Who Wants to be a Landlord? Factors affecting the Inclination

of Israeli Households to Rent out Property

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# Abstract

The supply of rental housing is by and large by landlord households. Little is understood about the factors, beyond financial portfolio considerations, that affect the inclination of people or of households to become landlords. Studies of the American rental market have pointed to differences across income, wealth, ethnic, and educational groups in the willingness to rent out residential property to others. Here we examine the question for Israel. We find that income and wealth are positively associated with the inclination to be a landlord. Education has an effect in Israel opposite that in the US (and Australia). Human capital in Israel appears to be complementary with rental property capital, unlike the case for the US and Australia, where they appear to be substitutes. In most cases, rental property in Israel and housing capital in the landlord's primary residence appear to be complementary. Ethnic minorities and new immigrants are under-represented among landlords. For households owning rental property, the income from such rentals is analyzed empirically.

# Who Wants to be a Landlord? Factors affecting the Inclination of Israeli Households to Rent out Property

#### **Introduction:**

Rental housing may be owned by public-sector bodies, by corporate landlords, by institutional investors such as funds or REITS, and by individuals or households. In the United States, in Israel, and in many other countries the bulk of landlords in markets for non-social housing are individuals and households. Relatively little is known about the factors that affect willingness of people to become landlords, beyond models showing the value for investors of including real estate holdings within investment portfolios. Why does one household become landlords why another does not?<sup>1</sup> While several interesting studies on these matters have been performed using American data, far less is known about factors affecting willingness to be landlords outside the US. Nevertheless the issue is of importance in other countries. Haffner, *et al* (2008), for example, note that the rental sector in many European countries has been contracting, with implications for housing market efficiency and equity issues.

This has become an important matter for policy in Israel, where the rental market plays a crucial role because large numbers of immigrants enter Israel and many of these live, at least initially, as tenants in rental units. The "social justice protests" that filled Israel in the spring of 2011, coming slightly before the various "Occupy"

<sup>&</sup>lt;sup>1</sup> The question is asked not only in academic research but also in the media. See for example "Are you Ready to Be a Landlord?" in the *Wall Street Journal*, November 12, 2011.

protests in other countries, focused attention largely on the rental market and the perceived "social injustice" from the high level of rents. The protesters demanded polices that would force rents lower and in some cases harm landlords.

As will be seen, in some interesting ways, landlords in the Israeli rental market differ from American landlords. While some rental units in Israel are owned by corporations and institutions, including government sponsored enterprises, the large majority of units are owned by households. Faced with sharply rising costs of housing, the Israeli government has been experimenting with different policies thought to lower costs for owned and for rental housing. Rent from housing owned enjoys a preferred rate of taxation. There have been parliamentary debates on ways to increase the stock of rental units available.

One interesting matter that has been addressed in a few previous studies of landlords is the relationships among the inclination to serve as a landlord, human capital, and housing capital in the household's primary residence. Studies in the US, Australia, and elsewhere have found that the inclination to be a landlord declines with human capital. This raises the possibility that rental property ownership capital and human capital may be substitutes. Curiously, as we will see, in Israel the opposite is the case. Less is known about the relationship between rental property capital and the amount of capital in the primary residence of the landlord household, although it would seem likely that these are positively correlated. If so, this would imply that these two forms of housing capital are complementary.

In the next section the literature on the economics of landlords is reviewed. Following that the data set for analyzing the decision to become a landlord is analyzed. Summary statistics that compare landlord households with non-landlords are presented. Then logit regressions are shown that estimate the impact of different

demographic and economic explanatory variables on the likelihood of a household being a landlord. For households who do own rental property, regression estimates are then presented of variables explaining the magnitude of rental income. Finally conclusions are discussed.

#### Landlords in the Analytic Literature

There are of course many media myths about landlords, and landlords are commonly vilified in the popular press. Hohm (1985) criticizes many of the stereotype images of landlords. He writes, "An owner of a tenement was **as** likely to be a housewife as a lawyer and was more likely to be a craftsman than a real estate broker." But beyond allegations that landlords are "greedy" folks, relatively little is known about them.

