

# Real Estate Watch

## Mexico

### “Land banks”: a little used financial model

#### Economic Analysis

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- International experience with land banks may serve to Mexico to address some problems created by rapid urban growth
- The interaction between government and private investors can solve housing problems such as uninhabited, lack of services and even tax evasion
- As financing mechanism, land banks offer attractive options to fund real estate projects

This real estate observatory is an analysis on the functions and role of land banks in housing markets. These institutions, mostly managed by

Governments, have become essential tools for promoting competitiveness in developed countries markets and in some cases to solve specific problems of communities. Through various incentives, they help to strengthen the channels of financing for land and correct some of the phenomena that inhibit the appreciation of housing, such as neglect, lack territorial planning, investment (public and private) and relocation of foreclosed homes.

First, we cite the definition and its main functions. Then we describe the main approaches that have been adopted internationally in this area and how these financial channels have been developed in the case of Mexico. Finally, it offers a perspective on the value potential that this market could offer in the country.

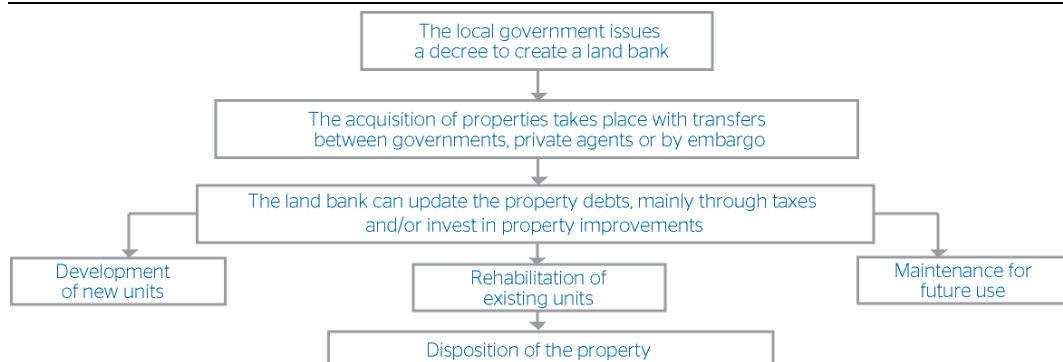
#### What is a land bank?

At an international level, land banks have been constituted as governmental institutions that establish mechanisms to channel financial resources toward specific urban areas which have problems in administration or in a sub-optimum use, or that are planning to improve its use in the future. Even though they normally operate with a government budget, on some occasions they can obtain private funds.

In general, they are directed toward preserving both the value of the land and the constructions, especially when they are affected by disorder in the urban environment. Normally, said disorder is associated with the abandonment of the land or the homes, the lack of investment in areas with an urban development potential and the recapitalization of properties that, due to the high costs of repossession or seizure, cannot be placed once again in the market.

Figure 1

#### Typical functions of a land bank at an international level



Source: Alexander (2005)

### Some examples: private investment in under-utilized areas in the United Kingdom

In the United Kingdom, land banks promote private investment in under-utilized areas. Government participation in the rehabilitation of the areas is marginal and close to three fourths of the investment destined for under-utilized areas comes from the private sector. It should be stressed that it is necessary that such areas are in total abandonment or have been repossessed. The intention to maximize or make better use of the properties is enough to justify the investment in favor of materializing the economic, physical and social benefits in the government's development plans.

One of the main incentives of the private sector lies in the fiscal aspect, given that the government allows the deductibility of all expenditures associated with the improvement of land that had been garbage dumps or that is in industrial obsolescence.<sup>1</sup>

The local governments contribute by identifying the properties in disuse, determining the responsibilities in the land rehabilitation process and set the criteria for maintaining a public registry of the properties according to zones and uses. Also, the municipal governments and the governmental landholding organizations are encouraged to sell so as to allow the central government to include them in their plans of urban growth. As a main rule, the local governments cannot constitute and operate land banks as a form of "corporate government" that avoids being judge and jury in the decisions regarding some public assets of the community. This generates incentives for a better execution and administration of the projects.

Finally, in those projects where the private sector does not invest directly, participation mechanisms can be established for the construction and operation of the projects through private associations and local governments.

### ...in other European countries, the investors are also the advisors

The first land bank formally created in Europe began operating in Amsterdam (Holland) in the last decade of the XIX Century. Later, Sweden (1904) and France (1958) adopted the system. The main reference of the land banks in the European countries resides on the Model of Private Land Associations. Although they can have variables, the activities they realize include the development of housing and commercial projects, being advisors in urban development matters, oversee that land use is respected and collaborate in the projects for maintaining urban image and conservation.

The Agencies for Regional Development are another mechanism, mainly for promoting economic development and the regeneration of properties, in addition to providing the counterbalance for private associations (among other ways, by regulating their activities).

### In China, the use of the land has been given on concession

Land banks began to operate formally in the decade of the nineties through a series of reforms for use of land. The main objective of the local governments was to promote the development of their economies with orderly urban growth, housing prices and healthy public finances. However, given the socio-economic differences of the regions, a single model was not followed.

In general terms, a dual model was followed where investors could obtain the right to use of the land through auctions or bidding processes at more competitive prices. This mechanism has contributed to generating Industrial and commercial areas in abandoned areas. Contrary to other countries, in China the land banks do not accumulate a large quantity of land, which has allowed for sustained price growth<sup>2</sup> in developed areas. Meanwhile, the rise in tax revenues has also been accompanied by an increase in investment on infrastructure.<sup>3</sup>

<sup>1</sup> Some programs can deduct up to 150% of the total cost of land improvement.

<sup>2</sup> Between 2002 and 2006, the rise in the average land price for commercial and residential use in the city of Guangzhou has been of 4.5%.

<sup>3</sup> The city's tax revenues rose almost 60% between 2002 and 2006 and investment on infrastructure 68% for the same period.

### In North America, the objective was to recover abandoned areas

Relative to the United States, land banks began to operate formally between the decade of 1960 and 1970. The states best known for the success of their policies are: St. Louis (Missouri), Cleveland (Ohio), Louisville (Kentucky), Atlanta (Georgia) and Flint (Michigan) which overcame problems such as the abandonment of properties and the consequent problem of default in their local economies. In the case of Canada, the practices began in the decade of the fifties, of note being the program implemented in cities in Ontario since the decade of the sixties.

In these cities, a mechanism was established for transforming all abandoned and repossessed properties into productive long-term assets<sup>4</sup>. Thus, the functions of the land banks included the reduction of the terms for the collection and execution of the mortgages in default.<sup>5</sup> Also, they maintained land use linked to the development priorities of the local governments. In some cases, the land banks had even acted as housing developers.<sup>6</sup> Here, the land banks also had the faculty of setting the prices of the land, even with the possibility of placing it below its market value as an incentive to attract private investment<sup>7</sup>. Finally, the land banks involve the community by generating incentives for a better use of land in disuse.<sup>8</sup>

Chart 1

#### Benefits of the land banks for the different participants

Municipal or local governments	Communities	Land banks and housing developers
<ul style="list-style-type: none"> <li>• Better use of community assets</li> <li>• Generate urban development solutions</li> <li>• Potential for generating higher taxes and collection</li> </ul>	<ul style="list-style-type: none"> <li>• Urban areas better integrated in work centers and urban equipping (schools, hospitals, training, etc)</li> <li>• Higher surplus value for real-estate assets</li> </ul>	<ul style="list-style-type: none"> <li>• Expand financing sources</li> <li>• Develop specific projects or the recovery of those with problems such as abandonment or under-utilization</li> </ul>

Source: BBVA Research

### In México, the focus has been on financial management

In the case of Mexico, although scarce, some experiences worth mentioning have begun to emerge. In Puebla and Aguascalientes, the state governments, through their housing institutions or agencies, have acquired land reserves for urbanization and placing among housing constructors, so as to attend to the housing needs of the low-income population.<sup>9</sup> Another example, in the Federal District, would be on the land where the Pemex refinery once stood in Azcapotzalco. The land of 55 hectares was unused close to three decades after the refinery had already closed, until 2011 when an ecological park was built there with a lake, gardens, sports courts, etc. Finally, at a federal level, in 2009 the government began the promotion of Comprehensive and Sustainable Urban Developments (DUIS for its Spanish initials) in order to further that land destined for housing would have guaranteed at least a provision for standardized services with criteria for sustainability.

<sup>4</sup> For example, in Hamilton, Canada, an improvement program was established for industrial properties in disuse where the government covered up to 80% of the improvement cost of the locality, with quick reactivation purposes.

<sup>5</sup> In 1999, Michigan implemented a reform so properties could be repossessed in the first two years after incurring in fiscal non-compliance. (Genesee County Land Bank, Side Lot Transfer Program Evaluation, 2006).

<sup>6</sup> Such is the case of the Genesee County, in the State of Michigan, in the U.S., which since 2004, expanded the faculties of the local Land Bank to act as developer, because of the large number of properties that the state had accumulated since 2003.

<sup>7</sup> One of the main policies of the land bank of Atlanta is to acquire properties for less than 75% of the net value of the property. (Land Bank Authorities, 2005, Chapter 6).

<sup>8</sup> For example, in the city of Cleveland, a government program marketed land in disuse with a front of up to 40 feet for just one dollar in order to integrate them with the neighboring homes.

<sup>9</sup> In the particular case of Aguascalientes, it should also be mentioned that the reserves acquired are framed in the urban development plan of the state that seeks to put in order urban growth with a 30-year vision.

But, beyond these cases that are a long way from offering comprehensive solutions, in Mexico land banks do not rely on the participation of the government—be it due to the ownership of the land or due to the authority for negotiating its use—; rather, they focus on the financial management of land reserves. And it is within the housing financing chain, in Mexico's case, that land has received relatively little attention by financial intermediaries and by the markets themselves. The commercial banks do not have a specifically designed product to finance, despite the fact that there are some cases of banks financing the equipping and infrastructure of lots. Instead, it has been the investment funds that have covered these needs. The same occurs in the financing of urban equipping and infrastructure.

The land banks are an effective way of administrating the land reserves of housing constructors. Typically, the institutions engaged in this activity acquire the reserves that builders will use to develop housing in the short term, which allows the construction companies to obtain liquidity and, at the same time, to discount these assets from their balance.

The financing is done on the basis of individual projects, although based on a certain scale.<sup>10</sup> That is, it is neither for all of the land reserve nor for the one that is expected to be developed in the long term. It is not even due to the costs that it implies; it is only for those projects to be developed in the next two to four years.

For those covering the conditions, the access to the land banks raises the profitability of their projects significantly. In exchange for a share in the sales (somewhere between 15% and 20%), the land bank covers the value of the land, which reduces the cost for the builder and, thereby, raises the profitability of the project.<sup>11</sup>

However, it must be clarified that the plan does not adapt to everyone's needs. An initial limiting factor is that some investment funds can only work with publicly traded companies.<sup>12</sup> A second one is that the financing cost itself cannot be absorbed by all the construction companies. Third, in order for it to be functional, the operating cycle of the housing product to be developed should be well defined, which is most probable to occur in the housing segments for the lowest income population, which have the support of the federal government for their marketing (which eliminates some of the uncertainty as to the times for displacement). Finally, not all the housing construction companies have land reserves for several years of sales and on which they require for specific financial management.

Thus, the companies which typically go to a land bank are those that have large extensions of land for their operation, both present and future, which they have accumulated so as to have the necessary input to guarantee their operation for several years, under the premise of being able to move the finished product with relative speed. In the end, this implies that it is the large companies, preferably publicly traded, that are the natural candidates to receive financing from a land bank.

### ... which constitutes an attractive market niche

Having already established that most (if not all) of the financing needs through land banks would correspond to large companies, the estimate of the potential financial volume is based on two criteria: one is the proportion of land in the total value of a home, and, two, the total surface of the land required in construction.

In a first approximation, the value of the land in the total value of the home, the important thing to know is how many homes of greater size are placed by the construction companies and what is their average price. In 2010, 610,00 mortgage loans were granted at a national level, of which the larger companies contributed 268,000.<sup>13</sup> The average value of homes in the segments attended by these construction companies (directed to the low-income population) is between P\$325,000 and P\$356,000.<sup>14</sup> Therefore, the housing market value in the segment attended by these construction companies would be of up to P\$95 billion. Consequently, the activity of the land banks would be a portion of that total.

<sup>10</sup> Although they are valued individually, land bank administrators require a portfolio of projects in which to invest.

<sup>11</sup> It can be shown that for a project of between 5,000 and 5,500 homes, of a price around P\$325,000 to be built and sold in five years (from the start of construction), under typical financing conditions costs for building and urbanization and operating and administrative expenditures, the constructor is offered a return on his investment on the order of 35%, when he should cover the cost of the land. In turn, when the land bank covers this amount (in exchange for a share in the sales of between 15% and 20%), the profitability for the constructor rises to more than 60% and for the land bank, it reaches 25%.

<sup>12</sup> One way to limit the risks associated with the projects is through the evaluation of the builder, which requires knowing his operating and financial performance throughout time. The publicly traded companies offer better conditions for making this evaluation.

<sup>13</sup> The publicly traded companies (quoting on the stock market) placed 155,000 and other large ones, around 113,000. As a whole, their participation in total new housing (456,000) was close to 60%.

<sup>14</sup> Based on reports of the companies themselves and the figures of the average housing value according to Infonavit and Fovissste segments.

Chart 2

Average prices of Infonavit homes  
(2010, thousands of pesos)

	Average price	Share (% of loans)
<b>Total</b>	<b>395.9</b>	<b>100.0</b>
<b>Social benefit</b>	<b>323.5</b>	<b>91.6</b>
Economic	173.0	2.9
Popular (Mass)	274.8	62.9
Traditional	458.8	25.9
Average	876.5	6.2
Residential	1,748.1	1.8
Residential Plus	3,870.7	0.4

Source: BBVA Research with Infonavit data.

Chart 3

Average price of housing: publicly traded companies  
(2010, thousands of pesos)

	Housing	Average price
Urbi	33.6	384.6
Geo	56.1	331.5
Homex	44.0	322.0
Ara	18.2	402.0
Sare	2.7	748.9
<b>Total</b>	<b>154.6</b>	<b>355.9</b>

Source: BBVA Research with the companies' data

On the other hand, a known datum is that the value of the land, as a proportion of the value of the home, fluctuates between 10% and 20%; the highest percentages correspond to a residential home. For the large companies which acquire large territorial extensions (and thereby have a greater capacity for negotiation) and build for the lower-income population segments, mainly for social benefit (or entry level), the figure for the value of the land is probably closer to the lower limit of the range, that is, toward 10%. Using this proportion in the value of the housing market, one can observe that the potential market value for the large construction companies is in the order of P\$9.5 billion annually.

Chart 4

Market value of the land: by required surface  
(Billions of annual pesos\*)

Homes sold (thousands)	268.0
Surface per housing unit* (m <sup>2</sup> )	120.8
Total surface (thousands Ha.)	3.2
Value per m <sup>2</sup>	200
<b>Total value</b>	<b>6.5</b>

\*Based on 2010 figures Source: BBVA Research with Infonavit data

Chart 5

Market value of the land: by % share in housing value  
(Billions of annual pesos\*)

Housing units sold (thousands)	267.5
Publicly traded construction companies	155.0
Other large ones	112.5
Average price (mp)	355.9
Market value (bp)	
Home	95.2
<b>Land**</b>	<b>9.5</b>

\*Based on 2010 figures

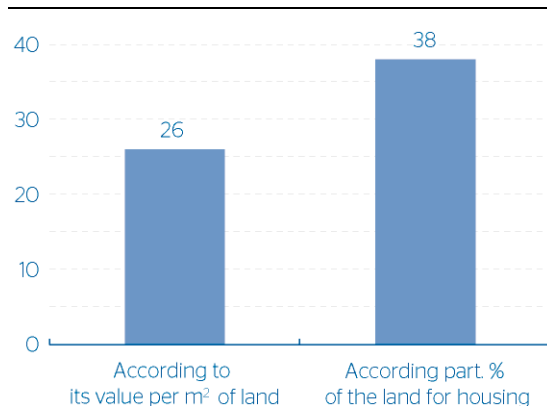
\*\*Assumes value equivalent to 10% of the home Source: BBVA Research with the companies' data

