POLICY DIALOGUES

South African housing subsidies: the challenges of measuring the impact of a productive asset

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PITCH

When analysing the impact of South African housing subsidies on poverty, Goldman, Woolard & Jellema (forthcoming) find that the housing programme looks less progressive than expected. They find both that: i) imputed rent for subsidised housing increases with earnings despite similar cost and specifications for all subsidised housing, and ii) roughly a third of households that earn more than 20% above the threshold report receiving subsidized housing. This policy note examines this result, and highlights the challenges for policymakers of evaluating the targeting success of a programme that provides subsidies in the form of productive assets.

CONTEXT

In 1994, South Africa embarked on a national housing programme at a large scale. By 2019, one third of housing on the total residential property market was estimated to be fully subsidised by the state[1]. The post-Apartheid housing programme began with the Reconstruction and Development Housing Programme (RDP), which allowed a beneficiary with an income of less than R3 500 per month to acquire a house built and provided for by government. This later morphed into the Breaking New Ground (BNG) programme in 2011. The policy objectives outlined for BNG include poverty alleviation and ensuring that "property can be accessed for all as an asset for wealth creation and empowerment"[2].

METHODS

We explore three explanations for the reduced progressivity of the housing programme within our fiscal incidence framework, namely leakage; the market valuation of imputed rent; and using current income as a proxy for past income. The **leakage** explanation points to administrative targeting errors or corruption leading to households above the threshold receiving houses[3]. The **market valuation of imputed rent** explanation posits that households with higher imputed rents - due to a higher market valuation of available amenities or more productive environments - may appear above the threshold when using a measure of income that includes imputed rent, thereby exacerbating the semblance of "leakage". In order to test this explanation we compare numbers of households above the threshold when using a measure of income that excludes imputed rent, and we compare concentration shares by decile of market income with and without imputed rent included in the measure. The **current income as a proxy for past income** explanation surmises that, at the time of receiving the house, the household was earning below the threshold but, over time, the household's income has likely grown due to receipt of a no-cost house in areas that would allow low-income individuals to invest and receive a positive and higher-than-average rate of return on that investment. Such investment would lead directly to an increase in income (from wages or from capital). Given that we do not observe income in multiple periods, we show circumstantial evidence by running a regression of settlement-type- and province-type-education level interactions on income, while controlling for years of education, and for region-specific effects.

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Key words inequalities, housing, fiscal incidence

Geography South Africa

Themes Economy, Finance, Public financial management

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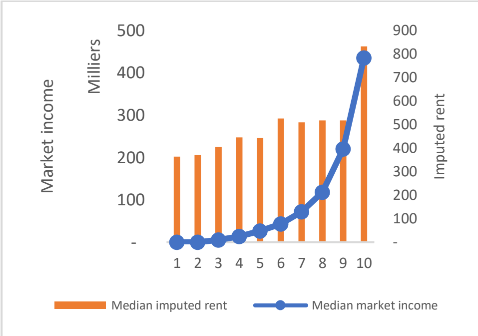
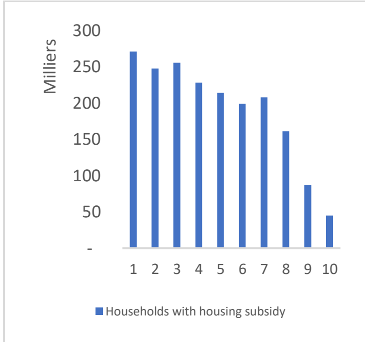
RESULTS

Market valuation of imputed rent: Using an income measure excluding imputed rent, we find fewer subsidised housing recipients (30 vs 33 percent) have income levels greater than 20% above the program threshold.

Examining concentration shares with and without imputed rent by settlement type, we see that concentration shares for the bottom three deciles increase when we exclude imputed rent from income, and concentration shares for the top three deciles decrease. The impact is strongest in urban formal settlement types (areas with the best amenities) and weakest in urban informal settlement types. The outcome is that the inclusion of imputed rent in market income exacerbates the appearance of housing subsidies going to non-qualifying households; and this "looks" worse in areas where imputed rents for similar housing are higher.

