Investors and Housing Markets in Las Vegas: A Case Study

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EXECUTIVE SUMMARY

The Las Vegas case study focused on four zip codes in the Las Vegas Metropolitan Area representing low to middle-level housing market subareas (the lower three quintiles of the market based on price) within the larger region containing roughly 12% of the region's population. The analysis looked at the universe of single-family and condominium sales for calendar year 2011 by census tract for these four zip codes, looking at the distribution of owner-occupant vs. non-owner-occupant (NOO) buyers by location and price range of houses bought by each, and the nature of the transaction, such as REO, short sale or conventional sale, as well as the geographic distribution of non-owner-occupant buyers by address, and whether there were patterns of concentration among non-owned occupant buyers. Using other property data sources, activity patterns of selected buyers in the larger market area were studied, while all of his information was supplemented with a series of interviews with informants in Las Vegas to provide a greater qualitative understanding of the dynamics of the real estate investor sector.

The Las Vegas area has been one of the nation's foreclosure hot spots since the collapse of the housing bubble, which was particularly pronounced in Las Vegas. Prices declined from the 2006 peak by roughly 60%, home construction came to all but a standstill, foreclosure starts were more than double the national average, and the great majority of owners in the area found themselves underwater. Investors began entering the market in large numbers late in 2008 or in 2009, and have represented roughly half the market since them. A ballpark estimate is that between 2009 and 2012 investors spent $25 billion acquiring single-family properties in the Las Vegas area.

Investors showed a pervasive presence throughout the study area, representing slightly more than half of all single family transactions and two thirds of condominium purchases, typically purchasing properties slightly below the median price within each submarket area. While individual buyers may focus on a particular submarket, investor activity was consistent across all submarkets represented in the study area. Half of the investors recorded out-of-state addresses; because of widespread use of local agents and representatives, particularly by overseas buyers, this significantly underrepresents the extent to which the Las Vegas area is drawing investors from out of the state, and from other countries, most notably, according to informants, from East Asia, particularly China. Investors are principally individuals or small-scale corporate entities, particularly LLCs, through while investors may buy one or two, but rarely more than twenty or so, properties. The ability of outside investors to function successfully in the Las Vegas market is significantly enhanced by the presence of a strong investor support network, containing Realtors, property managers, lawyers, home warranty companies, and the like, all oriented to the care and servicing of small investors. While there is evidence that 'mega-investors' such as Blackstone and Colony Capital have entered the market, they still have only a small market share.

As market conditions have changed since investors began entering the market, investor strategies have changed. The Las Vegas market has seen little predatory flipping or 'milking' of properties. What I have called 'market-edge' flippers, who are able to sell the houses they buy for more than their cost by taking advantage of greater market knowledge or greater access to properties than other investors or homebuyers, were common during 2009 and 2010; as the market began to stabilize, and the disparity between REO and conventional transactions diminish, they have

largely left the market. Nearly all investors in the market today are buying to hold for 3 to 8 years and rent, with the expectation of obtaining an annual cash-on-cash return of 6% to 8% and further return from appreciation on resale at the end of the holding period. Most of the properties coming on the market require little in the way of rehab, while property taxes are manageable at 1% of market value. While properties in low-end submarkets may require greater repairs and maintenance, that is offset by a lower gross rent multiplier; the same is true of the condominium market, where high HOA fees are offset by prices that are significantly below single-family house prices.

There is compelling evidence that the dramatic increase in real estate transactions in the Las Vegas market from 2007 to 2009 was investor- rather than homebuyer-driven, an increase that enabled the market to absorb an exceptionally high volume of inventory becoming available through foreclosure. That, in turn, meant that the widespread abandonment that was taking place at the same time in many other parts of the country affected by high foreclosure rates did not take place in Las Vegas. It is unlikely that, had investors not been ready to step in, the market would have adjusted in anything like the same fashion; the probability that an equivalent number of would-be owner-occupants would have emerged during those years must be considered remote. Thus, although it cannot be proven with certainty, it is a reasonable conclusion that investors played a critical role during that period in stabilizing the market and preventing widespread abandonment.

Over time, however, it appears increasingly likely that investors have come to crowd out prospective homebuyers. This crowding out is not so much because investors are willing to pay more as the fact that, from a transactional standpoint, selling to an investor offers the seller – particularly of an REO property – clear advantages. As one informant summarized them, the investor will take the property ‘as is’, will not look for a warranty, and as a cash buyer, will close quickly and require neither appraisal nor mortgage contingencies.

As a result, at this point, while investors are continuing to sustain the housing market, in the sense that they are continuing to absorb inventory at stabilized or rising price levels, and appear to have played a critical role in fostering a basic threshold level of stability in many neighborhoods, the extremely high share they represent of the single-family market may be discouraging further stabilization of the market by keeping prices from rising more if owner occupants were better able to compete for properties as well as further stabilization of neighborhood conditions, by preventing the homeownership rate from returning to what may be considered healthier levels.

In conclusion, there is strong evidence that investors have played a constructive role in the Las Vegas market, but there is less clear-cut evidence that their continued domination of the market continues to be as constructive. Since the great majority of investors appear eager to maintain their properties so that they may be able to sell them for a profit in a few years, it is less likely that their properties will be neglected and become neighborhood problems. At the same time, to the extent that they are crowding out potential homebuyers, their effect is problematic. Given that many investors may look to resell their properties over the next two to four years, a public or non-profit program designed to work with investors in order to facilitate their properties being restored to owner-occupancy might be a valuable investment in the community’s future.

ACKNOWLEDGEMENTS

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INTRODUCTION

The purpose of this paper is to present a case study of the activities and characteristics of distressed residential real estate investors in the Las Vegas Valley (the Las Vegas-Paradise Metropolitan Statistical Area or MSA) of Nevada, an area coextensive with Clark County, Nevada, based on a combination of quantitative analysis and qualitative assessment based principally on interviews with knowledgeable informants. This is one of four case studies carried out under the auspices of the What Works Collaborative to explore the behavior of investors in distressed real estate since the collapse of the housing bubble in 2006–07 and the onset of the mortgage foreclosure crisis, and their impact on real estate market and community conditions.

The Las Vegas experience, as described in this case study, is particularly interesting. Although the area was hit hard by mortgage foreclosures and collapsing prices, in many respects both the business practices and impact of distressed property investors in that market have been markedly different than those observed in Atlanta and Cleveland, two of the other case study communities. This case study concludes that the role these investors have played in the Las Vegas area has been positive overall, and that, with some qualifications, they played a significant part in stabilizing the area housing market and placing it on the path of recovery.[1]

This outcome does not reflect differences in the characteristics of investors or their underlying intentions, but rather significant differences not only in market conditions but also in market expectations.[2] These factors, as I have discussed in a previous paper (Mallach 2010), are fundamental to any understanding of investor activity. Moreover, a greater understanding of the way market factors affect investor behavior can offer a productive framework for practitioners elsewhere to not only better understand investor behavior in their communities, but to design and adopt effective strategies to address any problems their activities may be causing.

Rather than attempt to carry out a comprehensive quantitative analysis of the entire Las Vegas Metropolitan Area, a region of nearly two million population spreading across 600 square miles, I focused principally on a subset of the MSA consisting of four zip codes representing low to middle-level housing market subareas (or roughly the lower three quintiles of the market, based on price) within the larger region with a combined population of approximately 211,000 in 2010 (See appendix 1 for a map of the target zip codes). The analysis looked at the universe of single-family and condominium sales for the calendar year 2011 for these four zip codes, and within this area, I further examined activity at the census tract level for those census tracts having a minimum number of transactions.[3] Within this framework, I looked at the distribution of owner-occupant versus non-owner-occupant buyers[4] by location and price range of the houses bought

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[1] There is some evidence that patterns have been similar in some other Sunbelt communities, such as Phoenix (Timiraos 2013)

[2] Although the possibility of self-selection exists; that is, that investors sharing certain characteristics may be more drawn to areas with particular market characteristics.

[3] Using a minimum cut off of 15 transactions (for single-family detached [SFD] or condominium sales separately) to be included, the analysis included 37 census tracts for single-family detached transactions and 18 for condominium transactions (17 of the 18 condo tracts were also included in the SFD list). Five census tracts were excluded from the SFD list.

[4] The differentiation between owner-occupant (OO) and non-owner-occupant (NOO) buyers was made on the basis of the address recorded for tax purposes. An address other than the address of the property was considered an indicator of an NOO buyer. While it is possible that a certain number of second home buyers (rather than investor buyers) are included as a result, none of the census tracts included in the analysis is considered to contain significant numbers of second homes.

by each, and the nature of the transaction, such as REO[5], short sale or conventional sale. I also looked at the geographic distribution of non-owner-occupant buyers by address, and whether there were patterns of concentration among non-owned occupant buyers. In addition, using other property transaction data sources,[6] I looked at the activity patterns of selected buyers in the larger market area, in order to understand investor behavior in the Las Vegas area generally. This information was supplemented with a series of interviews with informants in Las Vegas to provide a greater qualitative understanding of the dynamics of the real estate investor sector.[7]

The case study is in four parts. The first provides an overview of housing market conditions and trends in the Las Vegas area, and more specifically in the four zip codes that were the focus of the quantitative analysis, in order to provide a framework for the analysis of investor activity. The second looks at who the investors are and the nature of the investor support system in the Las Vegas area, and describes in general terms the different strategies that they have used and how they have changed over time. The third section looks in more detail at the economics of distressed property real estate investment, including case studies of specific investors, while the final section attempts to evaluate the effect that investor activity has on the Las Vegas real estate market.

THE LAS VEGAS HOUSING MARKET

Area Overview

The Las Vegas area has experienced one of the nation's most dramatic patterns of price appreciation and collapse over the past decade. Figure 1 shows the trend in house values trend since 2000. As the figure suggests, the area has gone through four distinct phases during that period:

- 2000–03: steady, moderately strong appreciation
- 2003–06: unsustainably high appreciation (bubble)
- 2006–09: market collapse (bust)
- 2009–12: moderate decline with possible gradual market stabilization

From July 2003 to July 2006 house prices increased by 81 percent in the Las Vegas area. By July 2009, prices were only 42 percent of what they had been three years earlier, as shown in figure 1. The dramatic drop in prices, coupled with the large share of newly constructed units in the housing stock, has led Nevada as a whole to have by far the largest share of underwater borrowers of any state in the United States. By the second quarter of 2012, 59 percent of all mortgaged properties in Nevada were underwater.[8]

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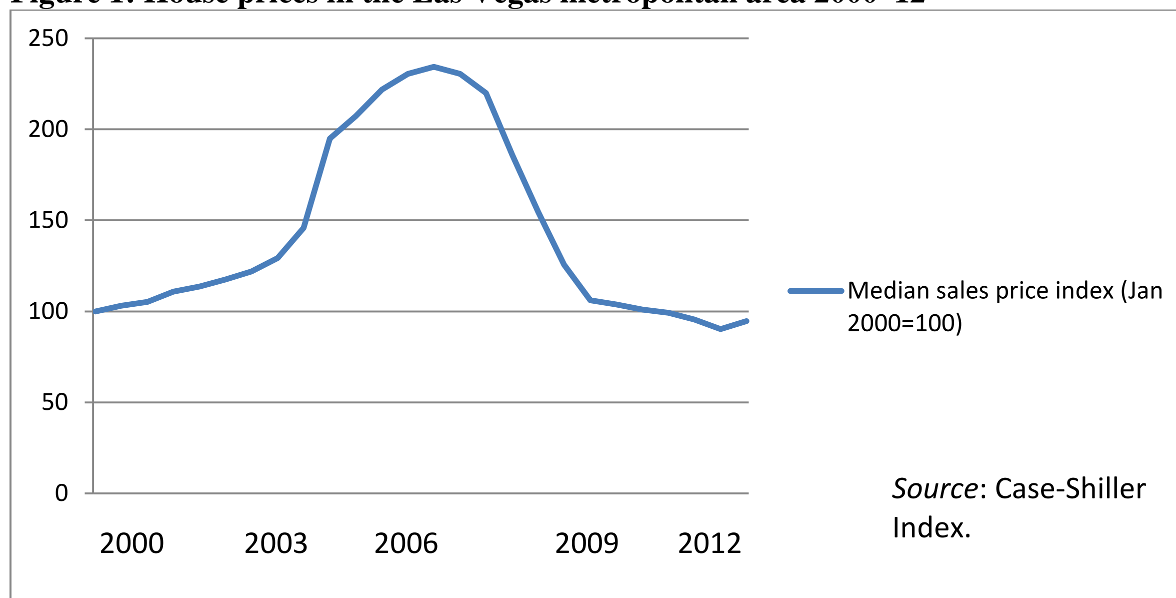
[5] REO or 'Real-Estate-Owned' is the generally-used term to refer to properties to which lenders have taken title as a result of foreclosures.

