

Nilton Porto

According to the 2010 Census, Hispanics or Latinos (both terms are used interchangeably in this chapter) are now the largest minority group in the USA, representing 16.3 % of the total population and are responsible for more than half of the American population growth from 2000 to 2010 (U.S. Census Bureau 2010). With a total fertility rate of roughly 2.3 children per woman, Hispanics have been the only group above the necessary replacement rate of roughly 2.1 to keep population constant in most industrialized countries. In public school enrollment, more than 20 % of all students are Hispanics (Pew Research Center, 2008) despite being underrepresented in post-secondary education. In sum, Latinos represent an important segment of the American population and, as such, have been deemed worth of interest by research in consumer finance.

Researchers from a variety of fields have recognized the importance of understanding individual and group characteristics of Hispanic Americans by contrasting and comparing them with non-Hispanic Whites and other minority groups. Empirical findings seem to point at the need to analyze this group separately in a number of relevant outcomes. For instance, in public

health, Hispanics have been shown to have equal or better health outcomes (despite their limited access to healthcare) than non-Hispanic Whites due to cultural factors that increase resiliency, a finding termed the Hispanic Paradox by epidemiologists (Gallo, Penedo, Espinosa de los Monteros, & Arguelles, 2009). Along the same vein, infant mortality among immigrants from Mexican origin is also lower than Whites (Hummer, Powers, Pullum, Gossman, & Frisbie, 2007).

In consumer research, there has also been a growing interest in comprehending Hispanic issues related to household financial management apart and in relation to other ethnic groups. Lee and Hanna (2012) have brought attention to the issue of combining Hispanic Americans and African Americans into one minority group; they find that Hispanic households are less likely to be delinquent than Whites or African Americans. Hispanic might behave differently than other groups in the financial arena for a number of internal or external reasons related to their ethnicity or upbringing. More specifically, recent arrivals and early generations bring a number of cultural beliefs and attitudes when dealing with financial institutions that might differ from non-Hispanics or later generations Hispanics. Hispanics placed communication higher than non-Hispanic Whites when ranking banking satisfaction (Lopez, Hart, & Rampersad, 2007), prefer near-term savings than long-term investments (Stevenson & Plath, 2006), and are more likely to be unbanked if non-citizen, foreign-born (FDIC, 2011).

N. Porto, Ph.D. (✉)
Department of Human Development and Family
Studies, University of Rhode Island,
Transition Center #212, 2 Lower College Road,
Kingston, RI 02881, USA
e-mail: nilton_porto@uri.edu

In addition to ethnic and cultural differences, there is considerable variation within the Latino population in a number of other factors. Measured by country of origin, Mexicans comprised 64.9 % of the Hispanic population in the USA, Puerto Ricans 9.2 %, and Cubans another 3.7 % (Motel & Patten, 2012). While Mexican Americans constitute the largest Hispanic group in the USA, there is extensive heterogeneity even within this group on features such as English proficiency, years in the country, and degrees of assimilation/accluturation. For instance, undocumented immigrants might shy away from using traditional financial services for fear of being discovered by immigration authorities while legal immigrants feel more comfortable being part of the system.

Regardless of the motives why Hispanics might approach their personal finances differently, this segment can be considered a vulnerable population in a number of household finance measurements. White households median wealth is 18 times that of Hispanic households and roughly one out of three Hispanic households had zero or negative net worth in 2009 (Kochhar, Taylor, & Fry, 2011). The Pew Institute 2011 National Survey of Latinos highlighted the large detrimental effect of the sluggish economy on Hispanic households (Taylor, Kochhar, Fry, Velasco, & Motel, 2011). Latino respondents report that their personal finances are in “poor” or “only fair” shape (75 %), that they or another household member has been out of work in the last year (59 %), and that 28 % of their mortgages are underwater. The national data also supports the fact that Hispanic Americans have been one of the most negatively affected group after the housing crisis and Great Recession; the unemployment for this group was 11.0 % in December 2011, higher than the national average of 8.5 % at that point. Although these rates have come down considerably in recent reports, as of November 2014, Hispanic and African Americans are still more likely to be unemployed than Whites.

As a result, the goal of this chapter is to review the most current research on consumer finance relate to Hispanic Americans while cautioning the reader to keep in mind the need to distinguish subpopulations within this group. This chapter

starts by discussing the financial capability of Hispanics. The subsequent section summarizes how Latinos use financial services—both mainstream and alternative—in a number of different ways than non-Hispanic Whites, including the issues of the unbanked. The next section is dedicated to asset building, an area of personal finance where Latinos seem to have been struggling to keep up with the rest of the population. The final section concludes this chapter by offering advice for future research on this topic.

