

Taxation of Vacant Urban Land: From Theory to Practice

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In 2011, with the inception of the Kampala Capital City Authority, the decision was made to establish a dedicated Directorate of Revenue Collection, whose mandate was to focus on improving the revenue performance within the city. In the few years of its existence, it has managed to fundamentally transform the revenue administration and procedures leading to increases in own-source revenue by over 100% in four years (Kopanyi 2015). Much of this increase in revenue was attributable to improvements in administration, which although provide sustainable revenue streams in the long-run, are generally represent one-off increases. Therefore, the KCCA is now to further expand its sources of revenue, it is exploring further approaches on how this can be done.

Following a comprehensive assessment of revenue performance, capacities and future plans of the Directorate of Revenue Collection, conducted in October 2015, Kopanyi (2015) highlighted several potential new sources of revenue, including a tax on vacant land. This type of tax is common practice in many cities around the world. Local governments not only tax land, but often set higher rates for vacant land in urban areas on the basis that, aside from increasing revenue, it may have further benefits such as reducing speculation, incentivising land transactions to ensure an overall more efficient usage of a scarce resource.

In Kampala, the ability for KCCA to tax urban land will require a change in national legislation. Furthermore, taxing vacant land could be politically unpopular and therefore for KCCA to advocate for this, they will have to assess its revenue potential in the context of Kampala. This IGC project aims to provide evidence and options for the potential introduction of a tax on vacant urban land in order to support informed policy dialogue.

As the first stage of analysis, the researchers have compiled and analysed a comprehensive set of literature around vacant land. Special attention has been paid to the

international standards through the International Association of Assessing Officers (IAAO) guidelines. A series of case studies of other cities that have introduced taxes on vacant land, further elaborates on details of the issues, potential, practices, and challenges in implementation.

Taxing vacant land can be approached from various different perspectives. The first and, perhaps the least controversial, is how this can enhance revenue potential. However, like other taxes, a vacant urban land tax has both positive and negative impacts, which can lead to both planned and unintended side effects. For example, it can affect private investments, equity, efficiency of using land as a scarce resource in cities, speculation and thus the whole urban transformation of the city. The authors are of the view that taxing vacant urban land is a substantial revenue source that should be advantageous for the city. At the same time, however, it is important to analyse other effects and perspectives into consideration when discussing the introduction of a specific vacant-land tax to provide a better understanding of other potential impact such a tax can have.

Land Tax as a Potential Source of Municipal Revenue

Particularly since the recent financial crisis, local governments around the world have been becoming more interested in raising revenues from property taxes (Ingram and Hong 2012). In many countries, property tax is a preferred form of raising additional revenues for governments (Bird and Slack 2007). In Africa, in particular, there has been a long tradition in these types of taxes since colonial times. This is especially the case for countries, like Uganda, which were previously under British rule since many of these countries have decentralized systems of governance that place the ability of raising property taxes in local government (Franzen and Youngman 2009).

A type of property tax particularly favoured by some economists, is a land tax, which places a higher emphasis on taxing the land itself rather than on its improvements (Dye and England 2010). The two potential benefits from a land tax for local governments is that it raises revenues and, from a planning perspective, has the potential to affect land use in a city. Land is a fundamentally immobile asset that cannot be replicated or moved, thus location is the key determinant of its value (Atack and Margo 1996). Land taxes are therefore also viewed as the most efficient and least business distortive form of taxation as it is a rent for scarce resources rather than a return on the investments of any one person (Lal, Henderson and Venables 2017).

The value of land is determined largely by factors that fall outside the landowners' own investments. These factors include the public investments made in infrastructure and services by governments, changes in land use development, population growth and economic development, as well as the original productivity of the land itself (Ingram and Hong 2012). Based on these factors, levying a tax to capture land value is also seen as fair due to the fact that it is wealth that has been created through collective action and therefore

should not be solely privately owned (Ingram and Hong 2012). Rapid urbanisation results in commensurate increases in land values due to all of the factors noted. Therefore, many economists also argue that capturing land values, also has the potential to raise local government revenue sufficiently to support the growth of cities (Collier 2016).

Vacant urban land is a specific subset of land in a city that displays these same characteristics of increasing in value with urban growth and public investments. A further distinguishing factor of vacant urban land is that it may be held as a form of speculation due to anticipated future investments by the city that could lead to further appreciations in its value. However, it is important to note, that this is not the only reason land remains vacant in the city, as further elaborated later in this note. Furthermore, there a clear distinction has to made between a land tax, which as highlighted is a form of property taxitton and a vacant urban land tax, which is a land base or an exemption issue. However, a well-administered specific tax on vacant land, also has the potential to raise revenues for the city.

Vacant Land and Urban Planning

In a recent review of African cities, the authors noted that one of the common characteristics was that there was a lot of patches of undeveloped land near the city centres (Lal, Henderson and Venables 2017). This has resulted in highly fragmented cities with urban sprawl, as the cities growth is pushed outwards. From urban economic theory, this is one of the major reasons that many African cities are unproductive cities: the disconnectedness prevents the necessary agglomeration from taking place that is inherently what makes cities productive (Collier 2016).