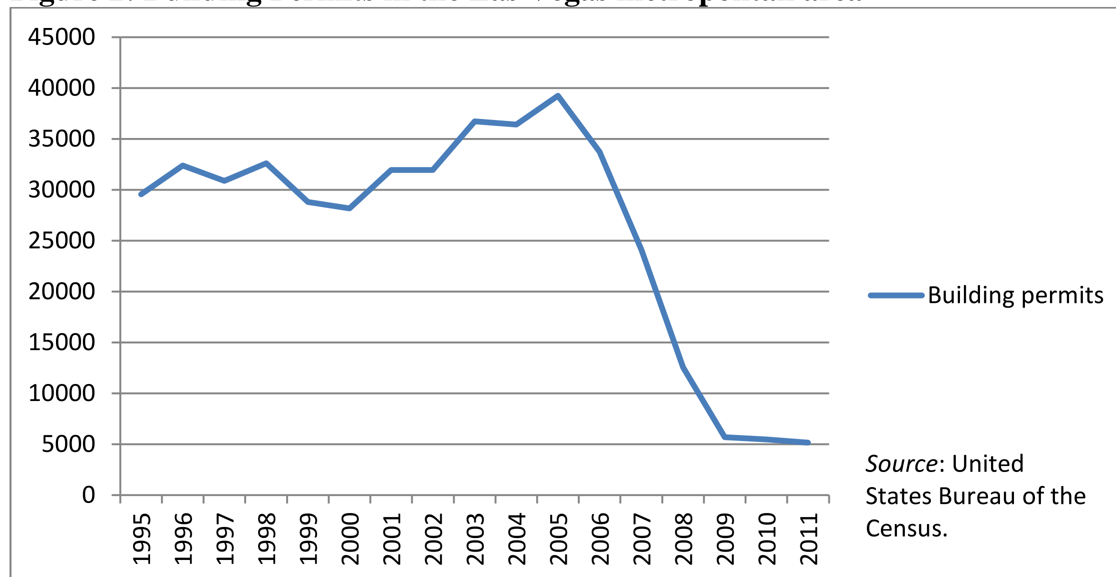
[6] The principal supplemental data sources were the Clark County Assessor and blockshopper.com.
[7] A list of informants are provided in appendix 4 to this case study.
[8] CoreLogic Negative Equity Report, September 12, 2012 http://www.corelogic.com/about-us/researchtrends/asset_upload_file448_16434.pdf. While the data is only available statewide, there is little question that this is equally or more true for the Las Vegas area, which contains 69 percent of the state's population.

Figure 1: House prices in the Las Vegas metropolitan area 2000–12



Price appreciation coincided with an increase in housing construction; as figure 2 shows, however, the volume of housing construction in the area was already quite high prior to the bubble years, fueled by steady appreciation and population growth during the 1990s. The

Figure 2: Building Permits in the Las Vegas metropolitan area



bubble, in some respects, was too short-lived to trigger more than a relatively modest increase in construction volume, with permits rising from an average of 30,700 between 2000 and 2002 to 37,500 between 2003 and 2005. Overall, the area was arguably heavily overbuilt, with permits issued between 2000 and 2005 equal to roughly 40 percent of the number of households in the area. With the market collapse, however, construction of new housing all but came to an end in the area, dropping between 2005 and 2009 from nearly 40,000 to barely 5,000 permits per year.

The market collapse following the house price bubble triggered a wave of foreclosures, leading Nevada to become known widely as the foreclosure capital of the United States. Table 1 compares key foreclosure data for the state of Nevada and the United States for selected quarters in recent years (percentages are of all mortgages). There were 24,971 foreclosures completed in Nevada during the 12 month period ending June 20, 2012.[9]

Table 1: Foreclosure trends in Nevada and the United States

	Mortgages past due		In foreclosure inventory		Foreclosures started in quarter	
	NEVADA	US	NEVADA	US	NEVADA	US
Q4 2007	6.53 percent	6.31 percent	3.02 percent	2.04 percent	1.54 percent	0.88 percent
Q4 2008	11.12 percent	8.63 percent	6.58 percent	3.30 percent	2.65 percent	1.08 percent
Q2 2009	12.14 percent	8.86 percent	9.13 percent	4.30 percent	3.70 percent	1.36 percent
Q3 2010	12.88 percent	9.39 percent	9.72 percent	4.39 percent	3.17 percent	1.34 percent
Q2 2011	10.37 percent	8.11 percent	8.15 percent	4.43 percent	2.25 percent	0.96 percent
Q2 2012	9.85 percent	7.35 percent	6.09 percent	3.09 percent	1.31 percent	0.90 percent

Source: Mortgage Bankers Association National Delinquency Survey.

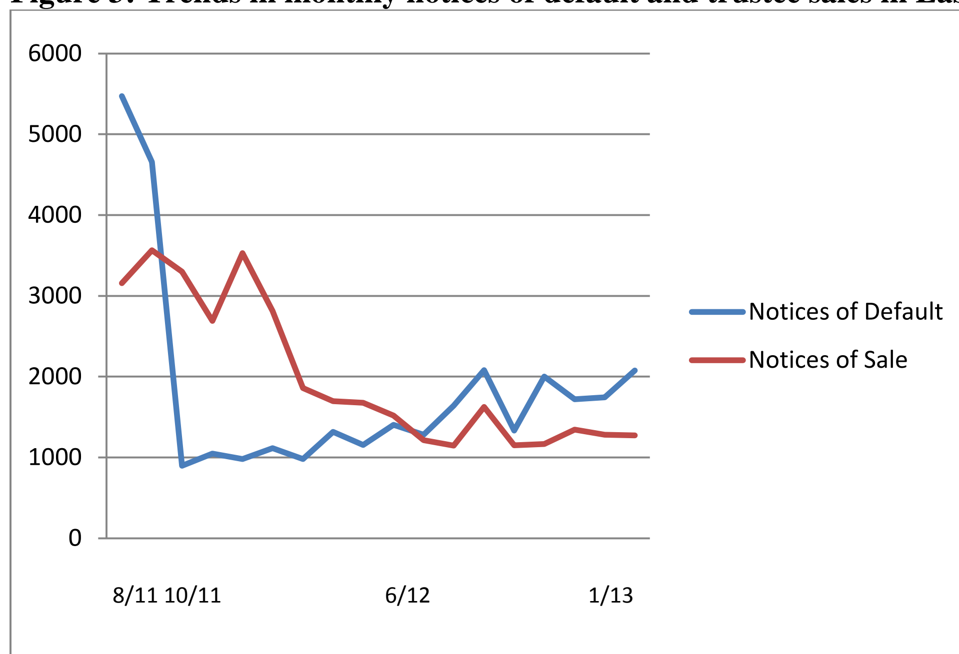
Predictably, the great majority of residential sales transactions in recent years have been either REO or short sales, with foreclosure sales peaking in 2009 at nearly 75 percent of all single-family sales in the area. New foreclosure filings (notices of default), however, have dropped off sharply since the fall of 2011 as a result of enactment of Assembly Bill 284 (AB284) by the Nevada legislature, a bill prompted by the robo-signing scandal. AB284, among other things, "makes it a felony for loan servicers to sign documents without 'personal knowledge' of who owns the note, and requires lenders to provide an affidavit showing they have authority to foreclose" (Smith 2012). The bill, which became effective in October 2011, resulted in a sharp Drop, from over 5,000 new filings to fewer than 900, as shown in figure 3.[10] Since then, new filings have gradually but slowly increased, to an average of approximately 1,900 per month for October 2012 through January 2013. Since trustee sales significantly lag initial filings,[11] they have not dropped as dramatically, but have also declined in number as the effects of the filing slowdown were felt. Since mid-2012, trustee sales appear to have leveled off at roughly 40 percent of the pre-AB284 level.

[9] CoreLogic, Foreclosure Report, July 31, 2012.

[10] Clark County, shown in figure 2, is all but coterminous with the metropolitan area.

[11] According to www.foreclosureradar.com, the average period between filing of the notice of default and the trustee sale for August 2012 trustee sales was 520 days, or roughly 17 months. This is unusually long for a state with a non-judicial foreclosure process, and reflects the existence of a strong state foreclosure mediation program, in conjunction with widespread use of postponements of trustee sales by lenders in conjunction with provisions of Nevada law which require a lender to foreclose after no more than three postponements, or else be required to start the proceedings again from the beginning.

Figure 3: Trends in monthly notices of default and trustee sales in Las Vegas area



Source: Foreclosureradar.com.

Given the nature of the Las Vegas market, the slowdown in foreclosures has led to a pronounced shrinkage in the available inventory of homes on the market. The number of properties actually sold at trustee sales (either to the lender or a third party) dropped from 2,213 in January 2012 to 636 in January 2013, while the total bank-owned inventory dropped from 9,396 to 3,870 properties.[12] The drop in inventory, in turn, has led to significant improvement in key housing market indicators. According to the Case-Shiller Index, house prices were up nearly 14 percent in December 2012 after bottoming out in March 2012, with a 10.5 percent year-over-year increase from December 2011, while building permits issued during 2012 increased 43 percent from the number issued during 2011.[13] Whether this improvement is sustainable is open to question; the "shadow inventory" of properties in default but not in foreclosure has been estimated as being as high as 75,000.[14] Still, at the moment, it is a significant factor in driving the Las Vegas housing market.

Target census tracts

As noted earlier, 37 census tracts with a minimum of 15 single-family detached sales transactions in 2011 were selected for study (referred to as Single Family Detached or SFD tracts), along with 28 tracts (generally overlapping with the 37 SFD tracts) with a minimum of 10 condominium sales. The distribution by quintile for each of a number of key tract-level indicators for each the 37 SFD tracts is provided in table 2.[15]

[12] ForeclosureRadar.com, accessed March 8, 2013.
[13] 2012 data is preliminary.
[14] CoreLogic, quoted in Smith (2012). This figure appears to be high; the underlying data from the MBA National Delinquency Survey used for table 1 would suggest that the number is between 50,000 and 55,000.
[15] The quintiles for each indicator are shown separately, and no relationship across rows is suggested in the table.