Research on rental housing supply and on who becomes a landlord goes back at least to de Leeuw and Ekanem (1971). Rental housing supply varies considerably across countries and markets. Gstach (2010) recently reviewed some of these variations, and Whitehead (1996) earlier reviewed rental markets in a number of countries, including some discussion of who becomes a landlord.<sup>2</sup> Oxley, *et al* (2008) discuss policy alternatives that can promote people becoming private landlords. Crook and Kemp (2010) provide a somewhat similar analysis for the UK. Several papers investigate holding periods selected by those who have already decided to be landlords, meaning the period in which to remain in the capacity of landlords, including Gau and Wang (1994) and Brown and Geurts (2005).

<sup>&</sup>lt;sup>2</sup> Nordvik (2000) examines the question of being a landlord theoretically. Wood and Tu (2004) consider the possibility of landlord "niches" based on taxes. Stanbury and Todd (1990) consider the effects of rent controls and other regulations on the willingness to become landlords.

One of the few in-depth studies of the question of who becomes a landlord was carried out for the United States in Shroder (2000).<sup>3</sup> In the US about three quarters of landlords are households. Besides financial investment considerations, Shroder explores the demographic and social characteristics of American landlords, using data from the American Health and Retirement Survey from 1992. He finds that people are more likely to become landlords when wealth increases, including from inheritances, and when inflation expectations increase. Black households are less inclined to become landlords, controlling for income, while married people are more likely to do so. Curiously, Shroder reports that the inclination to become landlords is negatively associated with education or human capital and current income. Shroder conjectures that real estate capital might be a substitute for human capital, rather than a complement.

Shroder's pioneering paper is based on data that are now about two decades old, while similar studies outside the US have been very rare. An earlier study of the rental market in San Diego by Hohm (1985) asked questions somewhat similar to Shroder. After reviewing studies of landlord characteristics, many sociological, he reviews results of a survey by the San Diego Apartment Association concerning the identity of landlords. While finding racial minorities under-represented among US landlords, he found women were about 37% of landlords. Protestants were the predominant landlord group, Catholics were well-represented, while there were few Jews. Most landlords were married, and those who vote Republican were over-represented. Hohm also examined age, income, occupation, and education characteristics of landlords. He found that education affected becoming a landlord

<sup>&</sup>lt;sup>3</sup> See also Retsinas and Belsky (2008) and Anderson, *et al* (2003).

somewhat ambiguously, but landlords were over-represented among some higher status professions.

For markets outside the US, Wood and Ong (2010) is one of the more interesting investigations of who becomes a landlord. Using Australian data, they find that landlords tend to be middle-aged, in a high tax bracket, with little unsecured debt and a continuous record of employment. Landlords tend to have lower levels of education, other things equal, similar to what is seen in the US. They tend to be married, and have children aged 5 years old or more living at home. Landlords who are younger, with low wage income, low human capital, tend to sell and exit the market quickly, having shorter holding periods.

Erling and Sommervoll (2009) measure some landlord characteristics and use them as explanatory variables to estimate a model of rent in the Norwegian market. They find some evidence that small-scale landlords scrutinize prospective tenants more effectively and consequently charge lower rents, other things equal. Kemp and Rhodes (1997) investigate landlord attitudes in Scotland, identifying differences between urban and rural landlords, and finding that most landlords do not see their main economic identity as being landlords.

Crook, *et al* (2002), Rugg and Rhodes (2008) and Rhodes and Bevan (2003) review the landlord market for the UK. Allen and McDowell (1989) examined landlords renting out residential property in the UK and discovered six distinct kinds of landlords, emphasizing the financial motives to become landlords. Kemp (2004) and Scanlon and Whitehead (2006) similarly investigate the characteristics of those who become landlords in the UK, and this is also addressed by Crook and Kemp (2006). About 65% of non-social rental units in the UK are owned by households.

Haffner, *et al* (2007) discuss analytically incentives and disincentives for people to become landlords in a number of European countries. Andersen (2008) examines the characteristics of private-sector landlords in Denmark, focusing in large part on the different motives serving to induce people to become landlords.

