BEHAVIORAL INSIGHTS FOR AFFORDABLE HOMEOWNERSHIP

The Affordable Housing Policy Issue

There has been an overall upward trend in the rate of cost-burdened renters and homeowners since 1960. In 2016, 18.5 million households were severely cost burdened and 19.6 million households were moderately cost-burdened, suggesting an increasingly important housing affordability issue.

Policies dealing with the affordable housing issue started with constructing public housing to serve the mainly poor population in the 1930s. Since the 1960s, the private sector began to engage in the development of affordable rental housing. The Nixon Administration shifted away from the construction-based housing subsidy programs out of the cost and efficacy consideration in the 1970s. The spotlight was turned to rent subsidies during the same period with the enactment of the Section 8 housing voucher policy. From the late 1980s through the 1990s, the federal government further shrank its role and authorized state and local governments to implement more tax credit programs to incentivize developers, which include the Low-Income Housing Tax Credit (LIHTC) program. [i]Till today, dominant housing policies mostly fall into rental housing assistance or (tax credit) housing finance programs, with Section 8 and LIHTC as the most influential implementation programs.

Section 8 and LIHTC programs have demonstrated the efficiency of leveraging the private market to address the housing affordability issue, however, they still haven't created sufficient housing supply and also lead to other unexpected policy failures. Section 8 program has incurred complaints about landlords' discrimination over voucher users, and racism factors even make the situation worse.[ii] In terms of LIHTC, aside from inadequate incentives for developers to increase the housing supply, one main critique is that this policy is essentially favoring rich developers.[iii] The amount of housing created by this program depends on how much developers use the tax credit instead of the amount of housing needed. Furthermore, either policy of rental housing assistance or (tax credit) housing finance gives more discretion power to housing suppliers and leaves the demand side—— people (especially those with low income) who need affordable housing—— in an unfavorable situation.

This article aims to propose a policy regime that will favor the demand side by empowering the targeted low-income population to build (affordable) homeownership. The key rationale behind the current policy focus on rental assistance can attribute to the inferior economic status of low-income people. Less money inflow is not the only reason contributing to their poor saving, behavioral issues like lacking cognitive resources and weaker self-control also play a vital role. Hence, the policy alternatives below are designed to help with the homeownership of low-income populations through increasing their saving for housing.

Behaviorally Informed Policy Alternatives

Policy alternatives with the potential to facilitate homeownership among the low-income population can strategically focus on (1) increasing the saving of the target low-income population and (2) adapting rent-to-own projects. A variety of behavioral interventions can help to achieve these goals.

- For increasing savings, techniques like increase saving next year, saving synchronized with

income, and default opt-in versus active opt-out[1] are expected to play a role. In a real-life setting, they can also be incorporated into current program terms of different levels.

  - At the organization level, the save-more-next-year tool can be adopted by non-profit developers who launched affordable homeownership projects and listed in the project term participants sign up. This behavioral tool can help to increase the saving amount of low-income participants by leveraging their present bias.
  - At a state or federal level, default opt-in saving, save-more-next-year term, and saving increase synchronized with income can all be available options to governmental affordable homeownership programs. It may further involve a setup of a housing saving plan (similar to 401k but for housing) or, more aggressively, a housing provident fund (similar to Australia's compulsory pension fund), as well as employer's participation. Behavioral tools like default setting are expected to utilize the status quo bias and synchronically increment of saving will leverage people's loss aversion; both of them will work together with the save-more-next-year term to enhance the policy impact of the housing saving program.

- For adapting rent-to-own projects[2], leveraging people's loss aversion and endowment effect can help to discourage drop-outs from the projects and thus promote homeownership. Behavioral tools adopted for such projects include: 1) defaulting a long lease term, like using a 10-year lease as a baseline; 2) a quarterly compounded subsidy for house possession, which is exclusively allowed to be used for the exact property one rented. Also, the amount of subsidy is determined by the time a tenant rents the house, and the tenant will lose all accumulated subsidy if she/he exits from this project. With the default long lease term, people may have a feeling of deprivation when moving out from a house they may already develop an emotionally attachment with; while the accumulated subsidy will avoid people from ceasing the term by triggering their loss aversion, and the quarterly compounded design is expected to intensify this feeling with the consideration of people's hyperbolic discounting and higher sensitivity to the near future.

Random controlled trials can be utilized to examine policy effectiveness. Working with community land trusts[3], and non-profit developers facilitating affordable homeownership will help to conduct experimental tests for the saving policy alternative; while the test for adapted rent-to-own terms will need collaborations with current rent-to-own developers. Experiment setting will be applied to participants of these organizations.

- Test subjects: low-income people participating in a (1) community land trust, or (2) a rent-to-own projects.
- Control vs test group: lease (to own) terms received by subjects will be used as an

[1] They are all behavioral tools used in the SMarT (save more tomorrow) plan.

[2] Current projects can be structured as: one program in rent-to-own Wisconsin allows low-income residents to pay an affordable rent for 15 years and receive a credit toward a down payment if they choose to buy the house after that time.

[3] Community land trusts (CLTs) are non-profit organizations that own land and develop it through an inclusive, community-based process. It provides lasting community assets and shared equity homeownership opportunities for families and communities.

instrumental variable to randomize the assignment of control and test groups. Subjects who receive terms identical to current ones are assigned to the control group, and those who receive behaviorally informed terms are in the treatment group. In specific, the treatment for subjects in community land trust projects will be save-more-next-year terms; while for subjects in rent-to-own projects, there will be three test groups, with group (1) using default more-than-10-year lease term, group (2) offering quarterly compounded subsidy and, group (3) utilizing both as treatments.