Table 2: Key indicators for SFD study tracts

	% units vacant	% households below poverty level	median sales price 2010 (000)	% population Latino
First quintile[16]	4.3 to 6.2 percent	2.1 to 7.5 percent	$37900 to $43000	7.1 to 23.1 percent
Second quintile	6.3 to 8.4 percent	9.5 to 13.9 percent	$44200 to $53750	25.4 to 33.1 percent
Third quintile	8.5 to 10 percent	13.9 to 16.1 percent	$56200 to $69500	33.7 to 43.9 percent
Fourth quintile	10 to 12.9 percent	16.4 to 23.1 percent	$73000 to $85000	48.6 to 65.8 percent
Fifth quintile	13.8 to 20.1 percent	25.3 to 44.1 percent	$91750 to $148500	67.5 to 85.2 percent
AVERAGE	9.4 percent	15.3 percent	$65000	36.7 percent

*Source*s: 2010 census (vacancy and Latino population), 2005–09 ACS (poverty level), Boxwood Means (sales prices).

As the table shows, these census tracts vary widely with respect to all of these indicators. Although there is no correlation between vacancy rates and the other variables in table 2, there is a strong (>99 percent confidence level) negative correlation between sales prices and Latino population share shown in figure 4, and a strong positive correlation between poverty level and Latino population share.[17] There is no evidence, however, that areas of minority concentration, either Latino or African-American,[18] were targeted by investors.

[16] The first and fifth quintiles contain eight cells, while the others contain seven.
[17] A table of correlations is provided in appendix 2
[18] While, as suggested in table 2, the distribution of Latino population varied widely by census tract, there was much less variation in the distribution of African-American households, which overall represent only 10 percent of the metropolitan area population, a much smaller share than the Latino population. The African-American population is also much less concentrated than the Latino population; African-Americans made up between 8 percent and 19 percent of the population of 27 of the 37 tracts, while only 2 census tracts contained more than 30 percent African-American residents.

Figure 4: Median sales price and Latino population share for study tracts

Source: Latino population US Census; sales price Boxwood Means from PolicyMap.

Within the study area, 53 percent of all buyers of detached single-family houses and 68 percent of all buyers of condominium units were non-owner occupant (NOO) buyers. At the zip code level, there was little variation in the level of investor activity, as well as in the extent to which investors focused on distressed sales compared to homebuyers; indeed, a *larger* percentage of the sales to homebuyers were distressed sales than were sales to investors.

The volume of non-distress purchases by investors, however, reflects the extent to which the 2011 investors were buying into a market in which other investors had been highly active since 2009. As a result, a large number of 2011 investor non-REO purchases were bought from investors who had in most cases bought the properties in distressed sales during 2009 and 2010, and were now flipping them to other investors. A description of the activities of such investors appears in a later section of this case study. A review of the data suggests that purchases from other investors make up over half of non-distressed purchases by investors; specifically with respect to condominium buyers, 61 percent of all sellers of non-distressed properties could be identified as likely absentee owners, in most cases flippers.[19] Investors did, however, tend to buy lower priced properties than homebuyers; the price differential ranged between zip codes from 5 percent to 20 percent, as shown in table 3.

Table 3: Comparison between Owner-Occupant and Non-Owner-Occupant buyers of SFD properties by zip code

Zip code	% of NOO among buyers	Distress sales (REO and short sale) %		Median price paid		NOO median price as % of OO price
		NOO	OO	NOO	OO	

[19] For these purposes, any entity with a corporate name, trust or LLC designation, as well as individual names where the same name appeared on multiple properties, were considered absentee/flipper sellers.

89030	53.5 percent	63.9 percent	79.8 percent	$ 40425	$ 42425	95.3 percent
89101	53.4 percent	61.2	73.5	$ 39840	$ 45651	87.3
89108	52.7 percent	69.3	64.6	$ 67408	$ 83685	80.5
89128	49.6 percent	67.2	70.6	$122710	$135525	90.5

Source: DataQuick; analysis by author.

While there are idiosyncratic variations between census tracts with respect to measures of investor activity, these appear to reflect the small number of transactions at the census tract level in many of the tracts, and do not appear to follow a pattern that would suggest any consistent relationship between investor activity and small area characteristics. Table 4 shows key variables aggregated for the 8 high-poverty (>25 percent below poverty level) and the 8 low-poverty (≤ 7.5 percent below poverty level) census tracts. The differences are not significant.

The principal difference between condo and SFD buyers was found in the lower prices paid for condominiums. The median purchase price for condominiums bought by investors was $42,000; in 12 of the 28 tracts the price was between $30,000 and $40,000, and in no tract did the median

Table 4: Comparison between high-poverty and low-poverty tracts

	High Poverty Tracts	Low Poverty Tracts
percent of buyers that are NOO buyers	66.8 percent	68.7 percent
NOO purchase price as percent of OO purchase price	95 percent	91 percent
NOO buyers - percent of sales that are distress sales	68.0 percent	67.5 percent
OO buyers - percent of sales that are distress sales	79.5 percent	74.3 percent

Source: DataQuick; analysis by author.

condominium purchase price exceed $60,500. As previously noted, a larger share of condo purchase were distressed sales; if one adds the likely absentee/flipper sales, we estimate that less than 13 percent of condo purchases by investors were purchases from homeowners. As will be discussed below, the condominium market in the Las Vegas area appears to be significantly weaker than the SFD market.

The most significant conclusion that can be drawn from the above analysis is what is missing; that is, any evidence that investor activity varies geographically on the basis of either the house price level or the ethnic composition of the zip code or census tract. While *individual investors* may concentrate their efforts in a single geographic area, or in areas with particular market characteristics, the *investor community as a whole* is consistently active across areas of different market and socioeconomic character. There is no evidence that either predominately Latino tracts, or the much smaller number of heavily African-American tracts, were targeted. While investors tend to buy lower-priced houses than homebuyers within the same census tracts, this is

credibly explained by their greater willingness to buy houses in need of repair, as well as by the price constraints imposed by their desire to generate a minimum rate of return from cash flow.[20]

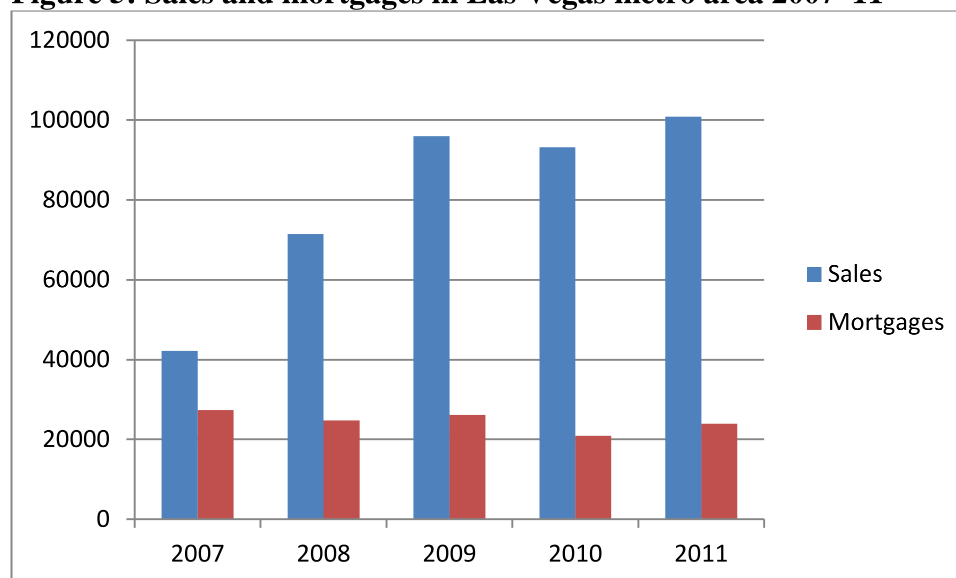
INVESTORS AND INVESTOR STRATEGIES

Who are the investors?

Investors have always made up a substantial part of the pool of single-family and condominium buyers in Las Vegas (Zito 2005). Investors played a major part in pushing the price of housing higher in the area during the bubble years; as one writer put it, "In 2003–04, speculators swarmed there like locusts looking to make easy money in what was becoming the hottest market in the nation" (Jurow 2011). Many, perhaps most of the investors in the market at that time were speculators; as Jurow points out, more than 40 percent of all Clark County sales in 2004 were by flippers who had bought the property within the previous two years, and nearly 20 percent were properties that had been purchased in the preceding six months. Not only did investors play an important role in pushing prices upward, in all probability they played a similar role in bringing on the subsequent housing collapse.

Although hard data is not readily available, accounts indicate that investors began to return to the market in significant numbers during the second half of 2008 and early 2009.
According to DataQuick, roughly half of all real estate sales in the metropolitan area in recent years have been to NOOs, principally investors. Further evidence for the central role of investors in the market is found in the growing disparity between the number of house

Figure 5: Sales and mortgages in Las Vegas metro area 2007–11



Source: PolicyMap, http://www.ffiec.gov/hmdaadwebreport/AggMSA.aspx (2011 HMDA data).

[20] The widely held belief that investors routinely outbid homebuyers for properties is a misapprehension; as will be discussed later, their advantage over homebuyers in the market stems from factors unrelated to price.

sales and the number of mortgages made for home purchase during the same year; as shown in figure 5, as sales have steadily increased since 2007, the number of mortgages has remained the same.[21] Less than one out of four house sales in the Las Vegas metropolitan area were made with a mortgage from a HMDA-reporting source.[22] The rise in transactions between 2007 and 2008, and again between 2008 and 2009, supports the anecdotal evidence on the return of large numbers of investors to the Las Vegas market. [23]

Using information acquired from DataQuick, we were able to create a file of 3,199 NOO (likely investor) purchases in the four zip codes for 2011, including addresses for both the property and (with some exceptions) for the buyer. The distribution of buyers by state is shown in table 5. This data overstates, perhaps substantially, the number of investors who are actual Las Vegas residents, since a substantial and growing share of the absentee investor market is made up of foreign investors, whose properties are held in the name of an entity—whether an LLC or a third-party representative—with a local address. The dynamics of foreign investment in the Las Vegas market are discussed further below.

Table 5: Distribution of NOO buyers addresses by state

State	Percentage		State	Percentage
Nevada	50.6 percent		Arizona	1.1
California	31.1 percent		New York	1.1
Hawaii	2.0		Other	8.4
Washington State	2.0		Unknown	2.3
Texas	1.3 percent			

Source: DataQuick; analysis by author.

Two types of buyer dominate the investor market: individuals and couples buying properties in their own names, and small-scale corporate entities (generally LLCs) and trusts. Las Vegas has seen the emergence of many small LLCs, through which investors may buy as few as one or two— or as many as twenty or thirty— properties, either for the purpose of flipping, or for holding and renting. Many have names that may reflect the name of the individual behind them, such as Tho Investments LLC or Ameer Investment Corp; others have idiosyncratic names such Golden Sun Dynasty LLC, Integrity Wealth Building LLC or 4 USA LCC. Some examples will be discussed further in the next section.

[21] The relationship between sales and mortgages is a reasonable basis for approximating the relative weight of investors and homebuyers in a market. According to data from Campbell/Inside Mortgage Finance *HousingPulse* Survey for March 2011, 77 percent of investor home purchases are all-cash transactions. FHA, Fannie/Freddie and VA mortgages *in toto* amount to only 7 percent of investor purchases, while 16 percent of transactions use some other type of financing, much if not most of which is unlikely to be subject to reporting under HMDA (which is likely to include hard money lenders). By contrast, nearly 60 percent of homebuyers use Fannie/Freddie, FHA or VA financing to purchase their homes, while an additional 24 percent use other financing. Only 26 percent of 'move-up' homebuyers and 10 percent of first-time homebuyers buy houses with cash transactions. If we assume that 50 percent of other financing is shown in HMDA data, we find that 70 percent of all homebuyer transactions are likely to appear in that data, but only 15 percent of investor transactions.