Furthermore, in monocentric city models that characterise many of these cities, the land near the centre is also the most valuable land. This is due the fact this is where there are the highest dynamics in terms of innovation and productivity (Lal, Henderson and Venables 2017). Therefore, if this land remains vacant, it is not being put to its most productive use. It is also this land presents the highest potential source for municipal revenue if it is taxed effectively. Higher fragmentation may also create multiple peaks of density across the city which area also not beneficial in terms of encouraging scale economies (Lal, Henderson and Venables 2017). Finally, fragmentation makes it more expensive for governments to provide necessary infrastructure and services to support city growth.

Urban planners in African cities are not the only ones that are concerned with vacant urban land. Atack and Margo (1996) studied the relationship between land price and location based on vacant land prices in Manhattan, New York's central business district, during the 19th century. In particular, they wanted to explore the notion of how urban growth affected the price and use of vacant land. During the early 19th Century, Manhattan was sparsely populated. However, large population growth happened both due to the influx of immigrants from Europe and the rest of the world but also as a result of the opening of the Erie Canal in

1820, which made Manhattan an increasingly attractive location for industry wanting to export its goods. This meant that population grew more than 6% per year following this, growth rates that some African cities are experiencing today.

The standard monocentric model of the city would predict that people would like to locate close to the centre of the city where the jobs are. This lowers their commuting cost; however, the high demand will also increase the price of land. This is indeed what Atack (1996) observed: between 1860 and 1870, there was a more than eight-fold increase in the price of vacant land in Manhattan. In 1810, a property speculator, Jacob Astor, started buying land in Manhattan, in anticipation of this increase in land value with the opening of the Erie Canal, which ultimately happened in 1820. By 1840 Astor was the wealthiest man in the United States of America at the same time that major plots in Manhattan's CBD remained unbuilt (Atack 1996).

Distance from the centre explained up to two-thirds of the price of land in New York the 1860s-1870s, however, over time this was no longer the case: by the 1930s, it was less than 10% that was explained by location. This is a result of the introduction of public transportation, such as the street car in 1870, which made it cheaper to live on the fringes of the city and commute to the centre.

In Latin America, Arujo de Larangeira (2003) noted that vacant land is also an indication of the unequal access to urban land by poorer populations. She further highlights the fact that this is exacerbated by the fact that vacant land also leads to social and spatial segregation. There are cases, like Sao Paulo, where the emergence of vacant land was a result of leap frogging urban development, due to the fact that building legislation was more stringent in the centre than on the urban fringes, making that land cheaper to buy and develop. This meant that by 1989, approximately 25% of blocks in the city were vacant and 39.1% of these vacant plots were under 500m² size each (Arujo de Larangeira 2003).

Therefore, to encourage efficient and effective city growth, local government's need to encourage all land to be put to its most efficient use. This will support densification and is one fundamental factor to increase productivity within the city. For this to happen, however, taxing vacant land with higher rate may be only one, and perhaps a less efficient method amongst many other preferable ones, including business friendly zoning regulation or master planning.

Why Urban Land Remains Vacant

Various theories have been developed to determine why vacant land exists in urban areas. For example, Northam (1971) outlines five reasons for vacant land in urban spaces, from an urban planner's perspective:

- Remnant parcels: These are parcels that are left over from other developments around them. They are characterised by being relatively small, irregular in shape and thus not conducive for large-scale development.
- Parcels with physical limitations: These are land parcels that are located in areas prone to flooding or where the topographical shape of the city does not allow for adequate construction, for example.
- Parcels held for corporate reserves: Large businesses may buy up land next to their existing plots in anticipation of future expansion of their production. This is particularly relevant for the industrial sector.
- Institutional vacant land: These are parcels held by public authorities for purposes of either shaping urban growth in the city or alternatively for future infrastructure investments, such as roads.
- Vacant land for speculation: This is land held by those who are benefiting from the appreciation of land values due to the growth of the city and associated investments.

Adams, Disbury et al (2002) note that determining how long the land has been vacant can help assess why it is vacant. In particular, land that has been vacant for long periods of time without being transacted may be more indicative of development constraints rather than speculation. Vacant land that is transacted frequently but not developed on the other hand, may be an indication that this land is more suitable for development as the frequent transactions is an indication of its marketability.

Further to this list, another reason land may remain vacant is as a result of insecure property rights. This is particularly the case for developing countries that are still in the process of undergoing land regularisation. If land owners do not have secure titles over their property, they may be willing to invest less as they are not sure whether it will be expropriated in the future. Therefore, vacant land may be a symptom of overall challenges within the formalisation of property rights (Haas and Jones 2016).

For urban planners, therefore, it is important to understand in which category the vacant land falls in because a land tax will only have any effect on incentivising more efficient land use through densification where the vacant land is actually buildable. As Northam (1971) further notes, it is often difficult to determine buildability as often vacant land does not enter the market before it is set to be developed. Furthermore, there are wide differences in the definition of 'buildability'; for example, a large manufacturing firm may have the incentive to manipulate vacant land that was considered unbuildable as a result of natural factors (Adams, Disbury et al, 2002).

Parcels that are considered too small by some developers to be worth investing in, there

may be others, particularly lower-income families, who are able to use the land to set up their own residences. In Buenos Aires, for example, smaller real-estate developers were pushed out of the markets by larger ones (Arujo de Larangeira 2003). However, the large developers were less interested in developing smaller parcels for low income families, which resulted in significant number of plots of land in Buenos Aires remaining vacant in the city. Furthermore, urban planners tend to overlook the option where a land tax may indeed incentivise non-speculative owners to release parcels that may be unsuitable for large development but rather offer free spaces for parks and other communal spaces. Therefore, the buildability of vacant land will depend on the owner and can shift over time.

Taxing Vacant Urban Land – Economics and Urban Planning Perspective

Assessing vacant land in the city requires two approaches. The first is to determine where the vacant land is located and how big it is. The second is then determining why it is vacant because, as noted, this can be for a variety of reasons. This will affect how taxing land owners may affect the overall development of the city.

Perhaps the earliest argument in support of taxing vacant land was made in Henry George's 1879 book *Progress and Poverty*. He posited that private land ownership and the associated possibilities of keeping land vacant was the reason for social inequality and economic crises at the time. Therefore, he argued, that by introducing a single tax on land this would incentivise land owners to develop and thus make the overall economy more efficient and productive, ultimately creating wealth for everyone. From his perspective the primary reason for implementing such a tax was from an urban development perspective. The additional revenue generated would be an additional benefit. In particular, George outlined was the fact that such a tax, which he advocated to be 100% of the incremental increase in land value, would be able to substitute for all other forms of taxation that were distortionary and help finance governments.

More modern economic theory suggests, however, that a tax on vacant land as George posited, is not an effective method for incentivising investment on the land. In particular, this theory, as outlined by Dye and England (2010) stipulates that a tax on vacant land will actually be neutral in incentivising owners to invest now or to continue to hold the land and invest later. This is due to a number of factors. Firstly, in many cases land owners are generally better off. Therefore, unless there is a particular reason they are cash strapped, they will continue to be able to pay the tax and hold on to the land. The only tax in this case that would force them to invest or sell, would be the tax proposed by George, which is 100% of the increment of land value. However, imposing such a tax is far from being politically feasible. Furthermore, there are various other reasons that people will not invest in their land, in particular, the fact that investing is expensive too. Therefore, if the costs on investing continue to be higher than the cost of the tax on the land, the landowners will continue to prefer to hold their land vacant and pay the tax.

In this context, Schenk (1978) outlines two models of thinking about urban vacant land. He draws upon employment models that differentiate between structural and frictional unemployment and applies these to thinking about vacant land. In this case, structurally unemployed land would be vacant land where the cost necessary to make it productive is greater than the present value of the yield from any productive use. Reasons for structurally unemployed land include lack of clear ownership or titling, unsuitability for construction due to natural reasons as well as the shape or size of the parcels under consideration. If one includes land with derelict structures that are out of use in the definition of vacant land, then structurally unemployed land in this case would be that type of land where the cost of removing the land is high. When there are structural reasons for vacant land being unemployed, it is the case where landowners are more likely to pay a tax on vacant land than developing it.

Frictionally unemployed land, on the other hand, includes land that is held for speculation. In this case, the optimum waiting time for the landowner to ultimately sell the land is when they maximise the present value of their land. More broadly, like in theories of unemployment, frictionally unemployed land also stems from asymmetries in information between buyers and sellers. Here the optimal time for the land owner to sell their land is when the return on alternative investments plus the cost of holding the land is equal to the value of services obtained from the land plus the change in land price. In the case of frictionally unemployed land, a land tax is more likely to incentivise a land owner to either sell their land or to develop it themselves.

Therefore, the policy choice to handle the vacant land issue, if the policy maker is looking to incentivise the development on the land, will largely depend on why the land remains vacant. Imposing a tax in this case, even if it is to target the frictionally unemployed land, may lead to less than optimal choices. For example, a tax may induce a landowner to sell their land quickly for present development where the most optimal choice may have been to hold on to it longer and develop it in the future. In general, Schenk (1978) asserts that vacant land is not necessarily a signal of the market malfunctioning. Therefore, a tax on vacant land will only lead to a better use of land if it targets solely the landowners who are ignoring the opportunity costs of holding land.

Another major consideration in taxation of vacant land is that the landowner's interests do not always match those interest that may be best of society. For example, increased developments that are done too early in areas of the city that are not optimal for development, will also require investments in public services to make them liveable and efficient. A government with limited resources to make these investments may then have to forfeit invest in one area over the other due to residential investments that have already taken place.

