it shows an \$62,122 higher annual income than those who are unemployment. According to the U.S Census Bureau, the real median household income in the United States increased 0.8% to \$61,937 between 2017 and 2018 (Guzman, 2019). Besides, the U.S. Census Bureau lists the annual median personal income at \$33,706 in 2018. By comparing these two official statistics, it can be inferred that there are around two labors in one household. However, the financial institution asset and the income from stock and mutual funds show the significant negative association if the reference person is employed.

A “not well” English proficiency household earn around \$11,020 less than the “well” English proficiency household. Health Status are significantly associated with most of the financial behavior outcomes. It means that the average value of a self-reported health evaluation by the all the household member will directly influence the financial outcomes. For example, household who response a poor health status has a \$131,325 less net worth than those who report the fair level. Therefore, this variable should be carefully controlled as it has a relatively large effect to the household’s financial well-being.

Fixed Effect Regression Modeling

Table 6 displays the result of fixed effect regression modeling using main dependent variables. In this regression, race of the household reference person and the immigrant household identification are not time-varying variables. Therefore, it is the function of this fixed effect regression modeling to check the other social-economic characteristics’ effect on the financial behavior outcomes changing with time given the race and immigrant household status remain the same. The results of all dependent variables are in the Table 8 listed in the Appendix.

Table 5. (continued)

Variable	-1 Basic Utilities	-2 Financial Institution Asset	-3 Retirement Account	-4 Asset Values	-5 Debt
Separated	-58.494	-13438.245***	-60952.633***	-293057.05***	-56784.375***
	-57.96	-5213.039	-9871.286	-90437.819	-9630.671

Single/never married	-206.438***	-7100.958***	-64018.337***	-265846.23***	-78338.876***
	-28.939	-2602.811	-4928.619	-45154.56	-4808.483
Number of Children	17.464***	-3436.09***	-8706.708***	-21521.195**	-909.965
	-6.691	-601.762	-1139.482	-10439.602	-1111.707
High School Graduation					
GED or other tests	-22.654	-10558.376***	-36971.263***	-208056.62***	-34109.529***
	-36.262	-3261.488	-6175.875	-56581.546	-6025.336
No diploma or GED	-23.285	-17827.94***	-41850.29***	-225888.93***	-28904.069***
	-30.675	-2758.976	-5224.331	-47863.78	-5096.986
Employment Status					
Employment	-2.34	-3886.304*	33557.361***	80526.559**	40984.218***
	-22.537	-2027.021	-3838.318	-35165.538	-3744.758
Health Status	-10.871	-10684.883***	-26445.512***	-145279.05***	-13953.655***
	-10.46	-940.768	-1781.416	-16320.813	-1737.994
English Proficiency	3.962	-4959.273	-8948.536	-102636.63*	-10583.703*
	-35.743	-3214.824	-6087.514	-55772.012	-5939.129
_cons	452.746***	14470.182***	47031.233***	301519.92***	157782.76***
	-60.791	-5467.637	-10353.386	-94854.672	-10101.019
Observations	12605	12605	12605	12605	12605
R-squared	0.011	0.062	0.122	0.04	0.086

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Age and us-duration have significant associa-tion with dependent variables. However, the coefficient of the US Duration is relatively smaller and less than that of the Age. That is, the longer a household stays in the U.S. and the older the reference person is, the more likely for the

Table 5. (continued)

Variable	-6 Stock and Mutual Funds	-7 Net Worth	-8 Annual Income	-9 Financial Market Participation
Separated	-387.419	-236272.67***	-74955.518***	-84964.83
	-537.196	-88341.929	-7240.439	-80275.865
Single/never married	-905.218***	-187507.36***	-92540.985***	-33331.087
	-268.216	-44108.107	-3615.068	-40080.814
Number of Children	-158.632**	-20611.23**	-2658.315***	2107.677
	-62.011	-10197.665	-835.793	-9266.567
High School Graduation				
GED or other test	-1087.454***	-173947.09***	-33512.303***	-50007.433
	-336.091	-55270.273	-4529.911	-50223.817
No diploma or GED	-1176.753***	-196984.86***	-36508.68***	-44180.046
	-284.308	-46754.54	-3831.967	-42485.614
Employment Status				
Employment	-507.062**	39542.341	62122.519***	26349.382
	-208.881	-34350.579	-2815.348	-31214.198
Health Status	-588.276***	-131325.39***	-22741.538***	-39948.862***
	-96.945	-15942.579	-1306.642	-14486.941
English Proficiency	-253.675	-92052.929*	-11019.939**	-63728.818
	-331.283	-54479.5	-4465.099	-49505.247
_cons	1357.105**	143737.16	163951.32***	57609.282
	-563.431	-92656.422	-7594.052	-84196.422

Observations	12605	12605	12605	12605
R-squared	0.019	0.034	0.219	0.005

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

household to accumulate more wealth and engage more in the financial market participation. In terms of the household type, all of its categories are significant to the dependent variables. This indicates that a change in the household type will have an important change in the financial behavior outcomes of the household, which is probably because the property ownership change after an individual's separating with the original household. For the number of children in a household, if there is a new-born or a newly adopted child of the household, the asset values will decrease. It is probably because the spending rises up and the household has to move its budget from other assets to raising the child. This indicator is also significant in the OLS model, but the coefficient here, is larger. It suggests that a household is burdened more when it indeed owns a child instead of comparing with other households given the race and immigrants status same.