[22] HMDA, or the Home Mortgage Disclosure Act, requires disclosure of mortgages made by recognized lending institutions such as banks, credit unions and savings associations,

[23] The number of mortgages made in the Las Vegas metro area dropped from 53,200 to 27,280 or by nearly 50 percent between 2006 and 2007.

Most of these entities are small in scale, and oriented in whole or large part to investment in the Las Vegas market, as distinct from national investors. While we have identified a handful of large investors that own over 100 properties in the overall Las Vegas market, both the data and informant responses are consistent in supporting the proposition that, with few exceptions, investment in distressed real estate in Las Vegas continues to be largely a cottage industry. Only one investor[24] purchased more than 20 properties within the four zip codes making up the study area during 2011, while eight purchased 10 to 18 properties; the names of the investors are shown in table 6. The entities shown on the table, however, account for only 125 of the nearly 5,500 transactions in the study area. Some of these entities are larger players within the Las Vegas market area. Silver State has been active since mid-2011, buying nearly 50 properties during the second half of that year alone, while Custom Estates is recorded as currently owning 174 properties in the Las Vegas area.[25] While a few national companies such as California-based G8 Capital are present in the Las Vegas market, they do not appear to have a significant market share.

This data is from 2011. Since early 2012, however, there is evidence that some of the mega-investors that have been featured in media reports (Gittelsohn and Perlberg 2013) have entered the Las Vegas market, although their acquisitions still represent only a modest share of the total

Table 6: Larger investors in the study area

Name	2011 purchases in study area	Properties currently held in Clark County[26]
Emily Chengdu LLC[27]	27	13
Heartland Coalition[28]	18	1
Custom Estates LLC	12	174
Shannon Pero	12	6
TIF JGNV 1 LLC	12	NA
4D Management Holdings	12	2
Orion 6 Property Investments LLC	11	22
Silver State Investments LLC	11	44
G8 (various funds)	10	NA

Source: DataQuick; Clark County Assessor.

[24] The possibility exists that entities with different names are actually the same or closely-related entities. I looked at the possibility that different names hide a common identity by doing a search to see whether multiple owners were listed at the same address. The search found five addresses in which 2 or more owners of 10 or more properties were listed at a single address. These addresses represent a total of only 90 properties; moreover, it is likely that some of the addresses are those of law firms or realtors. One address is that of a prominent local law firm, which another is that of a Realtor of French origins, who apparently packages properties for a variety of French individuals (judging by the investors' surnames).

[25] This is the largest current single holder we have been able to identify. It is a shadowy entity, with virtually no web presence, and only a registered (Las Vegas based) agent identified.

[26] NA indicates that it was not possible to find a name match in the Assessor data base. It is possible, of course, that entities controlled by the same parties but operating under different names control other properties in the county.

[27] Chengdu is a city in China, not a Chinese surname. This entity is most probably a vehicle for a group of investors from that city.

[28] Heartland Coalition is a San Diego-based non-profit entity that buys REO houses to rehabilitate and sell to low and moderate income homebuyers.

market or investor purchases during that period. As of April 1, 2013, the largest of these firms, Blackstone, had accumulated a portfolio of 258 properties in the Las Vegas area, while Colony Capital had acquired 313.[29] By and large, they appear to be buying properties in the upper half of the market value range; the median purchase price of a sample of Blackstone acquisitions was $150,000, with the prices ranging from $110,000 to $222,100.

The role of foreign investors in the Las Vegas housing market appears to be both significant and growing. [30] Although quantitative data on this sector of the market is not available, this point was consistently made by informants. Las Vegas appears to be particularly attractive to foreign investors. It is one of a relatively small number of American areas that are already well-known to people in Asia and Europe; as one informant commented, "Las Vegas is a brand… it's not Peoria." It is, moreover, one of relatively few such brand-name areas in the United States where the cost of entry for investors is relatively low, and where the sales/rent ratio is strongly favorable to investors.[31] While Las Vegas real estate investors come from every part of the world, the consensus of informants was that the largest group was East Asian (China, Taiwan, Korea, Japan, and Singapore) and that within that group, the largest number were from mainland China. Canada and Russia, as well as Latin America, were also noted as sources of real estate investors. In what appears to be a common practice, local intermediaries form LLCs on behalf of an investor or group of investors from such a location, through which the investors will typically buy some 10 to 20 properties.

Investing in Las Vegas real estate offers significant ancillary benefits for many overseas investors, according to our informants. Many Chinese investors keep their investment profits in the United States in order to cover the cost of travel in the United States, pay the expenses of a son or daughter studying in the United States, as a nest egg for future immigration, or simply as a hedge against economic or legal uncertainties in China. Many overseas investors use real estate investment as a means of taking advantage of the E-2 visa program;[32] while this program is not available to Chinese nationals, the absence of this opportunity does not appear to have deterred Chinese investors. A smaller number of investors participate in the more expensive EB-5 visa program.[33]

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[29] This may not be a complete count. This figure was derived by identifying owners of record for properties listed as being available for rent on these two firms' web sites, and then aggregating the properties under those names through the Clark County Assessor web site. The possibility exists is that these firms may be acquiring property under additional names, but if so, the number of additional properties is likely to be small.

[30] According to a 2011 report by DataQuick, "Roughly 3 percent of all Las Vegas-area homes sold last month were bought by foreign buyers, based on public property records, where a foreign mailing address was available." Given the nature of this sector, and the extent to which foreign buyers operate through the addresses of their locally-based agents, use of that data source is likely to substantially understate the number of foreign buyers.

[31] This is in marked contrast to cities like San Francisco, Washington DC, or Boston, where the cost of even modest investment properties is significantly higher than all but the most expensive Las Vegas properties, and the sales/rent ratio is substantially less favorable. In 2011, the gross rent multiplier (the ratio between the median sales price and the median annual rent) was 33.0 in San Francisco, 27.7 in Washington DC, and 23.6 in Boston, compared to 9.1 in Las Vegas

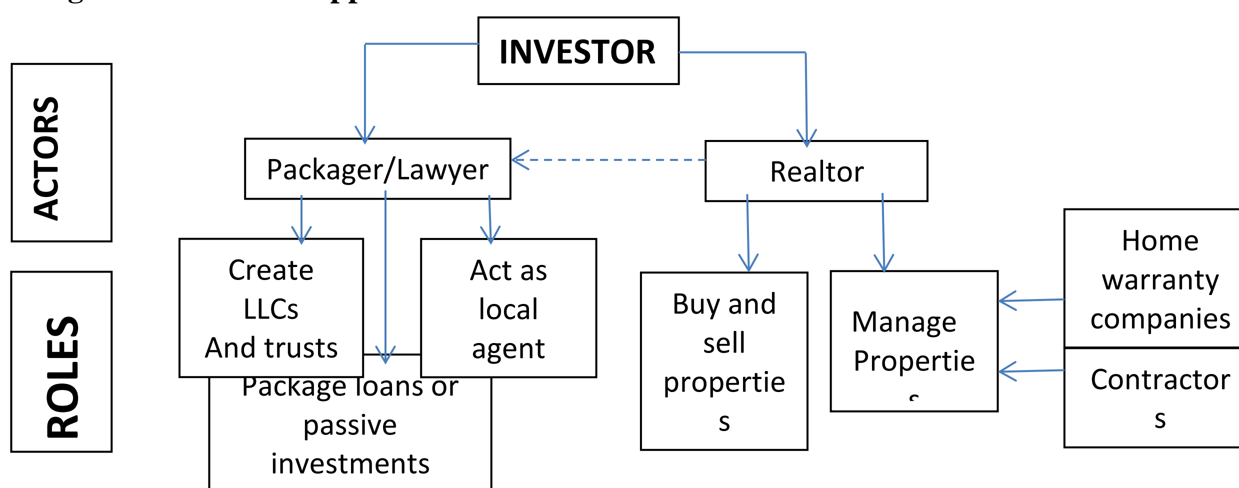
[32] The E-2 visas are available to immigrants from certain countries "solely to develop and direct the operations of an enterprise in which he has invested, or of an enterprise in which he is actively in the process of investing a substantial amount of capital." The visa must be renewed every 5 years; while there is no limit on the number of renewals, it does not in itself ensure permanent residency status in the United States. Nationals of Japan, Taiwan, and Korea are eligible for E-2 visas, but Chinese nationals are not at present eligible.

[33] EB-5 investors must invest at least $1 million ($500,000 in certain rural or high unemployment areas). The EB-5 visa brings a green card and the opportunity for permanent residency status. In contrast to the E-2 program, Chinese nationals are eligible for the EB-5 program.

The Investor Support Network

A critical element in the ability of Las Vegas to attract a steady flow of investors from across the globe is the existence of a comprehensive, and highly sophisticated local support network. This network was already in place when distressed property investors began to flood the market in 2008 and 2009, reflecting the area's long history of absentee real estate investment. A schematic description of this network, showing both actors and their roles, is shown in figure 6.

Figure 6: Investor Support Network



The Las Vegas network is rich with individuals and firms with strong capacity, close working relationships, and experience and expertise in dealing with and supporting outside real estate investors dating from long before the current wave of distressed property investment. As figure 6 shows, the two central figures are the realtor, and the entity that we refer to as the "packager" who is usually a lawyer (or works with a lawyer). In some cases, as indicated by the dotted line, the realtor arranges for the services of a packager on behalf of a new investor. The packager will create the LLC for the investor and where appropriate act as the local agent, particularly for overseas investors; less often, the packager will help an investor find capital, either from local informal sources[34] or from hard money lenders. The realtor both buys and sells properties on the investor's behalf and acts as the property manager; a number of large brokerage firms manage portfolios of 400 or more properties on behalf of their investors. Property managers, who must be or be employed by licensed realtors under Nevada law, screen and select tenants (and evict

[34] Local sources may be high net worth individuals, often independent professionals such as doctors or lawyers, who are interested in the returns from real estate investment, but want to be passive rather than active investors.

them when necessary) and maintain the properties. Some operate directly through their networks of contractors while others utilize the network of home warranty companies in the area.[35]

An unusual model, which falls somewhat outside what we characterize as the standard pattern but is instructive of the creativity with which the investor support system in the Las Vegas area operates, is that of 3JM LLC, a real estate investment firm. 3JM LLC, which is not a licensed realtor, buys properties in its own name as an investor for subsequent resale to individual Chinese investors.[36] According to their web site, they have sold 174 properties, although they are not currently offering any properties for sale. By selling only properties to which they have title, they avoid conflict with real estate brokerage laws. Instead of simply flipping the properties, however, they offer their investors a lease-back plan under which the investor enters into a three year lease agreement with 3JM LLC; while taking the risks of vacancy and damage, 3JM LLC guarantees the investor an annual cash flow of roughly 5 percent to 6 percent of the purchase price.

If the investor sells the property during the three year period, it must be sold subject to the lease, which is transferred to the new owner for the remaining term. While the guaranteed return is significantly lower than that which a successful actively-engaged investor may be able to obtain in many parts of the Las Vegas market, it relieves the distant investors of the uncertainties associated with owning and operating rental properties. This is likely to be a highly lucrative business model albeit a labor-intensive one that may involve greater risk tolerance than many actors in the support system may desire, because it provides both profit on the resale of the properties and cash flow from property management, in the form of the spread between the actual rental cash flow and the amount guaranteed the investors. By leasing the property from the investor, rather than being its property manager, 3JM LLC also avoids violating Nevada law, which—like many other states—requires that firms offering third-party property management services be licensed real estate brokers.

