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Economic incentives, housing allowance, and housing consumption: An unintended consequence of a shift in housing policy

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ABSTRACT

This study investigated whether an imposed dwelling size constraint in the Swedish housing allowance system induced recipients to move into smaller apartments and overcrowded conditions, i.e., an unintended consequence of a housing policy shift. To address this matter, this paper exploits a quasi-experimental dimension of the imposed dwelling size limit by applying the difference-in-difference estimator. Data for this study were extracted from the Swedish National Insurance Board's database on housing allowance recipients, which comprises data previously unavailable for research. The estimation results suggest that this policy shift induced single-parent households living in rental housing to decrease their consumption of interior space, yielding a statistically significant increase in moves into overcrowded conditions, an effect that is even greater for single parents with one child than for those with two or more children. This effect runs directly counter to two long-term stated goals of the Swedish housing allowance system: (1) to induce households to move into better housing, thereby increasing their housing consumption, and (2) to prevent families with children from living in overcrowded conditions.

1. Introduction

Housing policy is typically geared toward affecting the behavior of housing market actors through various economic means of control. One example of this is the housing allowance[1] extended to low-income households (Bengtsson, 2006, p. 14). The assumption underlying this selective support is that, in the absence of such governmental interventions, low-income households would consume inadequate housing, either because housing market demand exceeds the supply, or because they value other kinds of consumption more (*cf.* Olsen, 2008). Housing allowances seek to induce households to move into better housing, thereby increasing their housing consumption. However, the exact impact of a housing allowance on its beneficiaries' housing consumption depends on how they perceive the support – as a reduction of the housing price, a general income supplement, or a permanent or temporary increase in income – and on the extent to which they understand the regulatory framework. However, a necessary condition for justifying housing subsidies to low-income households is that they have real effects on recipient outcomes, in line with the stated policy aim. The overall aim of this study is to empirically investigate the potential for a change in housing policy to have an unintended consequence.

Housing policy has clearly shifted throughout Europe, as housing markets have moved away from regulations and subsidies toward more free-market arrangements. In Sweden, where housing policy has traditionally been a core element of the welfare system, this shift occurred in the 1990s.

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[1] Housing allowance is the term used in the Nordic countries and much of Europe; it is known as the housing voucher and rent certificate (in the USA), shelter assistance (in Canada), and housing benefit (in the UK).

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At that time, a generous subsidy system, with large general interest subsidies for new construction and rehabilitation, was replaced with assistance targeting single parents and lower-income households (Turner and Whitehead, 2002). As part of this change, and for the prime objective of cutting the expense of the housing allowance scheme, the Swedish housing allowance system was reformed in 1996–1997 (hereafter, "the 1997 reform"). This reform introduced a dwelling size constraint, relative to household size, into the Swedish housing allowance system. The effect of this constraint on the total state budget was to reduce expenditures by approximately SEK 672 million per year and the average impact per affected household was to reduce the housing allowance by approximately SEK 4600 per year (Swedish Housing Board, 2006). With the implementation of this reform, recipients could receive a housing allowance only for the part of the useful floor space that is within the set limit; previously, no restrictions were placed on the physical size of recipients' apartments. Households with greater floor space than this limit received a reduced housing allowance after January 1, 1997, while households with less floor space than the limit were unaffected by the reform, i.e., they received the same amount of housing allowance as before January 1, 1997.

In Sweden, in the late 1990s, there were reports of increasing overcrowding among Swedish housing allowance[2] recipients (Swedish Housing Board, 2006, p. 50). The present study contributes by empirically investigating the potential for an unintended consequence of the introduction of the dwelling size constraint in the Swedish housing allowance system, i.e., whether the dwelling size constraint has induced moves into smaller houses and into overcrowded conditions, causing the increase in the number of housing allowance recipients lives overcrowded. According to Clark and Onaka (1983), space is the dominant housing unit characteristic that induces moves, and such moves may be triggered by changes in institutional structures. Though this size limit has been criticized, this reform has not previously been formally evaluated.

Since the constraint on dwelling size applies to households living in premises of certain sizes, the effect of the reform exposure can be estimated using a difference-in-difference (DD) strategy. For the DD strategy to be convincing, the treatment and the comparison group should be as similar as possible. Therefore, this study is limited to recipients who are single parents living in rental apartments. One reason for limiting this analysis to such households is that it could be argued that home-owning households are willing to trade off interior space for location. A home-owning beneficiary affected by the policy could, for example, choose to live in a smaller apartment, and move into a unit that is more conveniently located. In this scenario, the beneficiary could keep the full housing allowance, consume less interior space, but enjoy a better location. The trade-off between location and interior space, however, is not possible in the same way in the Swedish rental market, since all rental units are subject to indirect rent control that is *de facto* binding in all attractive housing submarkets (*cf.* Glaeser, 2003). In recent years the rent levels have been adjusted in order to meet a more market-driven demand. However, in the 1990s, the time of this analysis, almost no variation in rent levels is found between municipalities, and equally little variation is found between locations within each municipality. Consequently, at the time of this study, the geographic rent distribution in Sweden displayed a fairly flat gradient from the city centre to the periphery (Söderberg and Janssen, 2001).[3]

Another reason for limiting the analysis to rental apartments *and* to single parents is that, at the same time as the dwelling size constraint was introduced for all households, several other changes were made in the housing allowance system that affected only spouses with children or households living in homeownership. The effect of these policy changes could be difficult to distinguish from that of the dwelling size constraint, since they all resulted in a decreased housing allowance. It is therefore reasonable to limit this study to include only single parents living in rental apartments – a group of households indeed overrepresented in the Swedish housing allowance system today.

Housing allowances seek to induce households to move into better housing, thereby increasing their housing consumption. However, the results of the present study suggest that when arbitrary limits (floor size) are set to affect margins that were not targeted by the policy, the adjustment may occur along these margins. In this case, the dwelling size constraint imposed in Sweden's 1997 housing allowance reform decreased the recipients' interior space consumption, and the size constraint increased the likelihood of households' moving into smaller apartments and into overcrowded conditions. These results could be compared to the growing body of research that analyzes how discontinuities in tax schedules generate the bunching of reported incomes near the kink points (see, e.g., Saez, 2010).

Section 2, which follows, presents some earlier research into housing allowances. Section 3 discusses housing standards in Sweden and Europe, some theoretical issues concerning housing allowances, as well as the Swedish housing allowance system and the implications of the dwelling size limit. Section 4 presents the data and the empirical strategy, Section 5 presents the results of the analysis, and Section 6 concludes the paper.

2. Earlier research on housing allowance and housing consumption

Despite the large social housing allowance experiments conducted in the USA, the effect of housing allowances on housing consumption is still debated and questioned, possibly due to differences between housing markets or to institutional differences between housing allowance systems that make it difficult to draw general conclusions. A growing literature therefore reports the results of

[2] The number of families with children that lived in overcrowded conditions among Swedish housing allowance recipients increased by ~15% points between 1994 and 2002.

[3] In addition to interior space and location, the consumption of housing could of course also be dependent on, for example, the quality of the interior; however, we have no such information in any register data in Sweden today.