The second approximation associated with the land area used in housing construction takes as reference the average surface area of a social benefit home and the price per square meter of the land for this type of home. On average, each home directed to the low-income segment requires a surface area of 150 sq. mts. under the horizontal construction model.<sup>15</sup> Multiplied by the 168,000 homes the large construction companies (publicly traded and others) placed in 2010, and adjusting 80% for considering that up to 20% could have been placed under a vertical housing model, the surface to develop annually is in the order of 32 thousand hectares.

<sup>15</sup> This surface area is the result of adding to the housing surface area that corresponding to roads, common areas and others, which, as a whole, represent up to 30% of the total area of the project.

For the land where this type of housing is typically built, the price of the land, according to the sector participants, is close to P\$200 per sq. mt. Multiplied by the surface required, we obtain that the value of the land the large construction companies occupy would be close to P\$65 billion.

Graph 1  
**Potential value of the land market\***  
(Billions of pesos)



\*Based on 2010 figures. It is assumed that the land to be developed can be placed in the following four years Source: BBVA Research with the companies' data

Chart 6  
**Land reserves, large construction companies (Through September 2011)**

Developer	Land Reserve, thousands of hectares	Housing, Thousands
Geo	7.2	382.3
Homex	8.0	388.4
Urbi	5.7	303.5
Ara	4.5	182.1
Sare	0.9	46.0
<b>Total</b>	<b>26.2</b>	<b>1302.3</b>

Source: BBVA Research with the companies' data

Now, taking into account that the volume that the banks can administer is equivalent to the development foreseen for the following two to four years, it is obtained that the total potential value of this market would be the result of multiplying by four the figures estimated above. The result is within a range of P\$26 billion to P\$38 billion (or something between P\$2 billion and P\$3 billion dollars). The figure should be seen as a potential, if it is that all the reserves (to be developed in the medium term) of the larger construction companies were funded in the market.

An important question that has to do with the assumptions used in the estimate is regarding the evolution of future land needs for construction. It could be assumed that to the extent that the way is opened for the vertical housing model, the need for accumulating territorial reserves would decrease. Even though there could be some reason for this argument, it seems more feasible to suppose that, at least in the medium-term horizon, vertical housing will begin to develop in the existing territorial reserves, and simply, there will be more space for building amenities and services which, up to now, have been scarce in the housing developments.

In addition, there is the interest of the federal government to develop financing products for the population that does not have access to financing from the public housing institutes, and this, in the end, means expanding housing construction in the low-income segments. So, it is not totally conclusive that the need for housing construction land will be reduced significantly in the coming years. It is probable that there will be a mixed development, making use of existing land reserves and, at the same time, seeking a more efficient use for other reserves or areas, up to now not much exploited. In this second case, land that is property of the state or the municipality, could enter into intra-urban areas that would contribute to a better use of the infrastructure and equipping of the city.

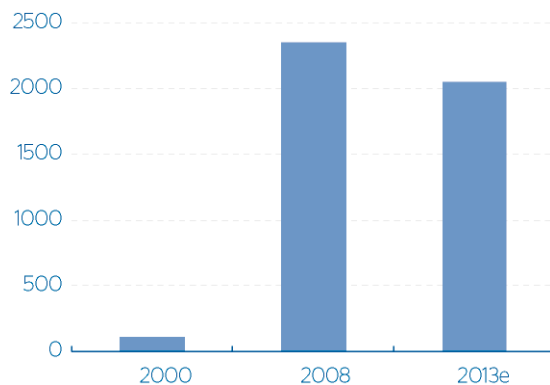
### ... and not only for housing

Housing development is not the only objective (nor the most important) among those who have developed or contributed to funding the land banks. The commercial and industrial sectors have land financing needs and attract more resources than housing. In 2010, a survey among the members of the Mexican Association of Real Estate and Infrastructure Funds (AMFII for its Spanish initials) revealed that housing obtained only 10% of the resources invested;<sup>16</sup> however, almost half, 48%, was destined for the industrial sector and 30% for the commercial. Moreover, they only occupy a fraction of the surface than the housing projects: the profitable surface developed through 2010 with the commercial and industrial projects came close to 10,000 hectares, one third of the land reserves available of the publicly traded construction companies for that same year.