Investor strategies

Distressed real estate investors follow a variety of different investment strategies, depending on their personal investment goals and the characteristics of the housing markets in the areas in which they are investing. Table 7presents a typology of the principal investor business models, including but not limited to those that are typical of the Las Vegas market.[37] As the table indicates, two business models— predatory flippers and what we have dubbed “milkers”— appear to be rarely used by investors in the Las Vegas market. The absence of milkers is easily understandable. Even in the most distressed neighborhoods in the area, there is enough

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[35] A home warranty company is a firm that provides, in the words of one firm’s web site “a residential service contract that provides repair or replacement coverage for the major operating systems and appliances in a home that fail due to normal wear and tear.” (https://homewarranty.firstam.com/homeowner/why_homewarranty.aspx)
Some of these firms are national companies, but most are active only locally or regionally; an example is the somewhat misleadingly named National Home Warranty Corporation, which operates in Las Vegas and Arizona.

[36] Their web site www.3jminvestments.com, is in English and Chinese, with substantial portions in Chinese only. During the course of research for this case study, I attempted to contact the principals of this organization, only to discover that not only were they reluctant to be interviewed, but that they were far from fluent in English.

[37] This model represents a modification and enhancement of the typology first presented in my paper *Meeting the Challenge of Distressed Property Investors in America’s Neighborhoods,* published by the Local Initiatives Support Corporation in 2010.

possibility of *some* appreciation for a rational investor to seek to maintain the value of his or her investment for potential resale.[38]

What we call "predatory" flippers—that is, flippers who use unethical or illegal practices to make a quick profit, often using inflated values and collusion between buyers, realtors, and mortgage originators—do not appear to have been a significant presence in the Las Vegas market. Neither responses from informants nor a fairly extensive web search elicited any indication of such activity in the market. While this does not mean that such bad actors do not, or did not, exist, it would certainly suggest that their presence was too insignificant to trigger either public notice or concern within the industry, in contrast to the experience in other parts of the United States.[39]

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[38] Another consideration is the low property taxes in the Las Vegas area, which are typically around 1 percent of current market value. While an investor in Detroit is strongly motivated to not pay property taxes (which can easily be over 20 percent of current market value), knowing that the outcome will be loss of the property to tax foreclosure after 4 or 5 years, non-payment of property taxes in Las Vegas does not have a comparable positive effect on cash flow, or enough to offset the subsequent downside of non-payment.

[39] One can only speculate on why this is so. One reason may be that the profits to be made from "ethical" flipping, particularly during the years from 2008 to 2010, were substantial enough to allow that sector to dominate the market. A second factor may be the extent to which Las Vegas has a strong and sophisticated real estate industry, as well as fairly serious state regulation of the industry.

Table 7: A typology of distressed property investors

Category	Principal investment goal	Secondary investment goal	Strategy	Time horizon	Presence in Las Vegas market (note 1)
Flipper/predatory	Appreciation	None	Buy properties in poor condition and flip to buyers in as-is or similar condition often using unethical or illegal practices	Less than 1 year	Rare
Flipper/market edge		None	Buy properties in fair to good condition and flip to buyers with profit based on market information or access.	Less than 1 year	Major market presence from 2008 to 2010. Rare at present.
Rehabber		None	Buy properties in poor condition, rehabilitate them and sell them in good condition.	Less than 1 year	Limited market presence in some sub-markets.
Milker	Cash flow	None	Buy properties in poor condition for very low prices and rent them out as-is with minimal maintenance, often to problem tenants. May abandon property after 2–4 years.	2 to 4 years	Rare
Holder/short-term		Expectation of break-even sale or modest appreciation	Buy properties to rent out for short period for cash flow and resale	3 to 5 years	Major market presence, probably dominant investor model at present
Holder/medium-long term		Expectation of modest or greater appreciation	Buy properties to rent out for more extended period for cash flow and resale	5 to 10 years	Some market presence.

1. Based on informant responses, not quantitative data.

Rehabbers, who buy properties in poor condition and make major investments in rehabilitating them before resale, may exist but appear to play a small role, if only because—according to informants—the great majority of distress sale properties coming onto the market do not need more than modest, largely cosmetic, repairs to be saleable.

"Market edge" flippers, however, have been a major factor in the Las Vegas market, although their role has significantly diminished since the period from 2008 to 2010, when they made up a large although undetermined part of the investor sector. Market edge flippers are able to sell the houses they buy for more than their cost by taking advantage of greater market knowledge or greater access to properties than other investors or homebuyers.[40] This was particularly the case during that earlier period, where thousands of foreclosed properties were being dumped onto the market by lenders, and locally-based buyers could buy REO properties at rock-bottom prices from lenders or realtors, or for even less by bidding directly at trustee sales.[41] The economics of these practices will be discussed in the following section of this case study.

While most market edge flippers appear to be locally-based players, often operating at a fairly modest scale, a flipper that gains its market edge by buying portfolios of properties at a discount from Fannie Mae is G8 Capital of Ladera Ranch, California.[42] G8 is a portfolio or bulk purchaser of distressed real estate.[43] Their activities in Las Vegas can be characterized as low-end flipping; we have identified 30 properties that they acquired during the end of 2010 and early 2011 in portfolios from Fannie Mae. Of these, they currently hold two, while one was apparently bought back by Fannie Mae. Of the remaining 27 properties, 15 were sold within 90 days or less of the date of acquisition, with the balance sold between 90 and 180 days after acquisition.

The properties in the portfolio were extremely low-value properties, many of which were in modest condominium developments;[44] G8 Capital's total investment was less than $750,000, with the average purchase price being slightly under $25,000. The average selling price was roughly $35,000; assuming they invested $3,000 to $5,000 in each property in holding costs and improvements, their return was most probably in the vicinity of 20 percent. Their market edge was their ability to capitalize on the discount they obtained from Fannie Mae for their bulk portfolio purchase.

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[40] Or, arguably, greater willingness to devote time and effort to bringing properties to move-in condition than many buyers; it is likely that many buyers (both investors and homebuyers) will pay a premium for a property in move-in condition that is significantly greater than the cost of bringing it to that condition, particularly when the nature of the work is more cosmetic than having to do with major systems.

[41] While in nearly all trustee sales (Nevada terminology for what are known elsewhere as foreclosure sales) the amount owed the lender significantly exceeds the market value of the property, so that the lender can easily take title to the property *if it wants to*, many lenders do not want to take title; as a result, they make an initial bid that is significantly lower than the full amount of the mortgage, a practice known as a "drop bid," and accept an only slightly higher bid from a third party investor. Since the lender does not publish his intention to do so in advance, it is possible that an investor with a relationship with a lender who is tipped off in advance about drop bids might have a further advantage over other investors in the market.

[42] The likelihood that a small, locally-based, investor would be in a position to acquire a portfolio, whether of properties or mortgage paper, from a large regional or national lender is remote.

[43] According to their web site, they have "managed more than 55 portfolio acquisitions across 28 managed funds since 2007, representing more than $250 million in principal balance or real estate value." http://g8cap.com/ accessed Sept. 27, 2012

[44] As discussed further below, high condominium fees as well as the character of many of the condominium developments results in their prices being significantly discounted relative to the price of single-family houses.

Informants agreed that the share of flippers in the investor pool began to decrease during 2010, and that they make up only a small part of the sector today. With the market stabilizing, and lenders becoming more selective about moving properties through foreclosure and into the REO market, the opportunities to gain a market edge have becoming fewer. This general trend has been strengthened by the more recent decline in the size of the REO inventory, which has all but eliminated the historic disparity between REO and conventional market prices. The investor market at present is dominated by holders. While some plan to hold their properties for an extensive period, most, according to informants, are oriented to short-term (three to five year) holding strategies.

In the absence of consensus about the future course of the Las Vegas housing market, investor strategies in the current market are not consistent. While some investors continue to buy, and are practicing a holding strategy in the expectation of gradual increases in house prices over the coming years, other investors—who are convinced that the constrained market and rising values experienced during 2012 were a product of artificially induced scarcity and are not sustainable—are liquidating their inventories.

THE ECONOMICS OF DISTRESSED REAL ESTATE INVESTMENT IN LAS VEGAS

A ballpark estimate of the amount spent by distressed property investors to acquire properties in Clark County since the beginning of 2009 is over $6 billion per year, for an estimated cumulative investment from 2009 to the end of 2012 of $25 billion, or slightly less than half of the estimated $57 billion spent by all buyers in the county.[45] The magnitude of that investment, and the extent to which it has been sustained over four years with no evidence of any decline in investor interest, suggest on its face that this is a highly profitable investment sector. This section will describe the economics of buying and either flipping or operating distressed real estate in the Las Vegas market. Although, as noted earlier, while flipping does not appear to be a widely-used investor strategy at present, it played a significant role during the first two or more years of large-scale investor activity.

The economics of flipping

As noted above, market edge flippers were a major factor in the world of distressed property investment in Las Vegas during the earlier years of strong investor activity, a period that can be seen as running from mid-2008 through the end of 2010. One representative flipper was Clobear LLC, which bought and sold at least 49 properties between

[45] This estimate was derived by multiplying the aggregate residential sales figure reported by Boxwood Means by 0.5 (the approximate share of investors in the overall market), and multiplying that by a percentage of the median sales price. It was assumed that the median distressed property investor price was 80 percent of the overall median in 2009, rising to 85 percent in 2010 and to 90 percent in 2011 and 2012. Although data on transactions for 2012 was not available, it was assumed that (1) the number of transactions would be roughly the same as 2011, and (2) the median price would be 3–5 percent higher.

mid-2010 and early 2011.[46] Clobear created its market edge by largely buying properties directly at trustee sales rather than waiting for the lender to acquire them and market them as REO properties; in doing so, they were taking advantage of the fact that by mid-2010, many lenders were prepared to facilitate third-party purchases at trustee sales by refraining from bidding the full amount of the mortgage, a practice referred to as "drop bidding."[47] Clobear acquired all of its properties between June and November 2010. By the end of February 2011, it had liquidated all but 5 of them, although the last property— clearly a bad investment— did not sell until May, when it was sold for a loss. Clobear invested a total of $4.4 million in property acquisition or just under $90,000 per property and realized a gross return on sales of $5.4 million; assuming they spent an average of $5,000 per house on holding and repair costs, their return on investment was approximately 16 percent. As table 8 shows, they turned most of their properties over quickly; in many cases, it is likely that they had a buyer at a previously agreed-upon price "in their pocket" at the time of the trustee sale. Clobear appears only to have been engaged in the Las Vegas market for a short period, as a search of county assessor records found no properties currently held by that entity.

Table 8: Clobear LLC resale timing

Month of purchase	Month of sale				
	Same month	One month later	Two months later	Three months later	Four or more months later
6.10	1		2		
7.10		3	2	1	2
8.10	3		1		
9.10	2	7	3		2
10.10	3	1	1	1	
11.10	2	4	2	3	3
TOTAL	11	15	11	5	7

Source: Blockshopper.com.

A longer-term operation was pursued by an individual investor to whom I will refer here as TW, who bought and re-sold 36 REO properties[48] during the period from the spring of 2008 through December 2010, or paralleling what we have identified as the period during which flipping was most widespread. Based on public property records, we have reconstructed his purchases and sales to create a profile of the monthly cash flow and ultimate return on investment for these transactions, which is presented in table 9. TW's acquisitions were for the most part in the higher reaches of the Las Vegas market, in contrast to Clobear, which concentrated on the middle market, and G8 Capital, which bought a portfolio of low-end properties from Fannie Mae. Over

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[46] This entity was apparently a vehicle for a San Francisco-based investor, whose name and (apparent) home address appear on the incorporation documents filed with the state of Nevada.

