

Do Foreign Buyers Really Pay More? Evidence from the Miami Condo Market

by Marcus T. Allen, PhD, Kimberly R. Goodwin, PhD, and Jennifer A. O'Sullivan, PhD

Abstract

Past research has suggested that some nonlocal buyers pay more than locals when purchasing homes. This is an example of information asymmetry and higher information availability for local buyers. Although there is relatively little research broadening nonlocals to foreign buyers, the premium should be even larger to account for the issues of information asymmetry and exchange rates. However, technology has revolutionized the availability of information about local housing markets. Many large companies provide potential buyers with information about local housing prices and neighborhoods (e.g., crime rates and noise levels), and Google imaging capability provides street views of distant properties. This article reconsiders the hypothesis that foreign buyers pay more than US buyers specifically within the Miami condominium market. We find evidence that technology has indeed reduced information asymmetry and that pricing premiums may be attributable to economic crisis in the buyers' home country.

Introduction

It is generally accepted within the real estate industry that local buyers have an advantage over nonlocal buyers. Local buyers benefit from first-hand knowledge of real estate people in the community, the neighborhood dynamics, and pricing trends. Past research validated this idea, whether the buyers were simply from another town in the same state, out-of-state, or even out of the country. Distance from the location seemed to create a greater level of information asymmetry. Yet, there is an increasing amount of information on local housing markets available online. As technology has improved, this information has become timelier and more accurate. Thus, the premium nonlocal buyers pay for housing could be shrinking in proportion to the decrease in information asymmetry. In light of the new technology and availability of information, it seems appropriate to revisit the question of whether local buyers have a pricing advantage over nonlocal buyers.

To the extent such an advantage exists for local buyers at any given time in a market, appraisers should recognize this market phenomenon and give it due consideration in their analyses. For

example, in the sales comparison approach, selection of comparable sales and adjustments to the prices of those sales reflecting conditions of sale (local versus nonlocal buyers) should be carefully considered to ensure adjusted sale prices provide credible indications of the subject property's value. At the extreme, a comparable sale involving a nonlocal buyer with atypical motivation may not be suitable for use in the sales comparison approach when sufficient market support for the adjustment amount is not available. This argument is similar to the notion that cash versus contingent sales must be handled with due caution in the appraisal process.

Very little research exists on the extreme non-local buyer—the foreign buyer of US housing. The information asymmetry is greatest for foreign buyers in US housing markets, because they must overcome more than simply understanding the neighborhoods and local market dynamics. Foreign buyers may be dealing with additional documentation requirements, fluctuating exchange rates, and a bias (price anchoring) toward housing prices in their home country.

This study investigates a unique data set of foreign buyers in the Miami condominium market. The data is used to examine whether foreign buy-

ers pay a premium compared to US buyers and whether there is still significant information asymmetry in the market. In addition, the analysis further examines foreign buyers by their country of origin to observe where pricing premiums may be the highest.

Review of Literature

Prior research has established both theoretically and empirically that local buyers have advantages over out-of-town buyers. Turnbull and Sirmans presented a model in which out-of-town buyers would be expected to pay higher prices due to higher search costs and greater information asymmetry with regard to the local market.¹ They were, however, unable to confirm this model using data from Baton Rouge, Louisiana. Barylá and Zumpano found that out-of-town buyers search for a home longer than local buyers.² Elder, Zumpano, and Barylá reported that out-of-town buyers have a significantly higher search intensity compared to local buyers.³

Early work by Watkins from Glasgow, UK, did not find evidence that buyers from outside the city paid more for properties compared to Glasgow residents.⁴ Later work with out-of-state buyers in the United States, however, did find evidence that such a price premium existed. Using data on Florida homes, Ihlanfeldt and Mayock confirm that out-of-state buyers pay more than locals.⁵ They find evidence that this is due to both low

information and high search costs as well as an upward bias in house price expectations associated with coming from a higher housing price area (identified as a price anchoring effect by Clauretie and Thistle, and Lambson, McQueen, and Slade).⁶

Expectations for foreign buyers should in theory be similar to those of out-of-town buyers. They are the extreme case of out-of-town buyers. Information asymmetry is even higher for these buyers, who face not only differences in market conditions but also factors such as language, currency, culture, and regulation. Miller, Sklarz, and Ordway examine Japanese buyers in Hawaii.⁷ They find that Japanese buyers paid prices around 21% higher than native Hawaiians for property and hypothesized that both information asymmetry and the dollar-yen exchange rate could explain the high premium.

