Local Trading Prior to Earnings Announcements

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Abstract

Retail investors exhibit a bias toward local stocks. Whether this bias is from real or perceived informational advantages is less clear. Our evidence suggests that some of the informational advantage is real. Large trading imbalances by investors living genuinely close to a firm's headquarters help predict the stock's earnings announcement return. Stocks with the most net buying by local investors average significantly higher market-adjusted announcement returns than stocks with the most net selling by local investors. This return difference is pronounced for small and medium-sized firms, but absent among large firms, which have significant analyst coverage. Local investors' information advantage comes at the expense of nonlocal traders who lose in aggregate on their trading prior to earnings announcements.

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1. Introduction

Individual investors prefer stocks of companies that are headquartered close to home.[1] Whether they prefer local stocks because they have better information about them has been a contentious issue. Ivkovic and Weisbenner (2005) examine individual investor trading activity from a data set supplied by a large discount broker and conclude that individuals do appear to be able to generate superior returns when trading local firms. However, Seasholes and Zhu (2010) use the same data to argue that individual investors do not have any information advantage in local stocks. We provide a new test of the information content of retail investors' local trading, and our results support the view that retail traders have an information advantage in local stocks.

We focus our analysis on local trading prior to earnings announcements. These regular information releases commonly create large stock price reactions; thus, earnings announcements provide investors with a strong motivation to gather private information and act on it prior to the public announcement. Unlike institutional investors, individual investors make small trades, which are not likely to attract the attention of market makers or regulators. Therefore, trading prior to earnings announcements provides a profit opportunity for local investors if they truly have an information advantage.

We test the hypothesis that retail investors have an information advantage in local stocks by testing if local investors' trading prior to earnings announcements predicts announcement returns. We find that large local trading imbalances do predict earnings

[1] French and Poterba (1991) show that the majority of the value in each of the world's five largest stock markets is held by investors living within each market's home country. Even among domestic stocks, investors prefer stocks of companies operating within their own region of the country (Huberman (2001)). Furthermore, Benartzi (2000) shows that many investors hold significant amounts of their own employer's stock. Coval and Moskowitz (1999) find that even professional money managers prefer locally headquartered firms.

announcement returns. Stocks with the most net buying initiated by local investors average 52 basis points in market-adjusted earnings announcement return, and stocks with the most net selling initiated by local investors average -35 basis points. The difference in returns between these two groups of stocks determined by local trading is strongly statistically significant.

To be sure that our result is unique to local investors, we also test if trading by retail investors not living near the corporate headquarters predicts announcement returns. We find that nonlocal retail traders do not have an information advantage. Stocks with the most net buying initiated by nonlocal investors average -11 basis points in market-adjusted earnings announcement return, and the stocks with the most selling relative to buying initiated by nonlocal investors average 8 basis points. This difference in returns across these groups of stocks determined by nonlocal trading is insignificant.

Local investors' information advantage comes at the expense of nonlocal traders. In our sample local investors' trading prior to earnings announcements results in announcement day gains of $1 million in aggregate on $262 million in trading volume. In contrast, nonlocal investors' trading prior to earnings results in announcement day losses of $1.1 million in aggregate on $1.6 billion in trading volume.

We define trades as local when they are made by investors living within 30 miles of the corporate headquarters. Our results remain significant with a wide range of alternative cutoffs. They are strongest with a local cutoff of 20 miles, and they weaken steadily as we extend the cutoff. Investors living within a reasonable daily commute of the corporate headquarters appear to have the strongest information advantage over investors living farther away.

Coval and Moskowitz (1999) argue that local information advantage is most likely to be found in smaller firms. Consistent with this hypothesis, we find that large local trading imbalances provide significant predictability for announcement returns among small and medium-sized companies, but they provided no indication of earnings announcement returns among large companies. Our results hold in each period of the sample and are strongest for the last two years suggesting that our results are persistent over time.

Our ability to identify local and nonlocal trades comes from the rich demographic data provided for a large sample of investors with accounts at a major discount brokerage. This dataset was first analyzed by Barber and Odean (2000) and has been used in many subsequent studies. The data include all the trades made by approximately 78,000 households from January 1991 to December 1996. Most importantly, the demographic file contains the five-digit zip code of the primary residence of over 55,000 households. We use the zip codes of the investors along with the zip codes of corporate headquarters, provided by Compustat, to calculate the distance between the investor and the company and determine if a trade is local or nonlocal. Bernile, Kumar, and Sulaeman (2010) note that many companies have a significant economic presence in many places in addition to their corporate headquarters; however, they find that almost all of individual investors' local bias comes from investors living near the corporate headquarters.

Our methodology closely follows the work of Kaniel, Lui, Saar, and Titman (2010), hereafter KLST. They find that aggregate buying (selling) by individual investors prior to earnings announcements predicts positive (negative) abnormal returns post announcement. They exploit proprietary NYSE data containing all of the trades by individual investors executed

on the exchange between 2000 and 2003. Like KLST we calculate individual investor trading imbalances in the two weeks prior to earnings announcements, then use this measure to sort announcements into quintiles, and then examine market-adjusted returns across these groups. Unlike KLST we exploit data including investors' zip codes to separate their trading into local and nonlocal imbalances. Our results are important because they provide an answer for where individual investors are accessing information about upcoming earnings announcements: they are accessing this information locally.

Our results are contrary to the findings of Zhu (2002) who concludes that local individual investor trading does not anticipate earnings announcement returns. His study uses the same dataset of trades as ours, but at the time of his study residential zip code data were available for less than half the households used in our study. Thus, we have the ability to identify significantly more local and nonlocal trades. Furthermore, his study only examines average individual trading imbalances prior to all positive and all negative earnings surprises. His study does not separately examine the largest trading imbalances as ours does following the methodology of KLST. Doing so reveals that large local trading imbalances anticipate announcement returns.

Our results are complementary to studies examining institutional trading. Coval and Moskowitz (2001) show that mutual funds earn substantial abnormal returns on stocks headquartered nearby. Baker et al. (2010) find that stocks mutual funds buy prior to earnings announcements perform better than the stocks they sell. Baik, Kang, and Kim (2010) find that trading imbalances of in-state institutions prior to earnings announcements predict announcement returns, but trading imbalances by out-of-state institutions do not. As with our

results, their results are strongest for small companies. Our results are also consistent with studies by Hong, Kubik, and Stein (2008), Pirinsky and Wang (2006), and Shive (2011), which show that local investors are important contributors to the price discovery process.

Our study is in contrast to early studies of retail trading that reveal individual investors' poor investment decision making. Odean (1999), Barber and Odean (2000), and more recently Barber et al. (2009) show that individual investors trade too much, incurring significant losses due to high trading costs. Barber and Odean (2001) connect this overtrading to investors' overconfidence. Odean (1998) shows that investors sell their winners too soon and hold on to their losers too long.

Our study is part of a series of recent studies showing that despite some poor decision making overall, aggregated individual investor trading contains information about future returns. Kaniel, Saar, and Titman (2008) show that intense individual investor buying is followed by positive excess returns and intense individual investor selling is followed by negative excess returns in the next month. Using data that distinguishes individual investors' market orders from their limit orders, Kelley and Tetlock (2011) show that both market and limit orders predict monthly stock returns, but only market orders correctly anticipate earnings announcement returns. They argue that retail traders enhance market efficiency with their market orders, which collectively bring new information to the market, and with their limit orders, which provide liquidity when scarce.

The remainder of this paper proceeds as follows. Section 2 describes the data and our procedures. Section 3 contains the results. Section 4 concludes.