Financial Capability

The set of human behaviors related to money management is commonly called financial behaviors (Xiao, 2008). Combined with both actual and perceived financial knowledge and access to financial institutions, these components now comprised a broader model of financial capability that is thought to be crucial in helping people achieve financial freedom. Financial capability “combines a person’s ability to act with their opportunity to act” (Sherraden, 2013). In other words, some degree of financial knowledge coupled with good money management behaviors, and unrestricted access to appropriate and beneficial financial services are all important factors in becoming financially capable. Furthermore, “financial capability can be demonstrated by a certain level of financial literacy and performance of desirable financial behaviors” (Xiao, Chen, & Chen, 2014). Latinos appear to represent a less financially capable group, encountering a series of unique challenges from limited human capital to lack of experiential learning and access to the right financial institution.

Prior research has found that Hispanic Americans scored lower than non-Hispanic Whites in a number of financial literacy measurements, from high school seniors taking the JumpStart survey (Mandell & Klein, 2007) to the five item questions included in the FINRA National Financial Capability Study (FINRA-IEF, 2013). Financial literacy appears to be particularly lacking among Hispanic Americans in both objective measures (Lusardi, 2008) or when this

group self-reports lower levels of financial knowledge than Whites when asked to estimate their own knowledge (Lusardi & Tufano, 2009). However, when the Hispanic individuals display a high degree of financial knowledge, they are more likely than Whites of similar levels to “engage in responsible financial management behaviors” such as budgeting, saving money, and controlling spending (Perry & Morris, 2005) and are less likely to be delinquent than Whites (Lee & Hanna, 2012). Although the last two findings are promising, knowledge of social security insurance is particularly weak on Hispanic Americans, with less than half of households able to estimate retirement benefits and less than one quarter of those able to estimate within 25 % of the actual amount (Gustman & Steinmeier, 2005).

A central challenge in financial capability is to close the motivation gap between people’s knowledge and behavior. While most people are able to identify the important choices to a better financial life, they often fail to act upon this knowledge. Similarly, the temporal gap between when the financial knowledge is achieved and when is needed can undermine the success of financial literacy interventions. Understanding sources and reasons for these mismatches is particular relevant to find the missing link tying together financial literacy training and optimal financial behaviors. Older Latino immigrants, for example, might be at a disadvantage in both formal and experiential financial knowledge: they might have never had a financial literacy class as part of their regular educations and their experience with financial products and services might be curbed by what was available in their cities or regions of origin.

Financial advice could potentially act as a substitute when Hispanic Americans’ financial knowledge is incomplete. However, relative to Whites, Hispanics are less likely to use a financial planner or seek financial advice (Bucks, Kennickell, Mach, & Moore, 2009; Collins, 2012; Hanna, 2011). This gap could be a function of a number of factors such as limited supply of financial advisers marketing to Hispanics, unique needs of this population that have not been addressed in the marketplace, or a number of

other cultural differences. As an alternative, Hispanics can also receive financial advice from financial counselors, more commonly associated with serving low to moderate income populations. The effects of counseling to help improve the financial capability of Hispanics are scarce and mixed. Reviewing the effects of a mandate financial counseling to high risk mortgages in a mostly Hispanic geographic area, a recent research (Agarwal, Amromin, Ben-David, Chomsisengphet, & Evanoff, 2011) concludes that the intervention pushed some borrowers to a less risky option but not after reducing the supply and demand for mortgages in those markets.

Another important concept in the financial behavior of Hispanic households is agglomeration, defined as the living, working, or interacting clusters of similar groups. Hispanics living in areas with a large number of Hispanic homeowners are more likely to purchase a home in the future (Haurin & Rosenthal, 2009). It follows that the influence of this ethnic peer effects can also explain a number of financial behaviors of Hispanic Americans, either learned in their previous home or in their current community.

Use of Financial Services

Hispanics are more likely to be unbanked and to use alternative financial services than Whites (FINRA-IEF, 2013). In fact, being Latino increases the likelihood of being unbanked by 11.5 percentage points using Whites as the reference group (Rhine & Greene, 2013). Although several socio-economics factors might explain most of this gap, cultural differences might also play an important role on this group’s money management preferences. Rhine et al. (2006) hypothesize that a number of unmeasured preference factors such as cost perceptions, liquidity constraints, and even information asymmetries might be in play on Hispanic Americans’ choice to patronize check cashing place instead of mainstream banking.