While RDP houses should have access to water, sanitation and electricity when they are handed over to recipients, a brief scan of media reports suggest that this is not always the case[4]. According to the survey, the probability of having access to electricity is between 94 and 100 percent, however having access to piped water within the home is low and increasing with the decile of market income - from only 32 percent in the first decile, to 80 percent in the tenth decile. The probability of having refuse collection and access to a flushing toilet for subsidised houses starts at around 52 percent in the first decile, and reaches 93 to 100 percent in the tenth decile. This pattern is complementary to the positive relationship between imputed rents (for similar housing) and income levels.





Source : authors' calculations based on the LCS 2014/15

Current income proxy: We find that the return to an extra year of education (a proxy for skills) varies substantially based on the settlement area. On average, an extra year of education in an urban informal area is worth about R10 300 less than it is in an urban formal area, and worth R3 700 less in a rural formal area than in a rural urban area. The returns to an extra year of education also vary substantially by province. An extra year of education is worth the least in the Free State at R4 600 less than the Western Cape. It is worth R3 300 less in the Eastern Cape, and between R2 600 to R2 800 less in Mpumalanga, the North West Province, and Kwa-Zulu Natal. The same extra year of education is worth about R4 200 *more* annually on average in Gauteng than in the Western Cape. The result is not significantly different from the Western Cape for the Northern Cape and Limpopo. These results provide circumstantial evidence that housing provided by the BNG programme, allows individuals *living in extra-productive* areas to accumulate income and wealth over time. That is to say, if an individual is located in a formal urban settlement, she can expect an income premium that is above and beyond what she would expect from her education, skills, previous employment, and other individual characteristics alone. If we assume this productivity premium applies to capital (including land and real estate) as well, the corollary is that the use of current income estimates as a proxy for past income exacerbates the appearance of housing subsidies going to households in higher earning deciles.

RECOMMENDATIONS

- It is important to understand the limitations of traditional distributional analysis when evaluating the impact or targeting success of a programme that distributes assets that generate returns to households over time. In this case, the inclusion of imputed rent in market income and the limitations of measuring past income with current income, necessitated further analysis is understand the implications of the results.
- Results of the distributional analysis that show imputed rent increasing with incomes, and households over the threshold reporting ownership of a subsidised house is unlikely to be fully the result of administrative leakages, although that may well be a factor. We find circumstantial evidence, by examining the impact of region and access to amenities on imputed rent and income, that housing does impact income and wealth over time, and so measuring the current income of households that received a subsidised house many years ago is likely to make the programme appear less pro-poor by nature.
- The likelihood that owners of subsidised houses have an enhanced ability to leverage their assets and wages points to a success story for the housing subsidy programme, and hints to policymakers at the different impact on poverty and inequality reduction that can be achieved by providing a productive asset to households that generates returns over time rather than cash. It also shows that recipients in different areas have differing capacity to leverage their assets and wages - even if the specifications of the subsidised house are the same.

[1] Centre for Affordable Housing Finance (2019). Housing Finance in Africa Yearbook: 10th Edition – 2019. http://housingfinanceafrica.org/resources/yearbook/
[2] DHS, 2004. Breaking New Ground: A Comprehensive Plan for the Development of Integrated Sustainable Human Settlements. Pretoria: Department of Human Settlements. http://www.dhs.gov.za/sites/default/files/documents/
[3] A review of the media provides anecdotal evidence that this is sometimes the case. See, for example: GroundUp, 30th March 2020. "Officials suspended as Gauteng faces 'RDP house selling' scandal". News24 https://www.news24.com/
[4] GroundUp, 28th July 2020. "Half-baked: Municipality hands over RDP houses without water, toilets and electricity". News24 https://www.news24.com/

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