Table 6 shows that when a household has one more member who receive a high school diploma, their financial outcome will significantly

Table 6. Fixed Effect Result on Main Social-Economic Characteristics for the Financial Behaviors Outcomes

Variable	-1 Basic Utilities	-2 Financial Institution Asset	-3 Retirement Account	-4 Asset Values	-5 Debt
Age	-0.501	1016.062***	2109.188***	18102.985***	-232.746
	-0.428	-58.209	-128.694	-1905.757	-368.247
US Duration	.918***	175.325***	996.361***	-406.378	81.059
	-0.355	-48.298	-106.781	-1581.271	-305.547
Household Type					
Married couple, spouse absent	-115.036***	-11735.132***	-66390.348***	-345731***	-61975.523***
	-23.039	-3132.847	-6926.363	-102568.97	-19819.299
Widowed	-95.77***	-19181.482***	-110029.32***	-460591.98***	-67372.388***
	-10.362	-1409.009	-3115.156	-46130.761	-8913.8
Divorced	-121.695***	-19213.61***	-82390.248***	-385697.05***	-61083.252***

	-8.389	-1140.77	-2522.11	-37348.641	-7216.84
Separated	-87.965***	-18357.574***	-73448.042***	-415164.81***	-75797.228***
	-19.67	-2674.727	-5913.512	-87570.179	-16921.097
Single/never married	-159.855***	-12240.077***	-78057.375***	-338910.54***	-86922.983***
	-9.131	-1241.601	-2745.036	-40649.842	-7854.728
Number of Children	12.038***	-3821.536***	-11152.199***	-33497.796***	-83.78
	-2.119	-288.147	-637.06	-9433.889	-1822.901
Coeff	.z	.z	.z	.z	.z
P_value	.z	.z	.z	.z	.z

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

increase as well. However, the debt will also increase because, in a great chance, the house-hold may have to borrow money from institu-tions or other individuals to pay for the college tuition if this member decides to go college. For the employment status, when the reference person finds a job and no longer be unemployed, this household will significantly increase their fi-nancial market participation by \$84,340. It will also significantly increase their debt by \$42,540, reducing their income from stock and fund market by around \$447. In fix effect mod-el, English proficiency is not significantly re-lated to retirement account, the asset values, debt, the income from the stock and mutual fund market, and the net worth is insignifi-cance. However, the health status is significant. If the average health status improves by 1 point, then this household will have a \$30,200 in-crease than the last year.

5. DISCUSSION

General Findings

After analyzing the results in the regression table from both the ordinary least square and fixed effect regression models, I find some variables contribute significantly to the de-pendent

Table 6. (continued)

Variable	-6 Stock and Mutual Funds	-7 Net Worth	-8 Annual Income	-9 Financial Market Participation
Age	52.862***	18335.73***	548.325***	5291.453***

	-5.693	-1862.505	-86.074	-998.886
US Duration	11.018**	-487.437	376.424***	-1668.889**
	-4.724	-1545.384	-71.418	-828.81
Household Type				
Married couple, spouse absent	-794.957***	-283755.48***	-76053.48***	-111552.92**
	-306.407	-100241.15	-4632.529	-53760.648
Widowed	-1247.291***	-393219.6***	-87856.722***	-111190.34***
	-137.808	-45083.816	-2083.496	-24179.044
Divorced	-922.549***	-324613.79***	-86091.522***	-78602.31***
	-111.573	-36501.008	-1686.852	-19575.97
Separated	-637.415**	-339367.58***	-84164.203***	-112053.42**
	-261.601	-85582.76	-3955.108	-45899.16
Single/never married	-761.901***	-251987.55***	-97956.111***	-80670.339***
	-121.434	-39727.287	-1835.951	-21306.267
Number of Children	-171.817***	-33414.016***	-3037.421***	766.954
	-28.182	-9219.786	-426.082	-4944.692
Coeff	.z	.z	.z	.z
P_value	.z	.z	.z	.z

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

variables. In general, race is an important indicator to understand household financial behaviors. Black people display negative characteristics in many aspects of the household finance, comparing to other race/ethnicity groups. Age and US duration for both native and immigrants are two important variables in explaining the financial behavior outcomes. They normally have a significantly positive relationship with the outcome. Household type is a strong explanatory variable and it is even more powerful when using fixed effect models to analyze. As an indicator of low education level, households whose reference person receive a high school diploma will increase the financial behavior outcomes. Besides, poorer average household health status will significantly reduce the wealth accumulation and attainment of the household.

Racial gap between Asian and White Drake (2013) said that Asian Americans are the highest-income, best-educated and fast-est-growing racial group in the United States. It is showed in the Table 5 that compared with White groups, Asian household has higher an-nual income, higher debt as well. This result might reveal some reality of the immigration system in current US. The U.S. department of state, bureau of consular affairs, there are mainly three immigrant

Table 6. (continued)

Variable	-1 Basic Utilities	-2 Financial Institution Asset	-3 Retirement Account	-4 Asset Values	-5 Debt
High School Graduation					
GED or other tests	4.964	-11580.588***	-40661.33***	-230692.21***	-39104.986***
	-11.795	-1603.849	-3545.926	-52509.805	-10146.417
No diploma or GED	-21.48**	-17708.591***	-48461.911***	-286088.35***	-39681.268***
	-9.942	-1351.881	-2988.852	-44260.383	-8552.389
Employment Status					
Employment	18.631**	70.616	32579.378***	163150.54***	42540.044***
	-7.39	-1004.934	-2221.792	-32901.386	-6357.502
Health Status	-7.323**	-9735.329***	-31527.586***	-172282.18***	-18471.648***
	-3.383	-460.076	-1017.175	-15062.819	-2910.573
English Proficiency	-22.505*	-4542.719***	-5401.158	5060.351	-10161.613
	-11.493	-1562.776	-3455.119	-51165.088	-9886.578
_cons	431.706***	11738.497***	59528.365***	184460.4**	175934.36***
	-19.919	-2708.576	-5988.35	-88678.418	-17135.241
Observations	50420	50420	50420	50420	50420
R-squared	0.012	0.052	0.111	0.014	0.01

Coeff	.z	.z	.z	.z	.z
P_value	.z	.z	.z	.z	.z

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

visas – family immigration, employment-based immigrant visas, and intercountry adoption. Among the above three categories, employment-

based immigrant visas make up the largest proportion, in which Immigrant Investor visa categories are for capital investment by foreign investors in new commercial enterprises in the United States which provide job creation (Affairs, 2020). The standard minimum investment amount has increased to \$1.8 million (from \$1 million) to account for inflation and the minimum investment in a TEA has increased to \$900,000 (from \$500,000) to account for inflation (Services, 2020). Especially in recent years, after the immigration system has become more systematized and competitive, an increasing number of people intend to migrate to the U.S. plan to do so by investing. The result of the statistic that Asian group has a general higher level of financial behavior outcomes is because the immigration system of the U.S. which potentially filtrates migration groups to bolster the economy.

