World Development Vol. xx, pp. xxx–xxx, 2017
0305-750X/© 2017 Elsevier Ltd. All rights reserved.
ELSEVIER
www.elsevier.com/locate/worlddev
http://dx.doi.org/10.1016/j.worlddev.2017.02.005

Property Tax Revenues and Multidimensional Poverty Reduction in Colombia: A Spatial Approach

JUAN MAURICIO RAMÍREZ [a], YADIRA DÍAZ [b] and JUAN GUILLERMO BEDOYA [c,*]

[a] *Centro Latinoamericano para el Desarrollo Rural, RIMISP, Bogotá, Colombia*
[b] *United Nations Development Program, Poverty Reduction Unit, Haiti*
[c] *Universidad de Los Andes, Colombia*

Summary. — Fiscal decentralization as an instrument to reduce poverty is an open debate that still takes place with little and contradictory empirical evidence regarding whether or not it has served the poor. This paper focuses on analyzing the impact of municipalities' per capita property tax revenues on multidimensional poverty in the Colombian case. This locally raised tax is used as an indicator of the state capacity that municipalities exercise when fiscal decentralization takes place. To estimate its impact on poverty, we control for the possible endogeneity biases that might affect this relationship while taking into account that multidimensional poverty exhibits strong spatial correlation among Colombian municipalities. We find statistically significant results that demonstrate a causal and diminishing effect of property tax revenues on the poverty headcount ratio and gap. We also find that this effect has substantial spillovers across municipalities. The findings of the paper highlight the need to strengthen subnational revenue systems through policy designs to increase locally raised revenues. We simulate four different counterfactual scenarios to evaluate the potential effect of alternative policy designs on multidimensional poverty. The results of these policy scenarios demonstrate that spatially differentiated policy schemes have greater effectiveness in reducing multidimensional poverty than geographically mute designs.
© 2017 Elsevier Ltd. All rights reserved.

Key words — fiscal decentralization, property tax revenues, multidimensional poverty, spatial interdependence, Colombia

1. INTRODUCTION

Several developing and developed countries around the world have decentralized fiscal, administrative, and political responsibilities to subnational governmental tiers during the past two decades. The argument behind the decentralization of these responsibilities is that decentralization allows for the revelation of local preferences, makes possible a more adequate supply of social services and basic goods appropriate to the conditions and necessities of local populations and puts citizens into a direct relationship with the level of government in whose election they participate and over whom they can exert a closer accountability. For these reasons, decentralization is also meant to improve participation, efficiency, and targeting at the local level. With this view, decentralization serves the poor (Bardhan, 2002; Dethier, 2000; Von-Braun & Grote, 2000).

There are also, nonetheless, arguments against decentralization policies as an effective way of reducing poverty. Poor and less developed countries and local governments with low institutional capabilities can be arguably more prone to corruption and political capture by local interest groups that distort and divert resources to their own interests (Bardhan, 2002; Bardhan & Mookherjee, 2005). In this context, and with weak local governments, decentralization would increase the provision's cost of social services, which in turn might increase territorial inequalities (Bird & Rodriguez, 1999). In addition, decentralization would increase political tensions across unequal territories, and in some cases might jeopardize political and economic progress to the greater detriment of the most disadvantaged population (Von-Braun & Grote, 2000).

As a result, fiscal decentralization as an instrument to reduce poverty is a debate far from closed. This debate takes place, nonetheless, with little and contradictory empirical evidence regarding whether or not fiscal decentralization has served the poor. On the one hand, cross-country studies such as those of Von-Braun and Grote (2000), based on a sample of 50 developing countries, and Sepulveda and Martinez-Vazquez (2011), based on information for 34 developing countries from 1976 to 2000, report opposite results. While the Von-Braun and Grote (2000) analysis suggests a positive association between the share of subnational expenditures and poverty reduction, Sepulveda and Martinez-Vazquez (2011) find a significant negative effect of the share of income of local governments over poverty.

Country-specific analyses, on the other hand, are not much more conclusive. In particular, Jutting *et al.* (2004) performed a literature review on the relationship between decentralization and poverty reduction among 19 different developing countries. Their results suggest an ambiguous link between decentralization and poverty reduction. The degree of success of fiscal decentralization in reducing poverty was found by the authors to be mostly determined by country-specific institutional capacity and the political conditions that ensure the

* This paper is based on research funded by the Germán Botero de los Rios, 2012 Award conferred by Fedesarrollo to Juan Mauricio Ramírez. We would like to thank Claudia Quintero for excellent research assistance, and Renata Pardo for her expertise in the construction of the Colombian Multidimensional Poverty Index based on the 2005 census information. We benefited from helpful comments from Julio Berdegué, Alain De Janvry, Leonardo Villar, Guillermo Perry, Fernando Rojas, Olga Lucia Acosta, Carlos Eduardo Vélez (RIP), Fabio Sánchez, Ximena Cadena, and other seminar assistants at Rimisp, Fedesarrollo, CEDE (Los Andes University), and Banco de la República (Colombian Central Bank). We also thank the anonymous referees for their helpful comments, which contributed substantially to improving the paper. Any remaining errors are ours. Final revision accepted: February 8, 2017.

Please cite this article in press as: Ramírez, J. M. *et al.* Property Tax Revenues and Multidimensional Poverty Reduction in Colombia: A Spatial Approach, *World Development* (2017), http://dx.doi.org/10.1016/j.worlddev.2017.02.005

ARTICLE IN PRESS

responsiveness of the local governments to their populations' needs.

