



Contents lists available at ScienceDirect

## The Journal of the Economics of Ageing

journal homepage: [www.elsevier.com/locate/jeoa](http://www.elsevier.com/locate/jeoa)

Full length article

Designing cash transfer programs for an older population: The Mexican case<sup>☆</sup>Emma Aguila<sup>a,\*</sup>, Arie Kapteyn<sup>b</sup>, Caroline Tassot<sup>b</sup><sup>a</sup> Sol Price School of Public Policy, University of Southern California, 650 Childs Way, Los Angeles, CA 90089, United States<sup>b</sup> Center for Economic and Social Research, University of Southern California, 635 Downey Way, VPD, Los Angeles, CA 90089, United States

## ARTICLE INFO

Article history:  
Available online xxxJEL classification:  
I32  
I38  
J14Keywords:  
Targeting  
Cash transfer programs  
Noncontributory pension programs  
Older population  
Mexico

## ABSTRACT

Aging populations and the prevalence of poverty in old age have led to the introduction of noncontributory pensions in many countries. We consider a number of alternative targeting approaches and simulate their effects in an empirical application in the State of Yucatan, Mexico. We compare the approaches with respect to leakage, under-coverage, and their effects on government budgets. We are also able to compare the simulated effects of one alternative with the observed effect of a recently introduced demogrant and find that the simulation is a close approximation of the empirical outcomes. We discuss issues of implementation and political feasibility.

© 2016 Elsevier B.V. All rights reserved.

## Introduction

Many countries around the world are experiencing an increase in the proportion of older persons in their total population. The global elderly population (aged 60 years and older) is expected to double by 2050 (United Nations, 2014; Schwarz, 2003). A growing majority of the elderly live in developing countries where formal arrangements for old age support are often lacking and traditional arrangements are declining (Kakwani and Subbarao, 2005). The fragile nature of care arrangements for the elderly in developing countries and increases in poverty in old age has led to the introduction of noncontributory pension programs in more than 80 countries around the world (HAI, 2012).

Though raising the incomes of vulnerable populations can improve the overall welfare of society (Coady et al., 2004), programs to assist the poor require tradeoffs with financial sustainability in the face of restricted resources. Targeting recipients based on their level of need rather than applying universal eligibility serves to distribute scarce resources to those who need it most, thereby reducing “leakage” of the poverty budget to non-poor individuals. This, in turn, allows for greater generosity in benefits for a

smaller eligible population or for the program to operate on a smaller budget. Effective targeting, in short, can improve resource allocation (Coady et al., 2004; Skoufias and Coady, 2007).

In many countries, particularly high-income ones, reported income is often used to identify the poor. This targeting method has a number of potential problems, including potentially high administrative costs, incentive effects, and fairness issues (Besley and Kanbur, 1990). A particularly challenging aspect of targeting recipients in developing countries is the potential for errors in identifying beneficiaries. Indicators of material wealth such as income, savings, and assets are considered the best option for targeting, but the difficulty in observing and correctly measuring these indicators in developing countries can diminish their efficacy in targeting the poor (De Wachter and Galiani, 2006; Ravallion and Chao, 1989). Income is difficult to assess and track in countries that do not have well-developed tax registries, that have large informal labor markets, or where the definition of a household is an issue (Besley and Kanbur, 1990; De Wachter and Galiani, 2006).

A second-best option for identifying the poor is to use observable characteristics of a household collected by program staff during an interview to predict household income and determine individual or household eligibility (Glewwe and Kanaan, 1989; Narayan and Yoshida, 2005; Grosh and Baker, 1995; Coady et al., 2004). This method is called proxy means testing or “tagging” (Akerlof, 1978) and it avoids issues with misreporting income when determining eligibility (Narayan and Yoshida, 2005). The

<sup>☆</sup> We thank two anonymous referees for helpful comments.

\* Corresponding author.

E-mail addresses: [eaguilav@usc.edu](mailto:eaguilav@usc.edu) (E. Aguila), [kapteyn@usc.edu](mailto:kapteyn@usc.edu) (A. Kapteyn), [tassot@dornsife.usc.edu](mailto:tassot@dornsife.usc.edu) (C. Tassot).

success of proxy means testing depends on the ability to pick observable variables that are highly correlated with income and to reliably gather the necessary information (Coady et al., 2004). Much previous research has analyzed the effectiveness of means-testing rules for social-protection programs (see, for example, Grosh and Baker, 1995; Ahmed and Bouis, 2002; Coady et al., 2004; Castañeda, 2005; Castañeda et al., 2005). Previous research has not, however, assessed whether tagging is an accurate method for programs for older populations. The effectiveness of tagging is closely related to the accuracy with which individual income can be predicted and how precision is affected over the lifecycle by different components of income. Relevant components of individual income change considerably at the end of the lifecycle (Hood and Joyce, 2015). Therefore targeting rules may differ in their accuracy for older adults than for individuals at working age and this would apply for any policy that targets an older population.

Additionally, in developing countries, the difficulty in targeting for the elderly population, stems from the challenge of identifying sources of income for those without social-security benefits and with sporadic sources of income, who may rely mainly on family transfers. The support of elderly generations through children, extended family, remittances, or by other members of the community poses a challenge to measuring income for recipients, especially if such support is volatile or in-kind (Kakwani and Subbarao, 2005; Schwarz, 2003). This issue is most pressing in developing countries due to the lack of universal coverage of social security benefits. One of the main concerns in the public debate has been the financial sustainability of programs to support the elderly.