While research of American residents has uncovered race and ethnicity disparities on banking utilization within the USA, another

potential comparison of interest is to review data from other Latin American countries. As of 2005, roughly 25 % of Mexican and 48 % of Dominican households are banked in their home country (Beck, Demirguc-Kunt, & Peria, 2007). Other countries with large immigrant contingents in the USA also have lower bank utilization than the American population: Guatemala at 16.5 %, Ecuador at 22 %, Colombia at 42 % (the highest bank utilization in Latin America from the data available), and Nicaragua at 5 %. While these figures are significantly lower than bank utilization in the USA (around 90 % of all households by most accounts), the low utilization could be due to lack of access, personal preferences, or other unmeasured factors. A possible clue can be found in Honohan (2008) composite measure of access to financial services. In this indicator, the USA scores 91 out of a possible 100 points while the countries mentioned above scored at a lower range: 25 in Mexico, 29 in the Dominican Republic, 32 in Guatemala, 35 in Ecuador, 41 in Colombia, and just 5 in Nicaragua.

Besides personal preference, limited access on their countries of origin to mainstream financial institutions should lead researchers to consider that the vast majority of first generation immigrants from Latin America have none or very limited banking experience. This lack of familiarity with traditional financial services could also prevent Hispanics from taking full advantage of the system and reaping the benefits from being banked (Grinstein-Weiss, Yeo, Despard, Casalotti, & Zhan, 2010). While time spent in the USA, age at immigration, legal status, and other characteristics can help immigrants incorporate themselves into becoming banked, they appear to still fall behind when taking advantage of more future forward financial products such as retirement accounts and investments (Osili & Paulson, 2007).

Reviewing recent waves of immigrants, Rhine and Greene (2006) found that immigrants from Mexico and other Latin American countries have the highest rates of being unbanked compared to immigrants from Asia or Europe. Similarly to other findings focused on native born consumers, the likelihood of being unbanked also increases

for larger families, low education attainment, and lower income. A number of alternative financial services such as check cashing places and bodegas have targeted considerable efforts towards building a large Latino clientele which can further prevent these customers inclusion into mainstream financial services.

While the most customary method to measure financial access is by the number of banking institutions and/or automated teller machines (ATMs) in a certain geographic area, Hispanic consumers might also encounter additional barriers such as language. For instance, less than 40 % of foreign-born or first generation Hispanics rate themselves proficient in English (Pew Hispanic Center, 2007). The banking industry has recognized the importance of this market and has striven to offer both in person and over the phone bilingual services; however, there is some evidence that Latinos might prefer to do business with the types of business they are already more familiar with such as bodegas, a type of mini-mart popular among Latino communities Martinez-Ruiz, Jimenez-Zarco, & Izquierdo-Yusta, 2010).

Prepaid card and smartphones are two recent developments that could have a positive impact on the use of financial services by Hispanics since they are slightly more likely to own smartphones than non-Hispanic whites (Smith, 2013) and this new technology has also been shown to facilitate access to the traditional financial systems (Mbiti & Weil, 2011).

Using several waves from the Survey of Consumer Finances, Weller (2009) finds that Hispanics and other minorities encounter more barriers to obtaining credit. Hispanics are twice more likely than Whites to have had a credit application denied and 11.9 % of Hispanic families said that they do not apply for a loan for fear of being denied—only 4.9 % of non-Hispanic Whites report the same type of apprehension. Perhaps of more relevant policy concern, when Latinos are approved for credit, their loan compare negatively to what non-Hispanic Whites are being offered: their mortgage is usually a subprime loan (Fishbein & Woodall, 2006) at a higher interest rate than the average loan being offered in that market (Bocian, Ernst, & Li, 2008). Similar

structural barriers can be found on the credit card market where Hispanics pay higher interest rates and are limited on their choice due to lack of credit history (Gonzalez, 2007).

Asset Building

Asset building is a crucial component of financial freedom. In this category, Hispanic Americans are also facing a major challenge compared to Whites. While some of the income gap had shrunk slightly until 2007, the wealth gap has continued to increase between Whites and Hispanics. On average, Whites accumulate six times more wealth and earn double the income of Blacks and Hispanics (McKernan, Ratcliffe, Steuerle, & Zhang, 2013). From 2010 to 2013, Hispanic families' median net worth fell another 17 % while Whites gained 2 % to their median net worth (Bricker et al., 2014). The continuity of the wealth gap is especially detrimental as Hispanics age since they forsake accumulating needed assets for retirement and rely more on Social Security benefits than their White counterparts.

