# Pets, Politics, and Condominium Prices 

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#### Abstract

This study discusses political efforts to affect existing as well as proposed laws and regulations regarding restrictions against keeping domestic pets in residential condominiums. In addition, the study uses a large data sample of condominium sales to statistically evaluate any price affects associated with such pet restrictions. These findings may prove useful for policy makers, developers of new condominium projects, and condominium owner associations in their decisions to establish or alter laws and regulations regarding restrictions on pet ownership by residents. Noting that the results reported here could be both market and time period specific, the results are somewhat inconsistent with prior research in the real estate literature on related topics.


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## Introduction

Data reported by the American Pet Products Association (APPA) indicates that pet ownership in the United States increased by almost 3 percent between 2005 and 2007 (Ferrante (2007)) resulting in an all-time high of 71.1 million households owning at least one domestic pet. Between 1997 and 2007, the number U.S. households grew by 14 percent, while the number of pet-owning households grew by 22 percent. The APPA (2008) estimates that total estimated expenditures by pet owners on household pet health and nutrition was $\$ 41.2$ billion in 2007, with $\$ 16.2$ billion spent on food, $\$ 10.1$ billion spent on veterinary care, $\$ 9.8$ billion spent on supplies and over-the-counter medicine, $\$ 2.1$ billion on live animal purchases, and $\$ 3.0$ billion spent on grooming and boarding. The rise in pet ownership and pet related expenditures is attributable to the perceived or real satisfaction enjoyed by individuals related to pet ownership, presumably due to increased health, safety, security or other benefits of sharing one's life with a pet.

Along with the increased incidence of pet ownership, some pet ownership advocates are pushing to eliminate or at least reduce restrictions on pets in residential dwellings. While federal laws already prohibit discrimination in housing and other public accommodations against mentally and physically disabled persons regarding "service and support" animals, efforts are underway to extend this protection to all individuals who wish to keep "companion" or "emotional support" animals in their dwellings even though these individuals do not have disabilities protected by federal laws. The strategy adopted by some proponents of such a policy
change is to appeal to the medical and psychological benefits that may accrue to pet owners, regardless of their disability (or lack thereof) status.

Irrespective of political and/or emotional motivations for eliminating or reducing restrictions against pet ownership in residential dwellings, the primary purpose of the current study is to consider the price effects of pet restrictions using a sizable sample of condominium transactions from the Fort Lauderdale, Florida metropolitan area. The research question considered is whether or not relationships can be detected between condominium prices and pet restrictions such as "no pets of any kind," "small pets only," "large pets only," "dogs only," and "cats only." Previous research on the effect of pet restrictions on condominium prices suggests that allowing cats is related to increased prices, but that prices are negatively related to allowing dogs. Previous research on the effect of pet restrictions in multi-family apartment rents suggests that pet restrictions have no significant rent effect. This study extends prior research on pet policies and condominium prices to a different geographic area and a more current time period.

The next section of this paper reviews the legalities and politics involved in the initiative to reduce or even eliminate restrictions on pet ownership in dwelling units. The second section describes the methods used in this study to empirically examine the price effects of pet restrictions. The third section describes the results of the analyses. The final section provides interpretations and potential policy directions suggested by the results of this study.

## The Legalities and Politics of Pet Restrictions

The federal Fair Housing Amendments Act of 1988, Section 504 of the Rehabilitation Act of 1973, and Title II of the Americans with Disabilities Act protect against discrimination toward persons who need the assistance of service or support animals as a result of conditions that
substantially limit major life activities. This protection from discrimination has been upheld in various courts. The 7th Circuit Court of Appeals ruled in favor of a deaf person's right to keep a service/support animal in a dwelling, opining that:
"[b]alanced against a landlord's economic or aesthetic concerns as expressed in a no-pets policy, a deaf individual's need for the accommodation afforded by a hearing dog is, we think, per se reasonable within the meaning of the" Fair Housing Act. (Bronk v. Ineichen, 54 F.3d 425, 429 ( $7^{\text {th }}$ Cir. 1995)).