Table 6. (continued)

Variable	-6 Stock and Mutual Funds	-7 Net Worth	-8 Annual Income	-9 Financial Market Participation
High School Graduation				
GED or other test	-894.345***	-191587.22***	-35999.522***	-65617.114**
	-156.864	-51318.087	-2371.606	-27522.565
No diploma or GED	-1099.097***	-246407.08***	-40449.076***	-51007.227**
	-132.22	-43255.887	-1999.021	-23198.701
Employment Status				
Employment	-447.035***	120610.5***	62331.886***	84369.732***
	-98.287	-32154.684	-1485.991	-17244.98
Health Status	-690.13***	-153810.53***	-22908.294***	-30220.197***

	-44.998	-14720.966	-680.312	-7895.047
English Proficiency	-63.169	15221.964	-14184.242***	-49646.256*
	-152.847	-50003.888	-2310.872	-26817.743
_cons	844.514***	8526.035	185098.64***	35795.253
	-264.911	-86665.847	-4005.162	-46480.034
Observations	50420	50420	50420	50420
R-squared	0.02	0.012	0.206	0.003
Coeff	.z	.z	.z	.z
P_value	.z	.z	.z	.z

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

U.S. Duration and Debt Analysis

Omitting the variables race and immigrant household identification, we are able to study the impact from other factors that leads the gradual integration of minority immigration groups. We are able to find out that the longer a group of people stay in the U.S., the higher chance it can earn a bigger financial behavior outcome. From the fixed effect model, I find that staying longer in the US can contribute to the increase in debt.; However, within the gen-eral U.S. population, as the reference person get older, the household will probably reduce their debt by around \$971. This seems contra-dictory at first, but it can be understood that the difference value between -\$786 and \$971 is contributed by the immigrants’ financial be-haviors. As I mentioned in the Data and Measures, I generated the new variable of US Duration by subtracting the entry year of im-migrants from the panel data’s year and for the rest of the native-born missing values, I coded the duration as reference person’s age. Since there is a large number of immigrants acquired their U.S. citizen identification through in-vestment, therefore, there is a large chance that this group of people will continue working or being active on the financial market which means there must be the exist of debt to keep their asset alive.

English Proficiency, Health Status, and Con-tradictory Ideas of Divorce Impact

Fontes (2011) mentioned the reason why Asian group shows a higher financial asset was sub-stantially impacted by financial and accultura-tion related variables, including English profi-ciency. Kim, Chatterjee, and Cho (2012) found that the types of assets a group owned were re-lated to income, education, age, gender, Eng-lish proficiency, and years of stay in the US. In Table 5 and Table 7, I found that a level of English proficiency’s improvement can help the household achieve higher annual income. Uniquely for wealth attainment, greater com-mand of the English language may allow im-migrants to interact more easily with financial institutions (e.g., banks and government agen-cies) since English is dominant in the culture of U.S. financial institutions (Paulson, Singer, Newberger, & Smith, 2006). Besides, DiMag-gio, P.J., Mohr, and J. (1985) believes that lim-ited English proficiency may depress the like-lihood of college attendance.

English proficiency is a predominant factor that contributes to the cultural assimilation of the different immigrant groups to the U.S. society.

Ouyang et al. (2019) mentioned that health status should have a positive effect, because better health presumably means less anticipated financial stress. Indeed, as indicated by the statistical results, a healthier status of a household will directly contribute to a much higher household retirement account, business values, and the annual income. Because a better health status can increase the resources – time and quality for an employee to hold their jobs. Therefore, it is significantly revealed in the retirement account variable, so as the education. Education plays a crucial role on deciding the financial resource allocation and future development potential for it not only provide workers with more skills to be hired as an employee but decide how they can make their decision on the financial market participation. French and Vigne (2018) mentioned in his study of financial strains and social and political consequences by saying that the effects on divorce are ambiguous, at least in the U.S. It is partially true or at least provide a contradiction to my study. According to the fixed effect analysis, the household type has a significant relationship with the financial well-being. If a household type changes from married, spouse present to the divorced, it will, on average reduce debt by \$61,082. Besides, according to the U.S. Census Bureau, the typical American household now carries an average debt of \$137,063 which is around \$61,082 after a husband/wife household divorced. This can be explained that the husband and wife separate their asset and debt. However, after getting divorced from the original household, he or she will face a greater risk of being unemployment status, therefore, this should be the implications that the divorce will lead to a certain financial stress.

6. LIMITATIONS AND IMPLICATIONS

Even though the U.S. Census Bureau released the 2018 panel in the August 2020. The intact SIPP data is 2014 panel data which ends in November 2017, which limits this study to capturing patterns of economic trajectories in the recent years (Chang, 2020). Moreover, while the SIPP data have information on wealth at the time of the survey, there is no information on immigrants' wealth at the time of migration (M. A. Painter, 2nd, 2013). In addition, The SIPP does not include any indication of whether an immigrant is in the United States illegally (Seto & Bogan, 2013).. Therefore, it is not possible to control for such a factor in the analysis which can turn the total results to a relative “positive” tendency. In addition, I planned to use the variable of the level of education as an indicator of the higher education level. However, it has a missing value of around 90% which requires a lot of techniques for doing the imputation, so I gave up this variable by using the lower education level “whether graduate from high school” to instead.

The past researches of economics of minority groups in the U.S. usually concentrate on merely immigrants or race, leaving the intersection of them. In this study, I tried to raise above this barrier by adding the fixed effect regression modeling to analyze the change of the financial behavior outcomes given immigrants and race remain the same. Therefore, I am able to learn about the internal transition of immigrants to an official race group in the United States. Even though there are many researchers studying the ethics of immigrants and race, more statistical methods and recent years policies analysis, such as the U.S. immigrant policies, are encouraged to be explored and added to the future studies.

REFERENCE

- affairs, u. s. d. o. s.-b. o. c. (2020). u.s. visa, immi-grants. retrieved from <https://travel.state.gov/content/travel/en/us-visas/immigrate.html>
- agius vallejo, j., & keister, l. a. (2019). immigrants and wealth attainment: migration, inequality, and integration. *journal of ethnic and migra-tion studies*, 1-17. doi:10.1080/1369183x.2019.1592872
- akresh, ilana, & redstone. (2011). wealth accumula-tion among u.s. immigrants: a study of as-similation and di!erentials. *social science research*, 40(1390–1401).
- alexander, k.l., entwistle, d.r., thompson, & m.s. (1987). school performance, status relations, and the structure of sentiment: bringing the teacher back in. *american sociological re-view*, 52(665–682).
- arrow, k. j., dasgupta, p., goulder, l. h., mumford, k. j., & oleson, k. (2012). sustainability and the measurement of wealth. *environment and development economics*, 17(3), 317-353. doi:10.1017/s1355770x12000137
- attainment. (2020). cambridge university press.
- banerjee, a. v., & duflo, e. (2011). book review: poor economics: a radical rethinking of the way to fight global poverty. *public affairs*.
- batalova, j., & fix, m. (2011). up for grabs: the gains and prospects of first- and sec-ond-generation young adults. migration policy institute. retrieved from <http://www.migrationpolicy.org/research/prospects-first-second-generation-young-adults-up-for-grabs>.
- bates, timothy, & robb, a. (2013). greater access to capital is needed to unleash the local eco-nomic development potential of minori-ty-owned business. *economic development quarterly* 27 (3)(250–259).
- bean, f. d., & bell-rose, s. (2001). immigration and opportunity: race, ethnicity, and employ-ment in the united states. *contemporary so-ciology*, 30. doi:10.2307/2654320
- blau, p., duncan, & o. (1967). the american occupa-tional structure. free press.
- bureau, u. s. c. (2008). 2008 population estimates. u.s. census bureau i. retrieved from <https://www.census.gov/>.
- bureau, u. s. c. (2019). survey of income and pro-gram participation 2014 panel users' guide. washington, d.c.
- campbell, a., l., & kaufman, r. l. (2006). racial dif-ferences in household wealth: beyond black and white. *research in social strati!cation and mobility*, 24(131–152).
- cancio, a.s., evans, t.d., maume, & d.j. (1996). re-considering the decling signiwcnance of race: racial diverences in early career wages. *american sociological review*, 61(541–556).
- cavalluzzo, ken, & wolken, j. (2005). small business loan turndowns, personal wealth, and dis-crimination. *the journal of business*, 78 (6)(2153–2178).
- census, u. (producer). (2012). total money income of households by type, for asian alone and white alone, not hispanic households: 2011, table 19. current population survey, annual social and economic supplement, 2012.
- chang, y.-l. (2020). does state unemployment in-surance modernization explain the trajecto-ries of economic security among working households? longitudinal evidence from the 2008 survey of income and program partici-pation. *journal of family and economic is-sues*, 41(2), 200-217. doi:10.1007/s10834-020-09661-4

- charles, c. z., roscigno, v. j., & torres, k. c. (2007). racial inequality and college attendance: the mediating role of parental investments. *social science research*, 36(1), 329-352. doi:10.1016/j.ssresearch.2006.02.004
- chiang, t.-f., & xiao, j. j. (2017). household characteristics and the change of financial risk tolerance during the financial crisis in the united states. *international journal of consumer studies*, 41(5), 484-493. doi:10.1111/ijcs.12356
- cole, s., & shastry, g. k. (2009). smart money: the effect of education, cognitive ability, and financial literacy on financial market participation. retrieved from https://www.researchgate.net/profile/david_cutter2/publication/228590711_smart_money_the_effect_of_education_cognitive_ability_and_financial_literacy_on_financial_market_participation/links/004635241b58237fdc000000.pdf
- dimaggio, p.j., mohr, & j. (1985). cultural capital, educational attainment, and marriage selection. *american journal of sociology*, 90 (6)(1231-1261).
- drake, b. (producer). (2013). asian-americans lead all others in household income. retrieved from <https://www.pewresearch.org/fact-tank/2013/04/16/asian-americans-lead-all-others-in-household-income/>
- falcón, l. m. (1995). social networks and employment for latinos, blacks, and whites. *new england journal of public policy*, 11(1). re-trieved from <http://scholarworks.umb.edu/nejpp/vol11/iss1/4>
- farkas, & g. (1996). human capital or cultural capital? ethnicity and poverty groups in an urban school district.
- feldstein, & m. (1995). college scholarship rules and private saving. *american economic review*, 85(3)(522-566).
- fernald, j. g. (2015). productivity and potential output before, during, and after the great recession. national bureau of economic research. retrieved from <https://www.nber.org/chapters/c13407.ack>
- financial market participants. (2020). capital.com.
- focusonconomics. (2020, september 1, 2020). united states economy overview. retrieved from <https://www.focus-economics.com/countries/united-states>
- fontes, a. (2011). differences in the likelihood of ownership of retirement saving assets by the foreign and native-born. *journal of family economic issues*, 32(4)(612-624). doi:10.1007/s10834-011-9262-3
- french, d., & vigne, s. (2018). the causes and consequences of household financial strain: a systematic review. *international review of financial analysis*, 62(2019)150-156. doi:<https://doi.org/10.1016/j.irfa.2018.09.008>
- grieco, e. m., & cassidy, r. c. (2001). overview of race and hispanic origin 2000. united states census bureau, c2kbr/01-1.
- guzman, g. (2019). new data show income increased in 14 states and 10 of the largest metros. retrieved from <https://www.census.gov/library/stories/2019/09/us-median-household-income-up-in-2018-from-2017.html#:~:text=real%20median%20household%20income%20in,%2461%2c937%20between%202017%20and%202018.>
- hanna, d., s., lindamood, & s. (2008). the decrease in stock ownership by minority households. *journal of financial counseling and planning*, 19(2)(46-58).
- hanna, s.d., lee, lindamood, j., & s. (2015). financial behavior and attitudes of asians compared to other racial/ethnic groups in the u.s. *journal of family and economic issues*, 36(3)(309- 318). doi: <https://doi.org/10.1007/s10834-015-9447-2>

- hanna, s. d., lee, j., & lindamood, s. (2015). financial behavior and attitudes of asians compared to other racial/ethnic groups in the united states. *journal of family and economic issues*, 36(3), 309-318. doi:10.1007/s10834-015-9447-2
- hao, & lingxin. (2007). color lines, country lines: race, immigration, and wealth stratification in america.
- herbert, e., c., haurin, r., d., rosenthal, s., s., . . . m. (2005). homeownership gaps among low-income and minority borrowers and neighborhoods. u.s. department of housing and urban development. retrieved from <http://www.huduser.org/publications/pdf/homeownership-gapsamonglow-incomeandminority.pdf>
- kalleberg, a. l., & wachter, t. m. v. (2017). the u.s. labor market during and after the great recession: continuities and transformations. *the russell sage foundation journal of the social sciences*, 3(3)(1-19). doi:10.7758
- keister, & a., l. (2005). getting rich: america's new rich and how they got that way. new york: cambridge university press.
- keister, a., l., vallejo, j. a., & borelli, e. p. (2015). mexican american mobility: early life processes and adult wealth ownership. *social forces*, 93 (3)(1-32).
- keister, lisa, vallejo, j. a., & aronson, b. (2016). chinese immigrant net worth: heterogeneity in adaptation. *plos one*, 11 (12)(e0168043). doi:doi:10.1371/journal.pone.0168043
- killwald, alexandra, pfeffer, f. t., & schachner, j. n. (2017). wealth inequality and accumulation. *annual review of sociology*, 43 (1)(379-404).
- kim, j., chatterjee, s., & cho, s. h. (2012). asset ownership of new asian immigrants in the united states. *journal of family and economic issues*, 33(2), 215-226. doi:10.1007/s10834-012-9317-0
- lareau, & a. (1989). home advantage: social class and parental intervention in elementary education.
- mehan, & h. (1992). understanding inequality in schools: the contribution of interpretive studies. *sociology of education*, 65(1-20).
- northwood, j. m., & rhine, s. l. w. (2018). use of bank and nonbank financial services: financial decision making by immigrants and native born. *journal of consumer affairs*, 52(2), 317-348. doi:10.1111/joca.12150
- oecd, & union, e. (2015). indicators of immigrant integration 2015.
- oliver, m.l., shapiro, & t.m. (1995). black wealth/white wealth: a new perspective on racial inequality.
- omi, m., & winant, h. (2015). racial formation in the united states (routledge ed. 3 ed.). 711 third avenue, new york, ny 10017.
- osili, u. o., & paulson, a. (2004). prospects for immigrant-native wealth assimilation: evidence from financial market participation retrieved from https://content.csbs.utah.edu/~philips/soccer2/readings_files/osili%20prospects%20for%20immigrant-native%20wealth%20assimilation%20evidence%20from%20financial.pdf
- ouyang, c., hanna, s. d., & kim, k. t. (2019). are asian households in the u.s. more likely than other households to help children with college costs? *journal of family and economic issues*, 40(3), 540-552. doi:10.1007/s10834-019-09614-6
- painter, matthew, holmes, m. d., & bateman, j. (2016). skin tone, race/ethnicity, and wealth inequality among new immigrants. *social forces*, 94(1153-1185).
- painter, m. a., 2nd. (2013). immigrant and native financial well-being: the roles of place of education and race/ethnicity. *soc sci res*, 42(5), 1375-1389. doi:10.1016/j.ssresearch.2013.04.001

- parcel, t., meneghan, & e.g. (1994). parents' jobs and children's lives. aldine de gruyter, new york.
- paulson, a., singer, a., newberger, r., & smith, j. (2006). financial access for immigrants: lessons from diverse perspectives. federal reserve bank of chicago and the brookings institution.
- picketty, & thomas. (2014). capital in the twen-ty-first century. harvard university press.
- pohlmann, j. t., & leitner, d. w. (2003). a comparison of ordinary least squares and logistic regression. *ohio j sci* 103 (5)(118-125).
- prawitz, d., a., cohart, & j. (2016). financial man-agement competency, financial re- sources, locus of control, and financial wellness. *journal of financial counseling and plan-ning*, 27(2)(142–157).
- priorities, c. o. b. a. p. (2020). chart book: tracking the post-great recession economy. retrieved from <https://www.cbpp.org/research/economy/chart-book-tracking-the-post-great-recession-economy>
- reid, k., c., bocian, d., li, w., & quercia, r. g. (2017). revisiting the subprime crisis: the dual mortgage market and mortgage defaults by race and ethnicity. *journal of urban affairs*, 39 (4).
- rosen, h. s., & wu, s. (2003). portfolio choice and health status. 1050 massachusetts avenue cambridge, ma 02138
- rugh, & jacob. (2015). double jeopardy. *social forc-es*, 93.
- salgado, d., c., & ortiz, v. (2019). mexican americans and wealth: economic status, family and place. *journal of ethnic and migration stud-ies*. doi:<https://doi.org/10.1080/1369183x.2019.1592878>
- services, u. s. c. a. i. (2020). eb-5 immigrant investor program. retrieved from <https://www.uscis.gov/working-in-the-united-states/permanent-workers/eb-5-immigrant-investor-program>
- seto, s., & bogan, v. l. (2013). immigrant household investment behavior and country of origin: a study of immigrants to the united states. *in-ternational journal of finance & economics*, 18(2), 128-158. doi:10.1002/ijfe.464
- sharpe, d.l., abdel-ghany, & m. (2006). determinants of income differentials: comparing asians with whites and blacks. *journal of family and economic issues*, 27(4)(588–600). doi:<https://doi.org/10.1007/s10834-006-9034-7>
- sierminska, e. m., & silber, j. (2019). the diversity of household assets holdings in the united states in 2007 and 2009: measurement and determi-nants. *review of economics of the household*. doi:10.1007/s11150-019-09472-z
- tomaskovic-devy, & d. (1993). gender and racial inequality at work: the sources and conse-quences of employment segregation.
- total_wealth. (2018). wealth accumulation. retrieved from <https://totalwealth.com.au/wealth-accumulation/#:~:text=accumulation%20by%20definition%20doesn't,work%20effectively%20to%20your%20goals>.
- valdez, & zulema. (2011). the new entrepreneurs: how race, class, and gender shape american enterprise. palo alto, ca: stanford university press.
- vallejo, a., jody, & canizales, s. (2016). latino/a pro-fessionals as entrepreneurs: how race, class, and gender shape entrepreneurial incorpora-tion. *ethnic and racial studies*, 39 (9)(1637–1656).
- wilson, & w.j. (1987). the truly disadvantaged.
- wilson, & w.j. (1996). when work disappears: the world of the new urban poor.
- wolff, & n, e. (2011). recent trends in household wealth in the u.s.: rising debt and the mid-dle class squeeze. in *economics of wealth in the 21st century*, 1–41.

wong, p., lai, f., c., nagasawa, r., . . . t. (1998). asian americans as a model minority: self-perceptions and perceptions by other racial groups. *sociological perspectives*, 41(95–118). doi:10.2307/1389355

zhou, & min. (1992). chinatown: the socioeconomic potential of an urban enclave.

Appendix

Table 7. OLS Result on Social-Economic Characteristics for the Financial Behaviors Outcomes

	-1	-2	-3	-4	-5	-6	-7
Variable	Basic Utilities	Financial Institution Asset	Retirement Account	Business Values	Primary Residence Values	Vehicles Values	Asset Values
Race							
Black only	118.222***	- 17183.557***	-27717.58***	29255.548	-35046.78***	-2458.583***	- 119902.72***
	-28.194	-2535.86	-4801.844	-38928.169	-5537.712	-373.336	-43993.083
Asian only	-6.445	14922.474***	14039.281	-149887.85*	77241.87***	-120.09	12318.994
	-58.886	-5296.298	-10028.943	-81303.842	-11565.846	-779.735	-91882.221
Others	-2.609	-4846.768	-19875.461**	-27054.909	-10190.273	-1986.004***	-98307.041
	-57.045	-5130.725	-9715.417	-78762.116	-11204.274	-755.359	-89009.792
Age	-2.139	849.478***	1712.602***	4536.534**	1932.426***	-49.983**	12105.495***
	-1.471	-132.282	-250.487	-2030.676	-288.873	-19.475	-2294.886
US Duration	3.254**	415.417***	1149.799***	-1994.083	1222.529***	145.467***	2785.736
	-1.273	-114.478	-216.774	-1757.367	-249.994	-16.854	-1986.017
Immigrant Household							
Yes	209.66***	18026.83***	35856.873***	397471.39***	104835.99***	2876.853***	566460.42***

	-66.64	-5993.756	-11349.633	-92010.575	-13088.928	-882.417	-103982
_cons	452.746***	14470.182***	47031.233***	41781.994	125258.47***	19338.235***	301519.92***
	-60.791	-5467.637	-10353.386	-83934.076	-11940.009	-804.96	-94854.672
Observations	12605	12605	12605	12605	12605	12605	12605
R-squared	0.011	0.062	0.122	0.004	0.141	0.192	0.04

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 7. (continued)

	-1	-2	-3	-4	-5	-6	-7
Variable	Basic Utilities	Financial Institution Asset	Retirement Account	Business Values	Primary Residence Values	Vehicles Values	Asset Values
Household Type							
Married couple, spouse absent	-179.344**	3279.543	-39388.137***	-78067.757	-50958.295***	-7336.927***	-114348.84
	-74.055	-6660.647	-12612.441	-102248.06	-14545.258	-980.599	-115551.47
Widowed	-96.808***	18403.839***	93483.207***	86609.039*	77229.741***	-9549.877***	378733.12***
	-33.274	-2992.762	-5667.022	-45942.096	-6535.475	-440.603	-51919.586
Divorced	-143.75***	17726.123***	69760.537***	66058.849*	75372.585***	-9571.561***	315048.01***
	-26.353	-2370.232	-4488.214	-36385.595	-5176.019	-348.952	-41119.695
Separated	-58.494	13438.245***	60952.633***	-71139.167	80232.237***	-8715.512***	293057.05***
	-57.96	-5213.039	-9871.286	-80025.734	-11384.03	-767.478	-90437.819
Single/never married	206.438***	-7100.958***	64018.337***	-25324.91	-93556.35***	11620.406***	265846.23***

		-28.939	-2602.811	-4928.619	-39955.926	-5683.915	-383.193	-45154.56
Number of Children	of	17.464***	-3436.09***	-8706.708***	5702.399	-5299.377***	-408.544***	-21521.195**
		-6.691	-601.762	-1139.482	-9237.693	-1314.104	-88.593	-10439.602
_cons		452.746***	14470.182***	47031.233***	41781.994	125258.47***	19338.235***	301519.92***
		-60.791	-5467.637	-10353.386	-83934.076	-11940.009	-804.96	-94854.672
Observations		12605	12605	12605	12605	12605	12605	12605
R-squared		0.011	0.062	0.122	0.004	0.141	0.192	0.04

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 7. (continued)

	-1	-2	-3	-4	-5	-6	-7
Variable	Basic Utilities	Financial Institution Asset	Retirement Account	Business Values	Primary Residence Values	Vehicles Values	Asset Values
High School Graduation							
GED or other tests	-22.654	-	-	-38361.604	-51959.79***	-2217.593***	-
		10558.376***	36971.263***				208056.62***
	-36.262	-3261.488	-6175.875	-50067.326	-7122.308	-480.165	-56581.546
No diploma or GED	-23.285	-17827.94***	-41850.29***	-25175.355	-58168.95***	-4071.688***	-
							225888.93***
	-30.675	-2758.976	-5224.331	-42353.234	-6024.943	-406.184	-47863.78
Employment Status							