These differences between landowner and societal interest is particularly pronounced when it comes to the number and size of urban land owners on the market. As Bostic (2009)

notes that when there are small number of large land owners they will have a larger sway over the land market, which in turn may affect the capacity to create well-functioning cities. For example, landowners may capture the planning process to promote their own individual interests rather than those of society. In the case where such land owners have a strong lobby, it may also be more difficult to institute a tax on vacant land as they may form a strong lobby. Adams, Disbury et al (2002) also note that large land owners holding small parcels of land may be less interested to develop this because it may not be in their business interests. Conversely, Bostic (2009) also large land owners may also provide opportunities as they can function as catalysts of economic development on land. This is due to the fact they are more likely to have sufficient funds to develop vacant land. In this case, they are equivalent of economic catalysts.

Adams, Disbury et al (2002) draw further important distinctions between the types of land owner with respect to development of urban vacant land. They highlight that there are two types of landowners: active and passive ones. Passive land owners are those who hold their land without developing it. This may be very rational behaviour as there may no pressing reason for them to sell the land at this point. They may also not have sufficient to develop the land and the given point in time and so may be holding it to develop it at a later date. Adams, Disbury et al (2002) emphasize that this behaviour is not necessarily a concern, unless there is very high demand for land or that the particular pieces of vacant land are hindering other developments.

Contrary to passive land owners, active land owners are those who have obtained planning permission for their land or sold their land, without influence from developers. This is the vacant land that is marketable and therefore may be transacted frequently. In a city's development, the transfer of land from passive to active use is a major part of its development.

Policy Options for Taxing Vacant Land

Until now, this note has discussed the issues on taxing vacant land from the view of economists, urban planners, and academics in general, who try to assess or predict possible or measured effects from equity, efficiency, or urban development perspective. All these concerns and assumed positive, and negative effects are rational. However, taxing vacant land is the norm and a central part of the property taxation system in many developed countries. Therefore, the issue is perhaps outlined not whether or why one should tax vacant land, but rather how the taxation of vacant land can work in the general context of the overall property taxation system.

A World Bank review (2016) of nine cases of vacant-land taxation from around the world shows that various governments have different ways of defining, identifying, prioritising and ultimately taxing vacant land. This includes deciding on how they structure vacant-land taxes, deciding who benefits from the tax and how, and what penalties to be imposed in the

absence of required payment (World Bank 2016 – **Table 1**). These practices include the eventual confiscation of the property, a rule that would be extremely challenging to adopt in many countries.

Land Value Taxation: Overall land value taxation has been tested in about 30 countries in the world (Dye and England 2009), has an automatic albeit hidden mechanism to levy substantially higher tax on vacant lands. This is because of the fact that land-value taxation does not capture the value of improvements, which means that the land owners with big houses or other large fixed assets are paying the same tax as an owner of an empty lot. Studies have also shown that the share of land value represents approximately 40 percent of the fair market value of aggregate housing stock (Davis and Heathcoat 2007, Deininger and Ali 2017). From this perspective, a tax on vacant land is levied by a two-and-a-half-fold tax as compared with a built-up property in land-value taxation, all other conditions equal. **Table 1** summarizes cases of extra taxation of vacant land or properties in selected countries.

Market Value Taxation: This is a tax levied on the estimated fair market values of the land and its improvements together. Cities are increasingly adopting additional rules and measures to impose extra taxes on owners of vacant land and properties. The market value of properties can be best verified from sales transactions or assessments of banks or insurers who have vested interest of estimating the fair market value for risk management purposes. However, the sales transactions provide the total value buyers paid, where, as noted, the separation of the value of land and improvement is complicated or matter of expert judgements unless there is a very active market of vacant land.

Table 1 Cases of Extra Taxation of Vacant Urban Land

Place	Tax Base and Definition of Land Subject to Extra Levies	Tax Rates
Harrisburg, and about 20 jurisdictions in Pennsylvania, United States	Split rate property taxation: tax on land applied to all properties, plus tax applied on improvements of built-up properties	Land: 3% of assessed land value Improvements: 0.5% of assessed value of improvements
Seoul, Korea, Rep.	Surtax on vacant properties: Land left vacant for a minimum of two years is subject of higher tax than the 2% property tax on improved lots.	5% if left vacant for 2-3 years 7% if left vacant for more than 3 years 8% if left vacant for more than 5 years 9% if left vacant for more than 7 years 10% if left vacant for more than 10