<sup>16</sup> Although sufficient for funding the development of almost 100,000 homes. Although it is not precisely known in how much time they have been developed, it is enough to see that they are equivalent to two thirds of all the sales of the publicly traded construction companies in 2010.

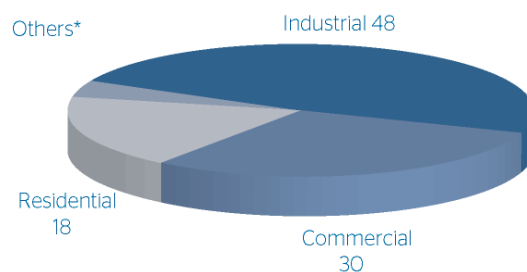
The same survey is revealing as to the marked growth of real estate funds as a source of financing for land development. In a period of just one decade, investment went from around US\$100 million to a figure that, in 2008, already surpassed US\$2.3 billion. It is true that the 2009 crisis reduced investment significantly, but as of then, the figures registered (and the medium-term projections) are showing a clear rising trend once again. In the year of the survey, growth in the construction of shopping centers advanced at rates of 20%.<sup>17</sup>

Graph 2  
**Amount invested of the real estate funds**  
(Millions of dollars\*)



\*Approximate figures Source:  
BBVA Research with AMFII data

Graph 3  
**Distribution of the investment of the real estate funds**  
(%, 2010)



\*Hotels and offices Source:  
BBVA Research with the companies' data

The potential for increasing investment in land banks (or, in a more general way, on land financing projects) in the coming years could be significant. In particular, because being projects with high levels of return, but above all, stable over time, they have in the institutional investors, such as pension funds, a broad funding basis. In this sense, the inclusion of Capital Development Certificates, known as CKDs, in the investment portfolio of the Afores (retirement fund management companies) they can be constituted as an important source of resources for the real estate sector in general. In a period of only three years, from the end of 2008 to the end of 2011, Afore financing to the CKDs has gone from P\$2 billion to P\$40 billion.

### Conclusions: land banks, a little-exploited financing model

At an international level, land banks have surged from the collaboration between the public and private sectors to solving some problems associated with a sub-optimal use of land, derived from factors like disorderly growth, the abandonment of homes, and even tax evasion, or simply for better future planning. Does this sound familiar? Experience should be retaken in Mexico, where accelerated urban growth in recent years makes it urgent to have formal mechanisms of coordination between the public sector and the private as to long-term urban planning and land management, which forms part of the public policy agenda for the coming years. The DCUIS (Comprehensive Sustainable Urban Developments), promoted by the federal government with enthusiasm, could be the response to this need, although there much more is lacking.

<sup>17</sup> Measured by the number of projects, the referred survey mentions that the companies surveyed operated 139 shopping centers in that year and 28 additional ones were under construction.

For now, the land banks in Mexico have been developed with the objective of covering financing needs to achieve the urbanization of land. However, this link, the first in the housing production chain, has been little attended in a comprehensive manner, not only by the commercial banks, but by other financial intermediaries. This speaks of the lack of specialized financial instruments and that these be adjusted to the needs of constructors throughout the entire production chain and in different stages of the cycle.

The rates at which the construction companies fund their land reserve management needs and the marked growth of investment destined to these projects in recent years suggests an ample development potential for the land market in the medium term. The land apt for housing is only one part, but the potential of other segments must also be considered, such as the development of infrastructure, offices, industrial parks and shopping centers in areas close to living complexes. Even the improvement of the areas where high indexes of uninhabited homes are registered, and where eventually it will be necessary to invest in improving services and urban infrastructure.

In any case, the key to the development of these activities will be to have specific products for the needs of housing constructors, according to their size, and that will help to cover land management needs, both in the short and the long term.

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