A similar ruling was handed down by the U.S District Court of Oregon in Green v. Housing Authority of Clackamass County, 994 F.Supp. 1253 (Or. 1998). In 2003, however, a court ruled against the plaintiff on the grounds that the animal possessed "no abilities assignable to the breed or to dogs in general" that would assist the plaintiff (Prindable v. Ass'n of Apartment Owners of 2987 Kalakaua, 304 F. Supp. 2d 1245, 1256-57 (D. Hawaii 2003)). In 2004, another court rejected the plaintiff's claim to the right of a service or support animal on the grounds that the plaintiff could not sufficiently prove that such an animal would provide the needed benefits (Oras v. Housing Authority of City of Bayonne, 861 A.2d 194,203 (N.J. Super. Ct. 2004)). Each of these rulings are premised on the idea "...that the animal be (1) individually trained, and (2) work for the benefit of an individual with a disability" (Poliakof (2008)).

At the state legislative level, California enacted a law effective January, 2001, (California Civil Code Section 1360.5) that permits each owner in common interest developments (such as condominiums and mobile home parks) to keep at least one pet, subject to reasonable rules and regulations of the homeowners association. Notably, the California law makes no reference to the owner's need for a mental or physical disability, instead permitting pets for all owners who desire to maintain a pet in their common interest home. Efforts are underway in Florida to adopt
similar legislation, though this legislature does make reference to need beyond simply the preference for a household pet in condominium properties.

In Florida, Citizens for Pets in Condos, Inc., a non-profit organization, is lobbying for consideration of a proposed bill (Emotional Support Animal Bill) in the state legislature that would permit "emotional support" animals in condominiums throughout the state. Anyone with approval from a qualified medical professional or social worker, regardless of the disabilities recognized in federal law, who could benefit from having an emotional support animal, could keep a pet in their dwelling regardless of community or homeowner association rules. Notably, the proposed law in Florida would allow a variety of medical professionals (doctors, nurses, social workers, etc.) to grant approval for individuals who express a preference to maintain a pet in their condominium unit, effectively overriding condo association rules against pets in the units.

The bill proposed by the Citizens for Pets In Condos group died in committee during the 2007 legislative session and was not considered by the legislature in 2008 due to the lack of a sponsor of the bill in the state senate. Even so, the group's efforts are continuing as of this writing and there is some probability, given the widely-held opinion of a need for condominium association reform that currently exists in Florida, that the legislation will eventually make it to the floor of the legislature. (See http://petsincondos.org (accessed October 18, 2008) for a current update on the group's activities to promote their cause as part of the broader effort to reform condominium association regulations).

Supporters of legislation prohibiting pet restrictions in dwelling units frequently cite the physical and emotional health benefits of pet ownership reported in numerous research studies conducted or supported by such entities as the Center for Disease Control, U.S. Department of

Health, American Association of Retired Persons, American Society for the Prevention of Cruelty to Animals, Humane Society of the United States, American Heart Association, and Baker Medical Research Institute, as well as numerous research reports published in a variety of research outlets. For examples of such research reports, see (among many others) Allen, Blascovich, Tomaka, and Kelsey (1991), Barker and Dawson (1998), Duncan (2000), Endenburg, Hart, and Bouw (1994), Hirschman (1994), Mallia (2006), and Raina, WaltnerToews, Bonnett, Woodward, and Abernathy (1999), Schwarz, Troyer, and Walker (2007).

Opponents, or at the very least, non-supporters, of the proposed Florida bill maintain that individual owner associations should be entitled to democratically determine, within the associations' bylaws, whether pet ownership rights are a desirable "amenity" of the condominium community. Possible negative effects cited by opponents of the Florida bill include odor, noise, waste disposal, and damage to the common areas of the property.

On the presumption that housing market dynamics should determine the economic effect of pet restrictions on condominium prices, a statistically rigorous analysis of the potential relationship between prices and pet restrictions may provide market-supported evidence of the price effects of pet restrictions and may be used by one side of this debate or the other to bolster their position and possibly affect decisions of developers, owner associations, and policy makers regarding pet restrictions. Such analysis is presented in the next section of this writing.