2. Data and Procedure

2.1 Data

We analyze the trading records and demographics of individual investors from a large discount broker first studied by Barber and Odean (2000). The data include the trades of 77,995 households from January 1991 to December 1996 as well as a rich set of demographic variables. The trading record includes the date of each trade, the household and account numbers of the trader, the cusip of the investment, a buy or sell indicator, the principal of the trade, and the commission paid. The demographic record includes the gender, age, and income ranges for most, but not all, of the households in the trading record. The five-digit zip code of the primary residence is provided for about 55,000 households.

We obtain earnings announcement dates from Compustat and earnings announcement returns from CRSP. Compustat also provides the zip code of each corporate headquarters. For the market return we use the value-weighted portfolio return of all NYSE, AMEX, and Nasdaq stocks in the CRSP record as provided by the data library of Kenneth French.

2.2 Procedure

To identify trades by local investors we measure the distance between the investor and the corporate headquarters. Because we do not know the exact address of the investor, only the five-digit zip code, we follow Ivkovic and Weisbenner (2005) and calculate the distance between the centroid of the investor's zip code and the centroid of the corporate headquarters' zip code. See Coval and Moskowitz (1999) or Ivkovic and Weisbenner (2005) for the precise formula. For most of our analysis we use a cutoff of 30 miles for a trade to be

considered local, but we also examine alternative cutoffs. We only consider trades made by households living within the US on stocks of companies headquartered in the US.

We construct a measure of the imbalance in individual investor trading. For each stock we subtract the value of shares sold from the value of shares purchased and divide this difference by the average daily trading volume of the stock in the year prior to the earnings announcement date. Days with no trades made in a stock are excluded. Similar to KLST we define $IndNT[t]^i$ for stock *i* on day *t* as:

$$IndNT[t]^i = \frac{Buy\ dollar\ volume[t]^i - Sell\ dollar\ volume[t]^i}{Average\ daily\ dollar\ volume\ in\ year\ prior\ to\ earnings\ announcement^i}$$

We define cumulative net individual trading in stock *i* over the period [t,T] as:

$$IndNT[t,T]^i = \sum_{k=t}^{T} IndNT[k]^i$$

where the period is defined relative to the earnings announcement date (day zero). As in KLST for most of our analysis we use *IndNT[-10,-1]*, which is the cumulative net individual trading from ten trading days prior to the earnings announcement to one day prior to the announcement date.[2]

Our measure of local net trading is calculated using only trades on stocks made by households living within a specific distance from the stock's corporate headquarters. Our measure of nonlocal net trading is calculated using only trades in stocks made by households living beyond the specified distance from the stock's corporate headquarters. Our combined measure of net trading is calculated using both local and nonlocal trades. We exclude those

[2] DellaVigna and Pollet (2009) note that some earnings announcement dates prior to January 1, 1995 are recorded with an error of one trading day. We have verified that our results hold when the trading window is measured up to two days prior to the recorded announcement date for these years. We also show that our results hold in the 1995-1996 subperiod when announcement dates are without error.

trades for which we cannot calculate the distance between the household and the headquarters because of a lack of data on the location of either.

We calculate market-adjusted earnings announcement returns $CAR[0,1]^i$ of stock *i* by adding the stock's return on the day of the announcement and the following trading day minus the market return over those two days. Returns are stated in basis points. The market is defined as the value-weighted portfolio return of all stocks reported in the CRSP data.

2.3 Sample

We begin constructing our sample from all of the earnings announcements from 1991 to 1996 with data provided by Compustat. Only companies headquartered in the US with a zip code in the Compustat data are included so that we can indentify local trades. Additionally, a stock must have been traded by a local investor on at least ten days in the year prior to the earnings announcement and by a nonlocal investor on at least ten days in the year prior to the earnings announcement. This trading requirement insures that we have enough data to calculate a meaningful average daily dollar volume for the denominator of the net trading measure. Further, a stock must have been traded by at least one investor with a known zip code during the ten trading days before the earnings announcement.

Table 1 provides summary statistics for the sample of earnings announcements meeting the above criteria. The sample includes 6,635 earnings announcements by 838 companies in 141 different industries. We classify companies into industry groups using their three-digit Standard Industrial Classification (SIC) codes. The average market-adjusted announcement return in the sample is -5.28 basis points. The sample includes 149,499 trades made in the ten trading days prior to the announcement by 28,359 households. Of these 18,154 are trades in

local stocks made by 7,692 households, and 131,345 are nonlocal trades made by 26,182 households. There are about 20% more purchases than sales, but the average sale size exceeds the average purchase size by about 20%. Thus, overall the average net individual investor trading measure prior to earnings announcements is near zero. Local trade sizes are only slightly larger than nonlocal trade sizes. The characteristics of trades made in the ten trading days after earnings announcements are similar to those made before. There is a slight increase in trading after earnings announcements relative to before.

The bottom of the table provides the median individual net trading imbalance measure by quintile for local, nonlocal, and combined trades. The quintile of announcements with the largest local selling imbalance in the two weeks prior has a median imbalance of -2.52, which implies that local selling dollar volume exceeded local buying dollar volume by 2.52 times the average daily local trading volume among days traded by a local investor. The quintile of announcements with the largest local buying imbalance in the two weeks prior has a median imbalance of 2.39, which implies that local buying dollar volume exceeded local selling volume by 2.39 times the average daily local trading volume. The median number of local trades computed in the imbalance measure for both the top and bottom quartiles is 3. In contrast, the median number of local trades per announcement in the middle quartile is just 1. These statistics indicate that the top and bottom quartiles of local individual net trading are driven by meaningful trading imbalances computed from multiple trades in advance of earnings.

Figure 1 provides the geographical distribution of the households in the analysis. Only those households with known zip code who made at least one trade in a stock within ten trading days prior to an earnings announcement are included. The areas of the map are shaded

according to the number of households within each three-digit zip code. The darkest shaded areas reveal where the most households live, and not surprisingly, these areas surround major metropolitan areas. Overall, the households in the sample are widespread throughout the US. The west coast is overrepresented relative to the weighting of the entire US population.

Figure 2 provides the geographic distribution of the companies in the analysis. Only those companies with earnings announcements meeting the sample criteria are included. The map reveals that companies in the sample are clustered around major metropolitan areas. Although there are a number of companies headquartered in rural areas in the US, these companies are largely excluded from the sample because there is not enough trading by local investors in the data for them to meet the criteria to be included. Overall, the companies in the sample are located in many different states and regions, and companies located in major metropolitan areas and on the west coast are overrepresented relative to the weighting of the entire population of US companies.

3. Results

3.1 Trading Prior to Earnings Announcements

We test if the trading imbalance of local investors prior to earnings announcements predicts the announcement return. Following KLST we sort the 6,635 earnings announcements in our sample into quintiles based on the amount of individual net trading IndNT[-10,-1] in the ten trading days prior to the earnings announcement. Announcements in the first quintile Q1 have the most selling relative to buying prior to the announcement, and those in the last quintile Q5 have the most buying relative to selling. We independently sort announcements

based on the local trading imbalance prior to the announcement, then again for the nonlocal trading imbalance and a third time for the combined trading imbalance. The combined trading imbalance includes both local and nonlocal trades. Each quintile of combined and nonlocal net trading contains over 1,000 earnings announcements, and each quintile of local net trading contains over 800 earnings announcements.

