Hispanic Culture, Stock Preferences, and Asset Prices*

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Abstract – We examine the effect of Hispanic culture on portfolio choice decisions and asset returns in the United States. We show that investors residing in zip codes with a high concentration of Hispanics are significantly more likely to chase returns and overweight local lottery stocks than the average US investor. To control for unobserved heterogeneity across zip codes that may be correlated with the concentration of Hispanics, we use the distance from the Canadian border to each zip code as an instrumental variable and find that our results are robust. We also find evidence that Hispanic investors' preferences affect prices and returns in local asset markets. In particular, we find that herding in local lottery stocks results in excess comovement in returns that cannot be explained by fundamentals. Furthermore, since investors who reside in high Hispanic areas tend to chase returns, we find geographic segmentation in the momentum effect, whereby momentum returns are more pronounced (nonexistent) among firms headquartered in MSAs with a high (low) proportion of Hispanics.

Keywords: Culture, style investing, comovement, momentum.

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1 Introduction

Hispanics are the largest and fastest growing subculture within the United States (US). The 2015 US Census Bureau estimates suggest that there are over 56.6 million Hispanic residents in the US.[1] By 2060, they are projected to grow to 120 million individuals, constituting almost 30% of the US population. As a result, there is an ongoing debate regarding the influx of Hispanic immigrants and their effects on the US economy and culture. In this paper, we are interested in studying the effect of Hispanic culture on portfolio choice decisions and how these investment preferences affect asset prices.

Our main conjecture that Hispanic culture can affect investor choice is motivated by the literature that examines the effects of culture in shaping economic decisions.[2] It suggests that various aspects of culture are important determinants of investment choices, savings, and portfolio decisions.[3] Since the Hispanic culture tends to exhibit several unique features and consumption patterns (Korzenny and Korzenny, 2011; Cartagena, 2013),[4] there is reason to speculate that the investment choices of Hispanics may also differ from their American peers. Therefore, to the extent that Hispanic households exhibit stock selection preferences that differ from the rest of the American population, they can generate sizable effects in asset markets.

[1]See https://www.census.gov/newsroom/press-releases/2016/cb16-107.html.

[2]Becker (1996) argues that "culture exercises a sizable influence over preferences and individual behavior" because it is "largely "given" to individuals throughout their lifetimes." In particular, he argues that "individuals have less control over their culture than over other social capital" since "they cannot alter their ethnicity, race, or family history, and only with difficulty can they change their country or religion." Further, Becker asserts that it is difficult to change culture and that culture exhibits a low depreciation rate, suggesting that the effects of culture may be long-lived and passed on through generations.

[3]Guiso, Sapienza, and Zingales (2006) provide a broad survey of the literature on culture and economics. For example, Guiso, Sapienza, and Zingales (2003, 2004a,b, 2006) demonstrate that nationality affects trust, an implicit requirement for economic exchange. Similarly, the nationality of American-born individuals' ancestors can affect women's labor force participation (Fernández, Fogli, and Olivetti, 2004) and fertility decisions (Fernandez and Fogli, 2009). Furthermore, Karolyi (2016) provides a more recent review of the literature on culture in finance. For instance, there is substantial evidence that both religion and language can affect investment style and preferences. Kumar, Page, and Spalt (2011) show that the predominant religious beliefs and gambling attitudes of a region can influence an institution's propensity to invest in certain types of stocks. Grinblatt and Keloharju (2001) find that investors in Finland tend to overweight firms that disclose their annual reports in their native language.

[4]Cartagena (2013) studies the differences between Hispanic and American consumers to learn how US businesses can capture a larger portion of the Hispanic market. They tend to focus on salient features of the Hispanic culture, such as community leadership, tight social networks, and collectivism.

There is reason to believe Hispanics may exhibit different stock preferences than other US communities. Specifically, they may have stronger "Keeping-Up-with-the-Joneses" preferences (Gali, 1994; Demarzo, Kaniel, and Kremer, 2004; Hong, Jiang, Wang, and Zhao, 2014). Korzenny and Korzenny (2011) argue that in Hispanic communities, being less wealthy than one's neighbors can generate significant disutility. Additionally, the literature suggests that status-seeking individuals exhibit a stronger propensity to gamble to increase their personal wealth, and thus, move up the social ladder (Friedman and Savage, 1948; Brunk, 1981; Brenner, 1983; Becker, Murphy, Werning, et al., 2000). Kumar (2009) identifies this effect in the stock market: investors who do not want to lag behind their peers tend to invest in lottery stocks because relative income is a good proxy for relative social status (Luttmer, 2005). More importantly, he also suggests that the Hispanic population is one of the largest buyers of lottery tickets (Price and Novak, 1999). Therefore, our first conjecture is that Hispanics will tend to overweight lottery stocks.

Korzenny and Korzenny (2011) also suggest that one of the distinctive characteristics of Hispanic consumers is that they find a product used by many to be more appealing, as opposed to a product used by only a few people. This certification effect implies that in the stock market, as more people buy a stock, it becomes more desirable because more people own it. This drives up prices, leading to higher future short-term returns and what looks like return chasing by Hispanic investors. Furthermore, Hong, Jiang, Wang, and Zhao (2014) link "Keeping-Up-with-the-Joneses" preferences with trend chasing behavior. Taken together, Hispanic's preference for socially "certified" products and strong "Keeping-up-with-the-Joneses" preferences motivate our second conjecture: Hispanic individuals will chase returns.

Our third hypothesis derives from a tendency toward collectivism in Hispanic communities, as opposed to the more individualistic culture of the US (Korzenny and Korzenny, 2011). As a group, Hispanics are very community oriented and highly dependent on their social network. This effect is exacerbated by the fact that Hispanic immigrants generally come from countries with relatively more corrupt institutions than in the US (TransparencyInternational, 2007). The collectivist nature of the Hispanic community could induce individuals to invest in locally headquartered firms because they might feel they are contributing to their community. Furthermore, through their strong social networks, it might be the case that Hispanic individuals have friends or family working at a local firm. Therefore, they feel they know (or actually know) more about a firm at which their friend or family member is employed than a firm headquartered far away. Consequently, our third conjecture is that this collectivism may generate excessive local bias in Hispanics' portfolios (Coval and Moskowitz, 1999).

We test our conjectures using data from a large discount brokerage house.[5] Since we cannot directly observe each investor's ethnic group, we use the concentration of Hispanic residents in an investor's zip code as reported by the US Census as a proxy. We find that even after controlling for a large set of known determinants of stock selection, investors residing in predominantly Hispanic zip codes are significantly more likely to over-weight lottery stocks, invest in local firms, and chase returns.

To mitigate the concern that our portfolio choice results are driven by unobserved heterogeneity across zip codes that is correlated with the Hispanic population of an area,[6] we use an instrumental variable (IV). More specifically, we use the minimum distance from the Canadian border to household i's zip code.[7] The intuition is the following: since the Hispanic population in the US tends to be concentrated towards the southern border as shown in Figure 1, then as the distance from the Canadian border increases, so will the concentration of Hispanics in an area.

[5]See Barber and Odean (2000) for a detailed discussion of these data.

[6]One particular concern is that investors who exhibit stronger return chasing and local bias tendencies may differ on the dimension of financial sophistication.

[7]Our baseline IV results use the Canadian instead of the Mexican border because the northern border is less rugged. To use the Mexican border, we need to draw a spline over the Gulf of Mexico. In addition, there is a positive relationship between the minimum distance from the Canadian border and the concentration of Hispanics, which aids in the interpretation of the results. For more details, see section 4.2.

In addition to the IV, we further control for unobserved heterogeneity by following the methodology of Rajan and Zingales (1998) and adding zip code fixed effects and interactions to our baseline specifications. Overall, we find that holding cross-sectional differences in financial sophistication constant,[8] investors living in high-Hispanic localities continue to overweight lottery stocks and exhibit stronger local bias and return chasing behaviors.

Since investors who reside in areas with a high Hispanic concentration have preferences that differ from the average US investor, it is possible that they affect the stock prices and returns of local companies. However, evidence of over-weighting is not a sufficient condition for a price impact; there needs to be correlated trading in a subset of stocks (Barber, Odean, and Zhu, 2008). Following the results from the Hispanic stock preference tests, we expect to find higher herding (correlated trading) in local lottery stocks in high Hispanic areas. To test this, we create a herding measure that determines whether there is systematic buying pressure in a specific set of stocks (Lakonishok, Shleifer, and Vishny, 1992; Barber, Odean, and Zhu, 2008). Consistent with our conjecture, we find that individuals residing in high Hispanic areas tend to herd in local lottery stocks.

Following the herding results, we examine whether Hispanic investors' preferences and subsequent trades affect the stock prices and returns of companies headquartered in areas with a high Hispanic concentration. First, we test whether their correlated trades induce a common factor in the returns of stocks, leading to excess comovement that cannot be explained by fundamentals (Barberis, Shleifer, and Wurgler, 2005). Since investors tend to exhibit a stronger local bias and return chasing behavior in high Hispanic areas, we expect the overall comovement of returns to be higher in these areas. Furthermore, because the buying pressure of lottery stocks in the high Hispanic concentration quintile is higher than the buying pressure in the low Hispanic concentration quintile, we also conjecture that the comovement of lottery stocks in the high Hispanic concentration areas should be the highest. As expected, we find that on average stocks that are headquartered in high

[8]We measure financial sophistication as portfolio concentration (Grinblatt and Keloharju, 2001).

Hispanic areas comove more than those located in low Hispanic areas. Furthermore, this excess comovement in returns is likely to be driven by the comovement in lottery stocks.

In addition, our results suggest that investors in areas with a concentrated Hispanic population tend to over-weight stocks that have performed well recently, suggesting that they are likely to chase returns among local stocks. Importantly, Jegadeesh and Titman (1993) and De Long, Shleifer, Summers, and Waldmann (1990) suggest that the momentum phenomenon is consistent with trend chasing behavior.[9] Therefore, we conjecture that price momentum (Jegadeesh and Titman, 1993, 2001) is likely to be stronger among firms headquartered in areas with a high concentration of Hispanics.

We test this idea using a double-sort portfolio approach. First, we sort all companies into quintiles based on the concentration of Hispanics in the Metropolitan Statistical Area (MSA) where the company is headquartered. Then, we sort all stocks within each quintile into winners and losers based on lagged 6-month formation period returns. We find that the momentum portfolio formed using companies headquartered in high Hispanic areas generates an average monthly return of 0.852% (t-statistic = 2.96). On the other hand, the momentum portfolio formed using firms headquartered in areas with the lowest concentration of Hispanics generates a statistically insignificant average monthly return of 0.388% per month (t-statistic = 1.39).

Furthermore, we explore whether the momentum profits can be explained by known risk factors and find that the risk adjusted returns between high and low Hispanic momentum portfolios are significantly different. Across various linear factor models, the alpha of the high Hispanic momentum portfolio exceeds that of the low Hispanic momentum portfolio by between 0.50% and 0.56% per month. Moreover, the risk-adjusted performance differential

[9] Jegadeesh and Titman (1993) argue that "positive feedback traders", e.g. those exhibiting trend chasing behavior, can cause momentum patterns in asset returns. Further, De Long, Shleifer, Summers, and Waldmann (1990) posit that by purchasing stocks with recent price increases, uninformed investors with extrapolative expectations can induce rational investors, hoping to profit from uninformed investors' continued purchase of increasing assets, to chase returns as well. The end result of this feedback is the well documented momentum anomaly.

is consistently significant at the 5%-level.