Employment	-2.34	-3886.304*	33557.361***	30742.749	25433.459***	2881.254***	80526.559**
	-22.537	-2027.021	-3838.318	-31116.938	-4426.528	-298.424	-35165.538
Health Status	-10.871	-	-	-	-	-1956.755***	-
		10684.883***	26445.512***	28675.703**	34372.555***		145279.05***
	-10.46	-940.768	-1781.416	-14441.801	-2054.413	-138.502	-16320.813
English Proficiency	3.962	-4959.273	-8948.536	-58515.872	-	-487.72	-102636.63*
					20151.877***		
	-35.743	-3214.824	-6087.514	-49350.994	-7020.406	-473.295	-55772.012
_cons	452.746***	14470.182***	47031.233***	41781.994	125258.47***	19338.235***	301519.92***
	-60.791	-5467.637	-10353.386	-83934.076	-11940.009	-804.96	-94854.672
Observations	12605	12605	12605	12605	12605	12605	12605
R-squared	0.011	0.062	0.122	0.004	0.141	0.192	0.04

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 7. (continued)

	-8	-9	-10	-11	-12	-13
Variable	Debt	Stock and Mutual Funds	and Net Worth	Sum Income	Annual Income	Financial Market Participation
Race						
Black only	-19497.485***	-878.503***	-100405.23**	-755.482***	-18950.578***	11193.487
	-4684.798	-261.316	-42973.546	-156.596	-3522.08	-39049.844
Asian only	45926.527***	-229.252	-33607.533	1216.323***	29267.152***	-135194.62*
	-9784.484	-545.775	-89752.857	-327.06	-7356.078	-81557.968
Others	-4264.891	-757.227	-94042.15	-445.62	-10331.939	-32658.904

	-9478.601	-528.713	-86946.997	-316.836	-7126.111	-79008.297
Age	-971.37***	46.961***	13076.865***	11.787	23.908	5432.973***
	-244.381	-13.631	-2241.702	-8.169	-183.728	-2037.024
US Duration	786.823***	11.133	1998.913	44.211***	1120.618***	-1567.533
	-211.49	-11.797	-1939.991	-7.069	-159	-1762.86
Immigrant Household						
Yes	47129.045***	427.054	519331.38***	1350.477***	38336.952***	415925.26***
	-11072.983	-617.647	-101572.22	-370.13	-8324.784	-92298.166
_cons	157782.76***	1357.105**	143737.16	6346.585***	163951.32***	57609.282
	-10101.019	-563.431	-92656.422	-337.641	-7594.052	-84196.422
Observations	12605	12605	12605	12605	12605	12605
R-squared	0.086	0.019	0.034	0.203	0.219	0.005

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 7. (continued)

	-8	-9	-10	-11	-12	-13
Variable	Debt	Stock and Mutual Funds	Net Worth	Sum Income	Annual Income	Financial Market Participation
Household Type						

Married couple, spouse absent	-	-928.133	-57472.334	-3165.5***	-	-75716.346
	56876.503***				75565.733***	
	-12305.01	-686.369	-112873.58	-411.312	-9251.035	-102567.65
Widowed	-	-837.095***	-	-3725.18***	-	-
	52631.534***		326101.59***		85193.506***	105849.97**
	-5528.887	-308.399	-50716.353	-184.811	-4156.675	-46085.694
Divorced	-	-921.189***	-	-	-	-
	46832.656***		268215.35***	3517.027***	82740.092***	84706.162**
	-4378.813	-244.249	-40166.75	-146.368	-3292.037	-36499.322
Separated	-	-387.419	-	-	-	-84964.83
	56784.375***		236272.67***	3296.021***	74955.518***	
	-9630.671	-537.196	-88341.929	-321.919	-7240.439	-80275.865
Single/never married	-	-905.218***	-	-	-	-33331.087
	78338.876***		187507.36***	4006.887***	92540.985***	
	-4808.483	-268.216	-44108.107	-160.73	-3615.068	-40080.814
Number of Children	-909.965	-158.632**	-20611.23**	-117.403***	-2658.315***	2107.677
	-1111.707	-62.011	-10197.665	-37.16	-835.793	-9266.567
_cons	157782.76***	1357.105**	143737.16	6346.585***	163951.32***	57609.282
	-10101.019	-563.431	-92656.422	-337.641	-7594.052	-84196.422
Observations	12605	12605	12605	12605	12605	12605
R-squared	0.086	0.019	0.034	0.203	0.219	0.005

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 7. (continued)

-8 -9 -10 -11 -12 -13

Variable	Debt	Stock and Mutual Funds	Net Worth	Sum Income	Annual Income	Financial Market Participation
High School Graduation						
GED or other tests	-34109.529***	-1087.454***	-173947.09***	-1285.694***	-33512.303***	-50007.433
	-6025.336	-336.091	-55270.273	-201.405	-4529.911	-50223.817
No diploma or GED	-28904.069***	-1176.753***	-196984.86***	-1486.928***	-36508.68***	-44180.046
	-5096.986	-284.308	-46754.54	-170.374	-3831.967	-42485.614
Employment Status						
Employment	40984.218***	-507.062**	39542.341	2719.043***	62122.519***	26349.382
	-3744.758	-208.881	-34350.579	-125.174	-2815.348	-31214.198
Health Status	-13953.655***	-588.276***	-131325.39***	-940.86***	-22741.538***	-39948.862***
	-1737.994	-96.945	-15942.579	-58.095	-1306.642	-14486.941
English Proficiency	-10583.703*	-253.675	-92052.929*	-509.387**	-11019.939**	-63728.818
	-5939.129	-331.283	-54479.5	-198.524	-4465.099	-49505.247
_cons	157782.76***	1357.105**	143737.16	6346.585***	163951.32***	57609.282
	-10101.019	-563.431	-92656.422	-337.641	-7594.052	-84196.422
Observations	12605	12605	12605	12605	12605	12605
R-squared	0.086	0.019	0.034	0.203	0.219	0.005

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 8. (continued)

