

Informality, Urban Poverty and Land Market Prices

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The excessively high price for serviced land is one of several explanations for the extent and persistence of informal land markets. Contrary to general beliefs, informality is expensive and therefore is not the best or even an advantageous alternative to combating poverty, but it is usually the only one available to the urban poor. A more consistent policy to reduce informality, and in so doing reduce poverty, should contribute to a reduction of the high land prices, or at least be neutral.

Poverty Alone Cannot Explain Informality

Although the map of illegality corresponds to a great degree with that of poverty, the extent and persistence of informality cannot be explained by poverty alone. Not all occupants of informal settlements are poor, as many empirical studies have proved repeatedly. The rate of new irregular land occupations is much higher than the rate of increase in the number of new poor families. In Brazil, for example, the total number of *favela* residents has increased at five times the rate of poor residents, and a similar trend is seen in most large Latin American cities.

This spectacular growth in informal settlements has occurred through expansion on the peripheries and densification in the “consolidated” irregular areas of large Latin American cities, even though the birth rate and the number of rural-to-urban migrants have declined substantially and the percentage of poor citizens has remained relatively stable. Other explanations for this growth in informality include the lack of sufficient social housing programs, inadequate public investment in urban infrastructure for public amenities and services (such as drainage and water supplies), and the “fading away” of urban planning. All of these factors directly affect the supply of serviced land.

The High Cost of Serviced Land

Although conventional economics argues that free market prices reflect the level at which a buyer’s ability and willingness to pay matches a supplier’s ability and willingness to sell, in practice no assurance is given with respect to meeting social need. That is, the market for serviced land may be functioning well, even though many families (even non-poor ones) are unable to access serviced land, and some existing serviced lands are being kept vacant intentionally.

On the peripheries of many Latin American cities, the price of a square metre (m²) of serviced land made available by private agents can vary between US\$32 and US\$172. These figures are close in absolute terms to those found in cities in the developed world, where the per capita income is 7 to 10 times higher than in Latin America. Even a family above the poverty line saving up to 20 percent of its monthly wages (US\$200) for housing would need between 12 and 15 years to save enough to acquire an urbanized plot of 150 m². These indicators suggest that the difficulty of gaining access to serviced land may be one of the factors that actually contribute to poverty.

The price of serviced land, like prices in other markets, is determined by supply and demand. The supply of land depends on the amount that is newly serviced (produced) per year, the amount that is retained from the market, and the intensity of the use of the existing serviced land. The demand depends on the annual rate of formation of new households, adjusted by their income and/or purchasing power, their preferences and the prices of other items in their budgets. It is difficult, if not impossible, to provide a full discussion of all factors affecting the behavior of land prices (see Smolka 2002), but it suffices to mention certain determinants that are emblematic to understanding some apparent idiosyncrasies of the functioning of urban land markets in Latin America.

On the supply side, property taxes, a major potential source of revenues to finance the production of serviced land, are ridiculously low. Typically property taxes represent less than 0.5 percent of GDP, compared to 3 to 4 percent in the U.S. and Canada. Overall there is a sense that Latin America underspends on infrastructure and services compared to its per capita GDP. The substantive observed land value increments resulting from investments in urban infrastructure and services are basically neglected as a revenue source to finance such investments due to weak sanctions on capturing land value increments or simply holding improved land from the market (Smolka and Furtado 2001).

In addition, the disposition of considerable amounts of land is controlled by agents that do not follow strict economic rules (e.g., some public agencies, the Army, the church or even state-owned enterprises like the railroads for whom some statutory restrictions preclude the disposition of land according to highest and best use criteria). Furthermore, the limited amount of available land that is fully serviced is often subject to overtly elitist urbanistic norms and ordinances (zoning) designed to “protect” those serviced neighborhoods by making it difficult for low-income families to comply.

On the demand side, many families, even those with relatively high incomes, work in the informal sector and are excluded from the market because they lack the credentials required by financial

agencies to apply for a loan. The need to self-finance housing production implies a time-lag between acquisition and occupation of land, which adds to overall demand for land. Further, the legacy of high inflation, ill-developed or inaccessible capital markets, and limited participation in the social security system are responsible for nurturing a well-established culture and preference by lower-income sectors to use land as a reserve of value and as a popular means of capitalization, thus adding to the overall demand for land. In other words, land vacancy and the culture of land speculation are not exclusive to high-income areas.

Prices for Informal Plots

Beyond these conventional arguments about supply and demand, one may also consider the dynamics or interdependency of formal and informal urban land markets as a factor contributing to high land prices. Specifically, the high prices for serviced land in the formal market seem to affect the relatively high prices of unserviced land in the informal market, and vice versa.