Place	Tax Base and Definition of Land Subject to Extra Levies	Tax Rates
		years
Marikina City, Philippines	Extra levy: Land area greater than 1,000 square meters, one-half of which unimproved Residential lots, regardless of land area, one-half of which remains unutilized or unimproved	Additional levy at the rate of 2.5% per year on the assessed value of the property
Bogotá, Colombia	Zoning: Land that is subject to urbanization but has not yet been developed, and land that has already been urbanized but has had no construction yet	In 2004: Vacant properties = 1.2–3.3 percent of the assessed value. For improved properties in urban areas, rates from 0.4% (residential use) to 1.5% (financial institutions) Today: vacant urban land rate is 30%
Washington DC United States 2017	Extra levy: Regular property tax Vacant Land Property Blighted/ruined property	0.83% on assessed market value 5.0% on assessed market value 10% on assessed market value
Seattle Washington State USA	Parking Lot tax	12.5% extra tax on parking lots since 2010 Plans to increase rate to 17.5% in 2017
Vancouver, British Columbia, Canada	Surtax: Empty homes tax 2017	Surtax of 1 percent on any residence that is not considered the owner or a renter's "primary residence".

Source: Authors based on World Bank 2016 p112, Povich, E. S. 2017, and Trumm 2017

Imposing an Extra Tax on Vacant Land: A market value taxation includes potential measures to either expand the tax base or to levy higher rate, but both require distinct land value estimates:

- *Best Possible Use:* In Canada and the USA assessors often follow the guidelines of the IAAO (2013) and estimate the tax base of a vacant land by identifying

comparable built-up properties that represent the “best possible use” of a vacant land i.e. what a good investor would develop based on the best properties in the same value zone. Therefore, if a piece of land is permitted for a 30-story high-rise, the property tax would be levied as a percentage of the value of that use (Loomans 2013).

- *Split Taxation of Land and Improvements:* With this approach, the property tax is levied and paid in one sum that is composed of an amount due for land and another due for improvement. However, the market value of land is charged with a much higher tax rate often double to the tax on improvements or higher. Pittsburgh, as an example, has adopted split taxation in 1913 with apparent positive results in the down-town area. (Povich, E. S. 2017) In 1979, they expanded the system where it now taxes vacant landowners a whopping 6 times the rate of owners of developed property. Pittsburgh had a 70.4% increase in building permits while the 15-city average decreased by 14.4% between 1979 and 1989 (Loomans 2103).
- *Surtaxes on Vacant Land or Properties:* Vacant urban land is rarely green empty lots in well-developed cities. Instead, it often appears as commercial properties such as parking lots, which may be needed, but does not represent the best use of the properties in dense city centres. The city of Seattle, in the US, for example, has imposed a parking lot tax of 12.5% since 2010, to incentivise owners putting these lots to the market and allow developers for building high value properties.
- *Taxing Vacant Built-Up Properties:* Well-developed cities do not usually have significant amount of vacant land, rather developers of new buildings need to demolish old structures, clean the sites to be able to build new ones. Abandoned vacant properties, such as apartments, offices, commercial or industrial buildings, are more common in these parts of the city. Sometimes developers demolish and clean a site and then postpone the development for long years or go out of business. Some of these sites might be classified as vacant land and used for parking at best. Washington DC, for example, has imposed 5% and sometimes event 10% annual extra tax on vacant land and properties respectively over and above the basis 0.83% property tax rate (Povich, E. S. 2017).

Annual Rental Value Based Taxation: Rental value systems are used in about 40 countries, particularly former British colonies in Asia and Africa (Bell 2011) and Uganda is among these countries. They define the tax base as the rent that can reasonably be expected in a fair market transaction. The supporting arguments include simplicity and availability of rental data. However, there are a number of both theoretical and practical challenges with this system. Often, scarcity of data on actual rental payments make the base assessment difficult. Furthermore, some of these properties are rarely in the rental market, in particular in the case of owner-occupied housing, industrial properties, and vacant land. Some countries also operate rent control systems, which further complicates the matter.

Estimates of the base tax may therefore, rely on rent surveys for different areas, often combined with expert judgment, estimated capital values of the property from sales data or construction costs, converted to rental equivalent (Bahl 2009, Bell 2011, Norregard 2013). Surtaxes on vacant land or properties can be applied similar to the market value systems, especially the higher tax rate.

Area Based Taxation: This type of taxation does not inherently support or include rules to levy extra tax on vacant land. However, specific rules can be adopted the way similar to those extra taxes explained above. Area based property taxation systems often include unit tax tables (Ellis, Kopanyi, Lee 2007) that attach per square meter unit taxes to the various clusters of properties, simulating the various value zones, then the tax is levied based on measured or reported size of land and improvements. In this system, extra tax can be levied on vacant land by adopting a simple rule that say double unit taxes apply for vacant urban land.

Tax on Transfer of Immovable Property (TTIP): Transaction taxes are levied in the vast majority of countries and based on gross value of transactions and revenues often used to finance the national land administration. However, owners of land and property may reap enormous benefits by keeping the properties unsold for years in fast growing cities. In these cases, profits that are a multiple value compared to the initial investments are not uncommon. Therefore, it is well justified for the local governments to tap into these private benefits and generate revenues for public use and thus to improve the public infrastructure that generates further private benefits. For instance, TTIP is the single largest revenue sources in Pakistani cities, while property tax revenue is negligible (Ellis, Kopanyi, Lee 2007). TTIP is levied on gross transaction value basis with multiple known negative effects. In contrast, a tax on net gain, means taxing the difference between the acquisition value and the sales value would discourage land speculation and generate substantial local revenue.