## An Empirical Analysis of Pet Restrictions and Condominium Prices

Previous research on the relationship between pet restrictions and housing rents and prices includes Sirmans, Sirmans, and Benjamin (1989) and Cannaday (1994). Sirmans, Sirmans and Benjamin report no statistically significant relationship ( $\alpha=.05$ )
between a "no pets" restrictions and multi-family rents using a sample of 188 apartment rental transactions from the Lafayette, Louisiana market area. Cannaday's analysis employs a data sample of 1,061 condominium sales that occurred in Chicago between 1988 and 1991, and considers four types of pet restrictions: no pets allowed, cats only allowed, small dogs allowed, and large dogs allowed. He concludes that in the market area and time period he studied, condo prices are positively related to "cats allowed," but negatively related to "dogs allowed," and that the net effect on prices related to pet restrictions ultimately depends on what type of pets are allowed.

Extending Cannaday's analysis to a different market, a larger sample, a more recent time period, and slightly different pet policies, a sample of condominium sales drawn from the local MLS for the Fort Lauderdale, Florida metropolitan area for the present study provides a sizeable data sample for analyzing the relationship between pet restrictions and condominium prices. The sample collected for this study contains 24,470 condominium transactions that occurred between June, 2005, and June, 2007 with sufficient information regarding the selected independent variables to be included in the analysis. Exhibit 1 provides descriptive statistics for variables from the condominium transactions used in the analysis.

The method of analysis is the familiar hedonic pricing model with the natural log of transaction price as the dependent variable and property/market characteristics (pet policies, bedrooms, bathrooms, age, location, vacant status, and time) as independent variables. The statistical model is estimated using ordinary least squares. The available information from the MLS regarding condominiums in this market area permits analysis of (1) "no pets allowed," (2) "any pets allowed," (3) "pets allowed with some
restrictions," (4) "only small pets allowed," (5) "only dogs allowed," and (6) "only cats allowed" pet policies. (The first two of these categories are mutually exclusive with each other. The last three of these categories are mutually exclusive subsets of the third category: "pets allowed with some restrictions.") The price equations considered, with the omitted category of pet policies in each equation being "no pets allowed," are:
$y=b_{0}+\boldsymbol{\beta} \boldsymbol{X}+b_{j}($ pets allowed $)+e$
(Equation 1)
$y=b_{0}+\boldsymbol{\beta} \boldsymbol{X}+b_{j}($ pets allowed with restrictions $)+e$
(Equation 2)
$y=b_{0}+\boldsymbol{\beta} \boldsymbol{X}+b_{j}($ only small pets $)+b_{j+1}($ only dogs $)+b_{j+2}($ only cats $)+e$
(Equation 3)

The vector $\boldsymbol{X}$ contains the control variables mentioned above that are not variables of particular interest in this study (bedrooms, bathrooms, age, location, vacant status, and time).

## Discussion of the Analysis Results

The results of all of the regressions analyses are shown in Exhibits 2 (with 307 location indicator variables omitted for brevity). The $R$-squares and the $F$-statistics support the notion that the models are reasonably good fits for each of the estimated price equations. It is apparent from a review of the $t$-statistics for the "all pets allowed" variable included in the first model that an overall policy allowing all pets has a significantly positive effect on condominium prices in this sample. Similarly, adoption of a "pets allowed" policy with more specific pet policies ("some restrictions," "small pets
only," "dogs only," and "cats only" in equations 2 and 3) support the contention that allowing small pets and dogs are also significantly and positively related to condominium prices in the same. The results indicate contradictory findings reported by Cannaday in his study in which he concludes that allowing dogs has a negative price effect, but allowing cats has a positive price effect. And, although the focus of the current study is on condominium sale prices, the results also contract Sirmans, Sirmans, and Benjamin's findings of no significant affect on apartment rents related to pet policy. In sum, the results of the current analysis of the marginal effects of pet restrictions in common interest housing projects depends to some extent on the types of restrictions imposed on unit owners.

Notably, the control variables in the regressions are all significant and have the expected signs. The time variables (cmontrend and cmontrend2) are consistent with the notion that values were increasing over the study period at a decreasing rate.