Other research into out-of-town buyers addresses investment and commercial properties. These buyers tend to be more knowledgeable than the average residential buyer, so they may have less information asymmetry and lower search costs. Clauretie and Thistle confirm the premium for buyers of investment homes in Las Vegas.⁸ Clauretie and Thistle find that out-of-state buyers paid a premium compared to local buyers, but the proxies for anchoring and search costs were not significant after controlling for search duration and intensity. Allen, Rutherford, and Rutherford study discounts on distressed properties for different types of investors.⁹ Large investors get

1. Geoffrey K. Turnbull and C. F. Sirmans, "Information, Search, and House Prices," *Regional Science and Urban Economics* 23, no. 4 (September 1993): 545–557.
2. Edward A. Barylá and Leonard V. Zumpano, "Buyer Search Duration in the Residential Real Estate Market: The Role of the Real Estate Agent," *Journal of Real Estate Research* 10, no. 1 (1995): 1–13.
3. Harold W. Elder, Leonard V. Zumpano, and Edward A. Barylá, "Buyer Search Intensity and the Role of the Residential Real Estate Broker," *Journal of Real Estate Finance and Economics* 18 (1999): 351–368.
4. Craig Watkins, "Are New Entrants to the Residential Property Market Informationally Disadvantaged?," *Journal of Property Research* 15, no. 1 (1998): 57–70.
5. Keith Ihlanfeldt and Tom Mayock, "Information, Search, and House Prices: Revisited," *Journal of Real Estate Finance and Economics* 44, no. 1 (2012): 90–115.
6. Terrence Clauretie and Paul Thistle, "The Effect of Time-On-Market and Location on Search Costs and Anchoring: The Case of Single-Family Properties," *Journal of Real Estate Finance and Economics* 35, no. 2 (2007): 181–196; Val E. Lambson, Grant R. McQueen, and Barrett A. Slade, "Do Out-of-State Buyers Pay More for Real Estate? An Examination of Anchoring-Induced Bias and Search Costs," *Real Estate Economics* 32, no. 1 (2004): 85–126.
7. Norman G. Miller, Michael A. Sklarz, and Nicholas Ordway, "Japanese Purchases, Exchange Rates, and Speculation in Residential Real Estate Markets," *Journal of Real Estate Research* 3, no. 3 (1988): 39–49.
8. Clauretie and Thistle, "Effect of Time-On-Market."
9. Marcus T. Allen, Jessica Rutherford, Ronald Rutherford, and Abdullah Yavas, "Impact of Investors in Distressed Housing Markets," *Journal of Real Estate Finance and Economics* 56, no. 4 (May 2018): 622–652.

the greatest discount followed by medium investors, small investors, and institutional investors. So, investor size and bargaining power matter when it comes to price negotiations.

Lambson, McQueen, and Slade examine apartment complex sales in Phoenix and find that out-of-state buyers pay a significant premium.¹⁰ Although their proxies for anchoring behavior and experience are not individually significant, the combined variables suggest that inexperienced buyers from high-cost states pay a significantly higher price premium compared to experienced buyers from low-cost states. More recent work by Liu, Gallimore, and Wiley, Devaney and Scofield, and Ling, Naranjo, and Petrova confirm significant premiums that foreign investors pay for US commercial properties.¹¹

Although technology companies such as CoStar make it easier to access information about commercial real estate assets around the world, that information is expensive. Residential home buyers benefit from the fact that there are multiple providers of free information about local home markets and values. Technology, therefore, should greatly reduce the asymmetric information and search costs that out-of-town buyers face. As a result, it could be the case that residential out-of-town or foreign buyers no longer pay a premium compared to local buyers. Kandlbinder, Miller, and Sklarz suggest that the premium has indeed decreased over time.¹² Holmes and Xie, however, show that out-of-state buyers continue to pay more than local buyers but that the premium could be fully explained by the size of the homes. In their sample, out-of-state buyers pay more because they buy bigger houses.¹³

This study extends the current literature in a few important ways. First, it examines the potential premium paid by foreign buyers in US markets. This has largely been ignored in the literature

beyond Miller, Sklarz, and Ordway.¹⁴ Second, foreign buyers are identified and studied by country of origin, which further investigates the propensity to pay a premium. Third, the study utilizes a data set of condominium sales, which helps to create a more homogeneous data set compared to typical single-family residential home sales data.

Case Study of Miami Condominiums

Data

The data for this study are derived from the Miami, Florida, multiple listing service from June 2011 through May 2017. This study period allows for examination of the market during a time of stability after the housing crisis of 2008 and before the COVID-19 pandemic in 2020. The data is restricted to condominium sales in order to reduce the heterogeneity of the sample and also to maximize the number of foreign buyers in the sample. After closing, brokers have the option to enter information about the buyer's country of origin along with sale price. Brokers do not always enter this information, however. Rather than making assumptions about sales where this information was missing, such sales were excluded from the study analysis. As a result, the study utilizes a sample of 3,650 sale transactions.

Exhibit 1 provides information about the origin and numbers of foreign buyers in the sample. Some of the countries have a relatively small number of total transactions, which could be problematic when attempting to make any kind of statistically significant conclusions. Therefore, the study analysis only includes countries with a minimum of about 50 sales transactions. Exhibit 2 defines the main variables used in the regression analysis, as explained in the next section. Exhibit 3 presents the summary statistics.

10. Lambson, McQueen, and Slade, "Do Out-of-State Buyers Pay More?"

11. Y. Liu, P. Gallimore, and J. A. Wiley, "Nonlocal Office Investors: Anchored by Their Markets and Impaired by Their Distance," *Journal of Real Estate Finance and Economics* 50 (2015): 129–149; Steven Devaney and David Scofield, "Do 'Foreigners' Pay More? The Effects of Investor Type and Nationality on Office Transaction Prices in New York City," *Journal of Property Research* 34, no. 1 (2017): 1–18; David C. Ling, Andy Naranjo, and Milena T. Petrova, "Search Costs, Behavioral Biases, and Information Intermediary Effects," *Journal of Real Estate Finance and Economics* 57 (2018): 114–151.

12. Katrin Kandlbinder, Norm G. Miller, and Michael A. Sklarz, "Leveling the Playing Field: Out-of-Town Buyer Premiums in US Housing Markets over Time," *International Journal of Housing Markets and Analysis* 12, no. 3 (2019): 377–404.

13. Cynthia Holmes and Jia Xie, "Distortions in Real Estate Transactions with Out-of-State Participants," *Journal of Real Estate Finance and Economics* 57 (2018): 592–617.

14. Miller, Sklarz, and Ordway, "Japanese Purchases."

Exhibit 1 Sample of Foreign Buyers

The sample of foreign buyers in the data set by country of origin and number of buyers from each country.

Country	Buyer Count
Argentina	202
Australia	3
Brazil	108
Canada	60
China	25
Colombia	88
France	37
Germany	4
India	6
Italy	49
Mexico	24
Russia	48
Spain	13
United Kingdom	10
Venezuela	163
Other Foreign Countries	354
Total	1,194

Exhibit 2 Variable Definitions

Variable	Variable Description
LnSP	Natural log of sale price
LnDOM	Natural log of days on market
LnSQFT	Natural log of property square feet
BEDS	Number of bedrooms
FBATHS	Number of full bathrooms
HBATHS	Number of half bathrooms
OCEANVIEW	A dummy variable equal to 1 if the property has an ocean view
FURNISHED	A dummy variable equal to 1 if the property is listed as furnished
REO	A dummy variable equal to 1 if the property is listed as REO (owned by lender)
CASH	A dummy variable equal to 1 if the buyer paid cash for the sale
SHORTSALE	A dummy variable equal to 1 if the property is listed as a short sale
ATYPICALITY	A measure of how the property varies from the mean property characteristics in the sample
USA	A dummy variable equal to 1 if the buyer is from the United States
ARGENTINA	A dummy variable equal to 1 if the buyer is from Argentina
BRAZIL	A dummy variable equal to 1 if the buyer is from Brazil
CANADA	A dummy variable equal to 1 if the buyer is from Canada
COLOMBIA	A dummy variable equal to 1 if the buyer is from Colombia
ITALY	A dummy variable equal to 1 if the buyer is from Italy
RUSSIA	A dummy variable equal to 1 if the buyer is from Russia
VENEZUELA	A dummy variable equal to 1 if the buyer is from Venezuela
OTHERFOREIGN	A dummy variable equal to 1 if the buyer is not from the US or any country specified in other control variables