Finally, we perform several robustness tests to ensure that the asset pricing effects we document are in fact driven by the preferences of investors living in high Hispanic areas. First, a major concern may be that we cannot identify all of the actual buyers of a stock. To address this issue, we look at a second asset market where it is easier to establish this relationship: the US residential real estate market. The return chasing and preference for commonly used products in Hispanic communities implies that as more and more families buy real estate in areas with a high concentration of Hispanic residents, more people will find owning an asset in this area desirable and they will run-up the prices. Consistent with this intuition, we find that house prices in areas with a large Hispanic population experience higher realized volatility due to more pronounced price run-ups and subsequent downturns.

Our second robustness test shows that all of the analyses in this paper are robust to using the minimum distance from the Mexican border to each zip code as an IV.[10] Finally, we analyze whether our tests truly capture the effect of Hispanic culture on investment decisions or if we are picking up some general aspect of culture. If it were the latter, then we would find a similar effect when we analyze another large subculture in the US. Instead, we find that our asset pricing results are unique to the Hispanic culture.

This paper contributes to several strands of the finance literature. First, it complements the growing literature that examines the determinants of individuals' stock investment decisions. For example, Barber and Odean (2000, 2001, 2008) show that investors, especially males, tilt their portfolios toward small, value stocks with high market betas. Kumar (2009) suggests that the gambling preferences of individual investors are reflected in their stock investment decisions. Cronqvist, Siegel, and Yu (2015) show that investors' stock preferences are partially driven by a biological component. Our results contribute to these

[10]Our argument is that the distance from the Canadian border to each zip code is a strong instrument for the Hispanic concentration of an area. By the same logic, it should then also be true that the distance from the Mexican border to each zip code in our sample is also a good instrument for H/W.

findings by showing that Hispanic culture is an important determinant of portfolio choice decisions.

Our paper also contributes to the literature examining the momentum return anomaly documented by Jegadeesh and Titman (1993). Many of the existing studies examining the underpinnings of the momentum effect suggest that it may arise from behavioral underreaction (e.g., Jegadeesh and Titman (2001)) or rational risk-based arguments (e.g., Conrad and Kaul (1998)). For instance, some proposed determinants of momentum profits include lagged market returns (Cooper, Gutierrez, and Hameed, 2004; Stambaugh, Yu, and Yuan, 2012), investor sentiment (Antoniou, Doukas, and Subrahmanyam, 2010), market illiquidity (Avramov, Cheng, and Hameed, 2015), and macroeconomic factors (Liu and Zhang, 2008). The paper most related to ours is Chui, Titman, and Wei (2010), who suggest that momentum profits in international markets can be attributed to individualism. Although we also argue that culture can influence the profitability of the momentum strategy, we focus on the cross-sectional variation in the US and its connection to the Hispanic population. Furthermore, our asset pricing tests are supported by portfolio-level evidence of the return chasing and herding behavior of Hispanics in the US.

The rest of the paper is organized as follows. Section 2 describes the data used in the analysis. Section 3 presents the main empirical results. Section 4 provides the results of several robustness tests. Finally, Section 5 concludes with a brief discussion.

2 Data and Summary Statistics

In this section, we briefly describe the data used in our empirical analysis. We use several data sources, including brokerage data from a large discount brokerage house, decennial census data from the United States Census Bureau, and data from the Center for Research in Security Prices (CRSP) and COMPUSTAT.

2.1 Household level brokerage and demographic data

To examine investor preferences, we use monthly retail investment account data from a large discount brokerage house. It includes household portfolio holdings and transactions at the security level for 51,957 households from January 1991 to December 1996. Panel A of Table 1 presents summary statistics for these brokerage data. Of the nearly 52,000 households, 74% are married and almost 97% own their own home. Consistent with the empirical fact that men are more likely to participate in the stock market, 88% of the heads of household in our sample are men. In addition, the median income of the households is $62,500, making them wealthier than the average household in the United States. In their brokerage portfolio, they tend to hold almost three securities with an average dollar value in each security of a little over $9,000. Furthermore, the average Sharpe Ratio of these portfolios is 12.4%.

2.2 United States Decennial Census

We combine the brokerage data with data from the Decennial Census of the United States Census Bureau. To analyze investor preferences, we utilize the 1990 census. For the asset pricing tests, we use the decennial censuses from 1970 through 2010. Panel B of Table 1 presents summary statistics for all 29,305 zip codes in the 1990 decennial census of the US. Panel C restricts the sample to the 10,485 zip codes in which at least one household from our brokerage sample resides. The summary statistics show that brokerage customers tend to live in zip codes that are more urban and more populous. More specifically, they have an average population of 17,397, which is more than twice the average population of all US zip codes. Moreover, the zip codes in which our brokerage households reside are wealthier than the average zip code in the US, with a median income of over $62,000, closely matching our investor data. Finally, a higher percentage of residents in brokerage zip codes are Hispanic (6.1% in brokerage zip codes versus 4.4% in an average US zipcode), but a very similar percentage of residents identify as being Black in both samples (7.1% in all US zip codes versus 7.4% in brokerage zip codes.)

2.3 Equity Data

We also use the standard data sets when analyzing common stocks, CRSP and COMPUSTAT. From CRSP, we utilize monthly stock prices, returns, and shares outstanding from January 1970 through December 2011. We restrict our sample to include only common shares, using observations with share codes of 10 or 11. We then merge in the location of each company's headquarters from the annual COMPUSTAT data files. In addition, we use the monthly Fama-French factors from Kenneth French's data library[11] and the liquidity factor from Lubos Pastor's website[12].

2.4 Instrumental Variable Distance Measure

From the US Gazetteer File of the US Census Bureau, we collect the latitude and longitude coordinates of the centroid of each zip code in the US.

3 Main Empirical Results

3.1 Identifying Cultural Style Preferences

We investigate the investment preferences of the largest and fastest growing subculture within the US: Hispanic Americans. Even though the group of people who identify themselves in the Decennial Census as Hispanics is extremely diverse, the majority (79%) of Hispanic individuals have origins in one of three different countries: Mexico, Puerto Rico, and Cuba. More specifically, approximately 62% of Hispanic Americans identify themselves as Mexicans in the 1990 Decennial Census. In addition, 12% claimed their country

[11]http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/f-f_factors.html
[12]http://faculty.chicagobooth.edu/lubos.pastor/research/liq_data_1962_2016.txt

of origin to be Puerto Rico and almost 5% named Cuba. Of the other countries mentioned in the Decennial Census, the majority of individuals came from Central America or the Dominican Republic. Nevertheless, every Hispanic country is represented. In this paper, we abstract from differentiating individuals based on their country of origin and treat the Hispanic population as a single subculture within the US.

Our main results showing the influence of an investor's culture on her investment preferences are presented in Table 2. We regress the excess weight of household i's portfolio on the set of stocks s at time t normalized by the market weight of set s, that is $EW_{i,s,t} = (w_{i,s,t} - w_{m,s,t})/w_{m,s,t}$, on a vector of zip code and household level variables. For instance, in column 1 of Table 2 Panels A and B, the set of stocks s is lottery stocks. Following Kumar (2009), we use three stock characteristics to identify stocks that might be perceived as lotteries: (i) stock specific or idiosyncratic volatility, (ii) idiosyncratic skewness, and (iii) stock price. We consider all CRSP stocks and assume that stocks in the lowest 50^{th} stock price percentile, the highest 50^{th} idiosyncratic volatility percentile, and the highest 50^{th} skewness percentile are likely to be perceived as lottery-type stocks. All three sorts are carried out independently. In this case, the dependent variable is the excess weight in the household's portfolio on lottery stocks over the market weight of those stocks. Persons is the census count of individuals in household i's zip code. B/W and H/W are the census count of Blacks and Hispanics divided by the census count of White individuals in household i's zip code. They measure the concentration of Hispanics and Blacks relative to the White population. Foreign is the proportion of foreign born individuals in the zip code. I_{urban} is an indicator variable taking the value of one if the Census Bureau classifies household i's zip code as urban. We have also added other controls to the specification. Density is a measure of population density or the total population of the zip code divided by its land area. We include several household level controls, including indicators if the head of the household is male (I_{Male}), if it's a married household ($\text{I}_{\text{Married}}$)

and if the household owns its home (I_{Own}). The age of the head of the household and the Sharpe Ratio (SR) of the household portfolio over the sample period are also included. All non-indicator variables are standardized, and zip code-year clustered t-statistics are presented in parentheses below point estimates.

Panel A of Table 2 shows the results for the OLS model. In columns (1) and (2), coefficients are presented where the dependent variable is the excess weight on lottery stocks. Column (2) includes state fixed effects for the state in which household i resides, while column (1) does not. The results show that the coefficients on H/W and B/W are statistically significant. More specifically, investors in high Hispanic areas tend to overweight lottery stocks. For instance, the coefficient of 15.29 in column (1) and of 14.26 in column (2) suggest that a one standard deviation increase in H/W for household i's zip code translates to a 15% higher weight on lottery stocks. Conversely, investors in areas with a high Black concentration tend to underweight lottery stocks relative to the market.

Columns (3) and (4) suggest that culture influences preferences for local stocks. For these columns, the dependent variable is household i's excess weight on local stocks at time t, where "local" is defined as companies headquartered in a zip code within 60 miles of household i's zip code. Column (3) includes zip code and household level demographic controls, while column (4) also accounts for geographic heterogeneity at the state of residence level with state fixed effects.

In both models, the coefficient of H/W is large and statistically significant, showing that investors in high H/W zip codes invest relatively more in local companies compared to the market weight. In column (4), the coefficient is 231.26, showing a one standard deviation increase in H/W is associated with a portfolio weight in local stocks more than three times the market weight. On the other hand, the coefficient on B/W is negative and statistically significant in both models. In column (4), the coefficient is -51.93, showing a one standard deviation increase in B/W is associated with a decrease in local stocks of over one half.

From the last three columns of Table 2 Panel A, we see that people who reside in high H/W zip codes tend to over-weight stocks that have recently had high returns. The dependent variable in these models is the excess weight on stocks in the top decile of returns over the last twelve, six and one month, respectively. The coefficients on H/W are highly statistically significant for the most recent twelve and six month returns with coefficients of 2.053 and 1.788, respectively.[13]

To control for unobserved heterogeneity across zip codes that is correlated with Hispanic concentration, we use the minimum distance from the Canadian border (Min. Dist.) to household i's zip code as an instrumental variable. We create the Min. Dist. variable by using the latitudes and longitudes of the centroids of the counties along the Canadian border and measuring the distance to each zip code.[14] For Min. Dist. to be a valid IV, it must meet the exclusion and the relevance restrictions. The instrument satisfies the exclusion restriction as long as the only way Min. Dist. affects households' decision to overweight a specific subset of stocks is through the Hispanic concentration within a zip code. In addition, it meets the relevance restriction because Min. Dist. is positive and statistically significant in the first stage regressions. The F-statistics are also very high and statistically significant, suggesting that it is very unlikely that it is a weak IV.

Panel B exhibits the IV regression results.[15] Similarly to the OLS model, there is a strong association between Hispanic culture and over-weighting of lottery stocks. The coefficient and t-statistics from the IV regression both increased, suggesting there was some endogeneity; however, the coefficients are positive and statistically significant.

The results for local stocks are weaker when we use the IV. In column (3), the coefficient of H/W is large and statistically significant. Nonetheless, when we include state level fixed

[13]Magnitudes are much smaller relative to the results for local bias due to the relatively small market weight of "local" stocks for most investors.

[14]Figure A1 exhibits the counties along the Canadian border used to measure the IV, while Table A1 provides the names of the counties along with their FIPS code.

[15]The first stage regressions can be found in Table A2.

effects, the effect is no longer statistically significant. For the return chasing findings, we see that people who reside in high H/W zip codes tend to over-weight stocks that have recently performed well in the past month.