The challenges for cities to impose these type of taxes, which represent a form of capital gains tax, include:

- i. The need for clear records of acquisition and sales over long time period;
- ii. The central government or a dedicated land bureau may already collect a property transfer tax and therefore may not want to change and give up this revenue source;
- iii. This tax often makes properties held over 10 years exempt of net gain tax, thus owners can manipulate the rules;
- iv. Introducing a tax on net land value gain may confuse legislators, who are familiar with capital gains tax on financial securities, but do not see the rational for imposing similar tax on value appreciation of land and properties.

The Challenges of Vacant Urban Tax Land from a Practitioners' Perspective

It is also worth considering the specific challenges tax administrators face in attempting to levy distinct and higher tax on vacant land.

Estimating the Value of Land: Studies often assume that the value of land is well established, recorded and accessible. In practice, however, it requires extensive amount of expert work to separate the value of land from its improvements. This is especially the case when this should be done with a large number of properties that are already established but have not been recorded as a result of insufficient land and property transaction records, which is the case in a number of developing countries.

There are a number of methods and procedures that can be used in this case:

- **Comparable Sales:** This comprises an analysis of sales of comparable unimproved land and then adjusting the prices to account for any differences in size, location, and features.
- **Income Analysis:** This is an analysis of the land residual with an estimate of the income yielded by the developed property.
- **Cost Analysis:** This is the division of value according to the depreciated reproduction cost of the improvements.
- **Cost of Development:** This is the appraisal of potential development alternatives for estimating the sale price of unimproved land. Large scale land valuations today can utilize the GIS maps, geo-positioning tools, and mass valuation methodology to establish separate land values. A good example is the experiments of the Lucas County, Ohio, USA. (German, Robinson, Youngman 2000 and Davis and Heathcoat 2007)

Defining Vacant Land: As noted, defining what constitutes vacant or unimproved land is also challenging. A land plot in a business or residential area that looks like a garden and therefore would optically be unimproved, is very common in fast growing cities in developing countries. This occurs mostly on the outskirts rather than in the city centres. In contrast, vacant land in developed countries and well-established cities may appear more like commercial spaces such as parking lots, temporary open storage facilities. Some cities also classify abandoned areas with derelict or demolished structures as vacant land, even if these may be developed in the near future. Overall the exact definition of what constitutes vacant land will be a policy decision and subject of local regulation to define what does constitute vacant land for taxation purposes.

Economic and Demography Issues: Studies have clearly shown that the possible effects and thus the rational of levying higher tax on vacant land or properties depend also on the

local demographic and economic context which determine if it is useful or rather counterproductive to levy higher taxes on vacant land and properties in a specific city. The major difference is apparent between growing cities, with both growing economies and population, compared to stagnant cities where the local economy is stagnant and the population is shrinking.

Strong local economy may appear without fast growing population and thus still justify imposing extra taxes on vacant land or properties. The case of Washington DC, USA and Vancouver, Canada exemplifies this situation of the developed world. Cities in the developing world faced with fast population growth and many with strong economic development and good perspectives as well. Studies suggest that these cities would benefit from higher taxation of vacant land, since the bulk of unutilized land is likely to be speculative.

Many cities in the developed world face with stagnant economy and/or shrinking population in the city or its centre, because families move out to live in the green suburban belt along the city. Minneapolis-Saint Paul, in the US, is an important example of this type of situation. However, many other US cities face similar challenges. There are numerous vacant land or properties in these cities, but imposing extra tax on the owners may undermine rather than improve the local development. Redevelopment of run-down areas are the prime challenges but also the way out for these cities rather than extra taxation of owners of vacant land (World Bank 2016). Turning the empty lots into green community gardens supported with tax preferences is one among the mitigation attempts. This is a recent program in a number of cities including San Francisco, albeit many question the sustainability and even the rational due to shortage of housing in the city.

Evidence and Case Studies of the Introduction of a Vacant Land Tax Around the World

As noted, land taxes are favoured by many economists and have both strong theoretical and practical underpinnings. Furthermore, administrators are supportive of using a vacant-land tax as a means of raising municipal revenue. However, this type of tax may be difficult to introduce in practice. This is due to the fact that, as noted, the information necessary to assess land values may not always be available, which is the case in many developing countries where administrative constraints have resulted in low collection of such a tax (Bird and Slack 2007). Another major challenge in levying any type of new property taxes is political will. For example, as noted, there are more than 30 countries across the world that have a form of land value taxation in place (Dye and England 2010). Fewer than these 30, however, have a separate tax on vacant land. As a result, there have only been a few actual rigorous statistical studies and many have led to inconclusive results and therefore further research is needed in this area to provide evidence (Dye and England 2010). However, there are individual examples of countries and cities that have managed to introduce such a tax with varying success.