### **Data and Methodology**

The data used here to examine factors affecting the inclination to become a landlord are the 2009 Income Survey, collected by the Israeli Central Bureau of Statistics. The data set was released in late 2010. It collects information about incomes and their component sources, as well as other demographic and social information. The Survey consists of detailed responses to interviews collected from about 8844 Israeli households<sup>4</sup> and from the individuals within those households. Each household in the sample was in fact interviewed four times during the survey year, once each quarter. The households included in the survey may be extrapolated to the general population using the relative weights of each household type in the full population.

The Israeli Income Survey collects detailed data at two levels: for the entire household (such as income from capital) and for individuals within the household (such as salary). Different sources of income are reported separately, where income from housing units owned by someone in the household and rented to others is one of these categories. Accordingly it is possible to identify "landlord households" and the income they receive from serving as landlords. The survey does not provide any information about the housing units from which these landlord households are deriving income. Landlord rental income is measured only as coming from

<sup>&</sup>lt;sup>4</sup> "Israel" does not include the occupied territories for purposes of the survey.

residential property units rented out. It does not include income from commercial properties, or from holding companies, trusts, REITS, or other institutional owners of commercial property. (Such income, when it exists, would be part of the "other income from capital" of the household.) In Israel rental income is subject to a reduced tax rate (compared with salaries) but a non-zero rate, meaning landlords have some motivation to hide this income from the tax authorities. The Survey however was conducted by interviewers clearly identified as being from the country's Central Bureau of Statistics, and as such having no connection whatsoever with the taxation offices.

In the analysis below, we use the household data from the 2009 Survey combined with the individual data for the individual defined as the "head of household." This "head of household" may be either male of female, and is identified as the member of the household who is employed and has the highest income in the household. Respondents being interviewed for the survey were asked to identify the head of household. Demographic and other variables are available for individuals (for example, ethnicity) and for households (for example, number of rooms in the primary home).<sup>5</sup>

Table 1 shows different characteristics of "Landlord Households" in the survey, defined as those having at least 2 NIS in gross rental income.<sup>6</sup> These account for about 8% of the total number of households in the Survey, and these are compared with non-landlord households. As can be seen, the heads of landlord households tend

<sup>5</sup> More detailed discussion of the survey methodology and collection process can be found here: <u>http://www.cbs.gov.il/www/publications09/1357/pdf/intro\_e.pdf</u>. Aggregate tables of results from the survey may be viewed here: <u>http://www.cbs.gov.il/reader/newhodaot/tables\_template\_eng.html?hodaa=20101521</u> <u>9</u>. Survey methodology is described in more detail (in Hebrew) at <u>http://www.cbs.gov.il/puf/H20091011Methodology.pdf</u>.

<sup>&</sup>lt;sup>6</sup> This was to avoid "symbolic" rent payments of 1 NIS in some contracts.

to be somewhat older, are more likely to be married, more likely to be Jews, slightly more likely to be headed by a male, and less likely to be recent immigrants. Household income from all sources shown and individual salaries of the head of household are all higher in landlord households than in non-landlord households. Household size and numbers of children are about the same for both groups. A bit surprisingly, ownership of the primary housing unit in which the household lives is about the same for both groups – approximately 72%. Heads of landlord households are somewhat better educated, and more likely to have college degrees and postgraduate degrees than non-landlord households. They are also more commonly employed in high-status positions as "professionals" or managers, and also more likely to be self-employed.

Logit regression was used to explore the question of factors affecting the inclination to become a landlord. For those who do choose to be landlords, regressions were performed on the magnitude of rental income.

#### <u>Findings – Factors affecting Inclination to be a Landlord</u>

Characteristics that affect the likelihood whether or not a household is a landlord type are analyzed in logit regressions shown in Table 2. The dependent variable is the logit of the likelihood that a household is a landlord relative to the likelihood that it is not. Two versions of the logit regression are shown; in the second, several variables that are non-significant but close to being significant are included.