To summarize the results from this section, we observe a strong association of culture with investing in lottery stocks, local firms, and recent winners. These findings are consistent with culture affecting investment preferences. The return chasing and lottery stocks results are consistent with "Keeping-up-with-the-Jones" type preferences. According to Soriano (1995), Hispanics are generally very concerned with social status, making them likely to have some form of "Keeping-up-with-the-Jones" preferences. Likewise, Hong, Jiang, Wang, and Zhao (2014) show that "Keeping-up-with-the-Jones" preferences can lead to return chasing behavior, particularly in local stocks. The local bias results confirm our conjecture; due to their collectivist culture Hispanics tend to favor local stocks. Lastly, it is important to highlight that these findings are robust to using each zip code's minimum distance to the Canadian border as an IV.

3.2 Controlling for Unobserved Heterogeneity

To further control for unobserved variables, we follow the method of Rajan and Zingales (1998). More specifically, we augment our baseline household investment preference regressions with zip code level fixed effects and omit all zip code level controls. In this way, we are able to control for unobserved geographic heterogeneity at the zip code level that could be correlated with Hispanic concentration. We also interact our Hispanic concentration and IV variables with two measures of household i's portfolio concentration. The first measure, CONC, is defined as CONC = 10 - NSTOCKS, where NSTOCKS is the number of stocks in household i's portfolio. The second measure, HERF, is a Herfindahl index for the portfolios of all long-only investors. Since a household that has a higher concentration in its investment portfolio is likely to be less financially sophisticated than a similar household with a less concentrated portfolio, we expect the first to exhibit a higher local bias, higher investment in lottery stocks, and stronger return chasing behavior (Grinblatt and Keloharju, 2001). Therefore, if Hispanic concentration (H/W) predicts local bias, excess weighting in lottery stocks, and return chasing, then for two investors with the same level of portfolio concentration living in different zip codes, we expect the investor living in the zip code with higher Hispanic concentration to exhibit *higher* investment in lottery stocks and *stronger* local bias and return chasing.

The results from the OLS regression analysis can be found in Table 3 Panel A. As expected, the interaction terms H/W×CONC and H/W×HERF are positive and statistically significant, suggesting that Hispanic culture affects excess weighting in lottery stocks, local bias, and return chasing behavior. In column (1), our measure of excess weight on lottery stocks is regressed on the interaction term H/W×CONC and a vector of additional controls measured at the household level. We see that the coefficient of 21.232 (t-statistic of 7.96) is positive and statistically significant. Standard errors are clustered at the zip code-year level. Moreover, column (3) shows that the results for local stocks are *very* strong. The coefficient of 95.7394 is highly economically significant. For example, consider two households, both with a portfolio concentration equal to the median of 7, but one lives in a zip code at the 75^{th} percentile of Hispanic concentration (H/W = 0.102) and the other lives in a zip code at the 25^{th} percentile of Hispanic concentration (H/W = 0.017). The household that lives in the 75^{th} percentile zip code is predicted to invest $95.739 \times (.102 - .017) \times 7 = 56.97\%$ of market weight *more* of its portfolio in local stocks than the household that lives in the 25^{th} percentile zip code. The results for the interaction of Hispanic concentration and the Herfindahl index are very similar.[16] For instance, if we consider two households with portfolios at the median level of concentration (0.536) as measured by the Herfindahl index, the household that lives in the 75^{th} percentile zip code

[16]The large coefficient is due to the fact that the interaction term is not standardized. The scale of H/W×HERF is much smaller than that of H/W×CONC. Looking at the net effect of living in a higher concentration zip code, we get very similar results for both interaction terms.

is predicted to invest $1,216.83 \times (.102 - .017) \times 0.536 = 55.44\%$ of market weight more of its portfolio in local stocks than the household that lives in the 25^{th} percentile zip code.

Columns 5 through 10 of Table 3 present regressions of excess weight in recently performing stocks on our interaction term. The coefficients of H/W×CONC and H/W×HERF when the dependent variable is excess weight on stocks in the top decile of most recent twelve-month returns are small and statistically insignificant. However, for the most recent six and one-month returns, the coefficients are positive and statistically significant. For the six-month return regression, the coefficient of H/W×CONC is 3.137 with a t-statistic of 4.41. In the one-month return regression, the coefficient of H/W×CONC is 5.888 with a t-statistic of 6.12. Both are statistically significant at the 1% level. They show that the return chasing behavior observed in Table 2 is not due to an omitted variable that correlates with our H/W measure. These observed coefficient values are economically significant, for example, consider two investors with portfolio concentrations at the median, that is CONC = 7 (HERF = 0.536). One of the investors lives in a zip code at the 75^{th} percentile of Hispanic concentration and the other lives in a zip code at the 25^{th} percentile of Hispanic concentration. The household that lives in the high concentration zip code will invest $5.888 \times (.102 - .017) \times 7 = 3.50\%$ (5.00% as measured by the Herfindahl index) of market weight *more* in the best performing stocks over the last month than the household that lives in the low concentration zip code. These are large deviations from market weight.

Table 3 Panel B exhibits the results for the IV regressions. More specifically, we use the minimum distance from the Canadian border to household i's zip code as an instrumental variable for the Hispanic concentration of that zip code. Column (1) shows that when we regress our measure of excess weight on lottery stocks on H/W IV×CONC, the coefficient is positive and statistically significant. Similarly, the results from column (3) suggest that the local bias results are robust to using the minimum distance from the Canadian border as an IV. Columns (2) and (4) show that when we use HERF as a measure of portfolio concentration instead of CONC, the effect remains the same: investors who reside in zip codes with a high Hispanic concentration tend to invest in lottery stocks and in local firms.

Columns (5) to (10) exhibit the IV regressions for stocks that have performed well recently. Like the OLS regressions, the coefficients of H/W IV×CONC and H/W IV×HERF are statistically insignificant when the dependent variable is the excess weight on stocks in the top decile of most recent twelve-month returns. Nonetheless, both coefficients are positive and statistically significant when the dependent variables is the excess weight on stocks in the top decile of most recent six-month and one-month returns.

These results provide additional evidence that the effect is not likely to be driven by some kind of unobservable variable. Not only do we include zip code level fixed effects that take into account time-invariant omitted variables, but we also use the minimum distance from the Canadian border to each zip code in our sample as an instrumental variable.

3.3 Herding Results

The propensity for investors in zip codes of high Hispanic concentration to invest in local lottery stocks and to chase returns suggests the possibility that their portfolio decisions can affect stock returns. Nonetheless, over-weighting specific stocks is not enough to affect asset prices; there needs to be a systematic trading of a particular set of stocks. To test whether investors located in high Hispanic areas herd, we follow Lakonishok, Shleifer, and Vishny (1992) and Barber, Odean, and Zhu (2008) and compute the following herding measure:

$$HM_{i,t} = |p_{i,t} - E[p_{i,t}]| - E|p_{i,t} - E[p_{i,t}]| \tag{1}$$

for stock i in month t. $p_{i,t}$ is the proportion of all trades in stock i during month t that are purchases. $E[p_{i,t}]$ is the proportion of all trades that are purchases in month t. Collectively, $|p_{i,t} - E[p_{i,t}]|$ is the proportion of all trades in stock i during month t that are purchases minus the proportion of all stocks traded by all investors during month t that are purchases.

In short, the first term of the herding measure is testing whether the observed distribution of $p_{i,t}$ is fat-tailed relative to the expected distribution. The null hypothesis suggests that given the overall level of buying ($E[p_{i,t}]$), the decisions of individual investors to buy or sell should be uncorrelated.

The latter term of the measure, $E|p_{i,t} - E[p_{i,t}]|$, is used to adjust for the fact that more variation in the proportion of buys is expected in stocks that have a few trades.[17] We compute this measure for all local stocks in the brokerage data set that have at least 10 trades in month t. Then, during each month, we average the herding measure across all local stocks.

The findings from Table 4 support our hypothesis: investors in high Hispanic areas tend to herd in local lottery stocks. Panel A shows that on average, investors tend to exert a similar buying pressure in both quintiles, 0.075 (p-value = 0.00) for the high Hispanic concentration and 0.78 (p-value = 0.00) for the low Hispanic concentration. Within each Hispanic quintile, we also compute the herding measure for lottery and non-lottery stocks. Lottery stocks are firms in the lowest 50^{th} stock price percentile, the highest 50^{th} idiosyncratic volatility percentile, and the highest 50^{th} skewness percentile. On the other hand, non-lottery stocks are firms that fail to meet one or more of these requirements. The findings suggest that lottery stocks are systematically bought in high Hispanic areas but not in low Hispanic areas. The herding measure of lottery stocks in low Hispanic zip codes is not statistically significant. Moreover, it seems that non-lottery stocks tend to have a slightly higher buying pressure in areas with a low Hispanic concentration, with a herding measure of 0.08 (p-value = 0.00).

Since lottery stocks are defined using three characteristics, in Panel B we test whether investors tend to herd in local stocks with low prices, high skewness, or high volume. We find that investors systematically buy stocks with all of these characteristics. Furthermore, the herding measure for low price and high volume are higher in areas with a higher concen-

[17]See Lakonishok, Shleifer, and Vishny (1992) for further details on this measure.

tration of Hispanics. These results go in line with the findings from Panel A because they show that investors tend to systematically buy stocks that have lottery-like characteristics.

Collectively, we find that the herding results support our findings from the investor preference tests: investors in high Hispanic areas tend to invest in lottery stocks and local firms. Since the investment of retail investors in these types of stocks is systematic, then investors in high Hispanic areas can affect returns. We test this in the next section.

3.4 Comovement Results

The systematic purchases of local lottery stocks can induce a common factor in the return of these securities that is not explained by fundamentals (Barberis, Shleifer, and Wurgler, 2005). To test this, we follow Pirinsky and Wang (2006) and construct a habitat-portfolio index, which consists of a value-weighted portfolio of each Hispanic quintile.[18] After, we estimate the following stock-level time-series regression:

$$\begin{aligned} r_{i,t} = \alpha_i + \beta_1 r_{t,Habitat_{-i}} + \beta_2 r_{t,Mkt_{-Habitat,-i}} + \beta_3 r_{t,SMB} \\ +\beta_4 r_{t,HML} + \beta_5 r_{t,MOM} + \beta_6 r_{t,Liquidity} + \epsilon_{i,t}, \end{aligned} \tag{2}$$

where $r_{i,t}$ is the monthly excess return of a particular stock and $r_{t,Habitat_{-i}}$ is the monthly return of the value-weighted habitat portfolio. $r_{t,Mkt_{-Habitat,-i}}$, $r_{t,HML}$, and $r_{t,MOM}$ are the three Fama-French factors. We also modify this specification to account for short- and long-term reversal:

$$\begin{aligned} r_{i,t} = \alpha_i + \beta_1 r_{t,Habitat_{-i}} + \beta_2 r_{t,Mkt_{-Habitat,-i}} + \beta_3 r_{t,SMB} \\ +\beta_4 r_{t,HML} + \beta_5 r_{t,STR} + \beta_6 r_{t,LTR} + \epsilon_{i,t}. \end{aligned} \tag{3}$$

To avoid multicollinearity, we exclude firm i's return from the habitat and market portfolios and the firms included in the habitat portfolio from the market portfolio.

[18]The results are robust to creating an equal-weighted portfolio. In fact,they become stronger.

The coefficient of interest is the beta of the habitat portfolio. Since investors tend to exhibit a stronger local bias and return chasing behavior in areas with a high Hispanic concentration, we expect for the habitat beta in the 5^{th} quintile to be higher than the habitat beta in the 1^{st} quintile. In addition, to make sure that the effect we are capturing is indeed driven by the trading patterns of investors, we also analyze the subsample of lottery stocks. More specifically, within each Hispanic quintile, we analyze the stocks that are in the lowest 50^{th} stock price percentile, the highest 50^{th} idiosyncratic volatility percentile, and the highest 50^{th} skewness percentile. Since investors in high Hispanic areas also tend to over-weight and herd in lottery stocks, not only should the habitat beta of lottery stocks in the 5^{th} quintile be greater than the habitat beta in the 1^{st} quintile, but also the habitat beta of lottery stocks in the 5^{th} quintile must be higher than the habitat beta of non-lottery stocks within the same quintile.

