Available online at www.sciencedirect.com

SCIENCE DIRECT®

Journal of Housing Economics 12 (2003) 1–11

JOURNAL OF HOUSING ECONOMICS

www.elsevier.com/locate/jhe

# Length of residence discounts, turnover, and demand elasticity. Should long-term tenants pay less than new tenants? ☆

David Barker

*Graduate School of Business, University of Chicago, USA*

Received 2 May 2002

**Abstract**

Previous academic work on rental contracts has predicted that landlords will attempt to minimize turnover costs by giving discounts to long-term tenants. If long-term tenants have less elastic demand than short-term tenants, however, landlords might prefer to give discounts to short-term tenants. A model is developed in this paper in which landlords take account of both turnover costs and demand elasticity. Evidence from a survey of apartment managers is consistent with the model and shows that length-of-residence discounts are less common than discounts on the first month's rent for new tenants.



## 1. Introduction

Landlords face a complex problem when they set rents. If tenants are identical, the problem is simply to determine the extent of a landlord's market power, from which optimal monopoly rent can be calculated. Since tenants

☆ I thank Jack Goodman for many helpful comments. Adam White provided able research assistance.

*E-mail address:* fdbarker@gsb.uchicago.edu.



doi:10.1016/S1051-1377(03)00002-0

differ in important ways, the problem is more complex than this. The academic literature on rental contract lengths generally predicts that landlords will attempt to minimize turnover costs by charging long-term renters less rent than short-term renters.[1]

A weakness in this strategy that the academic literature has not addressed is that long-term tenants are likely to have less elastic demand than short-term tenants. Long-term tenants have made significant investments in their location, including building relationships with neighbors and local businesses, knowledge of the area, and perhaps an emotional attachment to their immediate location. These tenants are unlikely to move because of a small increase in rent. A prospective tenant of an apartment complex, however, often has no particular attachment to a single location. If many properties are similar, a small difference in rent could be the deciding factor in the prospective tenant's location decision. A profit-maximizing landlord will attempt to exploit differences in demand elasticity by charging higher rent to tenants with less elastic demand.[2]

In this paper, a simple model of tenant demand is constructed and its implications are evaluated with survey data. In the model, tenants are divided into two groups, and the optimal rent charged to each group depends on relative demand elasticity and turnover costs. Section 2 describes this model, Section 3 discusses the results of a survey of apartment managers, and Section 4 concludes.

## 2. Model

In this section, two models are discussed, one in which landlords are able to identify which tenants have elastic demand and which have inelastic demand, and another in which landlords are unable to make this identification.

Turnover cost is important to owners of rental property and is an important part of these models. The cost of turning over an apartment unit usually includes painting, cleaning, and loss of rental income while this work takes place and a new tenant is found. The Institute of Real Estate Management, IREM (2001), reports that median painting and decorating expenses for garden-style apartments in the US are \$143 per unit, and that the average turnover rate is 61% per year, which implies that each unit turnover costs \$234 for painting and decorating. Gabriel and

[1] See Miceli and Sirmans (1999), Shear (1983), and Flath (1980). Length-of-residence discounts are also discussed in Hubert (1995), Miron (1990), Guasch and Marshall (1987), Goodman and Kawai (1985), Weinberg et al. (1981), and Follain and Malpezzi (1980).

[2] Rental price discrimination in different contexts is discussed in Benjamin and Sirmans (1992), Kondor (1995), and Benjamin et al. (1998).