Brazil (Arujo de Larangeira 2003): In Porto Alegre, the largest city in the state Rio Grande do Sul in Brazil, taxation of vacant land was introduced with changes in the state constitution in 1988. At the time, the city officials had identified 65 owners of 120 plots in the city, approximately 1.5% of the city area. The tax was aimed at incentivising the land owners to develop their plots or to sell them to those who could develop them. Although this is an example where there were a small number of large land owners, the tax was accepted and effective: only one of the landowners took the city to court but ultimately, he too developed the land.

Colombia (Arujo de Larangeira 2003): Bogota has developed a vacant-land tax with great success: in 2003, it was estimated that only between 2000 and 2200 hectares of the city's overall 36000 hectares remained vacant. The success of the tax is attributed to its time bound nature which the tax rate triples over a period of 10 years if there is no development. There is a further provision that land that is left idle more than two years can be reclaimed by the city and put forward to public auction – a harsh measure that Henry George had proposed.

Democratic Republic of Congo (Nwezwanga 2009): The Democratic Republic of Congo (DRC) is an example of a francophone African country that has a tax on vacant land. The tax is based on the surface area and is, as per the legislation, determined by projections of the vacant land on to the edges of rooves. The law on land tax differentiates localities based on their attractiveness for settlement and gives them ranks. Depending on the rank, the areas will fall into different tax brackets. The payment of this tax is fully the responsibility of the owner of the land. However, although this vacant-land tax and other land taxes exist in DRC legislation, their actual implementation is limited. In fact, in 2008, less than 1% of revenue collected by the General Tax Administration was attributable to the overall general land tax and even less was attributable to a vacant-land tax. This is due to the fact that its enforcement is difficult both administratively but also politically; the Congolese population believe the land belongs to their ancestors and is also a fundamental part of their lives. Therefore, they do not see the reason behind paying such a tax. Given this political sensitivity, the government has also not pushed on the enforcement of the tax.

Mexico (Arujo de Larangeira 2003): In Mexcali, Baja California a vacant-land tax was introduced with the purpose of incentivising development in the city. This case was seen as particularly successful as it motivated many owners to register their real estate to avoid paying the tax. In addition, it increased the municipality's in an over twelve-fold increase in revenue. Part of the success of this tax lay in the fact that it was staggered tax that increased by 25% each year the land was left vacant. In Mexico City, however, they decided not to introduce a vacant-land tax, but used a series of other fiscal policies including subsidised land purchases and expropriation as alternative methods to develop vacant land.

Philippines: In the Philippines, each metro area has the ability to tax vacant land up to a

surcharge of 5% on other property taxes. However, whether this is implemented depends on the various city administrations. It took a while, but recently the majority of cities have started to implement it. For example, Quezon City has a 3% tax rate on idle land that is located next to national roads. (McCluskey and Franzen 2013).

South Africa: In South Africa, vacant-land tax was implemented to promote densification but also to ensure that owners of the vacant land are contributing to the public investments and cost of services that were taking place around the land. (McCluskey and Franzen 2013).

United States of America: Estimates over the past decades have agreed that there is approximately 20% vacant land in US cities with populations over 100,000 people, although there are variations over time (Northam 1971, Schenk 1978). In particular, there is an inverse relationship between the population of the city and the vacant land in the respective city's CBD (Northam 1971). This confirms the theory of efficient city growth, given that as population grows, land use needs to become increasingly concentrated to accommodate them.

In the US, states have the responsibility of determining whether and how to impose land tax. However, as taxation of vacant land is considered a property tax, this remains in the cities domain. Therefore, certain US cities have taxes on vacant land where others do not. An example is Pennsylvania that had land value taxation, including on vacant land, since the early 19th century. Over time it became more politically contentious and was eventually abandoned. However, rather than being a problem with the tax itself, the tax rather became the scapegoat for poor implementation including inaccurate assessments and a lack of transparency in the procedures in setting the rates (Dye and England 2010).

Seattle, Washington State; Seattle, one of the fastest growing cities in the United States, has a parking lot tax which is a version of an extra land-value tax being charged with a rate of 12.5% since 2010. New proposals were initiated to raise this rate to 17.5% and introduce extra tax on vacant building lots in 2017. In addition to surface parking lots, vacant lots remain a problem, even in a city like Seattle. One prominent example is the city-owned Civic Square site right outside the City Hall, which has been vacant 12 years. The site was going to be a 43-story office building before the recession hit and the developer bungled its position. The challenge is that if the City also taxed vacant lots say within its urban centres, it would be taxing itself too, as long as the City does not exempt itself. But maybe doing so would light a fire under itself to do something with its underused properties. (Trumm 2017)

In *Hawaii*, a tax on vacant land was also instituted. In this case, the specific objective was to incentivise construction on vacant parcels of land in the city centre and thus support efficient growth of their cities. In this case, the tax was blamed for working 'too well': notably Honolulu, the capital of Hawaii went through a construction boom that the residents were not pleased with. Again, Dye and England (2010) posit that this was not a result of the tax per se, but rather due to poor zoning and planning decisions. It was however, easier to

blame the tax.