- Outcome variable: outcomes to be evaluated in community land trusts and rent-to-own projects will be slightly different.
    - For community land trusts the ultimate outcome of our interest is whether subjects in the test groups end up realizing homeownership. Since this outcome will need a long time to accomplish, we will also use a surrogate variable, the subject's saving performance. We will focus on two made-up saving metrics——accumulated saving amount and the latest monthly saving amount——to track subjects' saving performance in all groups, and the data will be collected monthly. Different outcome variables allow more flexible performance comparison among groups: in the short run, the two saving metrics can be used as the outcome variable; while in long run, a combination of a binary variable of whether possessing the house and the two saving metrics will better service for the comparison.
    - For rent-to-own projects, the binary variable of whether possessing the house will be the focus. Additionally, we will also consider the time when drop-outs happens as a surrogate variable.
- Evaluation: we will evaluate this policy alternative both depending on the outcome variable and participants' sign-up rate in different groups. Without a statistically significant reduction in the project sign-up rate of the test group, the alternative will be suggested to be implemented if the accumulated saving amount in the test group is higher than that of the control group in a 0.05 significant level; also, there will be stronger recommendations if the average homeownership rate in the test group is significantly higher than the control group.

For state or country-level policies, quasi-experimental designs are good candidates for examining their effectiveness. The difference in difference design with the state which enforces a policy pilot as the treatment group; or interrupted time-series regression discontinuity design to measure the policy impact of a model country (Singapore for instance) can be used to evaluate the Housing saving plan or compulsory housing fund policies. This article won't elaborate on this approach as there will be more uncontrollable factors involved.

Feasibility and Impact Analysis

Obstacles the proposed homeownership policies would encounter are mainly from the political and social/cultural side. Either the saving for housing policy or adaptations for the rent-to-own policy will demand a large amount of government subsidy. It will inevitably raise disagreements in the legislature process considering the constant contraction of government role and the corresponding appropriation. Finally, society's attitudes toward renting and homeownership also matter. Since a large portion of the population in the states prefer renting a house to possessing it, it can be difficult

to persuade the target population. Additionally, there will also be resistance from the interest group of employers if the provident housing fund plan, which will increase their administrative costs, can be adopted and implemented.

With respect to policy impacts, the benefits generated by the policies aforementioned will exceed related costs overall. Major costs will be the extra subsidy for homeownership beyond the current cost of acquiring and constructing (by incentivizing developers) affordable houses. Regarding the added subsidy of rent-to-own projects specifically, it's roughly estimated to be $7,000 to $12,280[4] per family of two in total, by assuming the saving amount as 20% of the value of 80% AMI[5], compounded rate of 3% in a quarterly basis and 7-10 years as a needed time for saving. In terms of the housing saving plan, employers will contribute a presumable 15% to the saving fund together with employees enrolled in this plan. Loss of public revenue due to this new tax-deductible term and additional administrative costs for managing the fund will be the cost borne by the government. While benefits of proposed policies are prominent, as they help to fix some people's housing access problem permanently and will also bring positive spillovers based on the externality of economic development. As one research has suggested that the shortage of affordable housing costs the American economy about $2 trillion a year in lower wages and productivity.[iv]

In spite of potential positive impacts, unintended consequences are also likely to also happen to the targeted low-income population. Those may include the opportunity cost of alternative investment rather than saving, further repairment and maintenance expenses of their homes, and the potential of aggregating into a disadvantaged community which may restrain intergenerational mobility. However, since current rental assistance policies will also not necessarily address such issues, homeownership policies proposed in this article can still be worth a try.

Discussion

Policies proposed in this article will have a far way to go on account of their deviation from the current political path as well as the corresponding administrative design once get legislative approval. Expenditure consideration is a vital cause that shifts the affordable housing policy toward rental assistance programs. It also reveals a deep-rooted tradeoff between thoroughly fixing the policy issue and restricting the public budget. Fortunately, behavioral tools can help to mitigate the conflicting interests in this dilemma, as they can better motivate the target population and boost policy impacts with an acceptable increment in public expenditure by merely slightly twisting the incentive structure. It adds chips to the transition toward homeownership and also reveals the large potential of applications of behavioral economics.

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[4] It's calculated from: 2 people*(1/4*$10,860) *[(1+3%)^ (4*7)-1]= $6,993.45 for 7 years and 2 people*(1/4*$10,860) *[(1+3%)^ (4*7)-1]= $12,282.87; given 80% AMI as $54,300 for a family of 2 (according to the HUD data), and thus the 20% is $10,860

[5] 80% AMI is the usually used eligibility criterion for affordable housing

Reference

[i] McCarty, Maggie; Perl, Libby & Jones, Katie. (2019). Overview of Federal Housing Assistance Programs and Policy. Congressional Research Service. https://crsreports.congress.gov/product/pdf/RL/RL34591

[ii] Vesoulis, Abby. (2020). 'A Mask for Racial Discrimination.' How Housing Voucher Programs Can Hurt the Low-Income Families They're Designed to Help. *Time*. https://time.com/5783945/housing-vouchers-discrimination/ February 20, 2020

[iii] Austin, Algernon. (2018). America Has a Right to Housing … for the Rich. *Demos*. https://www.demos.org/blog/america-has-right-housing-rich

[iv] The Problem. *National Low Income Housing Coalition*. https://nlihc.org/explore-issues/why-we-care/problem