Homeownership has been considered—for better or worse—one of the main venues for asset accumulation in the USA. A promising recent trend has been the all-time high homeownership rate among Hispanic Americans in 2007 (Cortes, Herbert, Wilson, & Clay, 2007); in fact, all racial/ethnic segments experimented the same upward trend in that period. Following this boom period, the subsequent financial crisis was especially hard to the Latin segment; their homes were highly concentrated around the most affected states and more likely to have a non-traditional loan such as an adjustable rate mortgage (ARM) or a subprime loan. Before the crisis, Hispanics and Black were also borrowing higher amounts than did Whites with similar incomes (Kochhar, Gonzalez-Barrera, & Dockerman, 2009). More recent figures put the rate of homeownership by Hispanics at 46.1 %, a drop from the all-time high of 49.7 % in 2005–2006 (National Association of Hispanic Real Estate Professionals, 2013). The same report further reveals that Hispanics have accounted for 47 % of the total net growth of homeowners since 2010.

Immigrants have been shown to have lower homeownership rates than natives. Europeans and Chinese immigrants have the highest homeownership rates among first generation immigrants; on the other hand, immigrants from Latin America are the least likely to own a home even after an assimilation period is taken into consideration (Borjas, 2002). While factors such as age, income, and household composition are related to homeownership across all ethnic groups, housing quality of Hispanic American either foreign- or native-born ranks lower than White or Asian households (Friedman & Rosenbaum, 2004).

We see an increase in homeownership rates for Hispanics that are able to speak fluent English, that have lived in the USA for more than 10 years, and that have become citizens (Cortes et al., 2007). Again, their increased assimilation and acculturation in the American society appear to have a positive effect on their ability and willingness to become a home owner. More specifically, differences between native and foreign-born homeownership rates seem to weaken or disappear when English fluency is brought to the analysis. Hispanics that are comfortable reading and speaking English might be also more comfortable entering the process of buying a house and navigating the intricacies of a mortgage contract regardless of their place of birth.

Higher education is an important path to financial wellbeing via better employment and higher salaries. The strong correlation between educational attainment and wealth has been pointed out as a factor explaining Hispanics deficiencies on financial topics and asset building. In fact, persistent family patterns of economic disadvantage can explain most of the low college attainment of Hispanic Americans, a factor that increases the economic divide between them and non-Hispanic Whites (Charles, Roscigno, & Torres, 2007).

Family homeownership and the existence of college savings have been found to be predictive of Hispanic's college attendance (Song & Elliott, 2012; Song & Elliott III, 2011). However, Zhan and Sherraden (2011) found a weaker relationship between household assets and college attendance for Hispanics and a negative correlation

between unsecured debt and college graduation rates. The authors further hypothesized that unobserved family characteristics such as immigrant status and language skills could contribute to other differences in college education attainment of Hispanic children.

Low financial risk tolerance is another potential suspect why Hispanic Americans accumulate less assets than Whites over their lifetime (Yao, Gutter, & Hanna, 2005). In fact, Hanna, Wang, and Yuh (2010) use decomposition analyses to establish that differences in risk tolerance explains 23 % of the Hispanic-White high return investments variation. The imbalance between White and Hispanic household's wealth can be further explained by Hispanic families' investment portfolio with a limited number of high return assets such as stocks and mutual funds (Plath & Stevenson, 2005). Moreover, Hispanic families' likelihood to hold stock investments appears to be decreasing in relation to Whites (Hanna & Lindamood, 2008). It is quite reasonable to imagine that some Hispanics avoid long-term and/or riskier investments due to their unstable legal status or due to planning to return to their home country before retirement.

Hispanics also encounter a number of labor market barriers that might further diminish their ability to accumulate assets. First generation immigrants earn 24 % less than natives and are less likely to be managers or supervisors (Hall & Farkas, 2008). The same study highlights how increased acculturation benefits immigrants via improved wages and higher employment. Applicants with Hispanic names or accents are also judged less favorably in an interview process than applicants showing no ethnic indicators (Segrest Purkiss, Perrewe, Gillespie, Mayes, & Ferris, 2006). As a result, real or perceived labor market barriers appear to lead a large number of Latinos to opt for self-employment. Hispanics have been shown to be more likely than Whites to start their own business but also more likely to fail afterwards (Sullivan, 2007). In fact, figures from the Current Population Survey from 1996 to 2008 show that Latinos have the highest increase in entrepreneurial activity of all population segments (Fairlie, 2009). Some researchers have

connected lack of financial resources (such as access to small business loans) and cultural differences (such as collectivism) to explain both this entrepreneurship tendency and high failure rate of Hispanic Americans (Blancero et al., 2014; Shinnar & Young, 2008).

For entrepreneurship, the bunching up of all group segments into a Hispanic or Latino umbrella might be particularly problematic in trying to generalize findings to this group as a whole. For example, self-employed Mexicans earn less if their business is within a Hispanic enclave as opposed to a business located in a more diverse neighborhood. However, the same effect fails to appear when comparing returns to Cuban entrepreneurs in ethnics versus non-ethnics enclaves (Aguilera, 2009).

Conclusion and Future Research Directions

Hispanic Americans financial issues might not be, at their core, so different from the same challenges facing other disadvantaged groups in the USA. They lack important financial capability tools, they rely too much on costly alternative financial services while staying away from mainstream banking, and they struggle to build wealth for the long haul. Furthermore, consumer financial researchers are also faced with the quandary of balancing the study of the whole of the Hispanic population and the individual characteristics of its distinct subgroups. Rather than treating the Hispanic ethnicity as a homogeneous group, researchers in the field of consumer finance are tasked with the challenge to better understand different subpopulations within this group to truly appreciate their financial needs and wants. English proficiency, country of origin, racial identification, and generational rank are all important aspects that needed to be examined before prescribing the right approach to reach and fulfill these group financial needs.

As Moffitt (1987) argued, the behavioral impact of policy changes is largely determined by how these changes were anticipated. Hispanic Americans have seen the marketplace adjust to

their needs over the years, from the prevalence of Spanish language in both customer service and printed materials to products and marketing aimed exclusively at this population. However, specific policy interventions designed to improve Hispanic Americans households finances are still scarce, mostly involving direct translation of materials initially produced for the general population. While this approach has a number of advantages to policymakers, including lower costs and scalability, Hispanic Americans have seldom received a targeted attention in consumer finances that also recognize the uniqueness and variation within their group. The same reasoning can be applied to financial institutions interested in bringing this population as customers or applied to financial coaches/counselors devising methods to better their clients' financial lives.

More specifically, this synthesis proposes a more in-depth measurement of acculturation when reviewing the personal finances of Hispanic Americans. Acculturation is the process to learn a second culture. The degree of acculturation, for example, has been related to a number of health outcomes variation among Hispanic American (Hunt, Schneider, & Comer, 2004); however, defining acculturation is also problematic due to the large number of scales being currently used (Thomson & Hoffman-Goetz, 2009) and its connections with the concept of cultural assimilation. While researchers have been proactive in bringing variables such as years in the USA, place of birth, and language preferences to their analysis, they rarely recognize these measurements as proxies for level of acculturation and fail to further explore this important factor when reviewing Latino households' finances.

In practical terms, a second generation Hispanic American living in a mostly White community might be well suited to the same mainstream financial strategies while a recent arrival from Central America with no banking experience might benefit from a more targeted approach. In other words, understanding differences and recognizing the heterogeneity of this group is a crucial component of any research aimed at American Latinos.

Two important research questions could be answered using this novel approach: what level

of acculturation becomes beneficial or detrimental to Hispanic Americans personal finances and how different degrees of acculturation can affect their financial needs, wants, and behaviors. Moreover, acculturation could be integrated in a variety of relevant consumer financial research models such as a component to financial capability or a moderator to financial wellbeing.

The Short Acculturation Scale for Hispanics (SASH) (Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987) includes 12 items that have been regarded valid and reliable in a number of studies (Chang et al., 2015; Kaplan et al., 2014). This scale could be inserted in surveys and experiments currently used in our field to shed some light into the variability of Hispanic subjects choices and respondents answers in relation to other variables of interest. Scales such as the SASH and other methods to better differentiate segments within the Latino population should be of great value in public policy and outreach initiatives to improve Latinos financial wellbeing and for the financial industry to design products and services aimed at this important and growing segment of the American economy.

About the Author

Nilton Porto is Assistant Professor of Personal Finance in the Department of Human Development and Family Studies at the University of Rhode Island. Prior to returning to academia, he spent over a decade in various management positions in the banking industry after obtaining an MBA in finance from Case Western Reserve University. He has worked as a project assistant at the Center for Financial Security at the University of Wisconsin—Madison for 4 years conducting research on financial literacy, financial capability, and financial wellbeing. His research applies behavioral economics concepts such as the role of reference points to personal finance and consumer behavior. He is a member of the American Council on Consumer Interests, the American Economic Association, the Association for Financial Counseling and Planning Education, and the Association for Public Policy Analysis and Management. He received his Ph.D. in household economics from the University of Wisconsin in August 2014.

