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Can land taxes foster sustainable development? An assessment of fiscal, distributional and implementation issues

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ABSTRACT

Economists argue that land rent taxation is an ideal form of taxation as it causes no deadweight losses. Nevertheless, pure land rent taxation is rarely applied. This paper revisits the case of land taxation for developing countries. We first provide an up-to-date review on land taxation in development countries, including feasibility and implementation challenges. We then simulate land tax reforms for Rwanda, Peru, Nicaragua and Indonesia, based on household surveys. We find that (i) land taxes provide a substantial untapped potential for tax revenues at minimal deadweight losses; that (ii) linear land value taxes tend to put a high relative burden on poor households as land ownership is pervasive; (iii) non-linear tax schemes could avoid adverse effects on the poor; and that (iv) with technological advances, administrative costs of land taxes have reduced substantially and are outweighed by tax revenues and co-benefits of formalized land tenure. Enforcement and compliance remain, however, a key challenge.

1. Introduction

Economic theory provides a strong case for land rent taxation to improve economic efficiency of fiscal systems especially for developing countries with highly distortionary tax systems (Lee and Gordon, 2005). Developing countries tend to have a low tax-to-GDP ratio in spite of social and development objectives that would require increased investments (Schlegelmilch et al., 2010). Due to their small distorting impact on the economy, land taxes could be a central policy to increase domestic resource mobilization, which is one of the main goals of the Addis Ababa Action Agenda (United Nations, 2015). In the past, excessive administrative costs were seen as the main explanation for the "weak link between the theoretical and practical aspects of land taxation" (Skinner, 1991a, 1991b). Administrative costs, however, no longer seem to be a fatal obstacle for land rent taxation. International organizations and developing countries have developed fit-for-purpose land administration (Enemark et al., 2014) and land administration reforms have been implemented in Rwanda (Sagashya, 2012), Ethiopia (Deininger et al., 2008) and other countries. In addition, computer assisted mass appraisal (CAMA) is lowering costs of valuation while yielding very accurate results (Barańska, 2013; McCluskey et al., 2013a,b).

There are very few assessments of the benefits and challenges of land taxation (Norregaard, 2013). Skinner (1991a, 1991b) and Khan (2001) study some countries which have previously introduced land taxes. Emphasizing the efficiency of land taxes, they study the obstacles to overcome and identify "administrative costs" and "political and administrative considerations" as the major obstacles. Bird and Slack (2004) provide a detailed compendium of knowledge on land and property taxes, including case studies from all over the world. Most recently, Henry et al. (2009) and Mirrlees and Adam (2011) considered land taxes in assessments of tax policy. Their respective chapters on land taxation come to a favorable conclusion on their usefulness and consider the implementation challenges as manageable. In this paper, we update the analysis of practical obstacles of land taxation to recent technological progress and improvements in governance. The main additional step we take is to use survey data to estimate the revenue potential in four developing countries and, most importantly, the distributional effects of land taxation. Using newly available data we thus move out of the narrow space of previous experiences and analyze potential benefits and future use of land taxes.

We focus in our quantitative analysis on the introduction of a new

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land value tax and do not consider general equilibrium effects of a reduction in other taxes or increased government spending. The analysis can thus be considered a first order approximation. Our results demonstrate that in the case study countries land rent taxation has the potential to contribute a substantial share to the public budget. Even though administrative costs might be in some cases slightly higher than for other taxes, they are unlikely to be prohibitive. We also find that linear land taxes could put a relatively larger burden on poor than on wealthier households, as de-facto land ownership is common among all income groups. We show how this can be avoided under a non-linear scheme that allows for a tax-free amount of land ownership.

The paper is structured as follows: We provide a brief overview on past implementations of land tax in Section 2. Based on the literature review and conceptual analysis in Section 3, we develop in Section 4 a country typology using easily accessible proxy indicators for various benefit and cost dimensions. Constructing Pareto frontiers, the typology aims to identify countries with preferential benefit-cost ratios, i.e. where implementing or extending land rent taxation can be expected to be particularly promising. The typology also provides a transparent way for selecting case-study countries that are analyzed in more detail in Section 5. We assess the magnitude and the distribution of agricultural and urban land rents among household and conduct a micro-simulation of various land tax schemes. We further elaborate on the status quo on land taxes and potential reform options. We conclude by summarizing the major insights from the article and outlining major design options and policy recommendations for land tax reforms in developing countries.

2. Experience with land taxes

More than 30 countries, including developing countries, use or have used some sort of land tax (Bird and Slack, 2004; Dye and England, 2010; McCluskey and Franzsen, 2005; Milan et al., 2016). Land taxes vary with tax base, the appraisal, and to whom it may apply. For example, land taxes may apply to all land uses, or only to developed land, with varying permissions granted (Fig. 1).