The Mexican case is particularly noteworthy because of a rapidly aging population, lack of universal coverage of social security benefits, and high poverty rates among older persons. Moreover, we are able to compare predicted income with observable characteristics used for tagging with a comprehensive measure of income and assess the accuracy of tagging. This is relevant, as tagging for older populations may lead to important amounts of under-coverage or leakage, if it proves to be inaccurate. In this study, we evaluate various policy options for pension design (demogrant, flat-rate, sliding-scale, and perfect targeting) and assess whether targeting through proxy means testing is a sufficiently accurate method for the poor older population in a developing country. In our analysis, we exploit a rich panel data set from a field experiment in the state of Yucatan, Mexico for the population 70 years or older. The survey instrument from this field experiment is similar to that for the US Health and Retirement Study (HRS) and the Mexican Health and Aging Study (MHAS) and includes detailed information about income, wealth, and individual and household characteristics. Our income measure follows the one in HRS and MHAS surveys and captures family transfers (both monetary and in-kind), salary income (even from sporadic jobs), income from businesses or farms, pensions, income from properties, capital income, and transfers from governmental institutions. The experimental nature of the data allows us to compare our demogrant simulations with the real changes in income, which not only quantify the cash transfer but also show other behavioral changes such as crowding out of private transfers and changes on labor supply. This allows us to gauge the extent to which the simulations might be biased due to the induced behavioral effects.

Another contribution of this study is that there is scarce evidence on poverty in urban areas. Most of the prior literature focuses on rural areas (e.g. Zimmer, 2008; Barrientos et al., 2003; Kobetz et al., 2003) compared to poverty in urban settings (e.g. Ezech et al., 2006; Geronimus et al., 2015). In this study, we analyze targeting in an urban context for older adults. As one will see, it turns out that dwelling characteristics, asset ownership, and individual characteristics predict income for an older population reasonably well.

The remainder of the paper is organized as follows. In Section “Data”, we describe the experimental design, data, and variables. In Section “Methods”, we describe the tagging methods and define various poverty and inequality measures. Section “Results” presents the results, including descriptive statistics of the data, regression results of the Heckman selection model used to model household income, and the results of the simulated targeting mechanisms. We present poverty and inequality measures, and compare the costs of the different types of mechanisms. In addition, we compare the simulated effects of the demogrant with the observed effects of a demogrant that was implemented as part of the experiment. Section “Discussion and conclusion” provides a discussion, conclusion, and policy recommendations.

## Data

The data we analyze are from the evaluation of a social-security program implemented in the State of Yucatan. This program provides benefits to individuals 70 and older in localities with more than 20,000 inhabitants. The program was designed to provide a non-contributory pension payment of MXN\$550 or US\$70.2 at 2013 PPP per month to any individual 70 or older in semi-urban and urban areas (see Aguila et al., 2014). The monthly benefit is equal to almost one third of the monthly minimum wage in Yucatan (MXN\$1,865.95 in January 2013 or US\$238.2 at 2013 PPP).<sup>1</sup> The program was implemented in phases throughout the state. To be able to evaluate the effect of the provision of the old age pension, we chose two towns of more than 20,000 inhabitants with similar demographic and economic characteristics, one of which would receive the pension, while the other would be the control town and only receive the pension at a later stage. Both towns had similar federal government programs and state government programs. Valladolid (45,868 inhabitants according to the 2005 Census) was randomly chosen to start receiving the pension in 2008, while Motul (21,508 according to the 2005 Census) was chosen as a control town. This paper is not about the experiment itself, but we take advantage of the availability of the extensive data collection that was part of the experiment.

For the experiment, surveys were conducted at baseline in both the control and treatment town and then in follow-ups after implementation of a social security program in the treatment town. The baseline survey collected data among persons at least 70 years of age and their households in the treatment town in August and September 2008 and identical data in the control town in October and November 2008. Evaluation staff conducted a follow-up survey in June and July 2009, in both municipalities approximately six months after the first pension payments in December 2008 in the treatment town. In this paper, we analyze baseline data collected for this program from August to November 2008, as well as data from the first follow-up in July–August 2009. For more information about the implementation of the non-contributory pension program, see Aguila et al. (2014). The baseline data sample includes 1656 individuals, 1146 of the treatment group and 510 of the control group. See Aguila et al. (2015) for a more detailed explanation of the sample design.

We define income as the sum of all wages, income from businesses or farms, pensions, income from properties, other capital income<sup>2</sup>, and transfers (both monetary and in-kind) from relatives,

<sup>1</sup> We denote Mexican pesos as MXN\$. The 2013 PPP exchange rate from Mexican pesos to U.S. dollars is taken from the Organisation for Economic Co-Operation and Development (n.d.).

<sup>2</sup> Including income from checking and savings accounts, fixed investments, stocks, bonds, and shares.

Download English Version:

<https://daneshyari.com/en/article/5100174>

Download Persian Version:

<https://daneshyari.com/article/5100174>

[Daneshyari.com](https://daneshyari.com)