Land prices reveal the difference that the purchaser has to pay to avoid falling into a worse situation (that is, more distance from work; fewer or worse services, lower environmental quality, and the like). Thus, if below a certain threshold the “best” alternative is a plot in an unserviced settlement, one would expect a premium on the existing serviced land, which would also reflect the “value” of the legal title that comes with serviced land. On the other hand, if the minimum price for serviced land (raw land plus the cost of urbanization) is still unaffordable, then whatever land one could have access to would represent an alternative. This alternative could range from outright squatter settlement, to invasion through the mediation of commercial operators or organized movements (both of which involve fees and other payments), to the more prevalent informal land market that is a commercial subdivision of large parcels into small plots with inadequate services.

The price of land in the informal market is, therefore, higher than the price of raw land but normally less than the sum of the raw land price plus the cost of providing services. At the same time, it tends to be lower (though not necessarily on a per square-metre basis) than the minimum price of fully serviced and commercialized land in the formal market. In effect the market values access to land, even if the plot is smaller than the minimum lot size, or building can be done without architectural restrictions, or the second floor of the house is sold as buildable space.

All this means that most low-income families do not choose an informal arrangement because it

provides the best price option, but simply because it is often their only option. The “choice” of acquiring an informal plot is still expensive. Conservative estimates obtained from an informal survey of 10 large Latin American cities show the average price of land on a commercialized illegal plot was US\$27 for one square metre (see Table 1).

Table 1: Prices and Profitability of Informal and Formal Land Markets (US\$)

	Informal market	Formal market
1 - Rural land designated for urban use	\$4	\$4
2 - Cost of urbanization	minimal = \$5	full = \$25
3 - Final price in the market	\$27	\$70
4 - Profit over advanced capital = $(3-1-2)/(1+2)$	200%	141%

The profit figure (4) explains at least in part the question (an apparent paradox): Why, in spite of a significant mark-up in the provision of urbanized land in the informal market, does one find so little interest in development from the private sector? Table 1 indicates that the provision of informal land is more profitable than the provision of formally developed land. In fact, the figures for the formal market are largely underestimated since there are higher risks associated with financial, security and marketing costs, and other costs not incurred in informal developments. This study helps explain why formality begets informality and exposes the fact that the advantages of informal arrangements are not necessarily perceived by the low-income occupants but by the subdivider or informal developer.

Unexpected Effects of Regularization

Let us turn now to the question of policy responses to this state of affairs. Given the apparent impossibility or impracticality of adopting any other policy, the prevailing notion has been that tolerating informal “solutions” to gain access to land and then regularizing the settlements after they are established is cheaper in the long run for public finances, and better for the low-income occupants.

The public finance argument claims that the existing arrangement is cheaper because it capitalizes on private (self-) investments in the consolidated settlements, thus relieving public agencies of social expenditures that they would otherwise have had to grant to citizens as their right. This view is questionable on two accounts. First, the physical conditions and existing housing are often

unacceptable as human shelter, in spite of the well-praised ingenuity and imagination of informal solutions found under extremely unfavorable conditions. Such standards of land use and density in these settlements are only tolerated because the damage has already been done. Second, with regard to infrastructure, some of the alternative technologies that look all right to start with are ultimately shown to perform poorly and to require overly expensive maintenance.

The impacts on low-income occupants are also worse than expected. Not only are land prices much too high but there are additional costs: those who do not have an official address (because they live in an irregular settlement) are often discriminated against when looking for a job or social services; rents as a percentage of property value are higher than the rates observed in the formal market; access to water from a truck or other temporary source is much more expensive than piped water; and the cost of insecurity is greater because of living in a more violent environment. Furthermore, regularization policies evaluated in a broader urban context may actually contribute to aggravating the problem it is supposed to remedy. That is, as a curative approach these policies may instead have perverse or counter-productive preventative effects, as noted below.

Price Signals

The expectation that an area of land will eventually be regularized allows the developer to raise the price. A purchaser often obtains a lot knowing that the developer does not yet have the services required by urban planning norms, but at the same time the developer promises that as soon as enough lots are sold, the services or infrastructure will be provided, even though such promises are regularly unfulfilled. At best, a relationship of complicity is established between buyer and seller. At worst, and this is quite common, the purchaser is often tricked by the existence of services, such as pipes put into the ground, which the developer claims are part of the infrastructure network. Other problems in these arrangements that can harm poor residents are doubtful rights of tenure, payment terms that require interest paid in cash, and confusing or inaccurate details in the contract.