Land taxes proliferated in places where a system of registration of title or deeds was already in place (i.e. Fiji, Kenya, and South Africa), and where there is no major issue regarding tenure insecurity and boundary disputes (McCluskey and Franzsen, 2005). Local governments in South Africa have relied upon taxation of urban land values as a significant revenue source for almost a century until early the 2000s, when a law eliminated the local option of a split-rate tax in favor of a single-rate property tax (Andelson, 2001).

Agricultural land is typically assessed using an area-based approach (Khan, 2001). When the tax applies to all land uses, including developed land, market or cadastral values are more common. Governments tend to implement relief mechanisms for farmers. They use deferrals of non-agriculture related values (New Zealand), differential and preferential rates (Australia and South Africa respectively), limiting taxable values to current use (Australia), rebates (Jamaica), or simply exclude rural land (Kenya and Fiji). In places where development is coupled with rapid urbanization, governments tend to shift towards property taxes to avoid land value appraisal processes (Jamaica, Kenya). In Fiji, however, local authorities have focused on enhancing the assessment process instead of changing the tax base (McCluskey and Franzsen, 2005).

There is a trend towards implementing differential taxation according to land values and land uses (South Africa, Fiji, Kenya, among others), penalizing unimproved land in particular to curb land speculation (i.e. Hungary, Tunisia). Tax rates in middle and high income countries are typically adjusted annually to avoid the gradual erosion of the tax base (as has happened in the case of Jamaica) (McCluskey and Franzsen, 2005). Classified assessment systems are another common and cost-effective way of differentiating among property classes (i.e. the Philippines). Under this system, a uniform tax rate is applied and properties are differentiated through assessment value ratios (the percentage of assessed value that is accepted as tax base) (Bird and Slack, 2004; Milan et al., 2016).

Land as well as property taxes are often important sources of local revenue, and thus have historically been locally governed (with a few exceptions like Ethiopia, Jamaica and Chile, where national governments regulate and administrate the tax). Their contribution to local revenues is highest in high-income countries, followed by Latin America, and some African countries, and lowest in Asian countries (Bird and Slack, 2004). Revenues are typically reported together with

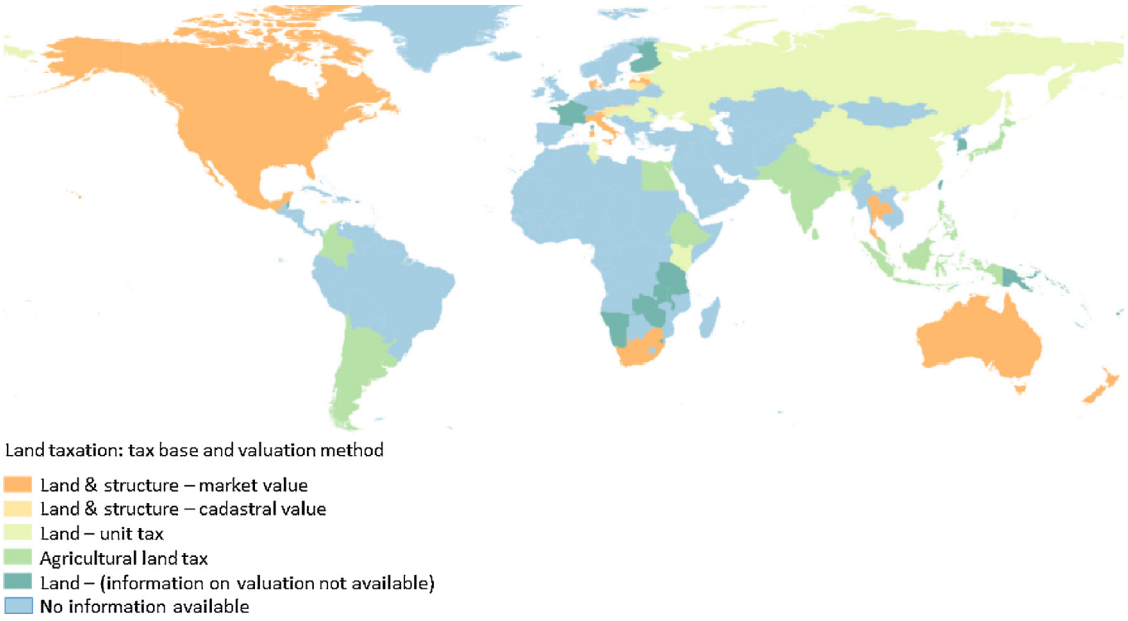

Fig. 1. Land taxation experience.
Note: based on Bird and Slack (2004); Dye and England (2010); Khan (2001); McCluskey and Franzsen (2005) and Milan et al. (2016). Countries may have only a land-based tax ("Land") or a combined land & structure tax ("property tax"). For some countries, information on the land valuation method or type of tax base was not available; for coutnries in blus, no information on existence of land-based taxes was available. For detailed country-based information see the Online Appendix).