Exhibit 3 Summary Statistics for Main Variables in the Regression Analysis

Variable	Mean	Std. Dev.	Min.	Max.
LnSP	12.33	0.79	10.31	16.00
LnDOM	4.71	0.81	0	7.52
LnSQFT	6.96	0.38	5.3	8.88
BEDS	1.77	0.75	0	5
FBATHS	1.70	0.63	1	7
HBATHS	0.19	0.40	0	2
OCEANVIEW	0.18	0.39	0	1
FURNISHED	0.06	0.24	0	1
REO	0.13	0.33	0	1
CASH	0.70	0.46	0	1
SHORTSALE	0.04	0.20	0	1
ATYPICALITY	0.04	0.03	0	0.23
USA	0.67	0.47	0	1
ARGENTINA	0.06	0.23	0	1
BRAZIL	0.03	0.17	0	1
CANADA	0.02	0.13	0	1
COLOMBIA	0.02	0.15	0	1
ITALY	0.01	0.12	0	1
RUSSIA	0.01	0.11	0	1
VENEZUELA	0.04	0.21	0	1
OTHERFOREIGN	0.13	0.34	0	1

Methodology

The study uses a standard hedonic pricing model that has been well established in the literature. Recognizing the simultaneous relationship between sale price and time on market instrumental variable, a 2SLS model of sale price was employed. In the first stage, the time on market was estimated while controlling for neighborhood (location), seasonal effects, and atypicality.¹⁵ The atypicality measure controls for the degree to which each individual property characteristic varies from the mean value in the sample. In this way, atypicality controls for properties that vary in a significant way from the average property in the sample. The estimator is then included in the second stage equation for the selling price. The selling price equation includes controls for distressed sales and cash sales, which are known to reduce sale price, general property characteristics directly corresponding to property value, and time trend controls.¹⁶ All variables of interest for country of origin are included in the second stage equation. The general model can be expressed as follows:

$$\text{LnSP}_i = W(\text{ORIGIN}_i, \text{DISTRESS}_i, \text{PROPCHAR}_i, \text{TIME}_i, \text{LnDOM}_i) \quad (1)$$

$$\text{LnDOM}_i = F(\text{AREA}_i, \text{MONTH}_i, \text{ATYP}_i) \quad (2)$$

Following this methodology, the variable of interest, *ORIGIN*, is examined in a few different ways. The analysis will look at whether foreign buyers pay a premium over domestic buyers and also will look closely at how foreign buyers' behavior may differ from each other based on country of origin.

Results

This investigation begins with the question of whether foreign buyers pay a premium over domestic buyers. The variable of interest *USA* is a dummy variable that distinguishes US buyers from foreign buyers. A 2SLS model is used where days on market (*LnDOM*) is modeled in the first stage and included in the second stage regression for sale price (*LnSP*). Exhibit 4 presents the

regression results. Although atypicality is not significant in the first stage, location control variables are unreported in the table but highly significant and indicate that certain neighborhoods are more desirable and thus sell faster than others. Control variables behave as expected with controls for size and quality increasing the sale price, while control variables for distressed properties decrease the sale price.

The variable of interest *USA* is significant at the 1% level and suggests that domestic buyers pay significantly less than foreign buyers. In other words, foreign buyers do pay more. This value is not only statistically significant but also economically significant. The coefficient -0.067 converts to a difference of 6.5% in the property sale price. The mean sale price in the sample is \$224,134. US buyers, therefore, pay \$14,570 less than foreign buyers on average for properties in this sample.

It is important to note that this 6.5% premium is considerably less than the 21% premium that Miller, Sklarz, and Ordway found when studying Japanese buyers in Hawaii. This smaller premium supports the idea that technology has driven down the information asymmetry in the residential real estate market over the past twenty years. Foreign buyers now have access to the same data as domestic buyers, which has helped to level the playing field for them in this market.

Next, the analysis takes a closer look at the difference between US buyers and foreign buyers. As in the previous model from Exhibit 4, a 2SLS regression is used to model days on market (*LnDOM*) in the first stage. This is included in the second stage model for sale price (*LnSP*). In this model, the US buyer variable is the reference variable. The variables of interest denote foreign buyers from specific locations: Argentina, Brazil, Canada, Colombia, Italy, Russia, Venezuela, and other international countries. Exhibit 5 presents the regression results.