3.1.A Main Results

Table 2 presents equally-weighted average market-adjusted earnings announcement returns for each quintile of individual net trading. The first column of the table presents the average CAR[0,1] for announcements in each quintile when sorted on the local trading imbalance. Those announcements with the largest local selling imbalance (in Q1) average -34.82 basis points CAR[0,1], and those announcements with the largest local buying imbalance (in Q5) average 52.22 basis points CAR[0,1]. This later average is statistically different from zero at the 5% level. The difference between the average CAR[0,1] of Q5 and Q1 for local trading is 87.04 basis points and is strongly statistically significant. These results indicate that a large local trading imbalance has predictive power for the earnings announcement return.

In contrast to local trading, trading that is not local does not help predict earnings announcement returns. The second column of the table presents the average CAR[0,1] for announcements in each quintile when sorted on the nonlocal trading imbalance. Those announcements with the largest nonlocal selling imbalance (in Q1) average 7.76 basis points CAR[0,1], and those announcements with the largest nonlocal buying imbalance (in Q5) average -10.71 basis points CAR[0,1]. Neither average is statistically different from zero. The difference between the average CAR[0,1] of Q5 and Q1 for nonlocal trading is -18.47 basis points and is

not statistically significant. These results indicate that trading that is not local has no predictive power for the earnings announcement return.

Like KLST we find that combined individual net trading, both local and nonlocal trades, collectively anticipate earnings announcement returns. Unlike KLST our combined results are not statistically significant. The difference in statistical significance could be a result of the large difference in the number of trades in their data and in ours. Their data include all trades made by individual investors through the exchange whereas our data include trades only from one discount broker. The third column of Table 2 shows the average CAR[0,1] for announcements in each quintile when sorted on the combined trading imbalance. Those announcements in Q1 average -16.27 basis points CAR[0,1]. This average monotonically increases when moving up the quintiles. Those announcements in Q5 average 15.25 basis points, and the difference between the market-adjusted announcement returns for the highest and lowest quintiles is 31.53 basis points.

3.1.B Alternative Definitions of Local Trading

We now consider alternative definitions of a local trade. We repeat the previous analysis of calculating individual net trading, sorting announcements into quintiles, and computing the average market-adjusted announcement return. The first panel of Table 3 presents these results for local trades defined as those made by investors living within 50 miles of the company's headquarters and nonlocal trades defined as those made by investors living beyond 50 miles. With the definition of a local trade loosened, the number of announcements meeting the sample criteria increases because more announcements now have enough local

trading in the year prior for the net trading measure to be calculated. The number of announcements in quintiles Q1 through Q5 in each category is provided in the table.

Again, those announcements with the largest local selling imbalance (in Q1) experience a large loss, on average -28.58 basis points, and those announcements with the largest local buying imbalance (in Q5) experience a large gain, on average 32.28 basis points. The difference in the average returns between these groups is 60.86 basis points and is statistically significant at the 10% level. In contrast, the trading imbalance of investors living beyond 50 miles from the corporate headquarters does not anticipate the earnings announcement return. Announcements with the largest nonlocal selling imbalance average a 16.50 basis point gain, and those with the largest nonlocal buying imbalance average a 6.20 basis point loss. The difference across the two groups is -22.70 basis points and is not significantly different than zero. Even with local trades defined with a 50 mile cutoff, the main results of local trading being predictive and nonlocal trading not being predictive remain.

As we extend the distance cutoff for defining a trade as local to 100 miles, the predictive power of local trading still appears in the point estimate, but becomes statistically insignificant. The lower panel of Table 3 presents these results for the 100 mile cutoff. Again, those announcements with the largest local selling imbalance experience a loss, on average -11.00 basis points, and those announcements with the largest local buying imbalance experience a gain, on average 21.31 basis points. The difference in the average returns between these groups is still positive at 32.31 basis points, but the difference is now not statistically significant. Trading by investors living closer to the corporate headquarters has more predictive power for earnings announcement returns.

Figure 3 displays the difference in average market-adjusted returns between announcements with the largest local buying imbalances (in Q5) and those with the largest local selling imbalances (in Q1) for various distance cutoffs for defining a local trade. The difference peaks at 104.84 basis points at a cutoff of 20 miles. The return differential steadily declines as the local radius is extended. The difference is statistically significant at the 5% level with cutoffs of 20, 25, 30, 35, and 45 miles. The difference is statistically significant at the 10% level with cutoffs of 40, 50, and 55 miles. These results show that investors living within a short distance from corporate headquarters appear to have the strongest information advantage over investors living farther away.

3.1.C Varying X in IndNT[-X,-1]

We now examine how the results change as we change the number of trading days prior to the earnings announcement that trading is accumulated. The first panel of Table 4 shows the results with trading imbalances calculated as IndNT[-5,-1], which cumulates trading from five trading days prior to the earnings announcement date to the day before the announcement. Those announcements with the largest local selling imbalance calculated as IndNT[-5,-1] experience a 42.89 basis point loss on average, and those announcements with the largest local buying imbalance experience a 21.11 basis point gain. Using trading over just the five days prior to the announcement creates a difference in average return between these two groups of 64.01 basis points, but no statistical significance with such few days of trading accumulated.

With eight and twelve days of trading accumulated the predictive ability of local trading imbalances becomes statistically significant. The second and third panels of Table 4 show the

results with trading imbalances calculated as IndNT[-8,-1] and IndNT[-12,-1] respectively. With eight days prior, the difference in average returns between announcements in Q5 of local trading and Q1 is 94.08 basis points and is statistically significant at the 5% level. With twelve days prior, this difference is down to 69.73 basis points yet remains statistically significant at the 5% level. Extending the accumulation of trading all the way to three weeks (fifteen trading days) prior to the earnings announcement weakens the main result. The final panel of Table 4 shows that the difference in average returns between announcements in Q5 of local trading and Q1 defined as IndNT[-15,-1] is down to 55.58 basis points and is statistically significant at the 10% level. Thus, trading by local investors within two weeks of the earnings announcement has the most predictive power for earnings announcement returns.

3.1.D Results by Company Size

We next examine how the size of the company affects our main result that large local trading imbalances predict earnings announcement returns. We sort announcements into three equal-sized groups each quarter by each stock's market capitalization. Table 5 presents average market-adjusted earnings announcement returns conditional on different levels of net individual trading and company size. Results in the first panel of Table 5 are calculated for the smallest size group, which have an average market capitalization of $220 million. The first column of this panel reveals that small companies that are heavily sold by local investors prior to the earnings announcement average -100.15 basis points CAR[0,1], which is statistically significant at the 5% level. Small companies that are heavily bought by local investors average 69.94 basis points CAR[0,1]. The difference in the averages across these two groups of small stocks is a remarkable 170.09 basis points and is statistically significant at the 5% level. The

second column of the first panel reveals that trading by investors that are not local to the corporate headquarters does not provide any significant predictability for earnings announcement return.

Results are similar for stocks in the mid-sized market capitalization group, which have an average market capitalization of $1.26 billion. Overall, mid-cap stocks had a better average market-adjusted announcement return of 13.07 basis points than small-cap stocks had (-43.08 basis points). The second panel of Table 5 reveals that heavy local net buying anticipates strong and statistically significant announcement returns. Mid-cap stocks in Q5 of local IndNT[-10,-1] average 95.90 basis points, and the difference between the average returns of mid-cap stocks in Q5 and Q1 of local trading is 129.87 basis points. Both are significant at the 5% level. Again, nonlocal trading provides no such predictability.