[47] From the perspective of a lender with a substantial and growing REO inventory, this is a highly rational strategy. If they take title to the property, their ultimate gain will be reduced by holding costs, real estate commissions, and the significant possibility of deterioration or vandalism between the time of the trustee sale and the resale. As a result, a rational lender might well accept a bid at the trustee sale in the vicinity of 80–90 percent of what the property might bring on the market.

[48] In three cases, he bought properties directly at trustee sales.

the period of TW's activity, he spent $5.1 million, for an average of roughly $142,000 per property, substantially more than the median sales price of houses in the Las Vegas area during the period in which he was active.

TW sold 23 of these properties within 90 days or less of acquisition, and all but one in 180 days. Given the nature of his purchases and the prices he realized, it is likely that in most cases the houses he acquired were in good condition, and required little work to be saleable. The ultimate results of his two and a half years of activity were quite productive. His total returns from sales were nearly $6.7 million; if we assume that he incurred $5000 in holding and repair costs for each house, his total cost basis was $5.33 million, for an overall return over the two and one half years of 26 percent.

An analysis of the profile suggests some important features associated with the role of the flipper. TW's activities clearly required him to put a substantial amount of money at risk. He invested roughly $500,000 in acquisitions before seeing any return, and after seven months and an expenditure of over $2 million,[49] he was still in the hole by $527,000. His balance of costs and revenues reached a break-even point in the eighth month, and was positive from that point onward. What is also worth noting is his pattern of activity from the second half of 2009. By the end of July 2009, TW had been active for 15 months, had accumulated a positive balance of sales over purchase costs of $950,000, for a return of 30 percent in little more than one year, and had liquidated his entire inventory, as shown in figure 7.

[49] I was unable to determine if TW used outside financing for his activities.

Table 9: Real estate transactions by TW

	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08	
Bought	224,000		155,000	134,000	124,900	253,900	167,000		
			124,000	195,000	217,000		148,500		
				95,000	171,500		97,000		
					53,500				
Sold			332,000	209,000	138,000	138,000	256,500	320,000	
					170,000			207,000	
					269,990				
					190,000				
Property costs	5,000		10,000	15,000	20,000	5,000	15,000		
Bought (cumulative)	229,000	229,000	518,000	957,000	1,543,900	1,802,800	2,230,300	2,230,300	
Sold (cumulative)			332,000	541,000	1,308,990	1,446,990	1,703,490	2,230,490	
+/-	- 229,000	- 229,000	- 186,000	- 416,000	- 235,910	- 355,810	- 526,810	+ 190	
Cost of inventory held at end of year									466,000

	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09
Bought		140,000	194,250	131,250	156,900			175,505	112,000	246,000	27,000
			105,000		160,125			165,000		224,000	
								190,000			
Sold		238,000	162,200	169,888	206,488	140,850	240,000			243,000	155,000
		105,500			239,888		279,000				
		180,000									
Property costs		5,000	10,000	5,000	10,000			15,000	5.000	10,000	5,000
Bought (cumulative)	2,230,300	2,375,300	2,684,550	2,820,800	3,141,825	3,141,825	3,141,825	3,687,330	3,804,330	4,184,330	4,216,330
Sold (cumulative)	2,230,490	2,653,990	2,816,190	2,986,078	3,432,454	3,573,304	4,092,304	4,093,401	4,093,401	4,336,401	4,491,401
+/-	+ 190	+ 278,690	+ 131,640	+ 165,278	+190,629	+432,479	+ 950,479	+406,071	+289,071	+152,071	+275,071

Table 9 (continued)

	12/09		1/10	2/10	3/10	4/10	5/10	610	7/10	8/10	9/10
Bought			97,000	156,800	110,000	175,000	131,900	170,100	56,000		
				97,000					35,000		
Sold	298,000		70,000	240,000		144,988		120,000	65,000		
	235,000					207,500		245,000			
								170,500			
Property costs			5,000	10,000	5,000	5,000	5,000	5,000	10,000		
Bought (cumulative)	4,216,330		4,318,330	4,582,130	4,697,130	4,917,130	5,044,030	5,229,130	5,330,130	5,330,130	5,330,130
Sold (cumulative)	5,024,401		5,094,401	5,334,401	5,334,401	5,686,889	5,686,889	6,222,389	6,287,389	6,287,389	6,287,389
+/-	+808,071		+776,071	+752,271	+637,271	+769,959	+642,859	+993,259	+957,259	+957,259	+957,259
Cost of inventory held at end of year		217,000									

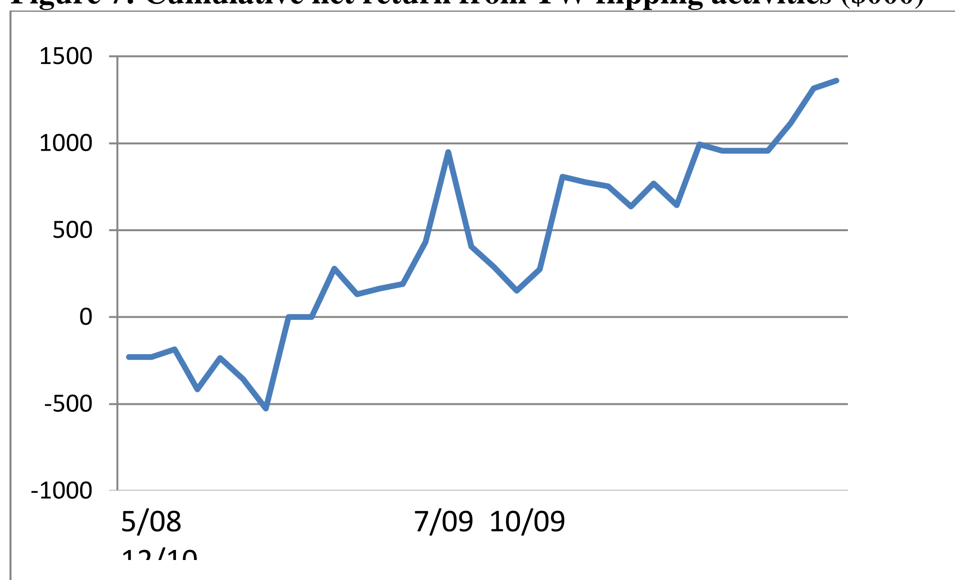
	10/10	11/10	12/10
Bought			
Sold	159,000	199,888	44,900
Property costs			
Bought (cumulative)	5,330,130	5,330,130	5,330,130
Sold (cumulative)	6,446,389	6,646,277	6,691,177
+/-	+1,116,259	+1,316,147	+1,361,047

Notes to Table 9

1. Highlighted purchases are those still held in inventory at end of calendar year.
2. A total average property cost of $5,000 per unit was assumed, including $4,000 for refurbishment and $1,000 for holding costs.

Source: Blockshopper.com. Analysis by author

Figure 7: Cumulative net return from TW flipping activities ($000)



Looking at the course of these investments in hindsight, it can be argued that a prudent investor should have walked away at the end of July 2009. TW, however, reinvested almost all of his profits in buying more properties, spending $1.1 million on property acquisition between mid-August and mid-November while seeing less than $400,000 in sales returns. While he ultimately recovered that money at a reasonable profit, the rate of return for what might be considered his second round of investment was substantially less than that of the earlier period, and his overall rate of return would have been significantly higher had he in fact liquidated in July 2009 rather than December 2010. This is not a reflection on TW's capabilities as a flipper, but instead reflects the way in which the market was shifting during 2010 in ways that were reducing the market edge previously available to flippers, and fostering a transition from a more flipper-oriented investor market to one dominated by individuals buying to hold.

The economics of holding

While the flipper's goal is purely appreciation, as a result of which she is motivated to minimize holding and improvement costs, and resell the property as quickly as possible, the holder is motivated most directly by cash flow, with appreciation a secondary (although not insignificant) objective. The rent/price ratio or gross rental multiplier for the Las Vegas market has steadily declined from the levels of 2006 or earlier, as shown in table 10, making a strong cash flow a realistic prospect for investors.[50]

[50] The data in table 10 should be seen as an approximation rather than a precise determination of the gross rent multiplier. The American Community Survey data has a substantial margin of error, while the sales price data shown is raw rather than matched-pairs data, so it may not account for variations in the characteristics of the inventory from one year to the next. Moreover, since the characteristics of the rental and the for-sale stock vary, the actual multiplier for a unit of a particular size or character may vary significantly from those shown in the table. This data, however, is generally consistent with data reported by rentjungle.com, which conducts regular surveys of apartment and rental single-family house listings in the Las Vegas and other market areas.

Table 10: Gross rent multiplier in Clark County Nevada 2006–11

	Median Gross Rent	Median Sales Price	Multiplier
2006	$ 949	$280500	24.6
2007	$1017	$268200	22.0
2008	$1049	$196400	15.7
2009	$1034	$129900	10.5
2010	$ 986	$124900	10.6
2011	$ 957	$107000	9.1

Source: Sales data from PolicyMap (Boxwood Means); rental data from one-year American Community Survey.

As prices have stabilized in the Las Vegas market, and expectations of positive appreciation within a reasonable time horizon have increased, investors' cash flow expectations (or requirements) have dropped markedly. While holders buying prior to 2010, according to informants, were typically looking for an annual before-tax return of 15 percent on their investment, investors buying and renting properties for cash flow today are willing to accept returns in the area of 8 percent, or as we saw in the example of 3JM LLC, as passive, remote investors, as low as 5 percent to 6 percent.

A representative cash flow profile for a mid-range property in the Las Vegas area, according to the head of a major property management firm, is shown in table 11A.[51] For those familiar with typical rental costs in the multifamily market, the low level of maintenance and repairs in the budget may be striking. In the above case, this can be explained on the basis of a number of factors, principally that the house is likely to be relatively new and freshly painted and carpeted before being rented, so that the extent of replacement or major repairs likely to be needed during

Table 11A: Representative cash flow profile for a mid-range single-family rental property

CATEGORY		Monthly	Annual
Purchase price (note 1)	$120,000		
Rent		$1,100	$13,200
Real estate taxes (1 percent of value)			(1,200)
Insurance			(450)
Repairs & maintenance (5 percent of rent)			(660)
Management fee (10 percent of rent)			(1,320)
Total cost			(3,630)
Net cash flow	$ 9,570		$ 9,570
Net cash flow	8.0 percent		

[51] All utilities are paid by the tenant. I have not factored a vacancy rate into the pro formas shown in table 11A and B because a significant percentage of single-family tenants in the Las Vegas market are likely to remain in the house for the duration of the investor's relatively short holding period.

(percent of investment)			

1. Including pre-rental repairs and holding costs.

the anticipated holding period is likely to be very small. Moreover, many of the families in the pool from which tenants are drawn may be former homeowners, who are likely to be relatively responsible tenants, as well as perhaps accustomed to making minor repairs themselves.[52]

In low-end markets, where maintenance and repair costs are likely to be higher, that is compensated for by a higher rent/sales ratio. As shown in table 11B, for a house selling at 50 percent of the price of the mid-range property, the investor is likely to get a rent that is in the vicinity of 75 percent of the mid-range rent. As a result, as shown in table 11B, even with substantially higher maintenance and repair costs, the return on investment is actually greater for the low-end product. A landlord may be able to further increase her cash flow by seeking out tenants with Housing Choice Vouchers (Section 8), and capitalizing on the spread between the HUD Fair Market Rents and the market rents in low-end parts of the region.[53] The risk of higher vacancy

Table 11B: Representative cash flow profile for a low-end single-family rental property

Category		Monthly	Annual
Purchase price (note 1)	$60,000		
Rent		$800	$9,600
Real estate taxes (1 percent of value)			(600)
Insurance			(350)
Repairs and maintenance (20 percent of rent)			(,920)
Management fee (10 percent of rent)			(960)
Total cost			(3,830)
Cash-on-cash return ($)	$ 5,770		$5,770
Cash-on-cash return (percent)	9.6 percent		

1. Including pre-rental repairs and holding costs.

and collection loss, however, as well as the uncertainty of future appreciation, are also greater.