Variable	-1	-2	-3	-4	-5	-6	-7
	Basic Utilities	Financial Institution Asset	Retirement Account	Business Values	Primary Residence Values	Vehicles Values	Asset Values
Number of Children	12.038***	-3821.536***	-	4760.308	-6563.904***	-413.935***	-
			11152.199***				33497.796***
High School Graduation	-2.119	-288.147	-637.06	-4926.457	-720.394	-45.386	-9433.889
GED or other tests	4.964	-	-40661.33***	-53142.181*	-	-2426.623***	-
		11580.588***			57715.833***		230692.21***
No diploma or GED	-11.795	-1603.849	-3545.926	-27421.065	-4009.77	-252.622	-52509.805
	-21.48**	-	-	-32199.54	-	-4342.398***	-
		17708.591***	48461.911***		71467.369***		286088.35***
Employment Status	-9.942	-1351.881	-2988.852	-23113.147	-3379.825	-212.934	-44260.383
Employment	18.631**	70.616	32579.378***	84746.151***	27767.715***	3031.84***	163150.54***
	-7.39	-1004.934	-2221.792	-17181.382	-2512.426	-158.287	-32901.386
Health Status	-7.323**	-9735.329***	-	-19794.737**	-	-2006.71***	-
			31527.586***		37770.205***		172282.18***
English Proficiency	-3.383	-460.076	-1017.175	-7865.931	-1150.232	-72.466	-15062.819
	-22.505*	-4542.719***	-5401.158	-45040.368*	-	-503.957**	5060.351
					25332.944***		
	-11.493	-1562.776	-3455.119	-26718.842	-3907.084	-246.153	-51165.088

_cons	431.706***	11738.497***	59528.365***	23212.242	152736.66***	20180.453***	184460.4**
	-19.919	-2708.576	-5988.35	-46308.62	-6771.689	-426.627	-88678.418
Observations	50420	50420	50420	50420	50420	50420	50420
R-squared	0.012	0.052	0.111	0.002	0.12	0.184	0.014
Coeff	.z	.z	.z	.z	.z	.z	.z
P_value	.z	.z	.z	.z	.z	.z	.z

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 8. (continued)

	-8	-9	-10	-11	-12	-13
Variable	Debt	Stock and Mutual Funds	Net Worth	Sum Income	Annual Income	Financial Market Participation
Age	-232.746	52.862***	18335.73***	24.897***	548.325***	5291.453***
	-368.247	-5.693	-1862.505	-4.404	-86.074	-998.886
US Duration	81.059	11.018**	-487.437	17.659***	376.424***	-1668.889**
	-305.547	-4.724	-1545.384	-3.654	-71.418	-828.81
Household Type						
Married couple, spouse absent	-	-794.957***	-	-	-76053.48***	-111552.92**
	61975.523***		283755.48***	3249.338***		
	-19819.299	-306.407	-100241.15	-237.022	-4632.529	-53760.648
Widowed	-	-1247.291***	-393219.6***	-	-	-
	67372.388***			3790.308***	87856.722***	111190.34***
	-8913.8	-137.808	-45083.816	-106.602	-2083.496	-24179.044
Divorced	-	-922.549***	-	-	-	-78602.31***
	61083.252***		324613.79***	3735.287***	86091.522***	

	-7216.84	-111.573	-36501.008	-86.307	-1686.852	-19575.97
Separated	-	-637.415**	-	-	-	-112053.42**
	75797.228***		339367.58***	3584.854***	84164.203***	
	-16921.097	-261.601	-85582.76	-202.362	-3955.108	-45899.16
Single/never married	-	-761.901***	-	-	-	-
	86922.983***		251987.55***	4281.447***	97956.111***	80670.339***
	-7854.728	-121.434	-39727.287	-93.936	-1835.951	-21306.267
_cons	431.706***	11738.497***	59528.365***	23212.242	152736.66***	20180.453***
	-19.919	-2708.576	-5988.35	-46308.62	-6771.689	-426.627
Observations	50420	50420	50420	50420	50420	50420
R-squared	0.012	0.052	0.111	0.002	0.12	0.184
Coeff	.z	.z	.z	.z	.z	.z
P_value	.z	.z	.z	.z	.z	.z

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 8. (continued)

Variable	-8 Debt	-9 Stock and Mutual Funds	-10 Net Worth	-11 Sum Income	-12 Annual Income	-13 Financial Market Participation
Number of Children	-83.78	-171.817***	-33414.016***	-101.401***	-3037.421***	766.954
	-1822.901	-28.182	-9219.786	-21.8	-426.082	-4944.692
High School Graduation						
GED or other tests	-39104.986***	-894.345***	-191587.22***	-1489.895***	-35999.522***	-65617.114**
	-10146.417	-156.864	-51318.087	-121.343	-2371.606	-27522.565

No diploma or GED	-39681.268***	-1099.097***	-246407.08***	-1699.258***	-40449.076***	-51007.227**
	(-8552.389)	(-132.22)	(-43255.887)	(-102.28)	(-1999.021)	(-23198.701)
Employment Status						
Employment	42540.044***	-447.035***	120610.5***	2824.06***	62331.886***	84369.732***
	(-6357.502)	(-98.287)	(-32154.684)	(-76.03)	(-1485.991)	(-17244.98)
Health Status	-18471.648***	-690.13***	-153810.53***	-974.757***	-22908.294***	-30220.197***
	(-2910.573)	(-44.998)	(-14720.966)	(-34.808)	(-680.312)	(-7895.047)
English Proficiency	-10161.613	-63.169	15221.964	-583.549***	-14184.242***	-49646.256*
	(-9886.578)	(-152.847)	(-50003.888)	(-118.235)	(-2310.872)	(-26817.743)
_cons	431.706***	11738.497***	59528.365***	23212.242	152736.66***	20180.453***
	(-19.919)	(-2708.576)	(-5988.35)	(-46308.62)	(-6771.689)	(-426.627)
Observations	50420	50420	50420	50420	50420	50420
R-squared	0.012	0.052	0.111	0.002	0.12	0.184
Coeff	.z	.z	.z	.z	.z	.z
P_value	.z	.z	.z	.z	.z	.z

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$