The recurring result in this paper that local trading imbalances prior to earnings announcements predict announcement returns does not hold true for stocks in the largest market capitalization group, which have an average market capitalization of $15.46 billion. The final panel of Table 5 reveals that large cap stocks that are heavily sold by local traders outperform large cap stocks that are heavily bought by local traders. The average announcement return of those stocks in Q1 of local IndNT[-10,-1] is 12.04 basis points, which is just slightly below the average announcement return of all large cap stocks at 13.97 basis points. The average announcement return of those stocks in Q5 of local trading, the most heavily bought, is less at just -4.06 basis points. These results indicate the local traders information advantage prior to earnings announcements is contained entirely in small and medium-sized companies.

3.1.E Results by Region

We now examine how our results for small and medium-sized companies vary by region of the country. We use the first digit of the zip code of the corporate headquarters to classify announcements into ten regions. Table 6 reports the difference between the mean earnings announcement returns of stocks in the quintile with the most net buying and stocks in the quintile with the most net selling prior to the announcement by region. As previously described, our sample is overweighed with companies headquartered on the west coast; they make up about half of our sample. In this region where we have the greatest concentration of investors, our main results are very strong. The difference between the mean earnings announcement returns of stocks headquartered on the west coast with the most local net buying and the most local net selling is 212.59 basis points and is statistically significant at the 1% level. Nonlocal trading shows no such predictability. The combined trading imbalance shows some predictability; the Q5 and Q1 difference is 110.06 basis points and is statistically significant at the 10% level.

We have significantly fewer observations in each of the other regions, which limits our power to make statistical inferences within other regions. Despite a small number of observations, we do find statistically significant results within other regions that are consistent with our main results. The largest return difference occurs within region 4 (IN, KY, MI, OH, and WI) where the stocks with the most net local buying experience 618.57 basis points greater earnings announcement returns than stocks with the most local selling. Also, the local Q1 and Q5 CAR[0,1] difference is significant at the 5% level in region 8 (AZ, CO, ID, NM, NV, UT, and WY) and nearly significant at the 10% level in region 0 (CT, MA, ME, NH, NJ, RI, VT). In contrast,

nonlocal trading imbalances are not predictive of earnings announcement returns within any of the ten regions.

3.1.F Results by Time Period

We next examine how our results for small and medium-sized companies vary by the time period examined. We separate the announcements of small and medium sized companies into three groups: those early in the sample period (1991-1992), in the middle (1993-1994), and at the end (1995-1996). Table 7 presents our analysis by time period. The first panel of the table presents results for the first two years of the sample. Small and medium sized stocks in our sample have market-adjusted earnings announcement returns of 0.69 basis points on average during this period. Those stocks with the most local net buying average 143.01 basis points, which is statistically significant at the 5% level. The difference between the average return of stocks with the most local buying and stocks with the most local selling is 118.92 basis points, but in this cut down sample the difference does not reach statistical significance. The second column of this first panel shows that stocks heavily sold by nonlocal traders have a significant negative average return of -80.28 basis points during this early period. However, the second and third panels of Table 7 reveal that this result does not hold in other sample periods. In the last two years of the sample, stocks with the most nonlocal net selling experience average returns of 54.95 basis points.

During the middle two years of the sample, small and medium sized stocks in our sample average -22.37 basis point announcement returns. Stocks with the most local selling relative to buying averaged -86.16 basis points, a significant loss. The difference between the average return of stocks with the most local buying and stocks with the most local selling is

49.98 basis points, but in this cut down sample the difference does not reach statistical significance.

Local trading demonstrates its predictive power for earnings announcement returns most strongly in the final two years of the data. Small and medium sized stocks with the most local net selling during 1995 and 1996 average -47.37 basis points while those with the most local net buying average 94.87 basis points, which is statistically significant at the 10% level. The difference in the average returns between these two groups is 142.24 basis points and is statistically significant at the 5% level even despite cutting down the sample to just two years of data from six years in the whole sample. The fact that the main result of this analysis is strongest in the final two years of the sample suggests that the predictive power of local trading is persistent.

3.2 Trading After Earnings Announcements

We also examine local investor trading patterns after earnings announcements. Table 8 presents the average net individual investor trading after earnings announcements conditional on different levels of market-adjusted earnings announcement returns. We calculate net individual trading for the days after the announcement by the same definition as for the days before. IndNT[1] is this measure for the day after the announcement. To calculate IndNT[1,10] we sum the daily measure over the ten trading days after the announcement. We sort earnings announcements into quintiles each quarter according to their market-adjusted earnings announcement return CAR[0,1]. Announcements in Q1 have the lowest market-adjusted return, and announcements in Q5 have the highest. We separately calculate net individual

trading for local trades defined as those made by investors living within 30 miles of the corporate headquarters.

The results in the table reveal that local and nonlocal traders behave similarly following the announcement; both types of traders buy following bad news and sell following good news. Among the quintile of the lowest announcement returns, buying volume the day after strongly exceeds selling volume for both local and nonlocal traders. On average local traders purchase about 54% of an average day's dollar volume more than they sell of a stock that reported bad earnings news the day before; this buying imbalance is 68% for trades by households that are nonlocal to the headquarters of the stock. Among the quintile of the highest announcement returns, selling volume the day after strongly exceeds buying volume for both local and nonlocal traders. On average local traders sell about 78% of an average day's dollar volume more than they buy of a stock that the day before reported good earnings news; this selling imbalance is 24% for nonlocal traders. This pattern of buying in response to bad news and selling following good news is very consistent across earnings announcements as indicated by the strong statistical significance of these individual net trading averages.

The lower half of Table 8 presents individual net trading cumulated over the ten trading days following earnings announcements. The pattern of buying following bad news and selling following good news remains. For local traders the difference in individual net trading after the lowest return quintile announcements Q1 and the highest return quintile announcements Q5 gets slightly smaller than when measured only for the day following the earnings announcement. This change indicates that trading on the day following the announcement is completely driving the difference for local traders. Excluding trading on the day following the

announcement, the difference between individual net trading after Q1 announcements and Q5 announcements is nearly zero. In contrast, nonlocal traders continue the pattern of buying following bad news and selling following good news in the days following the announcement. For nonlocal traders the difference between individual net trading after Q1 announcements and Q5 announcements cumulated over the ten trading days following the announcement is 1.5 times that of only the first day following the announcement.

4. Conclusion

If individual investors are able to gather economically significant information about firms and successfully exploit it, we suspect that investors living near the firms would be most likely to obtain this information and that they would be most successful exploiting it with small firms. This is exactly what our results show. By looking at trading imbalances in the two weeks prior to earnings announcements, we find that trading by local individual investors predicts announcement returns, while nonlocal traders show no such ability. We find that the information advantage of individual investors declines with increased distance from the corporate headquarters. The effects are concentrated in small and mid-cap stocks and disappear for large-cap stocks.

Our data set is the same as that used by both Ivkovic and Weisbenner (2005) and Seasholes and Zhu (2010). Our results support the view of the former that individuals are able to earn superior returns when trading local firms, at least in the case of trading prior to earnings announcements. Our results add to a growing list of evidence that some individual investors play an important role in the incorporation of information into stock prices.