[52] Property managers interviewed suggested that they preferred ex-homeowners as tenants, and as long as they had a steady income stream adequate to cover the rent, the managers were not concerned about whether they had a foreclosure on their credit record.

[53] The 2012 Fair Market Rents for the Las Vegas-Paradise MSA were $870 for a one bedroom unit and $1,024 for a two bedroom unit. Although the FMRs were reduced by roughly 4 percent for 2012 from 2011, they are still at least 25 percent to 30 percent higher than the market rents in the lower-end parts of the metropolitan area, encouraging landlords to game the system. That such practices are widespread has been documented in the literature (Susin 2002) According to one informant, this practice is more widespread in North Las Vegas, which has more areas of poverty concentration.

The cash flow of condominium apartments is affected by the substantial homeowners association (HOA) fees typical of the Las Vegas market, and by somewhat lower rents than a single-family unit with the same number of bedrooms is likely to command. Even in modest low-rise and relatively low-priced condominiums, HOA fees typically fall in a range of between $130 and $180 per month. Condominium prices in mid-range low-rise projects tend to be substantially lower than mid-range single-family prices. The price disparity appears to be greater than the capitalized value of the HOA fee, reflecting, in all probability, the likelihood that the local market sees condominiums as a less-desirable residential option than a single family house.[54] Representative cash flow profiles for two condominium units currently on the market are shown in table 11C.

For individuals investing their own capital in real estate, which according to informants is the most common investor practice, a rate of return of 8 percent, while not stellar, is clearly better than what is available from fixed-rate investments, and arguably offers comparable or better

Table 11C: Representative cash flow profiles for two condominium properties

Category	Property 1 (1 bedroom)	Property 2 (2 bedroom)
Purchase price (note 1)	$50,000	$50,000
Rent	$7344 ($612/month)(note 2)	$8460 ($705/month)(note 2)
Real estate taxes (1 percent of value)	(500)	(500)
Insurance	(200)	(250)
Repairs and maintenance (5 percent of rent)	(367)	(423)
Management fee (10 percent of rent)	(734)	(846)
HOA fee (actual)	(1,968) ($164/month)	(2,100) ($175/month)
Total cost	(3,769)	(4,119)
Cash-on-cash return ($)	$3,575	$4,341
Cash-on-cash return (percent)	7.2 percent	8.7 percent

1. Including pre-rental repairs and holding costs.
2. 90 percent of the average (median?) rent for summer 2012 reported in rentjungle.com.

returns with significantly less downside risk than stock market investment. Assuming an investor obtains an annual return of 8 percent for three years, puts the property on the market at the end of the third year and sells it after six months for a 20 percent increase over the initial purchase price, the average annual return over the three and a half year period is 12.6 percent, an attractive investment proposition in today's financial environment.

[54] There is a separate condominium sub-market made up of luxury high rise buildings, generally close to the Strip, and heavily marketed to second home buyers. This sub-market was not investigated as part of this case study.

In light of the financial uncertainties in the national and in the Las Vegas markets, the actual increase over the next three to five years is impossible to predict. Assuming that the local economy continues to improve, and that no future wave of foreclosures and trustee sales leads to a sharp increase in the amount of inventory on the market, a 15–25 percent increase in three to five years may be realistic. What will happen in the event that prices do not appreciate at all (or enough to significantly exceed transaction costs) over the next three to five years is hard to tell; informants, however, agreed that most of the investors coming into the market were looking to liquidate during that time frame, rather than remain in the Las Vegas market for the long run. The downside risk for most real estate investment options in the Las Vegas market is actually very small. While circumstances might lead to a property being vacant for a number of months, reducing cash flow; or a major unanticipated repair might increase costs, the cushion between the returns shown in the tables and the risk of an actual negative cash flow is a generous one. With total operating costs ranging from roughly 25 percent, in the best case, to 50 percent at worst, of gross revenues, even a significant drop in gross rental revenues or a significant increase in costs is unlikely to lead to a negative cash flow, as illustrated in table 11D.[55] The existence of the support system, including home warranty companies and professional property management services, described above provides a further backstop minimizing the investor's risk.[56]

Table 11D: Cash flow sensitivity analysis for a mid-range single-family rental property

Category		Monthly	Annual		
			Model case	Reduced cash flow case A	Reduced cash flow case B
Purchase price (note 1)	$120,000				
Rent		$1,100	$13,200	$13,200	$13,200
Vacancy @ 5.55 percent				(733)	
Vacancy @ 8.33 percent[57]					(1,100)
Real estate taxes (1 percent of value)			(1,200)	(1,200)	(1,200)
Insurance			(450)	(450)	(450)
Repairs and maintenance					
(5 percent of rent)			(660)		
(10 percent of rent)				(1,320)	
(20 percent of rent)					(2,640)
Management fee (10 percent of rent)			(1,320)	(1.320)	(1,320)
Total cost			(3,630)	(5,023)	(6,710)
Cash-on-cash return ($)			$ 9,570	$ 8,177	$ 6,490
Cash-on-cash return			8.0 percent	6.8 percent	5.4 percent

[55] In the unlikely event that the investor was forced to incur a major repair cost that significantly exceeded annual cash flow, she would most probably treat it as an increase to her basis which would be amortized over the holding period, rather than as an operating cost adjustment.
[56] All of the examples in the preceding section assume that the investor hires a professional property manager for a 10 percent annual fee, rather than self-manage. For an out-of-area investor, self-management is not a realistic option, but at least some locally-based investors self-manage, thus potentially increasing cash flow, but also potentially increasing risk.
[57] These vacancy assumptions correspond to either two or three months of vacancy over the course of a three year holding period.

(percent)					

INVESTORS AND THE LAS VEGAS HOUSING MARKET

The preceding sections have described the characteristics of investors and their strategies, and the economic conditions that have resulted in real estate holding having become a predictably rewarding investment strategy in the Las Vegas housing market. The question is, to paraphrase a famous routine from the early days of Saturday Night Live,[58] while Las Vegas has been very, very good to investors, have investors been good for Las Vegas?

Our informants, albeit largely from the real estate sector (investors, realtors and property managers) were quite emphatic that investors had had a positive effect; one stressed that investors had "repopulated areas, and brought neighborhoods back to life."[59] There is compelling evidence that the dramatic increase in real estate transactions in the Las Vegas market from 2007 to 2006 was investor- rather than homebuyer-driven. The consensus of informants is that investors began to re-enter the market in a significant way in 2008 and their activity increased in 2009. This impression is reinforced by the data on sales and mortgage volume during this period. As shown in figure 6, mortgages remained flat while sales increased sharply between 2007 and 2009. This suggests that the market was able to absorb an exceptionally high volume of inventory becoming available through foreclosure without mortgage financing. That, in turn, meant that the widespread abandonment that was taking place at the same time in many other parts of the country affected by high foreclosure rates did not take place in Las Vegas.[60]

It appears unlikely that, if investors had not been ready to step in, the market would have adjusted in the same fashion. Given the uncertain state of the Las Vegas economy in 2008 and 2009, the difficulty homebuyers were experiencing in obtaining mortgages, and the fact that prices were continuing to decline, the likelihood that a comparable number of would-be owner-occupants would have emerged during 2008 and 2009 to absorb the inventory must be considered remote. Thus, although it cannot be proven with certainty, it is not unreasonable to say that investors played a critical role during that period in stabilizing the market and preventing widespread abandonment. [61]

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[58] Gareth Morris playing the jock-turned-sportscaster Chico Escuela in 1978.

[59] Public sector informants, although more hesitant to sing the praises of investors, nonetheless did not identify major problems with investor activity. While the city's code enforcement managers indicated that they received more complaints about investor-owned properties, they felt that the level of complaints was not unusually high or cause for serious concern.

[60] Although hard data is difficult to come by, all informants (including the city of Las Vegas code enforcement director) agreed that abandonment was not widespread, even in the lowest-end areas. This is consistent with my own observations driving around some of these areas in the fall of 2012, and is in sharp contrast to cities like Cleveland or Atlanta, where abandonment in low-end areas is widespread.

[61] It can be argued that, inasmuch as the area did not see a significant population decline during this period, the absence of investors might not have led to abandonment so much as to an even greater fall in prices and longer foreclosure spiral. I doubt it. The absence of effective homeowner demand would have resulted in significant numbers of empty REO properties failing to find buyers, which would ultimately lead to their being abandoned. What would have happened to families losing their homes through foreclosure under those circumstances can only be a matter for speculation. Most probably the demand for apartments would have increased, as would have doubling-up and house sharing. Equally likely is that the absence of acceptable housing alternatives might have led to a decline in population, as displaced households moved elsewhere to rebuild their lives.

Over time, however, as the market began to stabilize, it appears increasingly likely that investors have come to crowd out prospective homebuyers. This crowding out is not so much because investors are willing to pay more as the fact that, from a transactional standpoint, selling to an investor offers the seller—particularly of an REO property—clear advantages. As one informant summarized them, the investor will take the property 'as is', will not look for a warranty, and as a cash buyer, will close quickly and require neither appraisal nor mortgage contingencies. Fannie Mae has instituted what it calls the "First Look" program, under which properties are offered exclusively to prospective homebuyers for the first 30 days that they are listed, to help address this concern, but with apparently only limited effect.[62]

This is in large part a reflection of the difficulty that prospective owner-occupants have in gaining access to the mortgage market. Although some homebuyers pay cash, the great majority look for mortgage financing to buy their home, particularly first-time homebuyers. By comparison, the overwhelming majority of investor buyers are cash buyers. [63] As long as the ability of a homebuyer to obtain a mortgage is fraught with delay and uncertainty, investors are likely to have a significant edge over homebuyers.[64]

I Investors appear to have played a critical role in fostering a basic threshold level of stability in many neighborhoods, and are continuing to sustain the housing market, in the sense that they are continuing to absorb inventory at stabilized or rising price levels. The extremely high share they represent of the single-family market, however, may be discouraging further stabilization of the market by keeping prices from rising more if owner-occupants were better able to compete for properties; furthermore, their high ownership share in many neighborhoods may be impeding further stabilization of neighborhood conditions, by preventing the homeownership rate from returning to what may be considered healthier levels, in light of what are generally considered significant social and property maintenance benefits associated with homeownership (Galster 1987, Rohe and Stewart 1996, among others).

Since 2000, the number of homeowners appears to have dropped in the great majority of the census tracts in the study area, in some cases substantially.[65] While it is arguable that homeownership rates in many areas were unsustainably elevated prior to the collapse of the housing bubble, it is questionable whether a market in which the investor market share makes up over 50 percent of single-family transactions is healthy for the long-term vitality of the area's neighborhoods.

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[62] Of the nearly 500 properties listed on the Fannie Mae HomePath web site for Las Vegas in December 2012, slightly more than 100 were under the First Look program.
http://www.homepath.com/listing/search?q=Las+Vegas%2C+NV&pi=&pa=500000&bdi=&bhi=&x=39&y=16
Accessed December 24, 2012.

[63] See footnote 16 for discussion of this point.