References

- Agarwal, S., Amromin, G., Ben-David, I., Chomsisengphet, S., & Evanoff, D. D. (2011). Financial counseling, financial literacy, and household decision making. *Pension Research Council WP*, 34.
- Aguilera, M. B. (2009). Ethnic enclaves and the earnings of self-employed Latinos. *Small Business Economics*, 33(4), 413–425.
- Beck, T., Demirguc-Kunt, A., & Peria, M. S. M. (2007). Reaching out: Access to and use of banking services across countries. *Journal of Financial Economics*, 85(1), 234–266.
- Blancero, D., Olivas-Luján, M. R., Stone, D. L., Canedo, J. C., Black, S. L., & Lukaszewski, K. M. (2014). Individual factors affecting entrepreneurship in Hispanics. *Journal of Managerial Psychology*, 29(6), 755–772.
- Bocian, D. G., Ernst, K. S., & Li, W. (2008). Race, ethnicity and subprime home loan pricing. *Journal of Economics and Business*, 60(1), 110–124.
- Borjas, G. J. (2002). Homeownership in the immigrant population. *Journal of Urban Economics*, 52(3), 448–476.
- Bricker, J., Dettling, L. J., Henriques, A., Hsu, J. W., Moore, K. B., & Krimmel, J. (2014). Changes in US family finances from 2010 to 2013: Evidence from the Survey of Consumer Finances. *Federal Reserve Bulletin*.
- Bucks, B. K., Kennickell, A. B., Mach, T. L., & Moore, K. B. (2009). Changes in US family finances from 2004 to 2007: Evidence from the survey of consumer finances. *Federal Reserve Bulletin*, A1, 95.
- Chang, A., Kenya, S., Ilangovan, K., Li, H., Koru-Sengul, T., Alonzo, Y., et al. (2015). Is greater acculturation associated with an increased prevalence of cardiovascular risk factors among Latinos in South Florida? *Medical Care*, 53(5), 417–422.
- 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.
- Collins, J. M. (2012). Financial advice: A substitute for financial literacy? *Financial Services Review*, 21(4), 307–322.
- Cortes, A., Herbert, C. E., Wilson, E., & Clay, E. (2007). Factors affecting Hispanic homeownership: A review of the literature. *Cityscape*, 9(2), 53–91.
- Fairlie, R. W. (2009). Kauffman index of entrepreneurial activity: 1996–2008. Available at SSRN 1395945.
- FDIC. (2011). *FDIC national survey of unbanked and underbanked households*. Washington, DC: Federal Deposit Insurance Corporation.
- FINRA-IEF (2013). *Financial capability in the United States: Report of findings from the 2012 National Financial Capability Study*. Washington, DC: FINRA Investor Education Foundation.
- Fishbein, A. J., & Woodall, P. (2006). *Subprime locations: Patterns of geographic disparity in subprime lending*. Washington, DC: Consumer Federation of America.
- Friedman, S., & Rosenbaum, E. (2004). Nativity status and racial/ethnic differences in access to quality housing: Does homeownership bring greater parity? *Housing Policy Debate*, 15(4), 865–901.
- Gallo, L. C., Penedo, F. J., Espinosa de los Monteros, K., & Arguelles, W. (2009). Resiliency in the face of disadvantage: Do Hispanic cultural characteristics protect health outcomes? *Journal of Personality*, 77(6), 1707–1746.
- Gonzalez, R. (2007). *Latino credit card use: Overcoming disparities, structural challenges, and harmful industry practices*. Washington, DC: National Council of La Raza.
- Grinstein-Weiss, M., Yeo, Y. H., Despard, M. R., Casalotti, A. M., & Zhan, M. (2010). Does prior banking experience matter? Differences of the banked and unbanked in individual development accounts. *Journal of Family and Economic Issues*, 31(2), 212–227.
- Gustman, A. L., & Steinmeier, T. L. (2005). Imperfect knowledge of social security and pensions. *Industrial Relations: A Journal of Economy and Society*, 44(2), 373–397.
- Hall, M., & Farkas, G. (2008). Does human capital raise earnings for immigrants in the low-skill labor market? *Demography*, 45(3), 619–639.
- Hanna, S. D. (2011). The demand for financial planning services. *Journal of Personal Finance*, 10(1), 36–62.
- Hanna, S. D., & Lindamood, S. (2008). The decrease in stock ownership by minority households. *Journal of Financial Counseling and Planning*, 19(2), 46–58.
- Hanna, S. D., Wang, C., & Yuh, Y. (2010). Racial/ethnic differences in high return investment ownership: A decomposition analysis. *Journal of Financial Counseling and Planning*, 21(2), 44–59.
- Haurin, D. R., & Rosenthal, S. S. (2009). Language, agglomeration and Hispanic homeownership. *Real Estate Economics*, 37(2), 155–183.
- Honohan, P. (2008). Cross-country variation in household access to financial services. *Journal of Banking & Finance*, 32(11), 2493–2500.
- Hummer, R. A., Powers, D. A., Pullum, S. G., Gossman, G. L., & Frisbie, W. P. (2007). Paradox found (again): Infant mortality among the Mexican-origin population in the United States. *Demography*, 44(3), 441–457.
- Hunt, L. M., Schneider, S., & Comer, B. (2004). Should “acculturation” be a variable in health research? A critical review of research on US Hispanics. *Social Science & Medicine*, 59(5), 973–986.
- Kaplan, R. C., Bangdiwala, S. I., Barnhart, J. M., Castañeda, S. F., Gellman, M. D., Lee, D. J., et al. (2014). Smoking among US Hispanic/Latino adults: The Hispanic community health study/study of Latinos. *American Journal of Preventive Medicine*, 46(5), 496–506.
- Kochhar, R., Gonzalez-Barrera, A., & Dockterman, D. (2009). *Through boom and bust: Minorities, immigrants and homeownership*. Washington, DC: Pew Hispanic Center.

- Kochhar, R., Taylor, P., & Fry, R. (2011). *Wealth gaps rise to record highs between and Hispanics*. Washington, DC: Pew Research Center.
- Lee, J., & Hanna, S. D. (2012). Limitations of combining Hispanics and African Americans for analysis of credit problems. *Journal of Consumer Affairs*, 46(3), 506–536.
- Lopez, J., Hart, L. K., & Rampersad, A. (2007). Ethnicity and customer satisfaction in the financial services sector. *Managing Service Quality*, 17(3), 259–274.
- Lusardi, A. (2008). *Household saving behavior: The role of financial literacy, information, and financial education programs*. NBER Working Paper 13824. <http://www.nber.org/papers/w13824>.
- Lusardi, A., & Tufano, P. (2009). *Debt literacy, financial experiences, and overindebtedness*. Working Paper 14808, National Bureau of Economic Research.
- Mandell, L., & Klein, L. S. (2007). Motivation and financial literacy. *Financial Services Review*, 16(2), 105–116.
- Marin, G., Sabogal, F., Marin, B. V., Otero-Sabogal, R., & Perez-Stable, E. J. (1987). Development of a short acculturation scale for Hispanics. *Hispanic Journal of Behavioral Sciences*, 9(2), 183–205.
- Martinez-Ruiz, M. P., Jimenez-Zarco, A. I., & Izquierdo-Yusta, A. (2010). Customer satisfaction's key factors in Spanish grocery stores: Evidence from hypermarkets and supermarkets. *Journal of Retailing and Consumer Services*, 17(4), 278–285.
- Mbiti, I., & Weil, D. N. (2011). *Mobile banking: The impact of M-Pesa in Kenya*. Washington, DC: National Bureau of Economic Research. No. 2011–13.
- McKernan, S.-M., Ratcliffe, C., Steuerle, E., & Zhang, S. (2013). *Less than equal: Racial disparities in wealth accumulation*. Washington, DC: The Urban Institute.
- Moffitt, R. A. (1987). Life cycle labor supply and social security: A time series analysis. In G. Burtless (Ed.), *Work, health, and income among the elderly* (pp. 183–220). Washington, DC: Brookings.
- Motel, S., & Patten, E. (2012). *The 10 largest Hispanic origin groups: Characteristics, rankings, top counties*. Washington, DC: Pew Research Center.
- NAHREP (2013). *2013 State of Hispanic homeownership report*. San Diego, CA: National Association of Hispanic Real Estate Professionals.
- Osili, U. O., & Paulson, A. L. (2007). Immigrants access to financial services and asset accumulation. In R. M. Blank & M. S. Barr (Eds.), *Insufficient funds: Savings, assets, credit, and banking among low-income households* (pp. 285–317). Washington, DC: Russell Sage Foundation.
- Perry, V. G., & Morris, M. D. (2005). Who is in control? The role of self-perception, knowledge, and income in explaining consumer financial behavior. *Journal of Consumer Affairs*, 39(2), 229–313.
- Pew Hispanic Center. (2007). *2007 National Survey of Latinos: As illegal immigration issue heats up, Hispanics feel a chill*. Washington, DC: Pew Hispanic Center. Retrieved from <http://www.pewhispanic.org/2007/12/13/2007-national-survey-of-latinos-as-illegal-immigration-issue-heats-up-hispanics-feel-a-chill/>.
- Pew Research Center. (2008). *One-in-five and growing fast: A profile of Hispanic public school students*. Washington, DC: Pew Hispanic Center.
- Plath, D. A., & Stevenson, T. H. (2005). Financial services consumption behavior across Hispanic American consumers. *Journal of Business Research*, 58(8), 1089–1099.
- Rhine, S. L., & Greene, W. H. (2006). The determinants of being unbanked for us immigrants. *Journal of Consumer Affairs*, 40(1), 21–40.
- Rhine, S. L., & Greene, W. H. (2013). Factors that contribute to becoming unbanked. *Journal of Consumer Affairs*, 47(1), 27–45.
- Rhine, S. L., Greene, W. H., & Toussaint-Comeau, M. (2006). The importance of check-cashing businesses to the unbanked: Racial/ethnic differences. *Review of Economics and Statistics*, 88(1), 146–157.
- Segrest Purkiss, S. L., Perrew'e, P. L., Gillespie, T. L., Mayes, B. T., & Ferris, G. R. (2006). Implicit sources of bias in employment interview judgments and decisions. *Organizational Behavior and Human Decision Processes*, 101(2), 152–167.
- Sherraden, M. S. (2013). Building blocks of financial capability. In J. M. Birkenmaier, M. S. Sherraden, & J. C. Curley (Eds.), *Financial education and capability: Research, education, policy, and practice* (pp. 3–43). New York/Oxford: Oxford University Press.
- Shinnar, R. S., & Young, C. A. (2008). Hispanic immigrant entrepreneurs in the Las Vegas metropolitan area: Motivations for entry into and outcomes of self-employment. *Journal of Small Business Management*, 46(2), 242–262.
- Smith, A. (2013). *Smartphone ownership—2013 update*. Washington DC: Pew Research Center.
- Song, H., & Elliott, W., III. (2011). The role of assets in improving college attainment among Hispanic immigrant youth in the US. *Children and Youth Services Review*, 33(11), 21602167.
- Song, H., & Elliott, W. (2012). The effects of parents' college savings on college expectations and Hispanic youth's four-year college attendance. *Children and Youth Services Review*, 34(9), 1845–1852.
- Stevenson, T. H., & Plath, D. A. (2006). Marketing financial services to Hispanic American consumers: A portfolio-centric analysis. *Journal of Services Marketing*, 20(1), 37–50.
- Sullivan, D. M. (2007). Minority entrepreneurs: More likely to try, but less likely to succeed? *The Academy of Management Perspectives*, 21(1), 78–79.
- Taylor, P., Kochhar, R., Fry, R., Velasco, G., & Motel, S. (2011). *Wealth gaps rise to record highs between Whites, Blacks and Hispanics. Social and demographic trends*. Washington, DC: Pew Research Center.
- Thomson, M. D., & Hoffman-Goetz, L. (2009). Defining and measuring acculturation: A systematic review of public health studies with Hispanic populations in the

- United States. *Social Science & Medicine*, 69(7), 983–991.
- U.S. Census Bureau (2010). American fact finder. <http://factfinder2.census.gov>.
- Weller, C. E. (2009). Credit access, the costs of credit and credit market discrimination. *The Review of Black Political Economy*, 36(1), 7–28.
- Xiao, J. J. (2008). Applying behavior theories to financial behavior. In J. J. Xiao (Ed.), *Handbook of consumer finance research* (pp. 69–81). New York: Springer.
- Xiao, J. J., Chen, C., & Chen, F. (2014). Consumer financial capability and financial satisfaction. *Social Indicators Research*, 118(1), 415–432.
- Yao, R., Gutter, M. S., & Hanna, S. D. (2005). The financial risk tolerance of Blacks, Hispanics and Whites. *Journal of Financial Counseling and Planning*, 16(1), 51–62.
- Zhan, M., & Sherraden, M. (2011). Assets and liabilities, race/ethnicity, and children's college education. *Children and Youth Services Review*, 33(11), 2168–2175.