The regression results support the idea that not all foreign buyers are the same. The results in Exhibit 4 indicating that foreign buyers pay more

15. Donald R. Haurin, "The Duration of Marketing Time of Residential Housing," *Journal of the American Real Estate and Urban Economics Association* 6 (1988): 396–410; Donald R. Haurin, Jessica L. Haurin, Taylor Nadauld, and Anthony Sanders, "List Prices, Sales Prices and Marketing Time: An Application to US Housing Markets," *Real Estate Economics* 38, no. 4 (2010): 659–685.

16. Using the natural log of sale price (*LnSP_i*) and of time on market (*LnDOM_i*) in Equations 1 and 2 allows the estimated regression coefficients to be interpreted as the percentage changes in the dependent variables for a one unit change in the independent variables. See Peter E. Kennedy, "Estimation with Correctly Interpreted Dummy Variables in Semilogarithmic Equations," *American Economic Review* 71, no. 4 (1981): 801.

Exhibit 4 2SLS Regression—Foreign Versus US Buyers

Variable	First-Stage Regression		Second-Stage Regression	
	Dependent Variable: LnDOM	t-Statistic	Dependent Variable: LnSP	t-Statistic
USA	−0.05*	−1.67	−0.07***	−2.58
REO	0.01	0.33	−0.41	−11.56
CASH	−0.15	−5.54	−0.02	−0.82
SHORTSALE	0.84	12.16	−0.96	−11.56
FURNISHED	0.11	1.95	0.16	3.40
BEDS	−0.03	−0.92	−0.15	−5.34
FBATHS	0.00	−0.02	0.22	6.46
HBATHS	−0.05	−1.25	0.14	4.27
LnSQFT	0.23	3.31	0.81	12.33
OCEANVIEW	0.01	0.31	0.51	15.23
ATYPICALITY	0.49	1.10		
LnDOM			0.63	8.27
CONSTANT	2.82	6.48	3.59	8.37
N	3,650		3,650	
R-SQUARE	0.14		0.26	

Results from 2SLS regression of LnSP. LnDOM is modeled in the first stage and then used in the second-stage regression. Variables for seasonality, time, and location are included but not reported.

* and *** designate statistical significance at the 10% and 1% levels, respectively.

Exhibit 5 2SLS Regression—US Buyers Versus Foreign Buyers by Country

Variable	First-Stage Regression		Second-Stage Regression	
	Dependent Variable: LnDOM	t-Statistic	Dependent Variable: LnSP	t-Statistic
ARGENTINA	0.10*	1.76	−0.03	−0.50
BRAZIL	0.11	1.09	0.15**	1.97
CANADA	0.04	0.44	0.05	0.60
COLOMBIA	0.10	1.15	0.03	0.37
ITALY	0.37***	2.80	0.02	0.17
RUSSIA	0.08	0.75	−0.27***	−2.42
VENEZUELA	−0.20***	−2.69	0.35***	5.30
OTHERFOREIGN	0.05	1.20	0.03	0.89
REO	0.01	0.20	−0.39	−10.93
CASH	−0.15	−5.57	−0.01	−0.46
SHORTSALE	0.83	12.03	−0.99	−11.66
FURNISHED	0.10	1.83	0.17	3.36
BEDS	−0.03	−0.87	−0.15	−5.18
FBATHS	0.00	0.09	0.21	6.07
HBATHS	−0.04	−1.20	0.14	4.11
LnSQFT	0.23	3.27	0.80	11.87
OCEANVIEW	0.01	0.23	0.51	14.77
ATYPICALITY	0.52	1.17		
LnDOM			0.69	8.80
CONSTANT	2.80	6.49	3.30	7.64
N	3,650		3,650	
R-SQUARE	0.14		0.21	

Results from 2SLS regression of LnSP. LnDOM is modeled in the first stage and then used in the second-stage regression. Variables for seasonality, time, and location are included but not reported.