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Table 1: Summary Statistics

This table presents summary statistics. The number of earnings announcements includes all announcements from 1991 to 1996 with data in Compustat made by companies whose stock was traded by a local investor on at least ten days in the year prior to the earnings announcement and by a nonlocal investor on at least ten days in the year prior to the earnings announcement. Additionally, at least one trade must be made by a local (nonlocal) investor in the ten trading days prior to the announcement for it to appear in the local (nonlocal) group. At least one trade must be made by either type of investor in the ten trading days prior to the announcement for it to appear in the combined group. We define local trades as those made by investors living within 30 miles of the company's headquarters, and nonlocal trades as those made by investors living beyond 30 miles. We only include trades for which this distance can be calculated. We calculate market-adjusted earnings announcement returns CAR[0,1] by adding the stock's return on the day of the announcement and the following trading day minus the market return over those two days. Returns are stated in basis points. The market is defined as the value-weighted portfolio return of all stocks reported in the CRSP data. We calculate net individual trading by subtracting the daily value of shares sold from the value of shares bought and dividing this difference by the average daily trading volume observed in the data over the year prior to the announcement. We cumulate this measure over the ten trading days prior to the announcement to get IndNT[-10,-1] and over the ten days after the announcement to get IndNT[1,10]. The combined trades include both local and not local trades. Industries is the number of industry groups (3-digit SIC codes) represented.

	Local	Not Local	Combined
Earnings Announcements	4,184	6,236	6,635
Companies	723	820	838
Industries	131	141	141
Market-Adjusted Return (CAR[0,1])	5.50 bp	-4.81 bp	-5.28 bp

	Trades Within Ten Trading Days Before Earnings Announcement			Trades Within Ten Trading Days After Earnings Announcement		
	Local	Not Local	Combined	Local	Not Local	Combined
Households	7,692	26,182	28,359	8,132	26,487	28,572
Trades	18,154	131,345	149,499	19,852	142,821	162,673
Purchases	9,848	71,758	81,606	10,659	78,967	89,626
Sales	8,306	59,587	67,893	9,193	63,854	73,047
Trade Size	$14,432	$12,473	$12,711	$15,344	$12,965	$13,256
Purchase Size	$12,798	$11,519	$11,673	$12,584	$11,689	$11,798
Sale Size	$16,370	$13,621	$13,957	$18,543	$14,544	$15,048

	Median Individual Net Trading (IndNT[-10,-1]) by Quintile		
	Local	Not Local	Combined
Q1 (Selling)	-2.52	-3.29	-3.64
Q2	-0.64	-0.84	-0.95
Q3	-0.01	-0.06	-0.07
Q4	0.62	0.80	0.87
Q5 (Buying)	2.39	3.36	3.58

Table 2: Predicting Earnings Announcement Return Using Net Individual Trading

This table presents market-adjusted earnings announcement returns conditional on different levels of net individual investor trading prior to the announcement. We calculate net individual trading by subtracting the daily value of shares sold from the value of shares bought and dividing this difference by the average daily trading volume observed in the data over the year prior to the announcement. We cumulate this measure over the ten trading days prior to the announcement to get IndNT[-10,-1]. We sort earnings announcements into quintiles each quarter according to their net individual trading measure IndNT[-10,-1]. Announcements in Q1 have the most intense selling relative to buying prior to the announcement, and announcements in Q5 have the most intense buying relative to selling. We separately calculate and sort IndNT[-10,-1] for local trades, defined as trades made by investors living within 30 miles of the company's headquarters, and trades not local, defined as trades made by investors living beyond 30 miles. The combined net individual trading is calculated for both local and not local trades. We calculate market-adjusted earnings announcement returns CAR[0,1] by adding the stocks return on the day of the announcement and the following trading day minus the market return over those two days. Returns are stated in basis points. The market is defined as the value-weighted portfolio return of all stocks reported in the CRSP data.

IndNT[-10,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	-34.82	7.76	-16.27
(Selling)	t-stat.	(-1.50)	(0.44)	(-0.93)
Q2	Mean	39.92	-17.35	-14.42
	t-stat.	(1.20)	(-0.93)	(-0.81)
Q3	Mean	-13.30	10.69	-6.99
	t-stat.	(-0.55)	(0.43)	(-0.28)
Q4	Mean	-17.50	-14.27	-4.24
	t-stat.	(-0.68)	(-0.65)	(-0.20)
Q5	Mean	52.22**	-10.71	15.25
(Buying)	t-stat.	(2.00)	(-0.52)	(0.76)
Q5 and Q1	Mean	87.04**	-18.47	31.53
Difference	t-stat.	(2.49)	(-0.68)	(1.19)

* Significant at 10 percent level. ** Significant at 5 percent level. *** Significant at 1 percent level. T-statistics are reported below the coefficients.

Table 3: Predicting Earnings Announcement Return Using Net Individual Trading

This table presents market-adjusted earnings announcement returns conditional on different levels of net individual investor trading prior to the announcement. We calculate net individual trading by subtracting the daily value of shares sold from the value of shares bought and dividing this difference by the average daily trading volume observed in the data over the year prior to the announcement. We cumulate this measure over the ten trading days prior to the announcement to get IndNT[-10,-1]. We sort earnings announcements into quintiles each quarter according to their net individual trading measure IndNT[-10,-1]. Announcements in Q1 have the most intense selling relative to buying prior to the announcement, and announcements in Q5 have the most intense buying relative to selling. We separately calculate and sort IndNT[-10,-1] for local trades. In the first panel local trades are those made by investors living within 50 miles of the company's headquarters, and trades not local, defined as those made by investors living beyond 50 miles. In the second panel this distance cutoff is extended to 100 miles. The combined net individual trading is calculated for both local and not local trades. We calculate market-adjusted earnings announcement returns CAR[0,1] by adding the stocks return on the day of the announcement and the following trading day minus the market return over those two days. Returns are stated in basis points. The market is defined as the value-weighted portfolio return of all stocks reported in the CRSP data.

Local Within 50 Miles				
IndNT[-10,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	-28.58	16.50	-10.96
(Selling)	t-stat.	(-1.34)	(1.03)	(-0.68)
Q5	Mean	32.28	-6.20	17.50
(Buying)	t-stat.	(1.38)	(-0.33)	(0.93)
Q5 and Q1	Mean	60.86*	-22.70	28.45
Difference	t-stat.	(1.92)	(-0.92)	(1.15)
Announcements		4,945	7,181	7,718

Local Within 100 Miles				
IndNT[-10,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	-11.00	7.96	-8.74
(Selling)	t-stat.	(-0.56)	(0.53)	(-0.60)
Q5	Mean	21.31	0.51	20.18
(Buying)	t-stat.	(0.97)	(0.03)	(1.19)
Q5 and Q1	Mean	32.31	-7.45	28.92
Difference	t-stat.	(1.10)	(-0.32)	(1.29)
Announcements		5,851	8,318	9,016

* Significant at 10 percent level. ** Significant at 5 percent level. *** Significant at 1 percent level. T-statistics are reported below the coefficients.

Table 4: Predicting Earnings Announcement Return Using Alternative Net Individual Trading Periods

This table presents market-adjusted earnings announcement returns conditional on different levels of net individual investor trading prior to the announcement. We calculate net individual trading by subtracting the daily value of shares sold from the value of shares bought and dividing this difference by the average daily trading volume observed in the data over the year prior to the announcement. We cumulate this measure over the five trading days prior to the announcement to get IndNT[-5,-1] and over the eight trading days prior to get IndNT[-8,-1], etc. We sort earnings announcements into quintiles each quarter according to their net individual trading measure IndNT[-10,-1]. Announcements in Q1 have the most intense selling relative to buying prior to the announcement, and announcements in Q5 have the most intense buying relative to selling. We separately calculate and sort IndNT[-10,-1] for local trades defined as those made by investors living within 30 miles of the corporate headquarters. We calculate market-adjusted earnings announcement returns CAR[0,1] by adding the stocks return on the day of the announcement and the following trading day minus the market return over those two days. Returns are stated in basis points. The market is defined as the value-weighted portfolio return of all stocks reported in the CRSP data.

IndNT[-5,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	-42.89	3.89	-19.77
(Selling)	t-stat.	(-1.50)	(0.20)	(-1.04)
Q5	Mean	21.11	-26.39	-7.93
(Buying)	t-stat.	(0.63)	(-1.21)	(-0.38)
Q5 and Q1	Mean	64.01	-30.28	11.84
Difference	t-stat.	(1.45)	(-1.03)	(0.42)
Announcements		3,009	5,336	5,826

IndNT[-8,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	-52.89**	13.16	-36.09**
(Selling)	t-stat.	(-2.08)	(0.74)	(-2.00)
Q5	Mean	41.19	-0.32	20.11
(Buying)	t-stat.	(1.41)	(-0.02)	(0.98)
Q5 and Q1	Mean	94.08**	-13.48	56.20**
Difference	t-stat.	(2.43)	(-0.48)	(2.05)
Announcements		3,685	5,877	6,331

IndNT[-12,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	-28.35	4.91	-18.32
(Selling)	t-stat.	(-1.23)	(0.28)	(-1.08)
Q5	Mean	41.38	-10.69	-6.55
(Buying)	t-stat.	(1.63)	(-0.54)	(-0.33)
Q5 and Q1	Mean	69.73**	-15.60	11.77
Difference	t-stat.	(2.03)	(-0.59)	(0.45)
Announcements		4,520	6,430	6,791

IndNT[-15,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	-37.79*	4.38	-24.10
(Selling)	t-stat.	(-1.74)	(0.26)	(-1.42)
Q5	Mean	17.79	-10.65	-12.83
(Buying)	t-stat.	(0.73)	(-0.55)	(-0.65)
Q5 and Q1	Mean	55.58*	-15.03	11.27
Difference	t-stat.	(1.70)	(-0.58)	(0.43)
Announcements		4,937	6,655	6,964

* Significant at 10 percent level. ** Significant at 5 percent level. *** Significant at 1 percent level. T-statistics are reported below the coefficients.

Table 5: Predicting Earnings Announcement Return Using Net Individual Trading by Company Size

This table presents market-adjusted earnings announcement returns conditional on different levels of net individual investor trading prior to the announcement. We calculate net individual trading by subtracting the daily value of shares sold from the value of shares bought and dividing this difference by the average daily trading volume observed in the data over the year prior to the announcement. We cumulate this measure over the ten trading days prior to the announcement to get IndNT[-10,-1]. We sort earnings announcements into quintiles each quarter according to their net individual trading measure IndNT[-10,-1]. Announcements in Q1 have the most intense selling relative to buying prior to the announcement, and announcements in Q5 have the most intense buying relative to selling. We separately calculate and sort IndNT[-10,-1] for local trades, defined as trades made by investors living within 30 miles of the company's headquarters. We then sort companies each quarter into three equal-sized groups according to their market capitalization. We calculate market-adjusted earnings announcement returns CAR[0,1] by adding the stocks return on the day of the announcement and the following trading day minus the market return over those two days. Returns are stated in basis points. The market is defined as the value-weighted portfolio return of all stocks reported in the CRSP data.

Small-Cap Stocks				
Average Market Capitalization = 220 Million				
IndNT[-10,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	-100.15**	-60.13	-87.67*
(Selling)	t-stat.	(-1.97)	(-1.17)	(-1.86)
Q5	Mean	69.94	-8.29	42.94
(Buying)	t-stat.	(1.18)	(-0.17)	(0.93)
Q5 and Q1	Mean	170.09**	51.84	130.60**
Difference	t-stat.	(2.18)	(0.74)	(1.98)
Announcements		1,281	1,956	2,204

Mid-Cap Stocks				
Average Market Capitalization = 1.26 Billion				
IndNT[-10,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	-33.97	19.72	-0.18
(Selling)	t-stat.	(-0.81)	(0.58)	(-0.01)
Q5	Mean	95.90**	-43.13	-10.45
(Buying)	t-stat.	(2.11)	(-1.06)	(-0.27)
Q5 and Q1	Mean	129.87**	-62.86	-10.27
Difference	t-stat.	(2.10)	(-1.18)	(-0.21)
Announcements		1,422	2,089	2,213

Large-Cap Stocks				
Average Market Capitalization = 15.46 Billion				
IndNT[-10,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	12.04	28.00	7.45
(Selling)	t-stat.	(0.40)	(1.45)	(0.38)
Q5	Mean	-4.06	12.95	18.22
(Buying)	t-stat.	(-0.13)	(0.58)	(0.82)
Q5 and Q1	Mean	-16.10	-15.05	10.76
Difference	t-stat.	(-0.37)	(-0.51)	(0.36)
Announcements		1,481	2,191	2,218

* Significant at 10 percent level. ** Significant at 5 percent level. *** Significant at 1 percent level. T-statistics are reported below the coefficients.

Table 6: Predicting Earnings Announcement Return Using Net Individual Trading by Region

This table presents market-adjusted earnings announcement returns for small and medium sized companies conditional on different levels of net individual investor trading prior to the announcement. We calculate net individual trading by subtracting the daily value of shares sold from the value of shares bought and dividing this difference by the average daily trading volume observed in the data over the year prior to the announcement. We cumulate this measure over the ten trading days prior to the announcement to get IndNT[-10,-1]. We sort earnings announcements into quintiles each quarter according to their net individual trading measure IndNT[-10,-1]. Announcements in Q1 have the most intense selling relative to buying prior to the announcement, and announcements in Q5 have the most intense buying relative to selling. We separately calculate and sort IndNT[-10,-1] for local trades, defined as trades made by investors living within 30 miles of the company's headquarters. We present the results below by region. Regions are determined by the first digit of the zip code of the corporate headquarters. We calculate market-adjusted earnings announcement returns CAR[0,1] by adding the stocks return on the day of the announcement and the following trading day minus the market return over those two days. Returns are stated in basis points. The market is defined as the value-weighted portfolio return of all stocks reported in the CRSP data.

Q5 and Q1 CAR[0,1] Differences by Region

Zip Code	States		Local	Not Local	Combined
0	**CT, MA, ME, NH, NJ, RI, VT**	Mean	233.30	5.05	80.77
		t-stat.	(1.67)	(0.03)	(0.55)
		Announcements	159	301	325
1	**DE, NY, PA**	Mean	7.71	-175.93	-137.30
		t-stat.	(0.04)	(-1.64)	(-1.29)
		Announcements	214	395	417
2	**DC, MD, NC, SC, VA, WV**	Mean	-164.50	213.16	19.79
		t-stat.	(-0.85)	(1.25)	(0.12)
		Announcements	72	124	129
3	**AL, FL, GA, MS, TN**	Mean	-300.64	-277.92	-193.41
		t-stat.	(-1.19)	(-1.58)	(-1.04)
		Announcements	124	231	249
4	**IN, KY, MI, OH, WI**	Mean	618.57***	144.93	363.97**
		t-stat.	(3.36)	(0.71)	(2.09)
		Announcements	43	66	78
5	**IA, MN, MT, ND, SD**	Mean	-157.71	-172.63	-143.55
		t-stat.	(-0.38)	(-0.81)	(-0.49)
		Announcements	69	177	125
6	**IL, KS, MO, NE**	Mean	-191.69	-162.73	-236.57
		t-stat.	(-0.82)	(-0.75)	(-1.18)
		Announcements	83	7,181	182
7	**AR, LA, OK, TX**	Mean	-19.13	87.68	57.63
		t-stat.	(-0.11)	(0.75)	(0.52)
		Announcements	166	297	314
8	**AZ, CO, ID, NM, NV, UT, WY**	Mean	414.42**	84.89	188.52
		t-stat.	(2.23)	(0.48)	(1.17)
		Announcements	114	207	222
9	**AK, CA, HI, OR, WA**	Mean	212.59***	26.01	110.06*
		t-stat.	(3.29)	(0.41)	(1.90)
		Announcements	1,652	2,124	2,365

* Significant at 10 percent level. ** Significant at 5 percent level. *** Significant at 1 percent level. T-statistics are reported below the coefficients.