The results in Table 5 support our hypotheses. Panel A contains the results from equation 2 and shows that for the entire sample of stocks, the habitat beta from the 5^{th} quintile is higher than the habitat beta from the 1^{st} quintile. The difference between the High H/W and Low H/W is positive and statistically significant at the 1% level. When we look at the subsample of lottery stocks, the results show that they have the highest habitat beta. This beta is higher than the beta for the Full Sample, suggesting that the comovement in returns could be driven by the over-weighting and herding in these types of stocks. Additionally, the difference between lottery and non-lottery stocks, or those stocks that fail to meet more than one of the requirements mentioned above, is positive and statistically significant at the 1% level.

Similarly, Panel B exhibits the results for equation 3, which includes the three Fama-French factors along with short- and long-term reversal. The difference between the 5^{th} and 1^{st} quintile increases to 0.641 (p-value = 0.00). When we look at the habitat beta of only Lottery stocks, we see that it is the highest, with a coefficient of 0.766. This coefficient is not only greater than the habitat beta of the 1st quintile but also than then habitat beta of non-lottery stocks.

It is important to highlight that the fact that the habitat beta from the 5th quintile is always the highest, meaning that the effect is robust to both specifications and all three samples. As shown by Panels A and B from Table 5, the difference between the habitat beta of the 5th and 1st quintile is always positive and statistically significant. Overall, the results suggest that the correlated trading of investors in high Hispanic areas result in excess comovement of returns that cannot be explained by fundamentals.

3.5 Sorting Results

The propensity for investors to herd and chase returns is one mechanism by which the well documented momentum effect is created. By purchasing stocks that have recently done well, investors drive prices up even further. If at least some portion of these purchases are financed by selling stocks that have done poorly recently, the momentum effect obtains. Our earlier results showing that investors in high Hispanic concentration zip codes prefer lottery stocks, local firms, and recent winners suggest that the momentum effect may be stronger for firms headquartered in areas of high Hispanic concentration.

To test this, we aggregate zip code level population statistics to the MSA level using the Decennial Census data set.[19] We aggregate the data to the MSA level because previous results suggest that households favor companies within sixty miles of their home zip code. Therefore, this radius is likely to be outside their home zip code, but within the same MSA.

For the period of January 1970 to December 2011, we create momentum portfolios using a bivariate dependent sort. First, we sort stocks into quintiles based on the most recent observation of our Hispanic concentration measure. It is important to highlight that

[19] For the decade beginning in 1970, census data is only available at the county level, so population is aggregated at the county level for this decade.

the location of a firm is defined as the MSA in which the firm is headquartered. Then, at the beginning of each month, we sort firms in each of these quintiles into deciles based on their previous six-month returns. Following Jegadeesh and Titman (1993), we create equally weighted portfolios holding the stock for the subsequent six months, skipping a month between formation and holding periods to avoid microstructure biases (short-term reversals, bid-ask bounce, lead-lag reaction effects and price pressure). The "winners" portfolio is the equal weighted portfolio constituted of firms in the top decile of the return distribution while the "losers" portfolio contains firms in the bottom decile. Momentum portfolios are created by buying winners and selling losers.

The results from this bivariate dependent sort can be found in Table 6. As shown in the first column, the returns to the winners are unrelated to the H/W ratio. Nonetheless, returns to losers decrease almost monotonically as the Hispanic concentration also decreases, with the exception of the highest quintile. Consequently, the momentum portfolio returns also tend to have a monotonic increase. Momentum returns in the highest quintile are the same as in the 3^{rd} quintile and almost the same as in the 4^{th} quintile. A test of the high Hispanic concentration momentum portfolio (MOM_5) being greater than the low concentration momentum portfolio (MOM_1) is statistically significant with a t-statistic of 1.84 (p-value = 0.033).

Figure 2 provides a visual representation of the findings from Table 6. It contains the cumulative monthly log-returns for winners and losers in Hispanic concentration quintiles 1 and 5, as well as the market and the risk-free asset as benchmarks. The winner portfolio in both quintiles has similar returns. For instance, a dollar invested in winners headquartered in areas with a low Hispanic concentration at the beginning of 1970 was worth $86.38 in 2011. Likewise, a dollar invested in winners headquartered in areas with a high Hispanic concentration was worth $76.81.

The majority of the difference in performance comes from the "loser" portfolios. The final dollar value from holding losers in the highest quintile of of concentration was just 0.65/1.45 = 44.83% of the dollar value of holding losers in the bottom quintile of H/W. These results are in line with the findings of Moskowitz and Grinblatt (1999), who show that momentum profits are due to the short leg of the strategy. In addition, the total return on the market was $53.08, significantly lower than both "winner" portfolios.

Overall, the findings in this section support our conjecture. We find that the preferences of local investors can lead to a geographic dislocation of momentum returns. More specifically, momentum returns are concentrated in areas of high Hispanic concentration.

3.6 Performance Estimates using Various Factor Models

Since the results from Table 6 show unconditional means for the momentum strategies, in this section we investigate whether these results can be explained by known risk factors. Table 7 presents risk-adjusted estimates of momentum returns for firms located in areas of low and high Hispanic concentration. Momentum returns for quintiles 1 and 5 are regressed on the three Fama-French factors (Fama and French, 1992), the short term reversal factor (Jegadeesh, 1990; Conrad and Kaul, 1998) and the long term reversal factor (De Bondt and Thaler, 1985; Jegadeesh, 1990; Conrad and Kaul, 1998).

The results show that the momentum profits are robust: neither the CAPM, the three Fama-French factors nor the short or long term reversal factors can explain the abnormal returns across H/W quintiles. The alphas of the momentum portfolios of firms located in high Hispanic concentration areas are positive and statistically significant in all the models. They range from 0.92% per month in the CAPM model to 1.19% per month in the Fama-French plus reversal factors model. The differences in alphas within each model across high and low quintiles are also large. On average, the momentum returns from the high Hispanic concentration areas tend to be twice as high as the momentum returns from the low Hispanic concentration areas. These differences in alphas are always positive and statistically significant at the 5% level. In addition, when the short- and long-term reversal factors are included in the specifications, they improve the fit of the model, suggesting that there could be a cultural or geographic component to these factors' ability to explain momentum profits.

4 Robustness Tests

4.1 Hispanic Culture and Real Estate Market Returns

One major concern so far is that we cannot link the buyers of an asset with the asset itself. Therefore, we look at a second asset market where it is easier to establish this relationship: the US residential real estate market. Although we cannot alleviate this concern entirely, we provide additional evidence to show that the asset pricing effects we have identified are in fact driven by local investors living in high Hispanic areas. For instance, when someone buys a house, it is very likely that they intend to live in that residence. Therefore, due to the immovable nature of residential real estate, the local ownership level is very high. The return chasing and preference for commonly used products in Hispanic communities implies that as more and more families buy real estate in areas with a high concentration of Hispanic residents, more people will find owning an asset in this area desirable and they will run-up the prices. As a consequence, we expect areas with a large Hispanic population to have more pronounced price run-ups and subsequent downturns in housing prices; and thus, higher realized volatility.

To test this hypothesis, we use CBSA-level housing price indices from the Federal Housing Finance Agency. Similar to the previous analysis, we sort CBSAs into quintiles based on the concentration of Hispanics in the local population. Then, we calculate the growth in house prices by equally weighting each CBSAs in a quintile.

Figure 3 shows the cumulative returns of housing prices for the 100 largest core based statistical areas (CBSAs) in the US.[20] CBSAs are sorted into quintiles of Hispanic concentration as measured by the H/W ratio. Figure 3 shows that CBSAs with the highest concentration of Hispanic residents exhibit the largest swings in real estate prices. Similarly, Figure 4 graphs the raw returns for the different quintiles of Hispanic concentration and suggests that areas with a higher Hispanic concentration exhibit more variance in annual returns. A statistical test of equality of variance in house price returns between the lowest and highest Hispanic concentration quintiles is rejected at the 1% level, suggesting that the variance of quintile 5 is higher.

Overall, the findings from the real estate tests confirm our conjecture: localities with a high Hispanic population exhibit higher price run-ups and subsequent downturns in asset prices, as well as realized volatility. Furthermore, the results show that the Hispanic culture can affect two of the largest asset markets in the US, the stock and real estate markets.

4.2 Distance from the Mexican Border

We use a zip code's minimum distance to the Canadian border to instrument for the Hispanic concentration of an area. However, we also test whether the results are robust to using the minimum distance to the Mexican border as an IV. Since the Gulf of Mexico separates Texas from Florida, we assign Monroe County, FL as being on the southern border. Then, we draw a line between the centroid of Cameron County, TX and Monroe County, FL and record the latitude-longitude coordinates along this new border at 20 mile intervals. We treat these coordinates as the centroids of "pseudo-counties" along the southern border that crosses the gulf. In untabulated results, we see that all of the findings of the paper are robust to using the Mexican border instead of the Canadian border.

[20] The data set is from the Federal Housing Finance Agency's House Price Index, which is based on transaction data for single family homes.

4.3 Testing Other Ethnicities

Another concern of the results so far is that it is not certain whether we are capturing the effect of Hispanic culture on investment decisions or if we are picking up some general aspects of culture that could also be correlated to other ethnicities. If the latter were to be true, then we would expect to find similar results when studying other cultures. To address this issue, we examine whether we find higher momentum profits in high B/W areas. This robustness test is driven by the fact that the B/W coefficient is statistically significant in some of the investment style and preferences tests. Furthermore, the MSAs were Hispanics tend to live are not the same MSAs were Blacks tend to live; the correlation between H/W and B/W MSAs is -0.008. However, we find that the asset pricing results are unique to high Hispanic concentration areas.

5 Summary and Conclusion

In this paper, we examine the effect of Hispanic culture on portfolio choice decisions and asset returns. We find that investors living in areas with a high concentration of Hispanic residents chase returns and prefer local lottery stocks. Importantly, through our IV analysis, we show that these effects cannot be attributed to unobserved heterogeneity correlated with the Hispanic population concentration. We also find that Hispanic investors' preferences affect prices and returns of local markets. More specifically, investors in high Hispanic areas tend to herd in local lottery stocks, creating higher comovement in returns that cannot be explained by fundamentals. In addition, since investors in high Hispanic areas tend to chase returns, we find that the well known momentum effect is significantly stronger for companies headquartered in these areas.

Overall, these results present a strong link between the culture of investors and their asset preferences. Additionally, it shows that culturally driven preferences of individuals can have profound effects on a macro scale. We focus on Hispanic culture, which is important given the large and growing Hispanic population in the United States. It is likely that the effects of Hispanic culture on other asset markets is significant and should be investigated in future research.