[64] One potentially significant byproduct of the effect of investors crowding out homebuyers in the existing home market, according to one informant, is to displace demand toward newly constructed housing, where investors do not have the same advantages over homebuyers. This informant suggested that this displacement of demand was a major reason for the resurgence, albeit modest, of homebuilding in the Las Vegas area. This may mean, however, that many homebuyers end up spending more to buy than they would if they had greater access to the existing house market.

[65] It is difficult to make precise comparisons between the 2000 and 2010 census because of changes in census tract boundaries and numbering. Some examples where comparisons can be more easily made include tract 101 where the rate dropped from 87.0 percent to 75.7 percent, tract 510 where it dropped from 64.8 percent to 55.6 percent, and tract 3219 where it declined from 82.7 percent to 62.3 percent. Three years of disproportionately heavy investor activity has taken place since the 2010 census, further eroding homeownership rates.

Part of this concern arises from the inherently greater stability and neighborhood engagement of homeowners, and part from the concern that absentee-owned properties are likely to be more poorly maintained than owner-occupied properties. While this latter proposition is all but universally acknowledged by housing officials and community development practitioners in urban neighborhoods, the actual research support for the proposition does not appear to be extensive.[66] Some, although limited, evidence in support of this proposition comes from a virtual windshield survey I carried out of four separate block faces in the Las Vegas study area, which found a consistent difference between the exterior quality and appearance of owner-occupied and absentee-owned properties.[67] At the same time, the difference was not so pronounced as to lead to a conclusion that the condition of the absentee-owned properties was such that it was necessarily destabilizing the blocks surveyed.

In conclusion, there is strong evidence that investors have played a constructive role in the Las Vegas market, but there is less clear-cut evidence that their continued domination of the market continues to be as constructive. The fact that the great majority of investors are holders, who are eager to maintain their properties so that they may be able to sell them for a profit in a few years, means that it is less likely that their properties will be neglected and become neighborhood problems. At the same time, to the extent that they are crowding out potential homebuyers, their effect is problematic. Given that many investors may look to resell their properties over the next two to four years, a public or non-profit program designed to work with investors in order to facilitate their properties being restored to owner-occupancy might be a valuable investment in the community's future.

[66] A recent study by the Urban Strategies Council in Oakland documented problems with investor-owned properties, but did not provide a comparison with owner-occupied properties in the same neighborhood (Urban Strategies Council 2012).

[67] Using Google Earth Street View, I looked at a total of 64 properties in three locations in the study area, using a scale to classify five variables: front elevation (façade), yard condition, fencing quality/condition, driveway condition, and an overall estimate of appearance (curb appeal). The first two variables were ranked on a scale from -4 to +4, thus giving them twice the weight of the others, which were ranked on a scale from -2 to +2. Thus, properties could have a score anywhere between -14 and +14. After classifying the properties on these variables, I used Clark County Assessor records to determine whether the properties were owner-occupied or absentee-owned. 38 of the properties in the sample were owner-occupied, and 26 absentee-owned. The owner-occupied properties had an average score of +2.4 and the absentee-owned properties -1.3. The difference was most pronounced in one location, which notably had the highest percentage of homeowners of the three areas. This analysis is suggestive, but no more than that. The survey guide that I used is attached to this paper as appendix 3.

REFERENCES

Galster, George. 1987. *Homeowners and Neighborhood Reinvestment.* Durham, NC: Duke University Press.

Gittelsohn, John and Heather Perlberg. 2013. "Blackstone Rushes $2.5 Billion Purchase as Homes Rise," *Bloomberg News,* January 9.

Jurow, Keith. 2011. "Shadow Inventory Undermining All Major Metro Markets Now." April 13. http://www.minyanville.com/businessmarkets/articles/housing-market-shadow-inventories.

Mallach, Alan. 2010. *Meeting the Challenge of Distressed Property investors in America's Neigbhorhoods.* New York, NY: Local Initiatives Support Corporation.

Rohe, William M. and Leslie S. Stewart. 1996. "Homeownership and Neighborhood Stability", *Housing Policy Debate* 7:1, 37–71.

Smith, Hubble. 2012. "AB 284: Help or Hindrance?" *Las Vegas Business Press,* October 22.

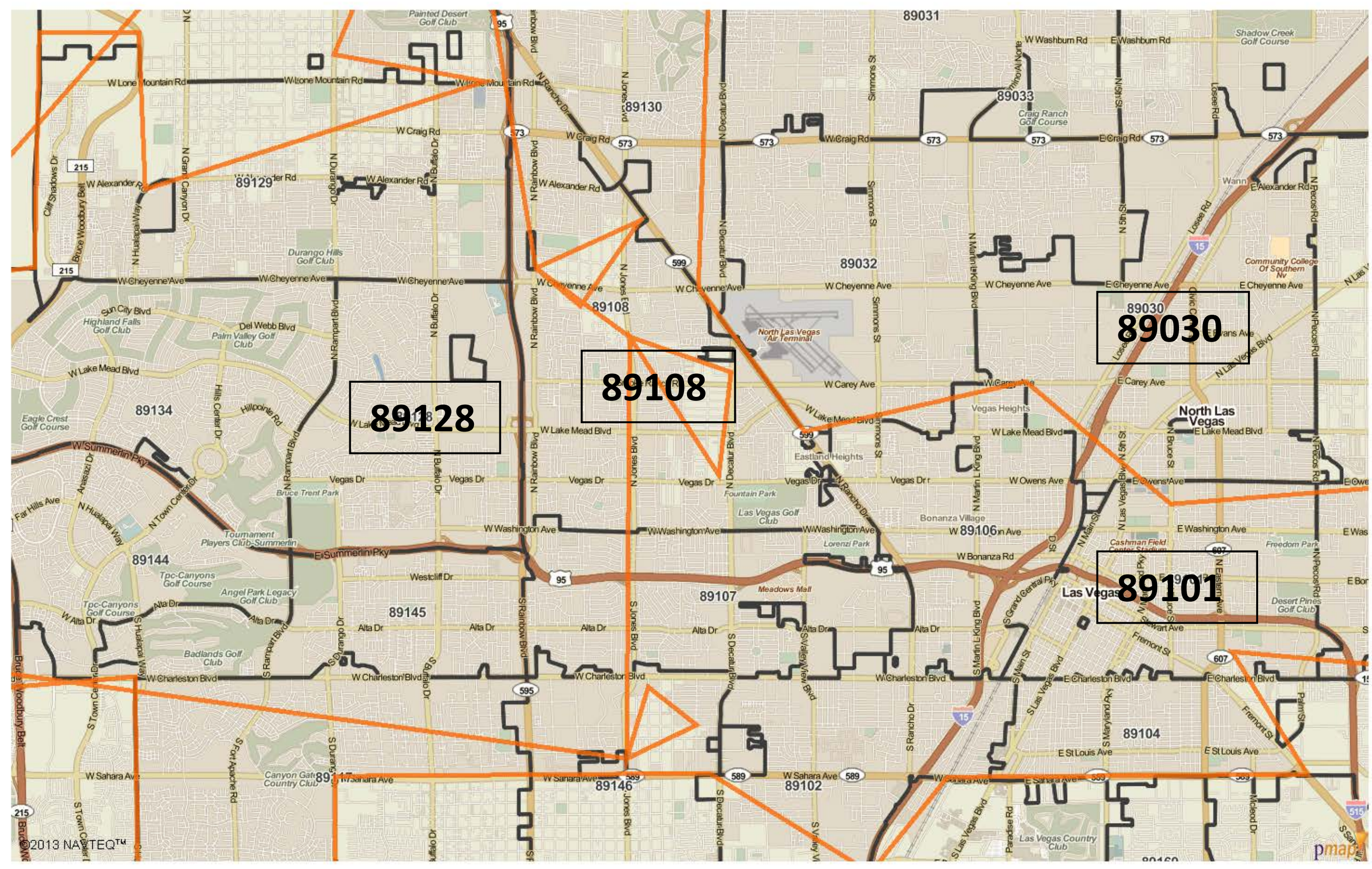
Susin, Scott. 2002. "Rent Vouchers and the Price of Low-Income Housing," *Journal of Public Economics,* 83:1, January, 109–152.

Timiraos, Nick. 2013. "Rise in Phoenix Housing Shows Path for Other Cities," *Wall Street Journal,* March 13.

Urban Strategies Council. 2012. *Who Owns Your Neighborhood? The Role of Investors in Post-Foreclosure Oakland.* Oakland, CA: Urban Strategies Council.

Zito, Kelly. 2005. "Real Estate Investors Cast Watchful Eye on Las Vegas' High Stakes Housing Game," *San Francisco Chronicle,* March 7.

Appendix 1: Case Study Zip Codes (89030, 89101, 89108, 89128)



Source: PolicyMap

Appendix 2: Table of Correlations

	% of purchases by non-owner occupants	Distress sales as % of all sales	% vacant units	% households in poverty	Median sales price	% Latino households	% African-American households
% Of purchases by non-owner occupants		-0.09144	0.04185	0.08088	-0.21374	0.00851	0.26063
Distress sales as a % of all sales	-0.09077		-0.03901	0.00204	0.04080	-0.11823	0.14403
% Vacant units	0.04185	-0.03901		0.00849	-0.11944	0.04263	0.03549
% Households in poverty	0.08088	0.00204	0.00849		-0.64466**	0.60718**	0.08411
Median sales price	-0.21374	0.04080	-0.11944	-0.64466**		-0.77077**	-0.10520
% Latino households	0.00851	-0.11823	0.04263	0.60718**	-0.77077**		-0.32254*
% African-American households	0.26063	0.14403	0.03549	0.08411	-0.10520	-0.32254*	

*Significant at the 90 percent confidence level.
**Significant at the 99 percent confidence level

Appendix 3: Virtual Windshield Survey Guide

Subject	Categories	Scoring
Elevation/façade	Well-maintained, improved, and embellished	+4
	Plain, no improvements but evidence of reasonably good maintenance	+2
	Evidence of neglect and poor maintenance	-2
	Seriously in disrepair, peeling stucco, missing tiles or window panes	-4
Yard	Carefully laid out and planted or otherwise hardscaped, and meticulously maintained	+4
	Clean, can be planted, paved or gravel yards, and generally well-maintained	+2
	Basically adequate planting or paving treatment but poorly maintained	-2
	Scrub vegetation, debris, trash, and other serious maintenance problems	-4
Fencing	Attractive decorative fence, well-maintained	+2
	No fence	0
	Chain-link or similar security fence, or poorly-maintained decorative fence	-2
Driveway	Visible cracking or crumbling concrete	-2
Curb appeal	Positive overall impression	+2
	Neutral overall impression	0
	Negative overall impression	-2

Appendix 4: Informants

Paul Bell, Prudential Americana Group Realtors®
Wende Bell, Prudential Americana Group Realtors®
Michael Bouse, Code Enforcement Manager, City of Las Vegas
Nasser Daneshvary, Professor of Economics and Director, Lied Institute for Real Estate Studies*
Flinn Fagg, Director, Department of Planning, City of Las Vegas
Matthew Goldstein, Reporter, Thompson Reuters Group
Moses Kim, Real estate investor
Warren Klein, Real Estate Investment Specialist, Formerly Golden Real Estate Investment LLC
William Meyer, Principal, William Meyer Property Management
John Restrepo, Principal, Restrepo Consulting Group
Kathy Somers, Neighborhood Services Manager, City of North Las Vegas

*Prof. Daneshvary, a colleague and friend who provided his insights and ideas during the early part of this case study, unexpectedly died at the age of 62 in August 2012.