Table 7: Predicting Earnings Announcement Return Using Net Individual Trading by Time Period

This table presents market-adjusted earnings announcement returns for small and medium sized companies conditional on different levels of net individual investor trading prior to the announcement. We calculate net individual trading by subtracting the daily value of shares sold from the value of shares bought and dividing this difference by the average daily trading volume observed in the data over the year prior to the announcement. We cumulate this measure over the ten trading days prior to the announcement to get IndNT[-10,-1]. We sort earnings announcements into quintiles each quarter according to their net individual trading measure IndNT[-10,-1]. Announcements in Q1 have the most intense selling relative to buying prior to the announcement, and announcements in Q5 have the most intense buying relative to selling. We separately calculate and sort IndNT[-10,-1] for local trades, defined as trades made by investors living within 30 miles of the company's headquarters. We present the results below in three sets of two-year periods. We calculate market-adjusted earnings announcement returns CAR[0,1] by adding the stocks return on the day of the announcement and the following trading day minus the market return over those two days. Returns are stated in basis points. The market is defined as the value-weighted portfolio return of all stocks reported in the CRSP data.

		1991-1992		
IndNT[-10,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	24.09	-80.28**	-59.69
(Selling)	t-stat.	(0.47)	(-2.01)	(-1.59)
Q5	Mean	143.01**	-27.59	-6.29
(Buying)	t-stat.	(2.17)	(-0.54)	(-0.13)
Q5 and Q1	Mean	118.92	52.60	53.40
Difference	t-stat.	(1.42)	(0.81)	(0.87)
Announcements		924	1,364	1,446

		1993-1994		
IndNT[-10,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	-86.16**	3.33	-28.38
(Selling)	t-stat.	(-1.97)	(0.09)	(-0.81)
Q5	Mean	-36.19	-14.72	-9.60
(Buying)	t-stat.	(-0.74)	(-0.35)	(-0.24)
Q5 and Q1	Mean	49.98	-18.06	18.78
Difference	t-stat.	(0.76)	(-0.33)	(0.35)
Announcements		1,152	1,754	1,912

		1995-1996		
IndNT[-10,-1]		**Local**	**Not Local**	**Combined**
Q1	Mean	-47.37	54.95	22.00
(Selling)	t-stat.	(-0.98)	(1.47)	(0.59)
Q5	Mean	94.87*	-21.45	49.36
(Buying)	t-stat.	(1.95)	(-0.53)	(1.19)
Q5 and Q1	Mean	142.24**	-76.40	27.36
Difference	t-stat.	(2.08)	(-1.38)	(0.49)
Announcements		1,272	1,874	2,018

* Significant at 10 percent level. ** Significant at 5 percent level. *** Significant at 1 percent level. T-statistics are reported below the coefficients.

Table 8: Individual Net Trading After Earnings Announcement

This table presents net individual investors trading after earnings announcements conditional on different levels of market-adjusted earnings announcement returns. We calculate net individual trading by subtracting the daily value of shares sold from the value of shares bought and dividing this difference by the average daily trading volume observed in the data over the year prior to the announcement. IndNT[1] is this measure for the day after the announcement. To calculate IndNT[1,10] we cumulate the daily measure over the ten trading days after the announcement. We sort earnings announcements into quintiles each quarter according to their market-adjusted earnings announcement return CAR[0,1]. Announcements in Q1 have the lowest market-adjusted return, and announcements in Q5 have the highest. We separately calculate net individual trading for local trades defined as those made by investors living within 30 miles of the corporate headquarters.

One Day After Announcement				
Mean IndNT[1]: 0.0143				
CAR[0,1]		**Local**	**Not Local**	**Combined**
Q1	Mean	0.5355***	0.6845***	0.6929***
(Lowest Return)	t-stat.	(4.83)	(7.03)	(7.46)
Q2	Mean	0.2851***	0.2097**	0.2162***
	t-stat.	(2.89)	(2.29)	(2.69)
Q3	Mean	-0.2471**	-0.0075	-0.0807
	t-stat.	(-2.07)	(-0.10)	(-1.15)
Q4	Mean	-0.2372	-0.2396**	-0.2908***
	t-stat.	(-1.46)	(-2.36)	(-3.08)
Q5	Mean	-0.7846***	-0.2427**	-0.4645***
(Highest Return)	t-stat.	(-7.48)	(-2.21)	(-4.64)
Q5 and Q1	Mean	-1.3202***	-0.9272***	-1.1574***
Difference	t-stat.	(-8.66)	(-6.32)	(-8.48)

From One Day After to Ten Days After Announcement				
Mean IndNT[1,10]: -0.1582				
CAR[0,1]		**Local**	**Not Local**	**Combined**
Q1	Mean	0.3349***	1.0262***	0.9727***
(Lowest Return)	t-stat.	(2.73)	(8.67)	(7.56)
Q2	Mean	-0.1701	0.1615	0.0258
	t-stat.	(-1.12)	(1.34)	(0.20)
Q3	Mean	-0.3043*	-0.1139	-0.2613**
	t-stat.	(-1.71)	(-1.04)	(-2.12)
Q4	Mean	-0.4116***	-0.4759***	-0.6583***
	t-stat.	(-3.36)	(-3.37)	(-4.64)
Q5	Mean	-0.7929***	-0.3665***	-0.8368***
(Highest Return)	t-stat.	(-6.37)	(-2.62)	(-6.09)
Q5 and Q1	Mean	-1.278***	-1.3927***	-1.8095***
Difference	t-stat.	(-6.45)	(-7.60)	(-9.61)

* Significant at 10 percent level. ** Significant at 5 percent level. *** Significant at 1 percent level. T-statistics are reported below the coefficients.

Figure 1: Geographical Distribution of Households

This figure presents the geographical distribution of the households in the analysis. Only households who made at least one trade in a stock within ten trading days prior to an earnings announcement are included. Areas are shaded according to the number of households within the three-digit zip code.