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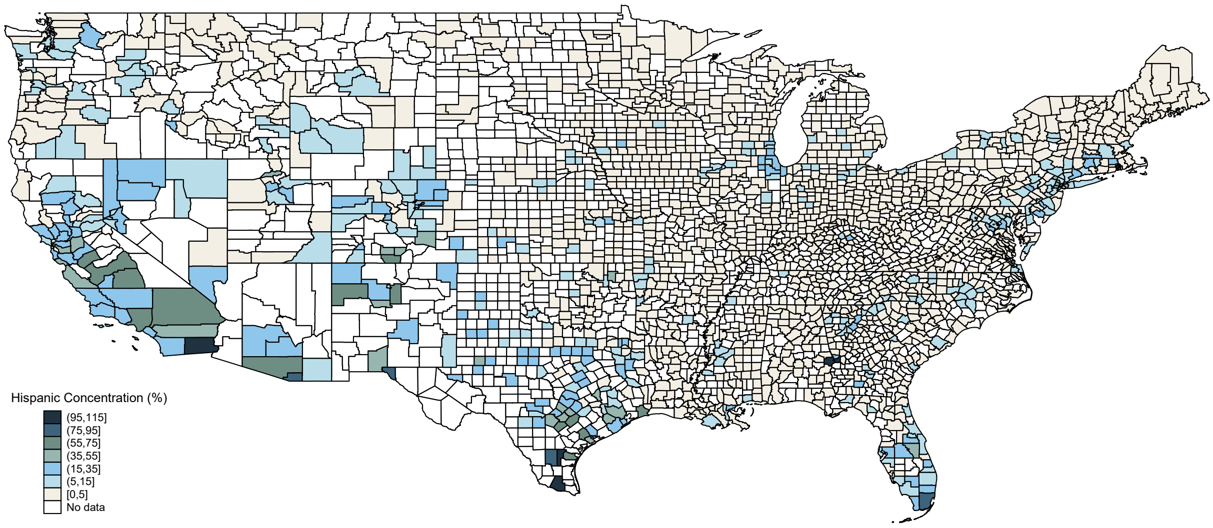
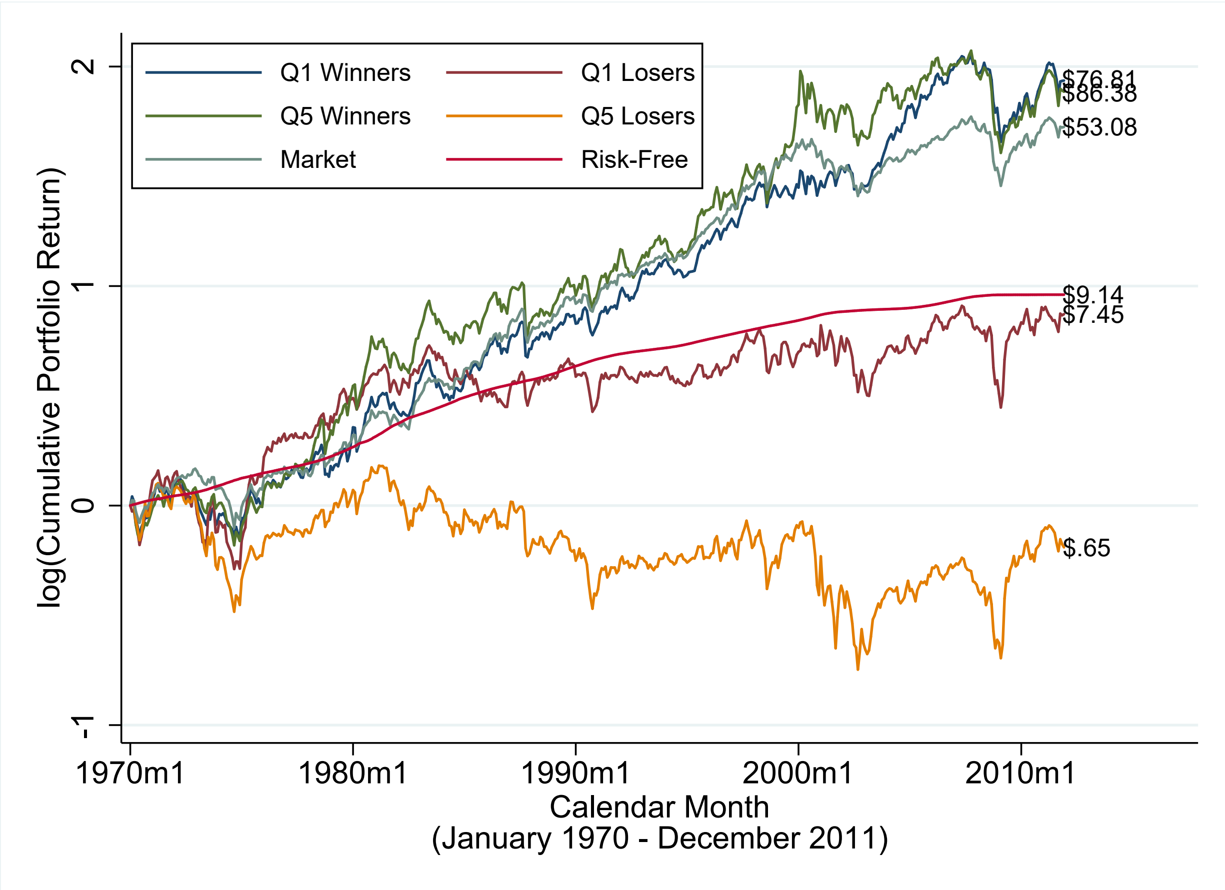
Figure 1
Hispanic Concentration per County



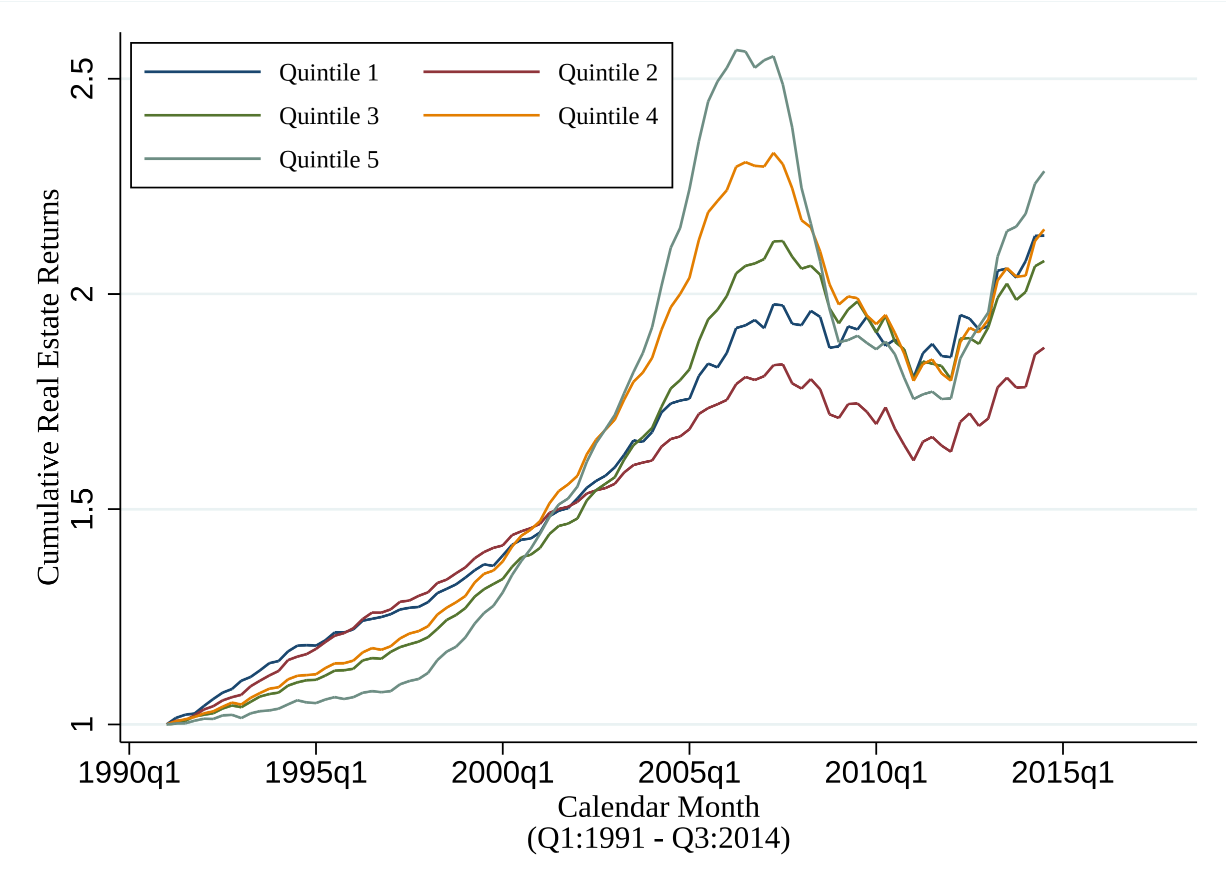
This figure plots the Hispanic concentration of a county as measured by H/W. In this figure, it is the ratio of the Hispanic population in a county relative to the White population in that county. Concentration is measured at the beginning of each decade based on the most recent census and is held constant for that decade. The Decennial Censuses used in this study start in 1970 and end in 2010.

Figure 2
Cumulative Gains for Winners and Losers



This figure plots the cumulative returns for different momentum portfolios from 1970 to 2011. Specifically, we have four momentum portfolios corresponding to stocks headquartered in either areas of high Hispanic concentration (as measured by H/W) or areas of low Hispanic concentration and winners or losers. Concentration is measured at the beginning of each decade based on the most recent census and is held constant for that decade. The thick blue line is low Hispanic winners and the thick red line is low Hispanic losers. The thin green line is high Hispanic winners and the yellow line is high Hispanic losers. For comparison, the market return (thin blue line) and risk free rate (1 year T-bill, red line) are also plotted.

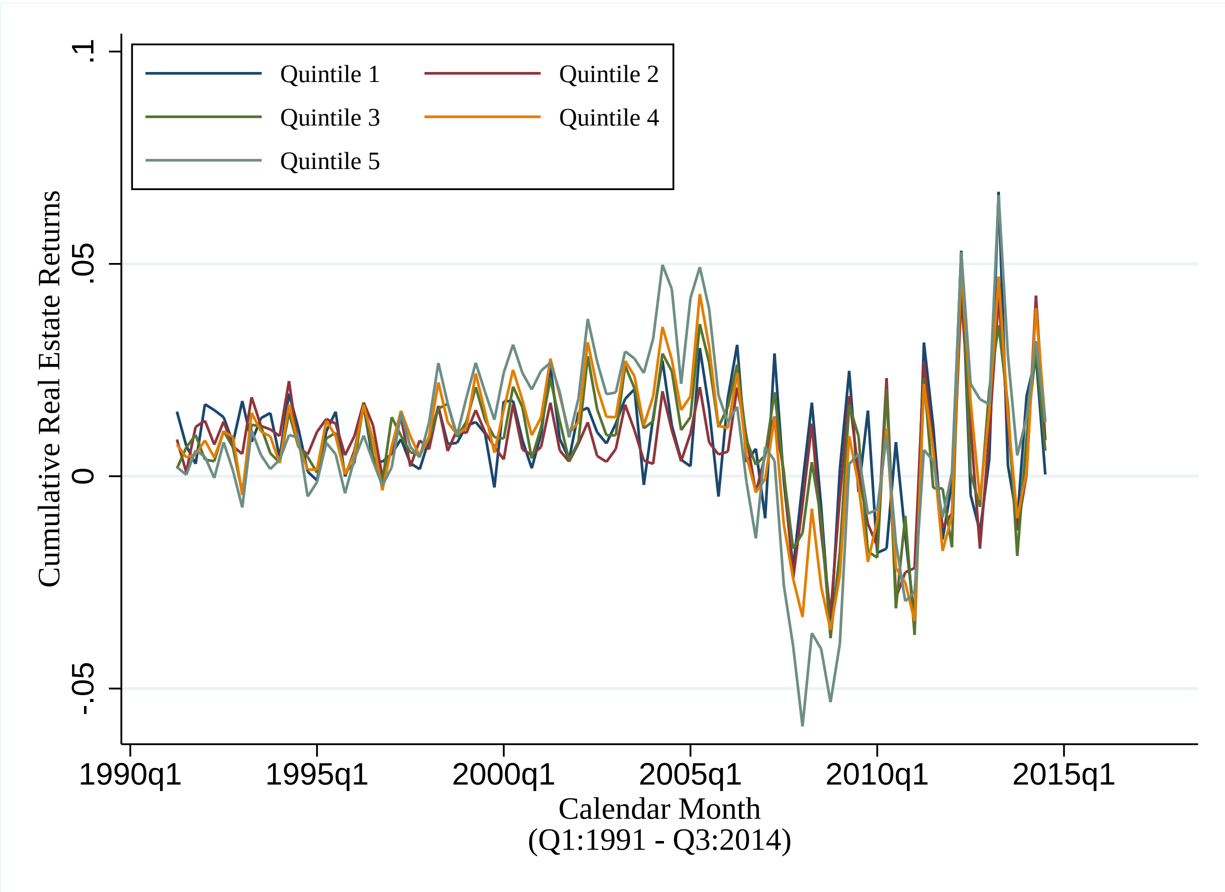
Figure 3
Cumulative Real Estate Returns by H/W Quintile



This figure plots cumulative returns for the Federal Housing Finance Agency's purchase only house price indexes for the 100 largest CBSAs in the country. These CBSAs are sorted on their concentration of Hispanic residents (as measured by H/W) and the cumulative returns for these 5 categories from 1991Q1 to 2014Q3 are plotted. Quintile 1 corresponds to the lowest concentration of Hispanic residents, while Quintile 5 corresponds to the highest concentration of Hispanic residents.