The greater the expectation that the unserviced land will get services eventually (either from the developer or, as is more likely, from the government through a regularization program), the higher the price at which the land is sold. In other words, the higher the expectation of regularization and its accompanying benefits of liquidity, the higher will be the added cost of the land.

Regularization as an Attraction for More Irregularity

Research on the first arrival dates of inhabitants in informal settlements suggests that in many cases more people moved to a settlement just when some regularization program (such as the granting of titles or urbanization improvements) was being applied (Menna Barreto 2000).

The idea that expectations about regularization have an effect on informality is corroborated by the large number of invasions or occupations that take place either just before or just after electoral periods, when candidates regularly promise regularization programs. The victory of Miguel Arraes as governor of Pernambuco, Brazil, in 1986 led to 13 land invasions in just over a month (Rabaroux 1997, 124). The Latin American historiography of the effects of the expectations created by populist promises made by political candidates is indeed rich in other examples. Many of the existing settlements that need to be regularized today owe their origin to the irresponsible complacency of politicians turning a blind eye to the irregular occupation of public or unsuitable areas, or, which is worse, who ceded public land for electioneering purposes.

The Opportunity Costs of Regularization

Regularization programs, which are normally of a remedial or curative nature, have a high opportunity cost compared to the cost of providing urbanized land in a preventative manner. Overall the rule of thumb cost per benefited family of a typical upgrading or regularization program has been in the range of \$3,000 to \$4,000. Taking the size of a plot to be 50-60m² and adding 20 percent to account for streets and other public areas and for public services and community facilities, the cost works out to US\$40 to US\$70 per m². This is considerably higher than the cost for urbanizing new land, which is less than US\$35 per m², and is similar to the price charged by private developers, even when allowing for a handsome profit margin. ECIA, a private developer operating west of Río de Janeiro, offers completely urbanized plots at prices from US\$70 to US\$143 per m² (Oliveira 1999). The Municipal Secretariat of Urbanism in Río de Janeiro has a technical study, from 1997, which demonstrates that it is possible to commercialize urbanized plots for less than US\$55 per m². Along the same lines, Aristizabal and Gomez (2001) in Bogotá estimate that the cost of correction (“reparation”) of an irregular settlement is 2.7 times the cost of planned areas.

These figures suggest the limitations of preventative programs in favor of curative ones. It is also significant to know that permission to develop a regular, formal subdivision may take from three to five years, whereas the decision to regularize an informal settlement may take no less than six months.

The “Day After” of Regularization

A well-executed regularization program (that is, one that effectively integrates the informal area with the urban fabric) would ideally result in the improved quality of life for all occupants and a stronger community. In particular, one would expect an appreciation of property values, causing some residential mobility as families with below-average incomes are forced to move. However, when the program is badly executed the area may be consolidated as a low-income irregular settlement.

The Favela-Bairro upgrading program in Rio de Janeiro is currently used to exemplify the most comprehensive and successful experiences in the field. Abramo’s (2002) study of the impact of regularization programs found a relatively small increase in property values in the affected areas (28 percent). Applying this average figure to typical or modest houses with an *ex-ante* value estimated at US\$12,000, the added value is about US\$3,400, a number close to the average per-family cost of regularization programs. This result may be contrasted with the mark-up of more than 100 percent obtained in the process of servicing raw land through the market by private agents. This intriguing piece of information seems to show how little notice the “market” takes of the increased value of these regularized settlements. At the same time, full integration into the urban fabric turns out to be less frequent than had been expected. Many of the *favelas* that received important upgrading investments remain stigmatized as *favelas* even 15 years later.

Conclusions

Informality is expensive, and it exacerbates the conditions of living in poverty. The diagnoses of such agencies as the UNCHS (Habitat), World Bank, Inter-American Development Bank and others would seem to be correct in regarding upgrading programs as an essential ingredient of any policy to deal with urban poverty or mitigate its effects. However, because of the piecemeal and limited approach of such programs, there is no guarantee that the regularization of settlements alone will contribute to reducing urban poverty. In effect these programs not only reiterate and keep intact the land market “rules of the game” that contribute to informality, but they also generate some perverse effects. This situation poses both a dilemma and a challenge. The dilemma is that not regularizing simply is not a political option (nor is it a humanitarian option). The challenge is how to regularize informal settlements without feeding the vicious circle of irregularity. This actually means guaranteeing that such policies and programs contain preventative content. The task ahead is indeed formidable.

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