There are also areas where conversely tax credits are used to protect vacant land. These have been used particularly in the US where urban growth is happening rapidly and infringing on agricultural land and forests. Given these lands have other public benefits, particularly agricultural land that is used for growing food, there is an interest to protect them. However, with urban sprawl, the land increases in value and therefore the idea is that without the tax credit owners of the land would be incentivised to sell it for construction (Malme 1993). The tax credit will protect them from doing so and rather owners will be incentivised to hold on to their land. However, just like the cases where taxation of vacant land has been an imperfect way to encourage densification, efforts in the US have been ineffective instruments. Rather than protect land, these credits effectively function as subsidies to a landowner to hold their land, wait for further appreciation and sell at a later date. Furthermore, tax credits also have a significant effect on revenues collected by the government.

United Kingdom (Adams, Disbury et al 2012): There has been an increasing push by the UK government in recent years to redevelop vacant land in already urbanised areas for residential purposes. In this context, the Government launched its Urban White Paper in 1998 to outline how this could be done. However, rather than advocating a land tax, a so-called “stick” approach, the policy went in the direction of incentives for development. In some cases, they also introduced reforms so that local authorities could undertake compulsory purchases where it was in society’s interest. This due to the fact that various studies on vacant land in the city outlined the reason for land remaining vacant was not as a result of owners holding it for speculative purposes rather that the cost of development was often too high.

Options for Kampala

Although the evidence is mixed on how a tax on vacant land will affect the growth of a city, for tax administrators, whose primary mandate is to raise municipal revenues, taxing land is part of a general portfolio of property taxation. Therefore, taxing vacant land has the potential to significantly raise revenues. Currently, Kampala represents the opposite case, namely that vacant urban land is exempt from property taxes by national legislation. This is despite the fact that Kampala is characterized with strong local economy and fast growing local population, thus taxing vacant land is likely to have an overall positive effect on the city development both in terms of revenue and also in terms of more efficient land use. Thus, for the Directorate of Revenue Collection at the KCCA, based on the review of the literature, are two main ways that the potential of a tax on vacant land can be assessed. Which of these ways is used will be dependent on data availability (IAAO 2013).

Proxy of Land Sales: The simplest way is to develop a proxy using only a sample of land-sales data in the city. The data is then posted on a map and standard unit values are

calculated taking into account the area and type of land use. The approximate values can be estimated, extrapolated and then used as a proxy for the vacant land. For this method, there is also a need to transform the estimated market values into rental values in order to harmonize with the current property tax system. The benefit of this method lies in its simplicity. Particularly in the case where data is sufficient to compare sales records of vacant and improved land, it is the preferred approach, according to the IAAO (2013). The major draw-back, however, is that it does not fully capture the potential next best use of the land and a sufficient sample of well-recorded data for land value sales might be missing. Furthermore, it may be in certain cases that vacant land is not actually transacted regularly and therefore data will have to be extrapolated from sales of improved properties.

Estimated Next-Best Use: The second approach is to tax vacant land based on its estimated best use i.e. what a good investor would develop based on the best properties in the same value zone. This would mean that a vacant-land tax is able to levy a tax that fully captures the value of the land and raise more revenue for the city. It is the approach used in most developed country cities. Where zoning and land use controls exist, these will help determine the best use of the land. However, in cities, like Kampala, where this does not exist, there needs to be further analysis done by the assessor, which takes into account possible uses of the land based on legal, physical and financial dimensions (IAAO 2013).

The next step of this analysis will be to model these options to help policymakers assess both the feasibility and potential for a vacant urban land tax in Kampala.

Conclusion

The primary reasons that the KCCA is exploring the possibility of introducing a tax on vacant urban land is to increase its own-source revenue. From this perspective, the theory and experiences support the fact that tax on vacant land is a major source of untapped revenue for cities in developing countries in particular. Therefore, cities should consider taxing vacant land both to raise revenue but also because it is an efficient and non-distortionary tax where it is implemented properly.

Although vacant-land tax might not be a sole or best instrument to foster densification, urban planning, and best economic use of land, it does support all of these objectives as well as the land market at the margin, rather than distorting positive market forces. The positive effects of a vacant-land tax are likely to significantly exceed the intuitively assumed albeit not proven negative effects, particularly in expanding cities with growing economies in developing country cities like Kampala.

Therefore, the issue, based on an extensive review of the available evidence is not whether, why or where to tax vacant urban land, but rather how to introduce such a tax. In particular, the major question for cities is what modality would be the most adequate form of taxing vacant urban land based on their local conditions.

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