Figure 4

Raw Real Estate Returns by H/W Quintile



This figure plots raw returns for the Federal Housing Finance Agency's purchase only house price indexes for the 100 largest CBSAs in the country. These CBSAs are sorted on their concentration of Hispanic residents (as measured by H/W) and the raw returns for these 5 categories from 1991Q1 to 2014Q3 are plotted. Quintile 1 corresponds to the lowest concentration of Hispanic residents, while Quintile 5 corresponds to the highest concentration of Hispanic residents.

Table 1
Summary Statistics

This table presents summary statistics for the data used in the paper. Panel A presents investor-level summary statistics for investors at a large discount brokerage house. Monthly data cover the period from January of 1991 to December of 1996. Age of Head is the age of the household head. Married is the percentage of married households. Own Home gives the percentage of investors who own their home. Number of Adults gives the number of adults in the household, and Male gives the percentage of households for which the head is male. Income is the household income as calculated using nine income categories with midpoints (in thousands) of 7.5, 17.5, 25, 35, 45, 62.5, 87.5, 112.5 and 250. The income of the household is assumed to be the midpoint value. Number of Securities is the number of securities owned by the household and held in the brokerage account and Portfolio Value is the total value of the portfolio, in thousands. Avg Sec Value is the average dollar value (in thousands) of all securities held in the brokerage account, while Portfolio Return and Sharpe Ratio are the average annual return and sharpe ratio of the brokerage account over the six year sample period. Panel B gives zip code level demographic summary information for all US zip codes, according to the 1990 Census. Total Population is the number of people living in each zip code, while Median Age, Median Income and Median Education are the median age, median household income, in thousands, and median level of education in years in each zip code. Minority is the percentage of the population classified as belonging to a minority (non-white) in each zip code. Male-female is the ratio of men to women in each zip code and Urban is the percentage of people residing in each zip code the Census Bureau classifies as living in an urban setting. Hispanic and Black are the percentage of people identifying as having Hispanic ancestry or Black in each zip code. Panel C presents the same zip code level demographic summary information as presented in Panel B, but only for those zip codes in which at least one household from the brokerage data resides.

Panel A: Investor-level portfolio characteristics

Variable	Mean	Median	Std Dev	10th Pctl	25th Pctl	75th Pctl	90th Pctl	N
Age of Head	40.9	46.0	22.9	0.0	34.0	56.0	68.0	51955
Married (%)	73.5	100.0	44.1	0.0	0.0	100.0	100.0	39953
Own Home (%)	97.0	100.0	16.9	100.0	100.0	100.0	100.0	41562
Number of Adults	2.0	2.0	1.6	-1.0	1.0	3.0	4.0	51955
Male (%)	87.5	100.0	33.1	0.0	100.0	100.0	100.0	45094
Income (000's)	88.1	62.5	64.1	25.0	45.0	112.5	250.0	45240
Number of Securities	2.7	1.0	3.9	0.0	1.0	3.0	6.0	51957
Portfolio Value (000's)	26.5	9.7	83.5	1.9	4.7	22.0	52.9	51957
Average Security Value (000's)	9.2	4.4	26.5	1.0	2.2	8.9	18.3	51957
Portfolio Return (%)	6.4	2.9	13.1	-0.5	1.0	7.1	17.0	49776
Sharpe Ratio (%)	12.4	14.6	46.0	-8.7	5.2	21.6	29.7	43109
Concentration	7.3	9.0	3.6	4.0	7.0	9.0	10.0	51957

Panel B: Zip code level demographic characteristics (all U.S. zip codes)

Variable	Mean	Median	Std Dev	10th Pctl	25th Pctl	75th Pctl	90th Pctl	N
Total Population	8485.6	2822.0	12334.5	353.0	907.0	10756.0	26118.0	29305
Median Age	34.5	32.0	6.0	27.0	32.0	37.0	42.0	29305
Median Income (000's)	48.6	43.8	24.8	28.8	36.3	57.5	67.5	29305
Median Education (years)	12.6	12.5	1.0	12.5	12.5	12.5	13.5	29305
Minority (%)	11.6	2.9	19.1	0.0	0.6	13.5	36.8	29305
Married (%)	49.1	49.9	8.1	40.1	46.0	53.2	56.8	29305
Male-female Ratio	1.0	1.0	0.5	0.9	0.9	1.0	1.1	29305
Urban (%)	31.9	0.0	42.2	0.0	0.0	78.9	100.0	29305
Hispanic (%)	4.4	0.7	11.5	0.0	0.0	2.7	10.6	29305
Black (%)	7.1	0.4	15.8	0.0	0.0	4.7	23.8	29305

Panel C: Zip code level demographic characteristics (zip codes where investors reside)

Variable	Mean	Median	Std Dev	10th Pctl	25th Pctl	75th Pctl	90th Pctl	N
Total Population	17398.8	13741.0	15155.1	1667.0	5002.0	26045.0	38179.0	10484
Median Age	34.2	32.0	5.5	27.0	32.0	37.0	42.0	10484
Median Income (000's)	62.0	57.5	31.2	36.3	43.8	67.5	87.5	10484
Median Education (years)	13.0	12.5	0.9	12.5	12.5	13.5	13.5	10484
Minority (%)	13.1	6.1	17.6	0.7	2.0	16.5	35.9	10484
Married (%)	47.4	48.5	7.5	38.2	44.4	51.7	54.5	10484
Male-female Ratio	1.0	1.0	0.3	0.9	0.9	1.0	1.1	10484
Urban (%)	65.1	85.9	40.5	0.0	26.6	100.0	100.0	10484
Hispanic (%)	6.1	1.7	11.8	0.2	0.6	5.7	16.9	10484
Black (%)	7.4	1.6	14.4	0.0	0.3	6.7	21.2	10484
H/W	0.1	0.0	0.3	0.0	0.0	0.1	0.2	10484

Table 2
Hispanic Culture and Investment Preferences

This table presents estimates from regressions of the excess weight of household i's portfolio on the set of stocks s at time t on a vector of zipcode, household and stock level covariates. Panel A shows results for the H/W concentration variable while Panel B uses a zip code's minimum distance to the Canadian border as an IV for the Hispanic concentration of a zip code. In the first two columns, s is the set of lottery stocks. They are defined as firms in the lowest 50^{th} stock price percentile, the highest 50^{th} idiosyncratic volatility percentile, and the highest 50^{th} skewness percentile. All three sorts are carried out independently. In the next two columns, s is the set of stocks headquartered local (within 60 miles) to household i's zipcode. Column (1) includes zip code level explanatory variables and household level regressors while column(3) adds state of investor residence indicator variables to the model. In columns 5-7, the set of stocks s includes those in the top decile of returns over the most recent 12, 6, and 1 month periods, respectively. B/W and H/W are the ratios of Black and Hispanic, respectively, to White individuals in household i's zip code. Foreign is the proportion of foreign born individuals in the zip code. I_{urban} is an indicator variable taking on a value of 1 if the Census Bureau classifies household i's zipcode as urban. Additional controls include income categories for household i, demographic variables such as an indicator if the head of household i is married or male, level of education and age. The set of covariates is constant across columns (4) - (7) and all continuous regressors are standardized. Heteroskedasticity robust t-statistics are presented in parentheses and are clustered at the zip code-year level.

Panel A: OLS Regression

	Lottery Stocks		HQ < 60 Miles		$\text{Returns}_{p > 90}$		
	1	2	3	4	12 mo.	6 mo.	1 mo.
H/W	15.294	14.260	253.809	231.261	2.053	1.788	1.163
	(3.86)	(3.40)	(8.21)	(7.85)	(2.17)	(1.74)	(0.78)
Persons	-10.176	-7.108	16.150	5.371	0.654	1.341	1.344
	(-3.47)	(-2.39)	(0.71)	(0.25)	(0.89)	(1.64)	(1.15)
B/W	-4.705	-4.282	-90.107	-51.925	-0.347	-0.470	-0.873
	(-2.92)	(-2.66)	(-8.44)	(-7.02)	(-0.93)	(-1.15)	(-1.65)
Foreign	3.572	-0.657	-471.651	-308.389	0.717	2.182	5.198
	(1.00)	(-0.16)	(-18.46)	(-11.64)	(0.73)	(1.90)	(3.13)
I_{urban}	10.252	9.181	255.294	150.041	2.725	2.116	2.883
	(1.56)	(1.39)	(4.33)	(2.72)	(1.66)	(1.17)	(1.15)
Port. Chars	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Income	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State Ind.	No	Yes	No	Yes	Yes	Yes	Yes
Adj. R sq.	0.007	0.033	0.01	0.011	0.007	0.039	0.01
N	1,470,297	1,470,297	1,470,297	1,470,297	1,508,936	1,508,936	1,470,297

Table 2
Hispanic Culture and their Investment Preferences (Continued...)