The lack of a clear and univocal relationship between decentralization and poverty reduction probably arises from the fact that, as stated by Careaga and Weingast (2003), there is not one kind of decentralization but many, depending on the different institutional settings and they "differ enormously in the ways they allocate power and authority across levels of government." (p. 3). Some decentralization processes could lead to poverty reduction, while others might be conducive to inefficient allocation of resources and corruption. Careaga and Weingast (2003) in particular study how variations in the locally raised taxes and electoral competitiveness might affect the subnational government decision-making process and argue that an increase in the share of these taxes increases the probability for a local government to choose the provision of public goods instead of rent seeking and corruption to gain political support.

Following the findings of Careaga and Weingast (2003), we focus in this paper on the empirical analysis of the impact that locally raised taxes have on multidimensional poverty for the Colombian case. In particular, we use the municipalities' per capita property tax revenue as an indicator of the local state capacity to exercise fiscal decentralization and we concentrate our attention on the effect that this source of revenue has on the multidimensional poverty headcount ratio and gap. Two remarks are worth marking in this regard:

First, in Colombia the main locally raised tax is the property tax. In fact, only few municipalities collect taxes other than the property tax, which are mainly local business taxes (industry and commerce). Still, in 2003, after more than 30 years of decentralization policies in the country, locally raised tax only represents on average 5.0% of the total municipal revenue and varies greatly among municipalities. While there are municipalities where income from property taxes represents almost 40% of their total revenue, other municipalities do not reach a share of this revenue larger than 1%. [1] We use this revenue source to reflect the different degrees of autonomy that subnational governments exercise when determining tax levels or even when introducing new taxes.

Second, our outcome of interest is multidimensional poverty rather than monetary poverty. Besides the fact that there are no monetary poverty figures at municipal level available for Colombia, through multidimensional poverty, we can assess the impact of locally raised taxes over the joint distribution of deprivation in multiple social outcomes where social public policies could have a direct effect (household educational conditions; childhood and youth conditions; health; labor characteristics; and access to household utilities and housing conditions).

Still, quantifying the causal effect of property tax revenues on poverty reduction is not always a straightforward task because of endogeneity problems (Bardhan, 2002). In particular, a double causality between a municipalities' raised taxes and poverty might take place, since municipalities with a larger share of the population and economic activity due, for example, to agglomeration economies, have at the same time a higher per capita income, which is conducive to higher tax revenues and lower income and multidimensional poverty ratios. As such, this double causality issue could bias econometric results regarding the relationship between locally raised taxes and poverty.

We respond to this double causality problem in several ways. First, we apply an instrumental variable approach using as instrument indicators of the capacity of the local government to raise property taxes that are plausibly unrelated to poverty and local economic activity. Second, measuring locally raised taxes by exclusively considering the property tax revenue, we exclude revenues coming from taxes that depend heavily on economic activity and agglomeration economies such as industry and commercial taxes. Third, in our econometric regressions we control for decentralization aspects that could be confounding for our results, such as transfers coming from the central government and administrative and political decentralization indicators observed in previous periods of our analysis, urbanization and rurality degree, and the presence of large urban municipalities and municipalities that are part of the National System of Cities (NSC). [2]

In our econometric analyses we take into account the fact that poverty is also a spatial phenomenon, which means that it is not distributed randomly in the territory. Specifically, we implement a spatial autoregressive strategy with spatial autoregressive disturbances to model the multidimensional poverty headcount and gap.

The results of this paper demonstrate a causal negative effect of per capita property tax revenues over multidimensional poverty headcount and poverty gap. We also find that this effect has substantial spillovers across municipalities, a finding that we argue worth taking into account when designing public policy interventions to incentivize the collection of locally raised revenues. Specifically, to provide policy lessons to maximize the effect of property tax revenues over multidimensional poverty reduction we test four counterfactual scenarios. The results of these scenarios indicate that spatially differentiated decentralization policies have greater effectiveness than geographically mute designs. Differentiated decentralization policies that take into account the heterogeneity of regions and municipalities are urged for the eradication of deprivation in the main dimensions of public policy intervention.

This paper is organized as follows. Section 2 reviews the relationship between fiscal decentralization and poverty alleviation. Then, Section 3 analyses the empirical descriptive relationship observed among Colombia's municipalities between multidimensional poverty and property tax revenues. Section 4 presents the econometric strategy that we pursue to disentangle the causal effect that this source of revenue has on multidimensional poverty. Section 5 presents and analyses the obtained results from this empirical strategy. The paper finalizes with Section 6, which provides some concluding remarks.

2. FISCAL DECENTRALIZATION AND POVERTY: A REVIEW OF THE RELATIONSHIP

This section reviews the literature regarding the relationship between fiscal decentralization and poverty. This review serves as a conceptual background for the subsequent empirical analyses of the paper.

One of the main arguments to foster fiscal decentralization policies is their effectiveness in increasing public expenditure efficiency, which would redound in a more adequate supply of social services and basic goods designed according to the preferences and needs of the local population (Bardhan, 2002; Martinez-Vazquez & McNab, 2003; Oates, 1993). Services and basic goods in turn would be specifically targeted toward the most disadvantaged within the population. With this view, decentralization indirectly serves the poor.

Indeed, fiscal decentralization could indirectly serve the poor through a plethora of channels, such as improving economic growth, developing institutional capacity to deliver public services at the subnational level, enhancing governance, and improving accountability, among others

Please cite this article in press as: Ramírez, J. M. *et al.* Property Tax Revenues and Multidimensional Poverty Reduction in Colombia: A Spatial Approach, *World Development* (2017), http://dx.doi.org/10.1016/j.worlddev.2017.02.005

دریافت فوری ← متن کامل مقاله

ISIArticles
مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات