

Affordable Housing Policies and Urban Land Markets in Peru

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With the collaboration of Jesús Quispe

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Abstract

This paper examines affordable housing policies and the behavior of urban land markets in Peru. Specifically, it analyzes a public housing program entitled: *Techo Propio/Adquisición de Vivienda Nueva* (AVN) [Own Roof/New Housing Purchase] from the economic and political science perspectives. The analysis considers the current state of the economy and the housing market in Peru, and examines the development and location of AVN homes and the business strategies of the developers involved. The study is based on in-depth interviews, and on a household survey of program beneficiaries. The results show that the Peruvian affordable housing policy achieved only 30 percent of its stated goals. The program faces developer's profitability issues associated with increased land prices. The higher land prices reflect the growth of the Peruvian economy and the concomitant construction boom, the reduction of poverty and a larger middle class, and the configuration of the real estate market and land rents.

Keywords: affordable housing, housing subsidies, land rents, Peruvian cities

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Affordable Housing Policies and Urban Land Markets in Peru

Introduction

Several studies on affordable housing policies in Latin America concur that increasing land prices have created a difficult problem for the implementation of these policies. This argument has been made repeatedly and, with some variations, is widely accepted among academics, government officials and real estate developers. To test this hypothesis, we decided to study the case of Peru and, in particular, its public program known as *Techo Propio/Adquisición de Vivienda Nueva* (AVN) [Own Roof/New Housing Acquisition]. This program has been implemented since 2002 with the aim to create a subsidized housing market for low-income households.

Affordable housing policies, or social housing policies, which we will use here as equivalent terms, are essentially designed to allow low income families to buy a home which they otherwise could not afford in the open market. These policies expose, both historically and from the theoretical point of view, the difficulties in satisfying the demand of a considerable portion of the urban population using the private and public formal housing markets. The interest in the real estate market from private agents, such as construction companies, developers, banks, brokers, landowners, etc., target homes that are above the capacity to pay of a large segment of the population. Affordable housing policies, based on direct subsidies to the consumer, assume that the government must provide money to low income families, both in cash and as mortgage credit, to cover the difference between what they are able to pay with their reduced income and the cost of a home of a given maximum value in the formal housing market.

Social and urban theories have shown that the so-called ‘housing problem’ and the need to provide subsidies to compensate for imbalances between supply and demand reflect high production costs, high regulatory standards, high initial investments, high land prices and the slow capital rotation in the construction industry (Cortés, 1995; Pradilla, 1982). Subsidies contradict the self-regulatory interpretation which assumes that markets will supply housing to match the demand. Such interpretation is based on certain assumptions, such as that the production of goods and services reflects the preferences of the consumers; all the families and businesses have perfect information; families maximize profits, and production is flexible, among others (Basset and Short, 1980:26). With regard to land markets, however, economic theory suggests that the externalities of the city interfere with the optimal use of the land, and there is a lack of markets for many urban goods and services (Richardson, 1975 15–18).

The present analysis delves into the crux of the current urban development discussion in Latin America, which is characterized by efforts to increase the inventory of affordable housing and, at the same time, reduce informality in the cities. For example, in Colombia, the long process of adoption of urban reform legislation—which took more than four decades—has provided support for affordable housing policies that minimize the informal occupation of land, and ensure access to urban land, housing, and the urban integration of the population (Maldonado, 2012: 161). A

similar discourse can be observed in Peru and represents the historical experience with housing in Latin America.

The methodology of this study is based on interviews with developers, builders, public officials and program beneficiaries (annex 1). We conducted a survey of a statistically representative sample of the population that purchased AVN homes in Lima, selected from four fully sold projects (Martinete, Campoy, Santa Rita and Parques de El Agustino). We reviewed the Latin American and Peruvian literature on the subject and, to estimate the cost of urban land, we examined publicly available data, real estate classified ads in the most important newspapers, and made field visits to project sites. Our study covers several cities. To analyze some aspects in greater depth, we carried out two case studies of the first and third largest cities of Peru—Metropolitan Lima and Trujillo. Both cities have similar urban expansion and consolidation trends, and are characterized by high incidence of informality.

The paper is organized in four sections following this introduction. The first section discusses some theoretical economic and political aspects of affordable housing and urban land issues. The second describes the current situation of the economy and the housing markets in Peru to contextualize the analysis of affordable housing. The third section evaluates the results of the AVN program, showing the development and the location of the housing projects, the business models used by builders and developers, financial aspects, the nature of the public interventions and the problems observed. The last section concludes, followed by bibliographic references and annexes.

Affordable Housing and the Land Problem

In Latin America, affordable housing, or social housing is resurfacing after failed experiments from the 1940s through the 1960s. There is no doubt that this resurgence was inspired by the impressive success achieved in Chile, where about 150 thousand social housing units were produced in 1996 alone (Sungrayes, 2006: 41 and 53). The policy of state intervention assumed a subsidiary role in association with construction and financial capital, whereby the private sector designs housing projects and the state subsidizes the demand through the provision of vouchers to eligible families (Sungrayes, 2006: 28). This ‘model’ was soon replicated by Mexico, Colombia, Costa Rica and, starting in 2002, Peru.

In order to better understand this resurgence of affordable housing policies, it is useful to reflect on the prior experiences. At that time (1940–1960), the government identified and acquired land, designed projects, and hired private firms to build housing estates for workers with no access to the open real estate market. One of the variants consisted in a ‘supply subsidy’ given by the government to developers to produce social housing. These experiments failed, as they could not be sustained once public funds started to dwindle as a result of several financial crises. The experiment was abandoned and public policies were redirected to support regularization of informal settlements through titling, home improvement loans and the provision of basic public services, among other programs.

These first experiences failed because the home prices became increasingly unaffordable by the intended market of low-income families. As a result, the housing policies ended up favoring the middle class, which did not require so much public support. Several reasons explain why the price of presumably affordable homes proved too high for the target population. Among these, the high cost of construction, the reluctance of private banks to get involved, poor government management and financial losses in program administration. But the main reason was the high price of land and the profits accruing to landowners. Interestingly, when the early affordable housing policies were created in the mid-twentieth century, they were justified as a response to the high and increasing cost of land, the same argument used to explain why such policies failed.

The second wave of affordable housing policies tries to resolve several problems at once. The most serious problem is to fight informality, which extensively marks the structure of Latin American cities, by promoting formal housing and social inclusion alternatives as desirable accompaniments to economic growth. Affordable housing is a preventive strategy and, if well designed, an alternative to informal settlements. In the long run, it will reduce the need for essentially curative measures, such as titling and costly improvement programs. Together with these social goals, and driven by the neoclassical principles that govern the administration of government, the new housing policies seek to promote private investment in affordable housing construction by lowering the risk and by providing subsidies. This is very clear in countries like Peru, where the construction industry is one of the engines of economic growth.

Despite the enthusiasm with which these affordable housing policies are being carried out, and their indisputable achievements, the current experiences in Latin America also have limitations. The central explanation for the observed shortcomings is, as before, higher urban land prices. In the case of Santiago de Chile, it has been argued that the subsidies for affordable housing had a direct impact in increasing the price of land (Brain and Sabatini, 2006), contradicting the conventional wisdom among politicians supporting the housing policies, who believe that such policies will reduce land prices (Landaure, 2010: 10). Higher land prices put pressure on developers to reduce floor area and building quality, and to push the location of projects further away in the urban periphery. This situation explains the main criticism of the Chilean affordable housing experiment, in terms of quality and peripheral locations (while other areas closer to the center are targeted for higher income groups), problems of integration to the urban fabric, lack of progressive housing criteria and social integration mechanisms, all of which generate new conflicts, social segregation and ghetto-like neighborhoods (Stockins, 2004: 93; Rodríguez and Sungrayes, 2009; Segovia, 2006; Hidalgo, 2007).

There are some basic economic theories that explain the urban land price issue. Several empirical studies have shown the specificity of the land market, where an increase in supply does not necessarily result in a reduction in prices, and, likewise, a reduction in demand does not lead to lower prices (Topalov, 1984: 6–8). Land cannot be created, and it belies the assumption of perfect competition of neoclassical economics. Land is subject to speculative demand that distorts the market, and confronts positive and negative externalities that create divergence between the social and private costs/benefits (Trivelli, 1994, among others).

The ‘land problem’ cannot be reduced to its economic aspects. Urban management, which regulates the linkages between housing policies, land, property rights and taxes, is a central

aspect (Calderón, 2006). One of its most visible manifestations is the classic debate between planned and free land markets or between regulation and flexibility for landowners. In Chile, neoclassical economists with influence in the power structure have argued that the increase in land prices was due to the scarcity of land, and that an increase in supply, achieved by expanding the city limits, would reduce prices. However, once this measure was applied, the prices of land did not drop, but continued to rise (Trivelli, 2009: 223–226; 2012).¹ In the 1990s, land prices increased to the point of not being able to support the nominal land values allocated to affordable housing units, and developers stopped participating in bids that required the provision of land; the price of affordable housing increased, creating the risk of deviating the program from its target population (Sungrayes, 2006: 53–54; Rodríguez and Sungrayes, 2009: 62).

This phenomenon shows a disconnection between the goals of a public policy (affordable housing) and the behavior of land markets. Public intervention has attempted to resolve this disconnect, which is recurrent in the region. Proposed solutions oscillated between policies of unrestricted defense of private property and others more inclined to apply charges and levies on real estate property, and to use value capture mechanisms. Among the several alternatives suggested, we have seen the deployment of instruments such as ‘land banks,’ land readjustment, and the promotion of mixed-income housing estates targeting middle class and lower income families. These instruments have been accepted (although applied with difficulty) or rejected based on the peculiarities of each country. While Colombia is an example of acceptance, Chile and Peru are not.

In order better understand the connection between affordable housing and land markets we need to review the historic peculiarities of the social structure and its agents, as a step toward a more pertinent theoretical approach. In the case of Santiago de Chile, the great quantity of affordable housing construction started after developers had acquired large tracts of land in the periphery during the crisis of the 1980s (Sungrayes, 2006). These parcels were then used by developers to build affordable housing units, but subsequently stopped doing so, once the land rents proved better suited for other social sectors. This business shift coincided with the introduction of a real estate promotion system (*sistema de promoción inmobiliaria*, or SPI) linking developers with financial capital (Sabatini, 1990: 64). Developers sought to integrate various activities (design, land acquisition, urban development, construction, financing, etc.) driven by the aim to control project profitability, and to share profits with landowners. The price of land is, therefore, not just one of the components of the housing price, as is usually thought, but shares in the profits generated by real estate developments: a *capitalized rent*.

Let’s now consider the key elements of the Chilean experience and then apply the analysis to the Peruvian case. In Chile, the integration of housing production activities in the hands of real estate and financial corporations, according to Sabatini (1990), replaced historical distinction between private land developers, public sector investment and construction companies. But this process requires a certain level of production development, as well as business coordination and management, that is not necessarily present everywhere. The integration of housing production activities has not yet happened in Peru, although it may be starting, and the various development agents are still locked in disputes over profits and rents, and large land acquisitions in times of

¹For a discussion between neo-classical and progressive positions on this policy, see Smolka and Sabatini, 2007.

crisis did not occur. In the expansion area of Lima, the land tenure structure introduced by the agrarian reform (1968–1975) resulted in an average of 4.2 acres per farmer by 1994 (Calderón, 2006). Owners of farmland in areas of urban expansion in Peruvian cities are not capitalist landowners, but rather owners of small parcels who exhibit conservative and speculative behavior and act on their own. They are in no rush to sell, and are willing to keep their land under cultivation or just hold it in reserve.

From the institutional and legal point of view, the conservative behavior of landowners is reinforced by a legal framework that, as in Chile, provides for an unrestricted defense of private property rights. In Peru, the 1993 Constitution eliminated the right to housing, and the subsequent laws (*Ley General de Expropiaciones*, *Decreto Legislativo* No. 313, and modifications of the Civil Code) pose difficulties to the adoption of regulatory measures such as charges and levies on real estate property, anti-speculation provisions and urban value capture mechanisms. In contrast, since the early 1990s, Colombia has been adopting land management instruments, such as the requiring new subdivisions to allocate a certain percentage of units to affordable housing, land banking, and measures aimed at an equitable distribution of costs and benefits of urbanization (Maldonado, 2012).

In analyzing affordable housing and urban land markets in Peru, it is important to recognize that there is a clear distinction between builders and landowners, a legal framework that upholds unrestricted private property rights and, in general, a dissociation between policies addressing urban development, housing, and land management. This situation, as we hope to demonstrate in this paper, explains not only the barriers to affordable housing development, but also how the economic agents conceive the solution to these problems.

The Economy and the Housing Market in Peru

In the past 10 years, Peru has experienced economic growth, accompanied by a process of social differentiation and poverty reduction. The Gross Domestic Product (GDP) grew in the 1990s by 47.6 percent (an average annual growth rate of 4 percent). This trend intensified in the first decade of the twenty-first century, when GDP grew 73.6 percent (or at an annual rate of 5.7 percent) (Egúsqüiza Economistas, desarrollo peruano.blogspot.com). In 2009, due to the international financial crisis, the growth rate dropped to 1 percent per year; but quickly recovered in 2010, reaching 8.8 percent per year, exceeding all expectations (MEF, 2011).

Domestic demand grew in 2010 at a rate of 12.8 percent, the highest mark in 16 years. Income per capita reached US\$ 5,225 or 64 percent higher than in the prior five years and twice as much as 10 years earlier, converting Peru into a middle income country. Private investment grew by 22.1 percent in 2010, and private investment as a percentage of GDP reached 17.7 percent in 2009, and 19.2 percent in 2010 (CAPECO, 2011). Poverty, according to the National Institute of Statistics and Informatics (INEI), dropped from 58.5 percent of the population in 2006 to 30.8 percent in 2010. Approximately 5.7 million Peruvians left poverty behind (<http://Peru21.pe>). Although difficult to measure, the informal economy also participated in this growth, contributing to the process of social differentiation, growth of the middle class and poverty

reduction. The contribution of the informal economy to the GDP is estimated at around 37.5 percent (IPE, 2013).

Since 2002, economic growth has been accompanied by a subsidized housing policy which grants below-market interest rate loans (general interest rates also fell due to greater market competition) and programs to promote affordable housing, such as *Mivivienda* and *Techo Propio* (CAPECO, 2011: 8). A real estate boom began in 2006, and the construction sector returned to the growth rates it had experienced before the financial crisis (2008–2009), reaching 17.4 percent in 2010, a level not seen since 1995.² The housing supply increased, as demonstrated by the 22,225 housing units sold in Lima in 2012, whereas in 1998 only 5,000 houses were sold. Land prices have increased four-fold between 2006 and 2011 (Abecasis, 2011, using data from CAPECO), and between 2002 and 2012 housing prices per square meter in Lima more than doubled, increasing 3.2 times for houses, and 2.3 times for apartments.³ Similarly, housing construction has increased.

Notwithstanding these developments, the housing deficit was estimated in 2007 at 1,860,692 homes, of which 79 percent is qualitative deficit (1.5 million units), reflecting the growth of the informal city. The various economic agents recognize that there is a mismatch between the housing supply, which is mainly directed to the middle class (social levels B and C), and the large pent-up demand by low income families (social levels D and E). As indicated by CAPECO, 19,000 new housing units were built in Lima in 2011, but most of these homes were priced higher than US\$ 50,000, targeting only 12.8 percent of the demand. In that same year, half of the unmet demand was for houses priced below US\$ 20,000 but, at that price, only 190 units were built in 2011 (0.6 percent) (CAPECO, 2011: vii).

The issue of affordable housing must be understood in the context of the various segments of the real estate market—formal and informal, private and government-sponsored—demanding land.

Between 2002 and 2012, the formal private segment of the real estate market underwent a veritable transformation. Thanks to the public momentum given by the Ministry of Housing Fund (*Fondo Mivivienda*, or FMV) the supply of apartments in central areas of the main cities (Lima, Arequipa, Trujillo, among others) exceeded the number of urbanized lots in peripheral subdivisions, which was prevalent in the 1990s. The main types of real estate products offered are homes built in urban subdivisions and multi-family condominiums in the city, and gated urbanizations in the suburbs. The rental market is driven by individuals (there are no corporate agents in the rental business) and serves the upper middle class and the middle class in central city areas, where there are also investment housing (“buy to rent”) options.

Together with subdivision developers that predominated in the 1990s (e.g. Corredores Asociados, Flowisa and L.J. Ortiz de Zevallos), there are now new economic groups that combine construction knowhow and financial capital, such as the Los Portales group, associated with the main bank in the country, suggesting the outlines of what could be an emerging “real

² The composition of the GDP of the construction sector, an estimated 35 percent corresponds to mining projects, 35 percent to energy projects and 15 percent to housing projects. *El Peruano*, May 24, 2012. <http://www.elperuano.pe>

³ CAPECO, XVII Study “Urban Construction Markets in Lima and Callao”, cited in *Gestión* 12/7/12, pg. 13 and *El Comercio*, 12/7/12, pg. B12.

estate development system.” New housing developments are now being built in all Peruvian main cities, not only in Lima as before, and they address the regional demand, particularly in cities experiencing high economic growth, such as Piura or Ica.

Some new housing projects offer purchasing options that do not require a down payment (e.g. Inversiones Centenario in Santa María de Carabayllo, Urbanización Esmeralda in Lima and Las Palmeras in Piura). Home buyers can also apply for private or public mortgage loans (e.g., *Nuevo Crédito Mi Vivienda*, NCMV), and the credit requirements have become more flexible to address the demand from informal sector workers who previously did not qualify for a bank loan due to lack of documentation demonstrating income (for example, the “4 programmed savings system”—*sistema 4 ahorros programados*). The prices of urbanized lots in new subdivisions have tripled. In the Carabayllo district, the average price is US\$ 339.16/m², while in 1998 it was US\$ 106.4/m² (Calderón, 2006). In Lima peripheral districts, there are now units in apartment buildings for sale, something unthinkable 10 years ago, with floor areas ranging from 54.8 m² to 68 m² and prices between US\$ 738/m² and US\$ 821.5/m².

In some provincial cities, large parcels of farmland are being privately bought with an eye toward future urban development, indicating the embryonic formation of private land reserves. Developers see the price of farmland increasing due to supply scarcity and excess demand, saying: “many people want to buy, but few want to sell.” For example, in the city of Ica, the price of farmland located in areas amenable for urban expansion went in one year from US\$ 25,000 per hectare to US\$ 60,000 in 2012. This land, situated 9 kilometers from the city, is expected to increase in price when sold as urban land. Something similar is occurring in the city of Trujillo, where future urban expansion areas, such as those in the Laredo district, sell for US\$ 40,000 per hectare (*Gestión*, 9/10/12, page 12).

The *informal* private segment of the real estate market maintains the trend of years ago (Calderón, 2006), developing ‘housing programs’ in peripheral districts for an emerging middle class (social level C) and lower income sectors with some capacity to pay (social level D). For that purpose, informal developers acquire land from farmers that benefited from the agrarian reform. Prices are lower and there are no down payments. The informal rental market consists primarily of single rooms in consolidated neighborhoods located at the intermediate belt and is run by individuals (Calderón, 2012).

As we already indicated, the government contribution as facilitator for the activation of the housing market has been substantial, delegating the design and implementation to the private sector. In general, this policy has been managed mainly by the central government, with the local governments having a minimal role, restricted to changes in land use regulations. The Mivivienda Fund (FMV), created in 1998, has subsidized a real estate market for the middle class since 2003, and since 2002, the Peruvian government has also subsidized lower income sectors (*Techo Propio* program). In January of 2006, the FMV was replaced by the MIVIVIENDA S.A. Fund, a government corporation under a private charter that manages the program *Nuevo Crédito Mivivienda* (NCMV) and the *Techo Propio* program, with the goal of promoting and financing home purchases, improvements and construction, especially affordable housing.

The most successful public program has been the one directed to the middle class, which has granted 68 thousand mortgage credits since its inception. This program supports new housing purchases with prices ranging between US\$ 19,950 (14 Tax Units—UIT) and US\$ 100,000 (70 UIT). The credit grants to the purchaser a Good Payer Bonus, valued at US\$ 4,716. The developments are located mainly in Lima, which absorbed 75.7 percent of the mortgage credits granted between August of 2006 and November of 2012, followed far behind by La Libertad and Piura, with 5 percent each. There is a slight tendency to decentralize the credits to the provinces according to data from the Housing Ministry Web page. As a result of these programs, the central areas of the city have been repopulated, housing supply has increased, and housing prices dropped until 2006 when the construction boom started, causing the mortgage credit market to grow as a result (Calderón, 2009).

The Techo Propio program, created in September of 2002 (Gobierno del Perú, *Resolución Ministerial No. 054-2002-VIVIENDA*), promotes affordable housing for lower income sectors, or “popular sectors.”⁴ The program has three modalities: Construction on Owned Land (*Construcción en Sitio Propio*, or CSP), Housing Improvement (*Mejoramiento de Vivienda*, or MV), for those who already have titled land with infrastructure and want to remodel, rehabilitate, finish or expand their home (Calderón, 2012b), and New Housing Purchase (*Adquisición de Vivienda Nueva*, or AVN), a subsidy for those who do not have land or a home and want to purchase a new house; this last option is the subject of this study.

AVN encourages builders and developers to offer housing units with minimal features (basic multiuse area, kitchen, and full bathroom), and a value no greater than 12 or 14 UIT (one UIT is approximately 3,650 Soles, or US\$ 1,425). Buyers have to be registered in the Household Targeting System (*Sistema de Focalización de Hogares*, or SISFOH), their monthly income cannot exceed 0.45 UIT (US\$641); they cannot own properties or a home anywhere in the country and must have a family savings of at least 3 percent of the value of the housing unit. Intermediate financing institutions (*Instituciones Financieras Intermediarias*, or IFI) grant Family Housing Vouchers (*Bono Familiar Habitacional*, or BFH), with a value of 3 UIT if the price of the home is between 12 UIT and 14 UIT, and 5 UIT if the price of the home is between 5.5 and 12 UIT. In other words, the BFH represents 42 percent of the value of a home of up to 12 UIT, and can represent 21 percent of the value of a home of up to 14 UIT.

Table 1 summarizes how households at different socio-economic levels (SEL) are distributed across the various private and public urban land market segments. We include both formal and informal purchase and sales (PS) and rentals (R), the government programs (Nuevo Crédito Mi Vivienda (NCMV); Techo Propio (TP)/AVN: Techo Propio (TP)/CSP and MV: Do-it-yourself-construction (DIY)) and land invasions. The table shows all the options to satisfy the housing demand in Peruvian cities and the role of the public sector in the configuration of the real estate market supply.

⁴The law stipulates that *Techo Propio* must “foster the effective participation of the private sector in the mass construction of affordable housing units and, at the same time, facilitate the means to allow low income populations access to a dignified home.”

Table 1—Housing Demand in Peru

SEL	Average Monthly Income US\$ (1)	% of households (1)	Formal Market R - PS	NCMV	TP AVN	TP CSP and MV	Informal market R - PS	Invasion	DIY
A	3,180	5.4							
B	925	17.4							
C	450	35.8							
D	297	28.7							
E	220	12.7							

Source: Julio Calderón.

(1) Ramos, 2011: 14.

By government decision, social level A has been left to the open real estate and mortgage credit markets (Ramos, 2011). Social level B, which corresponds to the traditional middle class, is serviced by the open market and is subsidized by the NCMV mortgage credit. Social level C, which is the emerging middle class, the larger and growing segment, is serviced by public subsidies, the formal and informal markets, and by Techo Propio/AVN. Social level D, the population living in poverty, is supported by Techo Propio/MV, if the family has titled land, and by the informal purchase and sale and rental markets (room rentals) if not. Finally, social level E, extreme poverty, is left aside by government decision due to lack of saving capacity. This group has the option of invading land or renting rooms.

Do-it yourself-home construction (DIY), using materials bought by the owner, is an alternative for social levels C, D, and E, and is an option when it makes economic sense (Jaramillo, 2012b:73). Although it is difficult to measure, some authors estimate that the DIY investment has reached 8 billion dollars (Barragán, 2005: 5) and, since 1980, it has been supported by the Materials Bank (*Banco de Materiales*), which was liquidated in 2012. A recent study concludes that DIY construction accounts for 55 percent of construction and building materials sales, and 3.6 percent of the Gross Domestic Product (GDP) (source www.arelanomarketing.com, visited on 12/26/12). *Techo Propio*, in its CSP and MV modality, is a subsidy that competes, since 2006, with DIY construction, and attempts to introduce small construction companies in neighborhood settlements.

Results of the AVN Program

AVN Development and Location

The AVN modality of *Techo Propio* has not reached the development level expected by the authorities. From an initial goal of granting 100,000 vouchers in its 10 years of existence, as shown in table 2, by November of 2012 only 30,591 vouchers had been granted (30.5 percent). In contrast, *Nuevo Crédito Mi Vivienda* (NCMV) for the middle class has granted 67,617 credits, and *Construcción en Sitio Propio* (CSP) has granted 62,456 vouchers. As for public investment from January 2006 and June 2012, according to government data, amounted to US\$ 1,060,559,876 for the middle class or an average of US\$ 30,187 per loan, considering 35,133

NCMV loans approved during that period, and about US\$ 133,998,968 for lower income households, or an average of US\$ 5,732 per loan, considering 23,736 AVN loans approved during the same period. New housing for the middle class has received a subsidy from the government that is 8 times larger in absolute terms than that granted to low income families.

There have been two stages in the development of the *Techo Propio*/AVN program. In the first, between 2002 and 2006 (the government of Alejandro Toledo), only 7,208 vouchers were granted, and large construction companies were reluctant to participate. In the first year alone (2003), 15,000 housing units priced at US\$ 4,000 were expected to be built (Eyzaguirre and Calderón, 2003: 41). Given the lack of enthusiasm on the part of the private sector, the government had to take a more active role, using public land and financing the construction materials bank.⁵ Only a few developers decided to participate, and, in general, these were small players (engineers that owned serviced land). Some went bankrupt and others had a low level of profitability. In some cities, like Chiclayo, there were non-compliances by the builders and grievances submitted by the buyers (Salinas, 2011).

Table 2—Credits and Voucher Grants, 1999–2012

Years	NCMV	AVN	CSP	MV	Total
1999	143				143
2000	405				405
2001	1442				1442
2002	3611				3611
2003	6166	3709			9875
2004	7960	1992	27		9979
2005	9205	702	32		9939
2006	5540	625	15	9	6189
2007	3123	2262	762	163	6310
2008	2994	2077	10029	922	16022
2009	3527	4085	22807	1753	32172
2010	6436	5144	12807	543	24930
2011	8888	6014	6062	388	21352
2012	8177	3981	9911	403	22472
Total	67617	30591	62456	4181	164845

Source: MVCS Web page.

Two explanations were given for this failure. The official explanations were ignorance and mistrust on the part of real estate agents and developers, the lack of savings for the down payment, the financial weakness of the development companies, the reluctance and mistrust of large financial institutions, the delays in urban permits and licenses granted by municipalities,

⁵Among the projects implemented were Martinete (343 homes) and El Mirador de Pachacútec (1,512 homes) in Lima, Cuatro Suyos (164 homes) and Cuatro Suyos Deuda Cero (87 homes) in the city of Trujillo, Jorge Basadre (376 homes) in Tacna, Nicolas Garatea (130 homes) in Chimbote and Mártires de la Democracia (138 homes) in Iquitos.

and the culture of informality (lack of trust) of the population (MVCS, 2006). On the other hand, Stipe Viator, a private consultant who assessed the Apoyo al Sector Habitacional (PASH) program in those years,⁶ concluded that Housing Ministry had only a few years of operation (it was created in 2002) and that the *Techo Propio* program was managed by its natural competitor: the *Mi Vivienda* Fund. This criticism, which is shared by the builders interviewed for this study, questions the strategy of having a single entity manage programs for the middle class and low income sectors simultaneously. According to the author, the FMV achieved greater operational returns from *Mi Vivienda* than from *Techo Propio* (Stipe Viator, 2007: 70).

The second stage began in the middle of the construction boom, when a large company (IVC) developed the “Las Casuarinas” project in Ica, comprising a total of 1,500 housing units (Santa María, 2011). Between 2006 and 2012, 24,188 vouchers were granted using a series of institutional arrangements to ‘enhance’ the allowable price of an affordable home (see annex 5) from the US\$4-8 thousand dollar range to US\$6,700–14,700, eliminating the credit requirement for families, thereby allowing them to use their own savings or other loans and reducing the minimum savings requirement, which went from US\$ 950 in 2006 to 10 percent of the value of the house in 2008, and finally down to 3 percent in 2009 (SASE, 2010: 66).

In contrast to the NCMV program which was concentrated in Lima, AVN has spread to the provinces (table 3). The Ica Department, between August 2006 and November 2012, captured almost 30 percent of the vouchers and La Libertad captured 22 percent, absorbing between them more than half the total number of vouchers. Metropolitan Lima, with 9 million people and an effective demand of 175 thousand homes (FMV, 2006) received only 3,960 AVN vouchers.

Table 3—Location of Vouchers Granted by the *Techo Propio* Program (August 2006–November 2012)

Region	AVN	%	CSP	MV	Total	%
Ica	7,619	29.8	24,765	437	32,821	37.3
La Libertad	5,644	22.1	8,736	68	14,448	16.4
Metropolitan Lima	3,969	15.5	9,237	2,990	16,196	18.4
Arequipa	1,719	6.7	371	2	2,092	2.3
Piura	1,438	5.6	3,966	39	5,443	6.1
Lambayeque	1,051	4.1	1,790	36	2,877	3.2
San Martín	880	3.4	4,856	344	6,080	6.9
Others (1)	3,169	12.4	3,354	95	6782	7.7
Total	25,489	100	58,299	4,005	87,793	

Source: Housing Ministry, Web page.

Note: Includes the Amazonas, Ancash, Apurímac, Ayacucho, Cajamarca, Cusco, Huancavelica, Huánuco, Junín, Loreto, Madre de Dios, Moquegua, Tacna, Ucayali, Pasco and Puno regions.

The results show that the AVN supply is not correlated to the demand. Despite having an effective demand of 16,189 homes, Trujillo- La Libertad had, between 2010 and 2011, nine registered AVN projects, while Lima, with its large effective demand, had only three (see annexes 2 and 3). While in Trujillo in past years, housing solutions have been provided by

⁶PASH was a joint project of the Peruvian government partly financed by the Inter American Development Bank (IADB) to support institutional reforms in the housing sector.

private companies, in Lima there was a large participation of funds from military institutions, in partnership with builders and financing companies.⁷ Although in both cities the AVN projects were located in the periphery (see annexes 7 and 8), the distances to the center of the city were 3 to 4 times greater in Lima than in Trujillo, considering their scale (2 hours v. 30 minutes using public transportation). In both cities there is a successful NCMV program being developed for the middle. In Lima, around 29 thousand homes were built, that sold at prices ranging from 51,100 soles to 182,500 soles, in more than 15 districts of the capital (*Expreso*, 7/14/12, page 10).

Profitability Strategies

The location of AVN units in the provinces, and their limited development in Lima, even though the types of housing, construction costs, and family situations are similar in both cities, is attributed by builders and developers to the price of urban land.

A simple way of studying the housing prices and understanding the business model of developers and builders is to infer the economic calculations made by them. The calculation begins when the developers conceive a certain housing project and determine the amount of land they need, the type of real estate product to build, the number of units, reserves for equipment, etc. They analyze the market prices to determine what they can charge for the units. Next, the developer subtracts the costs of building the houses on serviced land, and then calculates the mean profit expected from the project, which in turn can be distributed between the developer and the landowner: This is the localized profit, the return on the land. Therefore, *the return on the land does not determine the price of the home, but the price of the home determines the return on the land* (Topalov, 1979: 166–170), capitalizing the externalities associated with the land, such as location, and services. The payment from the builder to the landowner will depend on the expectation of obtaining a profit from the real estate operation, although this does not mean that both agents do not negotiate.

Given that the payment for land (return) is linked to the price of the home, it may be convenient to place the profit expectations of the builder or developer within each housing market segment. To simplify, we can classify these in three categories: i) private development, which in principle has no price ceiling; ii) housing units subsidized for the middle class (NCMV), with a price limit of between 14 UIT and 70 UIT (at the current exchange rate, between US\$19,950 and US\$99,750); and iii) housing units subsidized for lower income sectors (AVN), with a limit of 14 UIT (US\$19,949).

Assuming that the builder or developer bases his decision on all the parcels available in the city, and operates in all segments of the market, even if all of them opted hypothetically for private development, clearly they would face the limitation of a reduced effective demand by the upper-middle and upper classes. For this reason, there is a need for subsidized mortgage credits for the middle class (social level B, NCMV) and AVN vouchers to the emerging middle class (social level C) provided by the government. Note that the higher the house price ceiling, and the larger

⁷This is the case, for example, for Campoy, Santa Rita and La Estancia de Lurín, linked to the Police Housing Fund (*Fondo de la Vivienda Policial*, or FOVIPOL); La Ribera del Chillón, linked to the Navy Housing Fund (*Fondo de Vivienda de La Marina*); and Las Praderas de Lurín, for Air Force personnel.

the amount of mortgage credit or voucher, the greater the potential profitability for the builder and developer, and the higher the probability that the landowner will have bigger share in the negotiation.

A first conclusion, supported by the numbers, is that developers and builders find more profitable the NCMV product for the middle class. In fact, this is the most profitable product of the *MI VIVIENDA* Fund (Stipe Viator, 2007). Besides the fact that the NCMV has higher house price ceilings, such ceilings have risen in the last 3 months from 50 UIT to 70 UIT (around US\$ 100,000), as the ascending middle class has shown greater demand for housing, as well as for other goods (for example, an increase in car sales in 2012). The possibility of supplying homes at a higher price, and with subsidized mortgage credit, causes the builders to opt for this middle class demand. This also explains why the more valuable and better located parcels in Lima and central areas of provincial cities are used for middle class housing.

A second conclusion is that there is a very short supply of AVN units in Lima, despite the high demand, which is not true in the provinces. Around 85 percent of the 68,000 family housing vouchers (BFH) have been distributed in the provinces. For an AVN unit, the builder or developer is limited by a final home price of around 12 UIT (about US\$17,000), given the portion covered by the vouchers, which in this case is 42 percent of the home value (table 4). The government pays for almost half of the home cost, and through private banks, approves a mortgage loan of US\$ 8,208 (48 percent). Builders and developers are not interested in the lower value of affordable housing (5.5 UIT) because it is not profitable, and experience has demonstrated that these units are only built when the public sector provides land and financing. Similarly, the builders are not interested in homes in the range of 12 to 14 UIT.

Table 4—Financing of New Home Purchases

Item	12 UIT Housing Unit Value		14 UIT Housing Unit Value	
	US\$	%	US\$	%
10% down payment	1,710	10	1,995	10
Vouchers	7,125	42	4,275	21
Mortgage Loan	7,552.5	48	13,680	69
Housing Unit Value	17,100	100	19,950	100

Source: Julio Calderón based on Housing Ministry data

Note: For 12 UIT homes, the voucher is 5 UIT; for 14 UIT homes, the voucher is 3 UIT.

According to the people interviewed, the AVN requirements allow the developer to spend up to US\$ 50/m² on land; a higher value would eliminate all profit, and the developer would start considering the option of NCMV. When we reviewed the Lima and Trujillo newspaper ads, we could not find land offered in the periphery of Lima that met this requirement. Prices in Lurín were US\$ 350/ m², US\$ 150/m² or US\$ 100/m²; in Huachipa US\$ 170/m²; and in Carapongo US\$ 100/m². The lowest prices were in Carabayllo, US\$ 55/m² or US\$ 65/m². Landaure (2010: ii) analyzed 8 AVN projects in Lima and concluded that 3 of them were not profitable due to the price of land. On the other hand, in Trujillo, although the price of lots in Huanchaco at US\$ 84/m² or US\$ 80/m²; and in Moche at US\$ 60/m²; there were also lots in El Milagro at US \$

35/m² or in Moche at US\$ 22/m², which would qualify for AVN developments. Housing officials in Trujillo stated that in the northern cone of the city there were lots for sale at US\$ 50/ m², and in the southern cone (Moche, Delicias) for US\$ 30/m².

Analyzed over time, the construction boom that began in 2006 has increased the cost of land in Lima and that affected AVN projects. Landaure (2010) mentions in his study that in a project recorded in 2002, Campoy, the cost of land represented 6 percent of the total cost; in 2004, in the Santa Rita project, the cost of land accounted for 8.1 percent; and finally, in 2008, the land cost accounted for 19.2 percent in the Los Parques de El Agustino project. Currently, the builders interviewed estimate that the cost of land accounts for between 25 percent and 30 percent of the total cost. As in the case of Chile (Brain and Sabatini, 2006), the increase in land prices is eroding the subsidy for affordable housing.

The almost nonexistent supply of AVN housing in Lima contrasts with the increase in overall housing construction. Although between 2006 and 2011 the price of land multiplied by 4, accounting for a greater share of the landowner in the business, the sale of homes has not stopped and, in fact, from August 2010 and July 2011 it has increased 47 percent (CAPECO 2011; Abecasis, 2011). In 2012 there was a supply of 22 thousand formal homes, which is considered a milestone, but prices were above US\$ 50 thousand. In the peripheral districts, where AVN developments are theoretically possible, there are apartments selling for between 45 thousand and 54 thousand dollars. Clearly, AVN projects with a price limit of 17 thousand dollars cannot compete for land.

To conclude this aspect of the discussion, the increase in urban land prices, with the concomitant scarcity of land for affordable housing and the lack of AVN profitability in Lima, indicates that a larger share of housing development costs is accruing to landowners. But it also reflects broader changes, such as economic growth, the boom in the construction industry, the growth of the middle class and its demand for housing, higher public subsidies for the middle class and the profitability strategies of builders and developers. The price of housing determines the profitability of land, and not the other way around. The economic agents (builders and landowners) will opt for NCMV because its greater subsidy and effective demand allow for greater profits. For that reason, 76 percent of the NCMV investments are in Lima, where, at the same time, there are no lots for affordable housing.

Although most AVN housing is developed in the provinces, we cannot be very optimistic for the future, because, among other things, economic growth is reaching there as well. AVN projects can be implemented in the provinces because the price of land is lower and, until now, there are parcels available for affordable housing. Nevertheless, there are already problems in making the operation profitable. The perceived problems of profitability have, in some cases, driven builders to purchase land far in the periphery where there is no demand, and where it is difficult to install permanent infrastructure (roads, electricity and water), so only temporary solutions are provided.

The type of housing unit is another aspect affected by the profit strategies of developers. A single family home is preferable to a multi-family building. Of the 104 AVN projects recorded in 2011,

only 7 (6.7 percent) were multi-family, and 4 of these were in Lima (Orihuela, 2011: 16–25).⁸ According to *MI VIVIENDA* officials, the construction cost of an apartment exceeds the 12 UIT limit, as construction costs increase with building height; moreover, the developer is not allowed to build for mixed use. The floor areas of the single family homes are between 33 m² and 52 m², and allow for progressive expansion of the homes in the future (up to 3 or 4 floors); according to the developers, this housing typology matches the cultural expectation of buyers who prefer having a home affixed to the land. On the other hand, housing units in apartment buildings (Campoy and Santa Rita in Lima) have floor areas of between 43 m² and 51 m².

Building a housing project in stages is another strategy used by developers. Because subdivision regulations mandate reserves for parks (8 percent) and education (2 percent), the developer calculates a ‘loss’ of 10 percent of the land acquired. The strategy used by developers to minimize the negative impact of this norm is to purchase a land parcel (e.g. 4 hectares) and build housing units in 4 or 5 stages. In general, the park is left to the end, and in the meantime the developer tries to recover the capital invested.

There are also examples of housing projects combining more than one public program, namely NCMV and AVN (Landaure, 2010). Examples of such projects in Lima include Parques de El Agustino, which combined 3,200 homes of “*Mi Hogar*” (middle class) with only 100 AVN homes; Santa Rita, which combined FMV with AVN; and the proposed mega-project (if ever implemented) Ciudad del Sol de Collique (Comas), planned for 16,000 apartments, of which 5,000 would be AVN and 11,000 NCMV. The expectation is that projects of this magnitude would elicit a greater interest on the part of the banks.

Figure 1—Single Family AVN Homes in “El Milagro” Housing Trujillo, La Libertad



Source: Julio Calderón

⁸In Lima, this includes Campoy, Santa Rita, La Muralla and Los Parques de El Agustino. In addition, “García Ronceros” in Arequipa, Talara in Piura and Las Brisas Stage I in Huánuco.

Figure 2—Campoy. Multi-Family Housing, Lima



Source: Teresa Arias

Financial Aspects

Intermediate financial institutions (IFIs) have not found AVN mortgage credits attractive. IFIs manage the funds of public housing program (vouchers, savings and credits), assess the projects submitted by the builders, request “solidarity bonds” (before the letter of guarantee or the creation of the trust), and control, supervise and release funds as the project advances. IFIs have limited themselves to using the resources provided by the government, and have not contributed their own funds, despite the large *spread*⁹ in interest rates: They receive funds at 6.6 percent interest and lend to the consumer at 10 percent to 12 percent.