Panel B: Instrumental Variable							
	Lottery		HQ < 60 Miles		$\text{Returns}_{p > 90}$		
	1	2	3	4	12 mo.	6 mo.	1 mo.
H/W	77.897	400.383	3737.564	485.093	-6.107	-10.021	39.343
	(4.23)	(7.68)	(11.74)	(1.48)	(-0.66)	(-0.96)	(2.52)
Persons	-12.463	-16.502	-110.763	-0.415	0.852	1.628	0.415
	(-4.10)	(-3.99)	(-3.20)	(-0.02)	(1.10)	(1.89)	(0.32)
B/W	-11.914	-49.340	-503.846	-82.421	0.605	0.908	-5.328
	(-4.13)	(-6.05)	(-7.57)	(-2.05)	(0.53)	(0.70)	(-2.79)
Foreign	-32.158	-215.038	-2443.772	-447.733	5.248	8.739	-16.000
	(-2.92)	(-6.86)	(-12.91)	(-2.49)	(1.00)	(1.47)	(-1.79)
I_{urban}	10.157	11.825	233.125	151.040	2.669	2.035	3.145
	(1.54)	(1.60)	(3.53)	(2.74)	(1.62)	(1.12)	(1.24)
Port. Chars	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Income	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State Ind.	No	Yes	No	Yes	Yes	Yes	Yes
Adj. R sq.	-0.006	0.03	0.008	-0.042	-0.133	0.038	0.009
N	1,470,297	1,470,297	1,470,297	1,470,297	1,508,936	1,508,936	1,470,297

Table 3
Controlling for Unobserved Geographic Heterogeneity

This table presents estimates from regressions of excess weight ($EW_{i,s,t}$) of household i's portfolio on the set of stocks s at time t following the methodology of Rajan and Zingales (1998). Panel A shows results for the H/W concentration variable while Panel B uses a zip code's minimum distance to the Canadian border as an IV for the Hispanic concentration of a zip code. Regressions include fixed effects for every zip code of residence in the brokerage sample in an effort to further control for unobserved geographic heterogeneity. In addition, interaction terms of H/W and the minimum distance to the Canadian border with measures of household i's portfolio concentration are included. CONC is measured as 10 minus the number of stocks in household i's portfolio. HERF is a Herfindahl index of household i's portfolio if i is a long-only investor. Columns (1) and (2) present results where the dependent variable is excess weight in the household's portfolio on lottery stocks. They are defined as firms in the lowest 50^{th} stock price percentile, the highest 50^{th} idiosyncratic volatility percentile, and the highest 50^{th} skewness percentile. All three sorts are carried out independently. In columns (3) and (4), excess weight is measured with respect to the market weight of local stocks. A firm is defined to be "local" if they are headquartered within sixty miles of household i's zip code. The remaining columns present results where the dependent variable is the excess weight in household i's portfolio on stocks in the top decile of returns over the last twelve, six and one months, respectively. The independent variable of interest in each model is the interaction of H/W with a measure of portfolio concentration (H/W×CONC or H/W×HERF). Controls for the household's demographics and portfolio characteristics are included. I_{Male} equals one if the head of the household is male, $I_{Married}$ equals one if it is a married household, and I_{Own} equals one if the household owns its home. The age of the head of the household and the Sharpe Ratio (SR) of the household portfolio over the sample period are also included. Note that interaction terms are not standardized to aid in comparisons across differences in H/W. Standard errors are clustered at the zip code-year level and are included in parentheses below point estimates.

Panel A: OLS Regression

	Lottery Stocks		HQ < 60 Miles		$Returns_{p > 90}$					
	1	2	3	4	12 mo.		6 mo.		1 mo.	
HW IV x CONC	21.232		95.739		0.487		3.137		5.888	
	(7.96)		(15.75)		(0.76)		(4.41)		(6.12)	
HW IV x HERF		492.699		1216.826		8.83		48.131		109.81
		(10.27)		(4.70)		(0.80)		(3.93)		(6.46)
I_{Male}	112.467	111.489	0.176	224.245	13.081	12.167	19.633	18.688	38.13	36.678
	(13.62)	(13.31)	(0.56)	(4.34)	(6.37)	(5.80)	(8.82)	(8.23)	(12.46)	(11.83)
$I_{Married}$	-20.814	-23.851	1.038	-156.462	-2.68	-1.958	-3.068	-2.403	-6.312	-6.528
	(-3.02)	(-3.39)	(4.17)	(-3.23)	(-1.60)	(-1.14)	(-1.66)	(-1.27)	(-2.45)	(-2.48)
I_{Own}	-18.428	-14.855	2.588	203.23	-2.179	-2.864	-4.09	-4.333	-6.769	-6.202
	(-1.83)	(-1.45)	(7.63)	(3.17)	(-0.87)	(-1.11)	(-1.52)	(-1.57)	(-1.79)	(-1.61)
Age	-7.907	-6.995	-0.949	71.812	-10.266	-10.59	-9.984	-10.421	-14.872	-15.208
	(-2.17)	(-1.88)	(-6.84)	(2.52)	(-11.50)	(-11.64)	(-10.16)	(-10.44)	(-11.09)	(-11.27)
Zip Code FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Income Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Portfolio Chars.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R sq.	0.115	0.118	0.236	0.323	0.064	0.065	0.043	0.043	0.034	0.034
N	1,470,508	1,386,913	1,510,082	1,399,478	1,470,508	1,386,913	1,470,508	1,386,913	1,470,508	1,386,913

Table 3
Controlling for Unobserved Geographic Heterogeneity (Continued...)

Panel B: Instrumental Variable										
	Lottery Stocks		HQ < 60 Miles		$\text{Returns}_{p>90}$					
	1	2	3	4	12 mo.		6 mo.		1 mo.	
HW IV x CONC	57.659		363.122		1.905		5.912		13.616	
	(11.98)		(25.42)		(1.57)		(4.45)		(7.61)	
HW IV x HERF		1517.778		3754.321		23.334		117.841		302.491
		(18.06)		(4.23)		(1.20)		(5.34)		(9.83)
I_{Male}	113.631	114.774	0.266	232.499	13.126	12.214	19.722	18.911	38.377	37.296
	(13.75)	(13.61)	(0.85)	(4.49)	(6.39)	(5.81)	(8.85)	(8.32)	(12.53)	(12.00)
$I_{Married}$	-21.354	-24.718	1.002	-158.427	-2.701	-1.97	-3.109	-2.462	-6.427	-6.69
	(-3.10)	(-3.51)	(4.02)	(-3.27)	(-1.61)	(-1.15)	(-1.68)	(-1.30)	(-2.49)	(-2.55)
$I_{Own\ Home}$	-17.913	-12.481	2.621	209.342	-2.159	-2.83	-4.051	-4.172	-6.66	-5.756
	(-1.78)	(-1.21)	(7.70)	(3.25)	(-0.86)	(-1.10)	(-1.51)	(-1.51)	(-1.76)	(-1.49)
Age	-6.029	-4.524	-0.808	78.011	-10.193	-10.555	-9.841	-10.253	-14.473	-14.743
	(-1.65)	(-1.21)	(-5.82)	(2.75)	(-11.41)	(-11.59)	(-10.01)	(-10.28)	(-10.79)	(-10.93)
Zip Code FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Income Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Portfolio Chars.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R sq.	0.114	0.115	0.232	0.323	0.064	0.065	0.043	0.043	0.034	0.034
N	1,470,508	1,386,913	1,510,082	1,399,478	1,470,508	1,386,913	1,470,508	1,386,913	1,470,508	1,386,913

Table 4
Investor Herding Behavior

This table tests whether the trades of investors are correlated (Barber, Odean, and Zhu (2008)). The sample consists of the monthly trades made by local investors from January 1991 to December 1996 at a large discount brokerage house. Panel A calculates the herding measure from 1 for each H/W quintile, Lottery Stocks, and Non-Lottery stocks. Lottery includes firms in the lowest 50^{th} stock price percentile, the highest 50^{th} idiosyncratic volatility percentile, and the highest 50^{th} skewness percentile. Non-Lottery includes firms that are not classified as Lottery, e.g. they fail to meet one or more of these requirements. Panel B calculates the herding measure for the three components of Lottery stocks. As shown by 1, $p_{i,t}$ is the proportion of all trades in stock i during month t that are purchases. $E[p_{i,t}]$ is the proportion of all trades that are purchases in month t. Collectively, $|p_{i,t} - E[p_{i,t}]|$ is the proportion of all trades in stock i during month t that are purchases minus the proportion of all stocks traded by all investors during month t that are purchases. The latter term of the measure, $E|p_{i,t} - E[p_{i,t}]|$, is used to adjust for the fact that more variation in the proportion of buys is expected in stocks that have a few trades. We restrict the analysis to stocks with at least ten trades in month t. In each month, we average the herding measures across stocks. Statistical tests are based on the time-series of the mean herding measure across stocks. *p-values* can be found in parentheses.

Panel A

	High HW	p-value	Low HW	p-value
All Stocks	0.075	(0.00)	0.078	(0.00)
Lottery	0.015	(0.05)	-0.009	(0.82)
Non-Lottery	0.078	(0.00)	0.080	(0.00)

Panel B

	High HW	p-value	Low HW	p-value
Low Price	0.048	(0.00)	0.035	(0.00)
High Skewness	0.065	(0.00)	0.072	(0.00)
High Idio. Volatility	0.061	(0.00)	0.052	(0.00)

Table 5
Comovement of Returns in Hispanic Quintiles

This table shows the results for the comovement of returns tests. For each HW quintile, we estimate a time-series regression of monthly stock returns on the returns of the habitat portfolio along with several controls. Panel A includes the market portfolio, the Fama and French (1993) three-factors, the Carhart (1997) momentum and Pastor and Stambaugh (2003) liquidity factor. Panel D includes the market portfolio, the Fama and French (1993) three-factors, short-term and long-term reversal. Cross-sectional averages of the estimate coefficients (habitat betas) from the time-series regressions and their *t-statistics* are presented in the table. The habitat portfolio is constructed as a value-weighted portfolio of all stocks found in the same HW quintile as firm i, excluding firm i. The market index is the value-weighted return of all stocks in the market minus the firms included in the habitat portfolio. Each panel has three rows: Full Sample, Lottery Stocks, and Non-Lottery Stocks. Full Sample includes in the habitat portfolio all of the stocks in a specific H/W quintile. The next two rows divide this sample into Lottery stocks and Non-Lottery stocks. The first only includes firms in the lowest 50^{th} stock price percentile, the highest 50^{th} idiosyncratic volatility percentile, and the highest 50^{th} skewness percentile in the habitat portfolio. All three sorts are carried out independently. The latter row includes the stocks that do not meet one or more of these requirements. The column *Diff. High H/W and Low H/W* shows the difference between bright and dark habitat betas. The row *Diff. Lottery and Non-Lottery* tests whether the difference between the betas of lottery and non-lottery stocks within the High H/W and Low H/W quintiles is statistically significant. The *p-values* of the differences can be found in the row below in between parentheses. Standard errors are adjusted using the Newey and West (1987a) correction method.

Panel A

Habitat Beta	High H/W	4	3	2	Low H/W	*Diff. High H/W and Low H/W*
Full Sample	0.698	0.064	0.227	0.367	0.079	0.619
	(12.03)	(0.80)	(2.72)	(6.90)	(1.78)	(0.00)
Lottery Stocks	0.770	0.677	0.581	0.544	0.358	0.412
	(14.491)	(11.78)	(7.29)	(7.39)	(7.41)	(0.00)
Non-Lottery Stocks	0.573	0.189	0.215	0.421	0.261	0.312
	(14.74)	(3.24)	(3.37)	(11.29)	(6.49)	(0.00)
Diff. Lottery and Non-Lottery	0.197				0.097	
	(0.00)				(0.13)	

Panel B

Habitat Beta	High H/W	4	3	2	Low H/W	*Diff. High H/W and Low H/W*
Full Sample	0.720	0.056	0.180	0.338	0.079	0.641
	(13.36)	(0.68)	(2.37)	(6.37)	(1.84)	(0.00)
Lottery Stocks	0.766	0.670	0.563	0.527	0.344	0.422
	(14.598)	(12.42)	(7.33)	(7.29)	(7.13)	(0.00)
Non-Lottery Stocks	0.587	0.176	0.186	0.412	0.265	0.322
	(16.00)	(2.98)	(3.15)	(11.33)	(6.95)	(0.00)
Diff. Lottery and Non-Lottery	0.179				0.079	
	(0.00)				(0.21)	

Table 6
Momentum and Hispanic Origin

This table reports mean monthly returns for a portfolio of winners, a portfolio of losers and a winners-minus-losers momentum portfolio, by Hispanic concentration (H/W) in the zip code in which the company is headquartered. We sort all stocks into quintiles based on the ratio of Hispanic population to white population in the zip code in which the company is headquartered, according to the Decennial Census. We then sort the zip code portfolios into winners and losers. "Winners" are those companies with stock returns in the highest decile in the (t-7,t-1) period, with a one month delay in portfolio formation to avoid the short-term reversal phenomenon. "Losers" are those companies with stock returns in the lowest decile in the (t-7,t-1) period. t-statistics are presented in parentheses and are corrected for heteroscedasticity and serial correlation using the method of Newey and West (1987b). Point estimates and t-statistics from a test of equality of returns between low and high H/W location companies are presented in the last two rows.