From Table 2, it is seen that total household income, other things equal, is strongly and positively associated with a higher likelihood that a household is of the landlord type. In regressions not shown, various subcomponents of household income were run in regressions, including different salary measures and income from capital running separately as explanatory variables, but these other measures were not statistically significant. The data set does not contain indicators that can serve as surrogates of household wealth or equity. The closest measure is the number of rooms in the primary residence of the household, and this is positively and significantly associated with the likelihood of being a landlord household. Ownership of the household's primary residence is also positively correlated with this likelihood, but significantly so only in the second version of the regression.

When controlling for income, a number of demographic factors are found to be associated with the likelihood of being a landlord household. This likelihood increased significantly for households whose head was over 65 and also (a bit less strongly so) for those aged 45-64 (compared with younger household heads, which are the default alternative). When the head of household is Jewish and when he/she is married, the likelihood of being a landlord household increases significantly. It rises significantly if the head of household is native-born, but drops significantly if the head is ethnically a "Sephardic/Mizrachi" (defined and measured as where the household head or the head's parents were born in Asia or Africa) or who immigrated to Israel after 1990. These results are similar to those found for the US showing that ethnic minorities are less likely to be landlords.

Any level of education of the household head above graduating high school, including college degrees and even the earning of a high school matriculation certificate,<sup>7</sup> is associated with significantly higher likelihood of being a landlord household, compared with the default group of those with less education. Curiously, this is the opposite of what was found in from the results for American landlords reported by Shroder (2000), and for Australia, as reported by Wood and Ong (2010).

<sup>&</sup>lt;sup>7</sup> Only approximately half of Israeli high school graduates receive this certificate.

Dummies showing household income from a few specific other sources are very weakly, although statistically significantly, associated with the likelihood to become landlords.

Table 3 shows analysis of the level of landlord income from renting apartments to others. It is based on observations for the landlord subsample of the Survey only. The dependent variable is the natural log of the level of rental income. The Survey does not contain information on the number of rental properties the household owns nor on the quality of those units. These are presumably reflected to some extent in the total level of household income derived from its rental properties.

From Table 3 it is seen that among landlord households, rental income is weakly but positively and significantly associated with higher total household income (minus the rental income). In other words, households with higher incomes (not including rental income) tend to own more rental property or at least property generating a higher rental income stream, other things equal. The elasticity is about 2.5%. Landlord households themselves living in larger primary residence units also tend to have higher rental income, which rises by about 5% for each additional room the landlords have in their own home. To put this differently, rental property capital and the household's own housing capital in their primary residence appear to be complementary.

Landlord households whose head is over 65 tend to have higher rental incomes, while the level of rental income decreases with the number of minor children in the household, other things equal. Each of the dummies for education above and beyond simple high school graduation is positively and significantly associated with rental income. Hence, human capital and rental property capital appear to be acting as complements, not substitutes. The relation between rental income and education level

of the head of household, however, is not monotonic. Households whose heads hold a BA (only) receive considerably more rental income from those whose head is even more educated or less educated. Being self-employed is also associated with higher rental income. Evidently those with postgraduate education are less inclined than those with BA degrees only to pursue income as landlords, perhaps because other avenues of income generation are available to them.

#### **Conclusions**

Landlords may be the least studied segment of housing supply. They matter, particularly because rental sectors have been contracting in many countries. The cost of rental housing has become the focus for protests by the "social justice" and "Occupy" protesters who have been active around the world in recent days.

The factors that affect the decision to become a landlord are not well understood. Financial considerations, such as the impact of investing in rental property upon total investor portfolio wealth, are clearly important, as are tax considerations and regulatory regimes. But the non-financial factors that influence household decisions are also of interest, albeit less clear. Why do some households rent and lease out property while others, even of similar levels of wealth, do not? A broader understanding of housing supply requires a deeper understanding of landlords.

Relatively little is known about which sorts of households become landlords, even for the United States. While some interesting explorations of the question have been done for the US, very little is known about the factors inducing households to rent out property in other parts of the world. Among the findings of previous research has been the observation that human capital and rental housing capital (or real estate capital) appear to be substitutes, not complements.

This however does not appear to be the case for Israel. It is not clear why this is so. Israel is a country in which there are concentrated very large "stocks" of human capital, where there are many highly-educated people. For some reason, Israeli human capital seems to behave differently regarding inclination to serve as a landlord.