## Conclusions and Policy Implications

While there are certainly emotional and disability-related reasons why people prefer to have pets in their homes, the analysis presented in this study suggests that condominium prices are significantly related to pet policies. To the extent that these results support the contentions of anti-restriction activists, condominium developers and owner associations might well consider changing existing prohibitions against certain types of pets (or maintaining the status quo in the absence of such restrictions) in pursuit of enhanced property values. This market evidence may not, however, be sufficient to persuade elected officials from mandating the allowance of pets in common interest
housing at the state level. As noted by Cannaday (1994), government or condominium association regulations that results in uniform pet policies would eliminate this amenity as a price determinant. Such interventions could result in social welfare losses if some portion of condominium owners would pay more for units in pet restricted condominium projects.

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| Exhibit 1: Descriptive Statistics for Sample Variables |  |  |
| :--- | ---: | ---: |
| $N=24,470$ |  |  |
| Variable | Mean | Standard Deviation |
| Sale Price | $246,403.70$ | $183,637.80$ |
| Petsyes | 0.59 | - |
| Anyrest | 0.50 | - |
| Petmaxsize | 0.14 | - |
| Dogsonly | 0.01 | - |
| Catsonly | 0.03 | - |
| Beds | 2.04 | 0.70 |
| Baths | 1.93 | 0.53 |
| Cmontrend | 11.90 | 6.89 |
| Cmontrend2 | 189.01 | 180.53 |
| Vacant | 0.38 | - |
| Age | 21.93 | 11.34 |


| Exhibit 2: OLS Regression Results <br> $($ dependent variable $=\operatorname{lnsp})$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Equation 1: | Variable | Coefficient | Standard Error | t-stat |
|  | Petsyes | 0.136 | 0.003 | 41.040 |
|  | Beds | 0.193 | 0.003 | 65.990 |
|  | Baths | 0.209 | 0.004 | 54.900 |
|  | Cmontrend | 0.020 | 0.001 | 26.660 |
|  | Cmontrend2 | -0.001 | 0.000 | -28.810 |
|  | Vacant | -0.037 | 0.003 | -13.980 |
|  | Age | -0.010 | 0.000 | -64.840 |
|  | Constant | 11.793 | 0.139 | 84.560 |
|  | $R$-square | 0.877 |  |  |
|  | $F(151,24,318)$ | 1,144 |  |  |
| Equation 2: | Variable | Coefficient | Standard $\qquad$ | t-stat |
|  | Anyrest | 0.081 | 0.003 | 27.720 |
|  | Beds | 0.204 | 0.003 | 68.790 |
|  | Baths | 0.208 | 0.004 | 53.560 |
|  | Cmontrend | 0.021 | 0.001 | 27.470 |
|  | Cmontrend2 | -0.001 | 0.000 | -29.370 |
|  | Vacant | -0.041 | 0.003 | -15.030 |
|  | Age | -0.011 | 0.000 | -72.270 |
|  | Constant | 11.825 | 0.142 | 83.290 |
|  | $R$-square | 0.872 |  |  |
|  | $F(151,24,318)$ | 1,098 |  |  |
| Equation 3: | Variable | Coefficient | Standard Error | t-stat |
|  | Petmaxsize | 0.034 | 0.004 | 8.730 |
|  | Dogsonly | 0.048 | 0.013 | 3.780 |
|  | Catsonly | 0.001 | 0.008 | 0.110 |
|  | Beds | 0.209 | 0.003 | 69.700 |
|  | Baths | 0.204 | 0.004 | 51.800 |
|  | Cmontrend | 0.022 | 0.001 | 27.880 |
|  | Cmontrend2 | -0.001 | 0.000 | -29.550 |
|  | Vacant | -0.042 | 0.003 | -15.400 |
|  | Age | -0.012 | 0.000 | -77.250 |
|  | Constant | 11.879 | 0.144 | 82.500 |
|  | $R$-square | 0.869 |  |  |
|  | $F(153,24,316)$ | 1,050 |  |  |

* Location indicator variables (307) omitted for brevity.