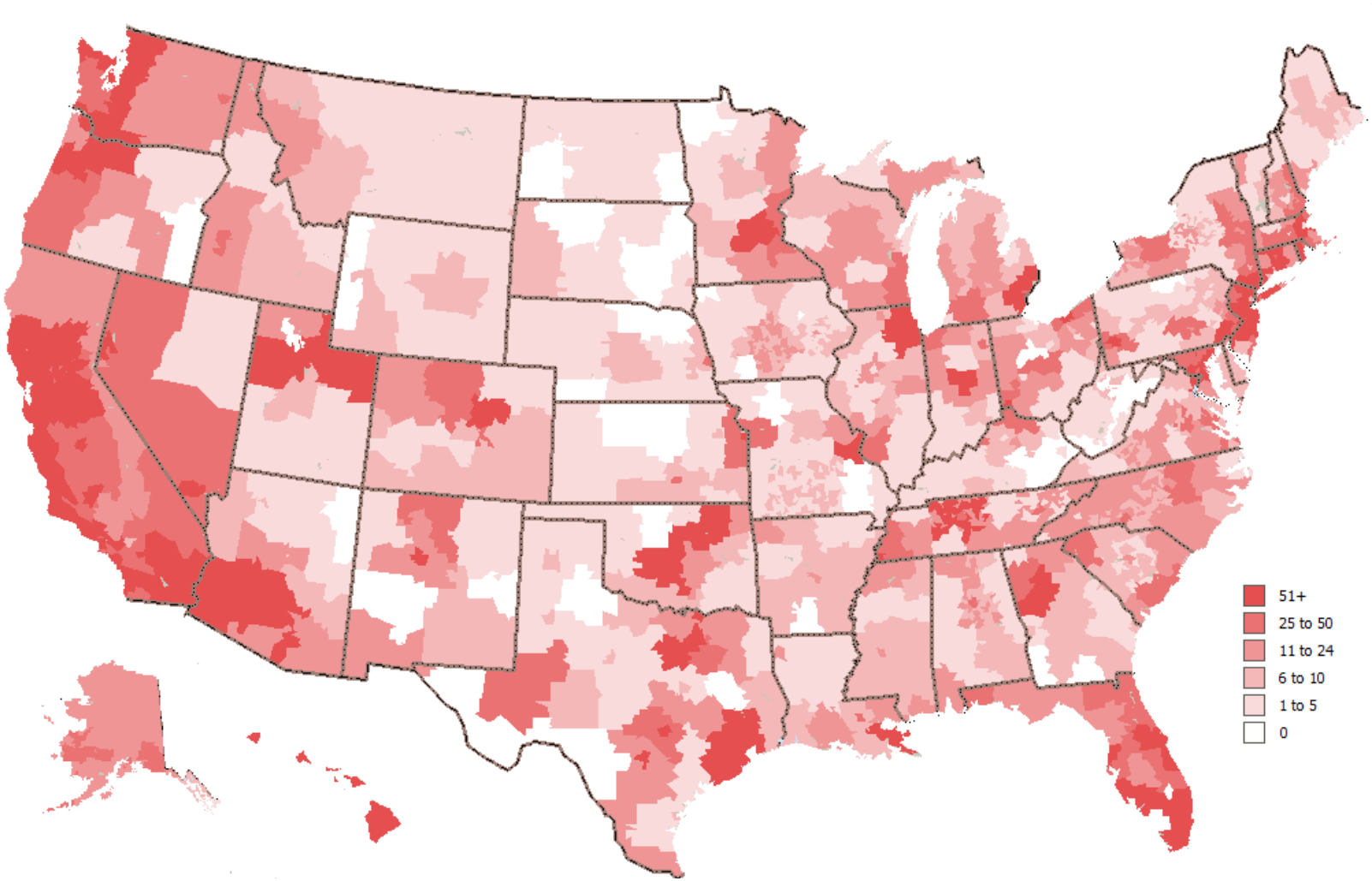

Figure 2: Geographical Distribution of Companies

This figure presents the geographical distribution of the companies in the analysis. Areas are shaded according to the number of companies within the three-digit zip code. Alaska and Hawaii are excluded from the map because they did not have any companies headquartered there that met the criteria to be included in the analysis.

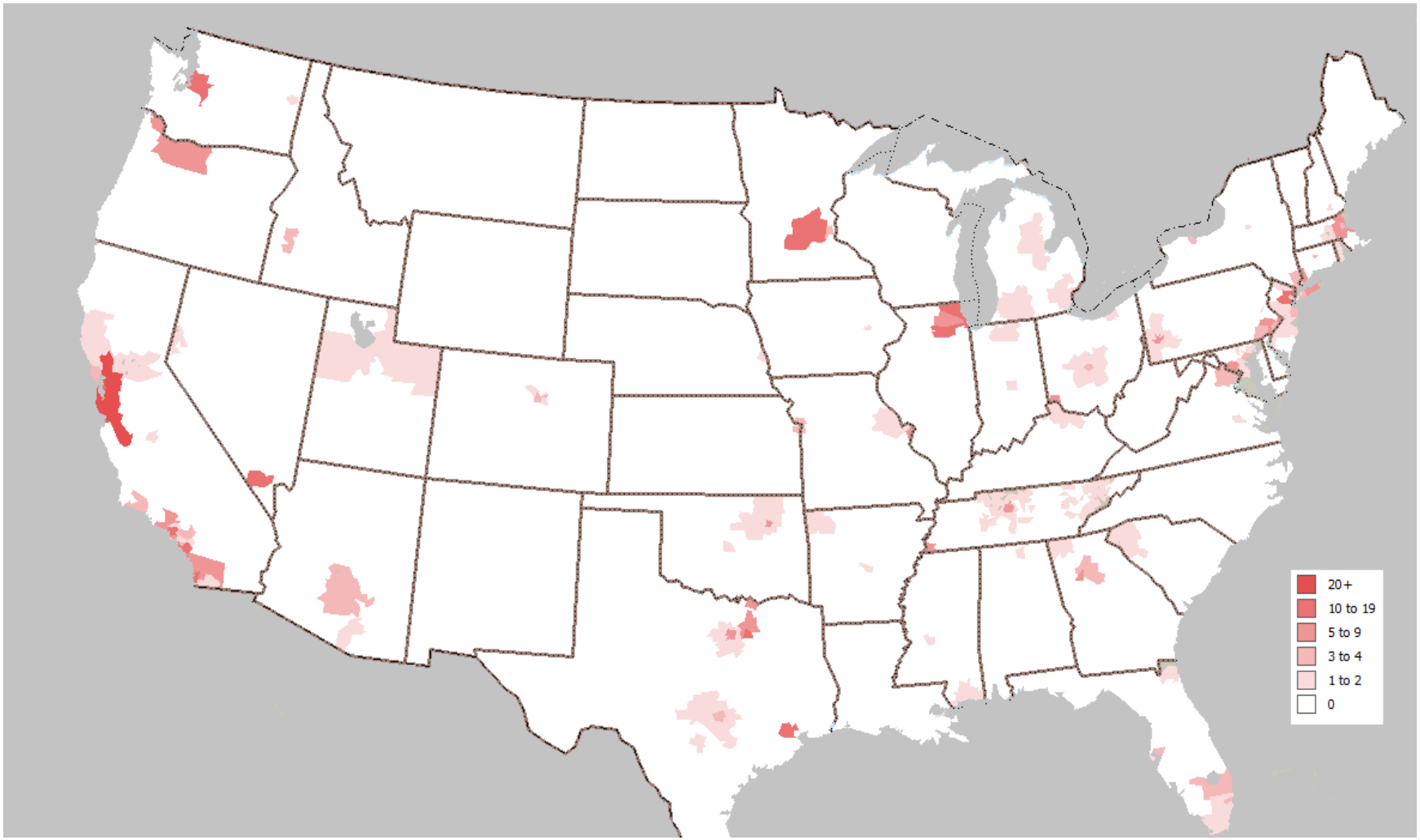

Figure 3: Local Information Advantage Declines With Distance

This figure presents the difference in average market-adjusted earnings announcement returns between the quintile of announcements with the most local net buying (Q5) and the quintile with the most local net selling (Q1) for different distance cutoffs for what defines a local trade. * Significant at 10 percent level. ** Significant at 5 percent level. *** Significant at 1 percent level.