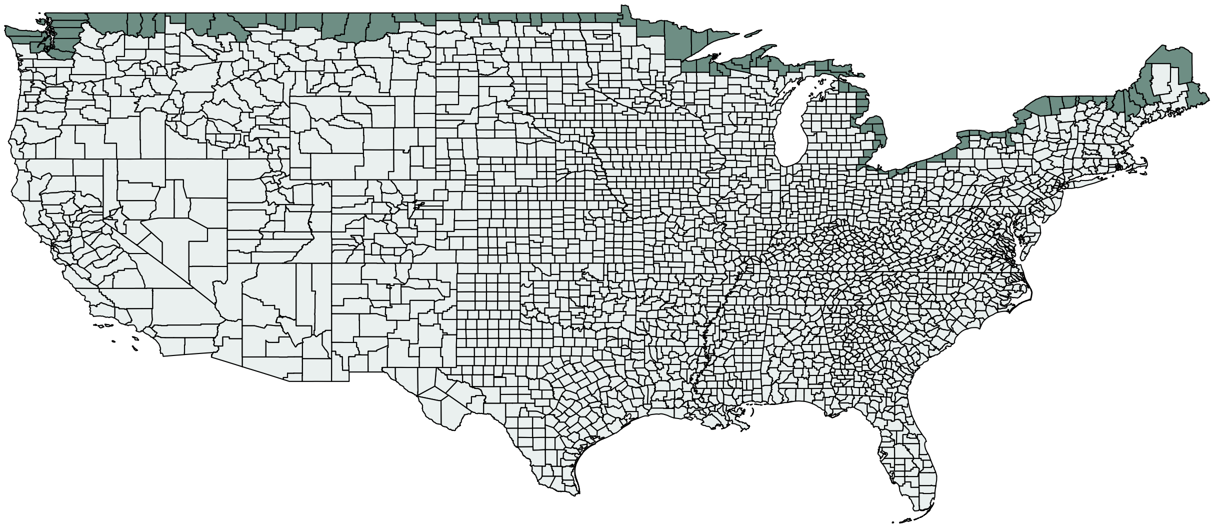
	Individual Stocks				
	Winners (W)		Losers (L)		Momentum Portfolio (W-L)
	Raw Return	Mean H/W	Raw Return	Mean H/W	Raw Return
Low H/W	1.082	0.01	0.694	0.01	0.388
	(3.67)		(1.82)		(1.39)
2	1.290	0.02	0.511	0.02	0.778
	(4.05)		(1.35)		(3.36)
3	1.178	0.05	0.325	0.05	0.852
	(3.63)		(0.89)		(3.48)
4	1.060	0.10	0.202	0.10	0.858
	(3.22)		(0.52)		(3.38)
High H/W	1.172	0.29	0.321	0.28	0.852
	(3.19)		(0.77)		(2.96)
H-L	0.090		-0.373	MOM_5-MOM_1	0.464
	(0.54)		(-1.54)		(1.84)

Table 7
Alpha Estimates of Cultural Momentum Returns

This table reports risk-adjusted performance estimates for the winner-minus-loser momentum strategy in low H/W zip codes and in high H/W zip codes. Component returns are those of equally weighted portfolios of companies in high H/W zip codes and low H/W zip codes. The set of factors includes the market excess return (RMRF), size (SMB), value (HML), short-term reversal factor (STR) and long-term reversal factor (LTR). t-statistics are presented in parentheses and are adjusted for autocorrelation and heteroscedasticity following Newey and West (1987b). Alpha Difference is the difference in the alpha of the momentum strategy between the high and low H/W zip codes, the p-value testing equality of alphas is presented in parentheses. The estimation period is January 1970 to December 2011.

	Low H/W	High H/W	Low H/W	High H/W	Low H/W	High H/W
Alpha	0.422	0.917	0.529	1.066	0.634	1.190
	(1.59)	(3.44)	(1.99)	(3.81)	(2.32)	(4.00)
RMRF	-0.076	-0.146	-0.123	-0.217	-0.056	-0.137
	(-0.91)	(-1.40)	(-1.48)	(-2.05)	(-0.53)	(-1.05)
SMB			0.011	0.039	0.049	-0.038
			(0.08)	(0.17)	(0.34)	(-0.19)
HML			-0.218	-0.307	-0.178	-0.420
			(-1.55)	(-1.30)	(-1.00)	(-1.55)
STR					-0.306	-0.394
					(-2.05)	(-1.87)
LTR					-0.010	0.348
					(-0.06)	(1.54)
Alpha Difference	0.495		0.537		0.556	
(5-1)	(0.045)		(0.041)		(0.029)	
Adj. R sq.	0.002	0.010	0.010	0.028	0.034	0.078
N	504	504	504	504	504	504

Figure A1
Counties Along the Canadian Border



This figure plots the counties along the Canadian border used to calculate the minimum distance to each zip code in the US.

Table A1
Counties Along the Canadian Border

This table presents the counties along the Canadian border used to calculate the minimum distance to each zip code in the US.

State	*County*	*FIPS*	*State*	*County*	*FIPS*	*State*	*County*	*FIPS*
Washington	Clallam	53009	North Dakota	Pembina	38067	Michigan	Wayne	26163
Washington	Jefferson	53031	Minnesota	Kittson	27069	Michigan	Monroe	26115
Washington	Mason	53045	Minnesota	Roseau	27135	Ohio	Lucas	39095
Washington	Pierce	53053	Minnesota	Lake of the Woods	27077	Ohio	Ottawa	39123
Washington	Kitsap	53035	Minnesota	Koochiching	27071	Ohio	Eerie	39043
Washington	King	53033	Minnesota	St. Louis	27137	Ohio	Lorain	39093
Washington	Snohomish	53061	Minnesota	Lake	27075	Ohio	Cuyahoga	39035
Washington	Island	53029	Minnesota	Cook	27031	Ohio	Lake	39085
Washington	San Juan	53055	Wisconsin	Douglas	550331	Ohio	Ashtabula	39007
Washington	Skagit	53057	Wisconsin	Bayfield	55007	Pennsylvania	Eerie	42049
Washington	Whatcom	53073	Wisconsin	Ashland	55003	New York	Chautauqua	36013
Washington	Okanogan	53047	Wisconsin	Iron	55051	New York	Eerie	36029
Washington	Ferry	53019	Michigan	Gogebic	26053	New York	Niagara	36063
Washington	Stevens	53065	Michigan	Ontonagon	26131	New York	Orleans	36073
Washington	Pend Oreille	53051	Michigan	Houghton	26061	New York	Monroe	36055
Idaho	Boundary	16021	Michigan	Keweenaw	26083	New York	Wayne	36117
Montana	Lincoln	30053	Michigan	Baraga	26013	New York	Cayuga	36011
Montana	Flathead	30029	Michigan	Marquette	26103	New York	Oswego	36075
Montana	Glacier	30035	Michigan	Alger	26003	New York	Jefferson	36045
Montana	Toole	30101	Michigan	Luce	26095	New York	St. Lawrence	36089
Montana	Liberty	30051	Michigan	Chippewa	26033	New York	Franklin	36033
Montana	Hill	30041	Michigan	Mackinac	26097	New York	Clinton	36019
Montana	Blaine	30005	Michigan	Cheboygan	26031	Vermont	Grand Isle	50013
Montana	Phillips	30071	Michigan	Presque	26141	Vermont	Franklin	50009
Montana	Valley	30105	Michigan	Alpena	26007	Vermont	Orleans	50019
Montana	Daniels	30019	Michigan	Alcona	26001	Vermont	Essex	50011
Montana	Sheridan	30091	Michigan	Iosco	26069	New Hampshire	Coos	33007
North Dakota	Divide	38023	Michigan	Arenac	26011	Maine	Oxford	23017
North Dakota	Burke	38013	Michigan	Bay	26017	Maine	Franklin	23007
North Dakota	Renville	38075	Michigan	Tuscola	26157	Maine	Somerset	23025
North Dakota	Bottineau	38009	Michigan	Huron	26063	Maine	Aroostook	23003
North Dakota	Rolette	38079	Michigan	Sanilac	26151	Maine	Washington	23029
North Dakota	Towner	38095	Michigan	St. Clair	26147			
North Dakota	Cavalier	38019	Michigan	Macomb	26099			

Table A2
First Stage Regressions: Hispanic Culture and their Investment Preferences

This table presents the first stage regressions of a zip code's minimum distance to the Canadian border on a zip code's Hispanic concentration. Persons is the census count of individuals in household i's zip code. B/W is the census count of Blacks divided by the census count of White individuals in household i's zip code. Foreign is the proportion of foreign born individuals in the zip code. I_{urban} is an indicator variable taking the value of one if the Census Bureau classifies household i's zip code as urban. Density is a measure of population density or the total population of the zip code divided by its land area. Controls for the household's demographics and portfolio characteristics are included. I_{Male} equals one if the head of the household is male, $I_{Married}$ equals one if it is a married household, and I_{Own} equals one if the household owns its home. The age of the head of the household and the Sharpe Ratio (SR) of the household portfolio over the sample period are also included. All non-indicator variables are standardized, and zip code-year clustered t-statistics are presented in parentheses below point estimates.

2-SLS First Regression		
Variable	1	2
Min. Dist.	0.148	0.292
	(25.60)	(12.04)
Persons	0.033	0.023
	(4.95)	(3.42)
B/W	0.121	0.121
	(9.10)	(9.07)
Foreign	0.531	0.546
	(41.83)	(37.11)
I_{urban}	-0.015	-0.014
	(-1.87)	(-1.75)
Density	0.079	0.097
	(7.95)	(9.40)
Port. Chars.	Yes	Yes
HH Controls	Yes	Yes
State Ind.	No	Yes
F-Stat.	645.94	144.39
Adj. R sq.	0.475	0.515
N	1,534,816	1,534,816

Table A3
First Stage Regressions: Controlling for Unobserved Geographic Heterogeneity

This table presents the first stage regressions of a zip code's minimum distance to the Canadian border interacted with a measure of portfolio concentration (H/W×CONC or H/W×HERF) on a zip code's Hispanic concentration interacted with a measure of portfolio concentration (H/W×CONC or H/W×HERF). Regressions include zip code fixed effects for every zip code of residence in the brokerage sample in an effort to control for unobserved geographic heterogeneity. CONC is measured as 10 minus the number of stocks in household i's portfolio. HERF is a Herfindahl index of household i's portfolio if i is a long-only investor. The independent variable of interest in each model is the interaction of Min. Dist. with a measure of portfolio concentration (H/W×CONC or H/W×HERF). Controls for the household's demographics and portfolio characteristics are included. I_{Male} equals one if the head of the household is male, $I_{Married}$ equals one if it is a married household, and I_{Own} equals one if the household owns its home. The age of the head of the household and the Sharpe Ratio (SR) of the household portfolio over the sample period are also included. Note that interaction terms are not standardized to aid in comparisons across differences in Min. Dist. Standard errors are clustered at the zip code-year level and are included in parentheses below point estimates.

2-SLS First Regression		
	1	2
Min. Dist. x CONC	0.015	
	(37.57)	
Min. Dist. x HERF		0.015
		(53.78)
I_{Male}	-0.010	-0.001
	(-1.44)	(-2.78)
$I_{Married}$	0.000	0.000
	(0.04)	(0.97)
I_{Own}	0.007	-0.001
	(0.74)	(-0.75)
Age	-0.013	0.000
	(-4.35)	(-0.63)
Zip Code FE	Yes	Yes
Income Controls	Yes	Yes
Portfolio Chars.	Yes	Yes
F-Stat.	1419.09	2891.513
Adj. R sq.	0.803	0.888
N	1,535,038	1,423,474