*, **, and *** designate statistical significance at the 10%, 5%, and 1% levels, respectively.

suggest that the findings may be driven by a specific set of foreign buyers. Exhibit 5 shows that buyers from Argentina, Canada, Colombia, Italy, and other foreign countries do not pay a statistically significant higher price compared to US buyers. On the other hand, statistically significant price premiums are paid by buyers from Brazil, Russia, and Venezuela. A CNBC news article reported that buyers from Brazil and Venezuela had the most foreign interest in Miami real estate according to search engine results for 2013–2015 before being replaced by buyers from Russia in 2017.¹⁷

In the current study, buyers from Brazil and Venezuela paid more than US buyers, with the results significant at the 5% and 1% levels, respectively. The coefficient of 0.1537 on the Brazil variable converts to a difference of 16.6% in the sale prices paid by US buyers and buyers from Brazil. On average, that equates to a \$37,233 higher sale price after accounting for time, location, and physical property characteristics. The story is even more pronounced when considering buyers from Venezuela. The coefficient of 0.3534 on Venezuela converts to a 42.4% difference in sale price. Using the average sale price in the sample, that would result in Venezuelan buyers paying \$95,007 more than US buyers for the same property. It is hard to make an argument that price anchoring or information asymmetry explains such enormous premiums.

Interestingly, Russian buyers actually paid statistically lower prices than US buyers, and the result is significant at the 5% level. The coefficient of -0.2688 equates to a 23.5% lower sale price. Using the average sale price of \$224,134, that corresponds to a \$52,824 lower price when compared to US buyers. Since neither price anchoring nor information asymmetry can explain this result, there must be other reasons for the difference that have not been considered in the past studies that clumped all foreign buyers into one category. Russian interest in the Miami luxury real estate market increased 35% following 2016, and Russian real estate developers were involved

in many new condo construction projects in Miami.¹⁸ Nemtsova suggests the Russian investors in Miami real estate are extremely wealthy bureaucrats and businessmen who may carry a great deal of bargaining power into their real estate purchases.¹⁹

Just as real estate has been considered a tangible, stable investment for people inside the United States during times of political and economic uncertainty, US real estate seems to serve the same purpose for foreign buyers looking to move their money outside of their home countries. Both Brazil and Venezuela experienced high levels of political and economic crisis during the period of this study. For these investors, the risk of keeping their money in their home countries for even another month might have resulted in a greater loss in purchasing power than they would experience by paying a premium for their condominium purchase in Miami.

Brazil slid into a severe economic crisis in 2014.²⁰ The country experienced rising unemployment, high inflation, commodity price shocks, and contracting GDP into 2017. The economic crisis was coupled with a political crisis that resulted in the impeachment of Brazilian president Dilma Rousseff. Plagued with high real interest rates and a continuous devaluation of the Brazilian currency real against the US dollar, emigration from Brazil also increased during this time, with the majority of Brazilians moving to the United States, Canada, Portugal, and Japan.²¹ The high levels of political and economic instability at home could have been of higher concern than negotiating the best price for a condominium purchase in Miami. Therefore, a 16.6% pricing premium may have been inconsequential compared to the loss of purchasing power and devaluing of the Brazilian real currency (Exhibit 6).

The political and economic problems in Venezuela were far more severe than those in Brazil during this time. Following the same reasoning, one can see why buyers from Venezuela might pay premiums of over 40% in the Miami condo-

17. Diana Olick, "Russian Buyers Suddenly Warm to Miami Real Estate in a Big Way," CNBC, January 30, 2017, <http://bit.ly/3KxCbdf>.

18. Olick, "Russian Buyers."

19. Anna Nemtsova, "Russia's Filthy Rich Have a Thing for Miami—But the Good Times May Be Ending," The Daily Beast, April 22, 2019, <http://bit.ly/3o7qZOS>.

20. "Brazil's Fall: Dilma Rousseff and the Disastrous Year Ahead," *The Economist*, January 2, 2016, 7, <http://bit.ly/3UPz9YJ>.

21. Daniel Gallas and Daniele Palumbo, "What's Gone Wrong with Brazil's Economy?," BBC News, May 27, 2019, <https://bbc.in/43vYQBe>.

Exhibit 6 Brazilian Real/USD Exchange Rate, 2010–2021

US recessions are shaded; the most recent end date is undecided. Source: US Federal Reserve Bank FRED database.

minium market. The risk of loss facing these buyers may have been far greater if they did not quickly get their money into assets outside the country. The economic crisis in Venezuela began in 2013, but it is impossible to know the true extent of the economic damage since the government stopped releasing data in 2014.