In other ways, however, Israeli landlords resemble those in other countries, such as regarding the relatively small number of members of ethnic minorities or recent immigrants to become landlords, the prevalence of married people among landlords, or the higher representation for "high-status" professions among landlords. Rental property capital and the housing capital in the landlords own primary residence appear to be complementary. This is not very surprising, but the complementarity has not been widely documented for other countries.

For Israeli households holding rental property, total rental income tends to rise with the household's own total income and wealth, including with the size of their own primary living unit. Interestingly, there are some households who own property that they rent out, but do not own the unit in which they live. For them, clearly the two forms of housing capital are acting as "substitutes." It might be interesting if future research were to investigate such households separately.

There are implications to expanding the role of landlord, not only for rental pricing but also for other broader matters, such as equity-distributional concerns and household mobility. Certainly the "social justice" protesters in Israel and elsewhere regard these matters as relevant. If expansion of the supply of rental housing is regarded as socially desirable, more needs to be learned about the choice to become a landlord. And because the American housing market is so unusual in so many ways, it is of interest to expand understanding of the decision to be a landlord to other countries and conduct international comparisons.

Table 1: Households own	Landlords	Non-	Significance
	Lanuforus		U
		Landlords	Test – Level
			of
			Significance*
Percent of Entire	7.56%	92.44%	NA
(Weighted) Sample in			
Column			
Percent of Households	20.1%	18.9%	
whose Head is Over 65			
years old			
Percent of Households	45.3%	34.7%	0.01%
whose Head is 45-64			
years old			
Percent in Households	71.4%	62.1%	0.01%
whose Head is Married	/1.1/0	02.170	0.0170
Mean (SD) Number of	0.38	0.34	18%
. ,	(1.13)		1070
minor children in	()	(1.03)	
Household	3.33	2.21	
Mean (SD) Number of		3.31	
Persons in Household	(1.86)	(1.99)	
Mean (SD) Salary of	8,436	5,717	0.01%
Head of Household from	(11,279)	(7687)	
Work – in Israeli NIS			
Mean (SD) Household	10,776	7,724	0.01%
Income from Salaries	(14,224)	(10150)	
	4.000		0.0101
Mean (SD) Gross	4,022	207.6	0.01%
Household Income from	(8,174)	(3,959)	
Capital			
Mean (SD) Gross	2,228	996.7	0.01%
Household Income from	(4,880)	(2,950)	
Pensions, Advanced			
Study and Provident			
Funds			
Mean (SD) Gross	24,200	12,857	0.01%
Monthly Household	(21,484)	(13,153)	
Income	(,,	(10,100)	
Mean (SD) After-Tax	19,691	10,790	0.01%
Net Monthly Household	(15,843)	(9,578)	0.0170
Income	(13,043)	(),570)	
	13.92	14.20	
Mean (SD) Number of	(11.03)	(11.2)	
work days of salaried	(11,00)	(11.2)	
work during past			
month – head of			
household			

Table 1: Households owning Rental Apartments vs. Those that Do Not

Household who are Recent Immigrants from former USSR Percent who own the Housing Unit in which they Live Percent Heads of 99.2% 86.4% 0.01% Percent where Head of 60.2% 58.7% Percent whose Heads of 18.6% 11.3% 0.01% Household have Postgraduate Degree Percent whose Heads of 24.8% 16.0% 0.01% Household have Undergrad Degree (only) Percent whose Heads of 32.3% 31.9% Household have High School Matriculation Certificate Percent whose Heads of 52.01% Household are Percent whose Heads of 31.51% 13.7% Household were born in Africa-Asia or to Africa-Asia Parents Percent whose Heads of 64.3% 55.5% 0.01% Household were Born in Israel Percent whose Heads of 9.11% Culture Percent whose Heads of 9.11% Culture Percent whose Heads of 9.11% Culture Cultu	Percent of Heads of	13.5%	21.0%	0.01%
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to Israel after 1990Percent whose Heads of Household is Self-35.9%35.0%		• •		
Household is Self-	-			
	Percent whose Heads of	35.9%	35.0%	
Employed	Household is Self-			
	Employed			

\* Chi square test for percentages, and GLM test of differences in means for variables where Means and Standard Deviations are shown

	Equation 1	Equation 2
Intercept	8.77	9.33
	(282.5)	(284.8)
Log of Household Gross Income	0.21	0.21
Log of Household Cross meetine	(19.4)	(18.4)
Number of Rooms in own Housing	0.17	0.21
Unit	(40.9)	(56.0)
Dummy for Head of Household	0.60	0.63
over 65 Years Old	(28.2)	(26.8)
Dummy for Head of Household 45-	0.44	0.51
64 Years Old	(33.2)	(43.0)
Dummy if Head of Household is	0.10	0.13
Married	(1.82)	(2.93)
Dummy if Head of Household is	2.91	2.90
Jewish	(73.2)	(67.7)
Dummy if Head of Household is	-0.27	-0.26
Ethnic "Sephardic/Mizrachi"	(13.6)	(12.3)
Dummy if Head of Household is	0.33	0.31
Native Born "Sabra"	(15.3)	(13.3)
Dummy if Head of Household	-0.84	-0.85
Immigrated to Israel after 1990	(43.8)	(44.2)
Dummy if Head of Household has	0.56	0.51
Postgraduate Degree	(22.7)	(18.5)
Dummy if Head of Household has	0.52	0.47
BA Degree	(25.0)	(19.8)
Dummy if Head of Household has	0.34	0.32
High School Matriculation	(14.9)	(13.1)
Certificate		
Dummy if Head of Household is	0.31	0.30
Self-Employed	(14.9)	(13.3)
Dummy if Head of Household is	0.21	0.22
Professional or Manager	(7.15)	(7.29)
Dummy if Household is Recipient		0.01
of Compensation for Injury		(1.98)
Dummy if Receive Income		-0.06
Supplements from Government		(6.56)
Dummy if Receive Pension		0.002
		(2.50)
Dummy if Household owns the		0.398
Housing Unit in which they Live		(35.8)
Somers' D	0.50	0.52
Percent Concordant	74.5%	75.4%
Chi Square Significance	0.01%	0.01%
AIC Intercept and Covariates	7317	7278
Ν	15,114	15,114

Table 2: Logit Analysis of the Likelihood of Household Being Landlords for Rental Property

Numbers in Parentheses are Wald Chi-Square

	(1)	(2)
Intercept	7.14	6.82
*	(41.7)	(26.18)
Log of Household Income without	0.026	0.026
Rent Income	(1.71)	(1.75)
Number of Rooms in Primary	0.052	0.055
Residence	(3.66)	(3.79)
Number of Minor Children in the	-0.049	-0.049
Household	(-2.90)	(-2.91)
Dummy if Head of Household		-0.056
Married		(-1.26)
Dummy for age of head of landlord	0.201	0.211
household over 65	(3.76)	(3.86)
Dummy for Head of Household	0.125	0.116
Having a High School	(2.46)	(2.29)
Matriculation Certificate		
Dummy for Head of Household	0.226	0.218
Having a BA Degree	(4.14)	(4.01)
Dummy for Head of Household	0.155	0.153
Having a Postgraduate Degree	(2.60)	(2.57)
Dummy for Head of Household	0.104	0.112
Being Self-Employed	(2.33)	(2.51)
Dummy for Primary Residence	0.087	0.077
being Owned by Household	(2.16)	(1.91)
Dummy if Head of Household is		0.301
Jewish		(1.42)
Dummy if Head of Household is		0.070
Israel-born "Sabra"		(1.54)
Dummy for Head of Household	-0.272	-0.231
Immigrant since 1990	(-4.11)	(-3.08)
Dummy for Household receiving	-0.012	-0.014
some Income for Survivors Pension	(-2.08)	(-2.30)
Dummy for Household receiving	-0.006	-0.005
some Income for Disability Pension	(-2.25)	(-2.03)
R Squared	0.086	0.091
Ν	1142	1142

Table 3: OLS estimates of Level of Income from Rental Property Owned, for Landlord Households Only – Dependent variable is Log of Rental Income

(Numbers in Parentheses are T-statistics)

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