Venezuela was once Latin America's wealthiest country, but that success has been shattered by corruption and poor governance. The suffering in Venezuela is so bad that the economic collapse resembles that of a war-torn nation. Economists suggest there is nothing in recent years to compare to the crisis in Venezuela aside from the situation in 1970s Lebanon.²² Since 2013, Venezuela has experienced negative interest rates, increasing devaluation of its currency, and nearly a 100% decline in economic activity.²³ In 2019, Venezuela hit a record 10 million percent inflation rate.²⁴ The purchasing power of most Venezuelans was "reduced to a couple of kg of flour,"²⁵ and most rely on money sent from family members who have managed to flee the country. Over 5 million people are reported to have emigrated from Venezuela since 2013. Facing such dire economic conditions, it is easy to understand why Venezue-

lans would desperately want to purchase real estate assets outside the country. Paying even a 46% premium for a condominium in Miami would likely be more favorable than facing losses from another month of hyperinflation in Venezuela.

Conclusion

This study examines the pricing premium of foreign home buyers in US markets. With data from the condominium market in Miami, a relatively similar subset of properties and a large number of foreign buyers from a variety of countries is captured for the analysis. The only similar previous study was of Japanese buyers in Hawaii; that study found that the large premium could be attributed to both information asymmetry and exchange rates. Since the time of the Hawaii study, technology has evolved allowing for vast dissemination of information about local housing markets, and therefore, it could be expected that pricing premiums for foreign buyers would have decreased in recent years.

In fact, this study finds evidence to support this hypothesis. When all foreign buyers are grouped

22. Anatoly Kurmanav, "Venezuela's Collapse Is the Worst outside of War in Decades, Economists Say," *New York Times*, May 17, 2019, <https://nyti.ms/3UyaHdV>.

23. Valentina Sanchez, "Venezuela Hyperinflation Hits 10 Million Percent. 'Shock Therapy' May Be Only Chance to Undo the Economic Damage," *CNBC*, August 3, 2019, <https://cnb.cx/3KVjvrd>.

24. Siobhán O'Grady, Chris Alcantara, and Armand Emamdjomeh, "Venezuela's Crisis in 5 Charts," *Washington Post*, January 26, 2019, <https://wapo.st/3zRCIUu>.

25. Kurmanav, "Venezuela's Collapse."

together and compared to US buyers, there does appear to be a statistically significant price discount for US buyers (or price premium for foreign buyers). Looking more closely at the foreign buyers, however, reveals that buyers from two countries were driving the initial results. Only buyers from Brazil and Venezuela paid a statistically significant premium during the study period. Of special interest is the favorable prices paid by Russian buyers. Future research should focus on the possible source of the bargaining power advantage that Russian buyers experienced.

The pricing premiums identified in this study tend to be related to economic and political crises in the buyers' home country. In these circumstances, buyers are likely more concerned with quickly converting their home currency into a physical asset valued in US dollars than they are with potentially overpaying for that asset. In other words, paying a \$50,000 premium for a condominium in Miami may not be a relevant concern if inflation in the home country will reduce the buyers' purchasing power by \$100,000 in the next month.

About the Authors

Marcus T. Allen, PhD, CCIM, is the Alico Professor of Finance at Florida Gulf Coast University. He is also a Florida state-certified general real estate appraiser who consults on litigation-related appraisals involving econometric issues. **Contact:** timallen@fgcu.edu

Kimberly R. Goodwin, PhD, is the director of the school of finance and the Parham Bridges Endowed Chair of Real Estate at the University of Southern Mississippi. She is currently serving as President of the American Real Estate Society. **Contact:** Kimberly.Goodwin@usm.edu

Jennifer A. O'Sullivan, PhD, is an assistant teaching professor of finance at the University of Southern Mississippi. She is also an advanced credentialed educator by The Association of College and University Educators. **Contact:** Jennifer.A.OSullivan@usm.edu

Additional Resources

Suggested by the Y. T. and Louise Lee Lum Library

Appraisal Institute

- **Education**
Appraising Condos, Co-Ops, and PUDS
- **Lum Library, Knowledge Base Bibliographies [Login required]**
 - Residential properties
 - Value
- **Publications**
 - *The Appraisal of Real Estate*, fifteenth edition
 - *Residential Property Appraisal*
 - *The Valuation of Condominiums, Cooperatives, and PUDS*
 - *Valuation by Comparison*