For the IFIs, the AVN loan modality is a *secondary product*. The absolute amounts are not an important source of income, and they are afraid of not being profitable and operating at a loss. For the banks, the transaction costs of a mortgage credit are the same, regardless of the loan amount. An AVN mortgage credit amount is particularly low. The average sale price of a home is US\$ 17,000; there is a voucher subsidy of US\$ 7,125; the buyer contributes savings of US\$ 1,710; so the mortgage credit is limited to US\$ 7,552.50. The mortgage credit for *Mi Vivienda* (NCMV) for the middle class, on the other hand, is attractive for the IFIs, and the average value of the mortgage loan, as of April of 2012, was around US\$ 82,000 (*Gestión*, 4/17/12).

Families that want a *Techo Propio*/AVN home need to be qualified by an IFI to receive the voucher and to process the complementary mortgage credit.¹⁰ The majority of the owners, according to our survey, have financed their homes through a private bank (41.5 percent),

⁹Spread is the difference between the active rate, charged for loans, and the passive rate, paid to savers, that generates the financial profits. In addition, banks charge commissions for various items.

¹⁰Art. 16 of RM.128/2009 of MVCS stipulates that complementary financing “Is the credit granted by an Intermediate Financial Institution (IFI) to supplement the buyer’s savings and the Family Housing Voucher (BFH), and can be applied to a finished property or a future property. This financing must be approved by the IFI before applying for a BFH.”

followed by those that used savings funds from their place of employment (30 percent), the latter are mostly policemen and, to a lesser extent, teachers. Public banks, which were important in the first stages of the AVN program, have a 7.5 percent share. Among home buyer surveyed, 15 percent did not use a complementary credit (beneficiaries of “Los Parques de El Agustino”, who, in fact, were treated as homeless people). Further, 41 percent of respondents consider the requirements of the IFIs to be somewhat complicated, 32 percent think they are easy to comply with, 12.5 percent think they are complicated, and the rest have no opinion. Most respondents (64 percent) consider that the monthly payments they make to IFIs are adequate, because they are matched to their income. Our focus groups confirm this opinion, as the homeowners feel that they are well served by the home they purchased.

The Public Intervention

The housing market has two basic elements, to which the government makes a decisive contribution. On one side, it consists of the demand for property and the allocation of public funds by law and regulations. On the other side, the supply aspects comprise the credit policies for builders that define the parameters of market access (Bourdieu, 2002: 32). In the case of affordable housing, the government contribution is substantial by definition. AVN operates via a secondary market, which provides mortgage loans to private banks that in turn to finance individual loans and provide vouchers to homebuyers. The government also enacts norms and regulations defining the real estate product and the conditions to access the program; and procures and urbanizes urban land to reduce costs, among other things.

Despite the large scope of the government intervention, the public agenda provided by key economic agents is restricted to a discussion over larger vouchers and subsidies, and provision of inexpensive public land. For example, CAPECO has indicated that: “the government continues to offer subsidies to low income families for the purchase of homes...The government budgets US\$ 130 million a year to finance these subsidies and would have to triple this amount...” (Piazza, 2011: 18).

The way to address the problem of land for affordable housing has been reduced to requesting the supply of inexpensive public land. In 2003, the Housing Sector Support Program (*Programa de Apoyo al Sector Habitacional*, or PASH), developed the Primary Urban Production (PUP) component for demonstration and limited intervention purposes. PUP provided for the urbanization of parcels up to the macro-lot level, to auction them to private investors. Despite the efforts to regulate this initiative,¹¹ it failed. By November of 2005, only 8 lots had been identified, based on cadastral data. By December 31 of 2006, only 5 percent of the IADB funds and 5 percent of local counterpart funds had been used. In April 2007, PUP was shelved. There were difficulties in regularizing the tenure of the lots and delays in providing basic public services and sanitation (Stipe Viator, 2007). Subsequently, the government proceeded to auction public land in Lima.¹²

¹¹In February of 2006, Law 28687 allowed affordable housing to be considered in private properties and farming communities on the coast. The law charged the Housing Ministry with creating the Land Bank (Article 23), El Peruano, 17 de marzo de 2006.

¹²In Los Parques de El Agustino, the lots of the former “La Pólvara” barracks were sold to the builders at US\$ 14.97/m², while their market price was 50 US\$/m² (Lecca, 2011, pg. II). The land (640 hectares) of the former

In January of 2012, the Urban Land Program (D.S.003-2012-VIVIENDA) was created to satisfy the demand for serviced land for affordable housing and for private initiative projects. A land bank of 93 thousand hectares was announced in April of 2012 (Gestión, 4/13/12 page 2) to address the limited supply of land with basic services. Government officials reported that in order to have an impact on the final price of new homes, 6,542 hectares of urban land would have to be produced each year. The intent was to “make urban land available to real estate developers in order to counteract the restrictions we face at this time” (Gestión, 4/13/12, page 2). In April of 2012, the housing minister himself stated: “as land is scarce, prices climb and put homes out of reach for the poorest. This means that the government has to make these parcels available to the market” (Gestión, 6/11/12, page 15).

To reduce the problem of land for affordable housing to simply supplying inexpensive public land, would limit the debate to the housing policy model as currently implemented. This option leaves out of the agenda other types of measures, such as land use regulations that assign percentages for affordable housing, urban development in partnership between the government and private or community actors, measures to curb land speculation, and fiscal instruments, such as value capture, that can recover the incremental land value generated by public intervention (Maldonado, 2012: 182–183).

Small farmland owners are given free rein to continue with their speculative and conservative behavior. This is a decision with a clear ideological connotation, based on an unrestricted defense of private property rights.

Another theme that should be included in the public agenda is the targeting of AVN beneficiaries and the quality of life in residential complexes.

Is AVN really addressing its stated public goal? Our study shows that, although AVN officially addresses the effective demand of social levels C and D, in reality there is a *clear predominance of level C*. The monthly family income of the beneficiaries surveyed, as of January 2012, was 1,540 soles (some US\$ 570),¹³ higher than the average estimated salary level of level C, which according to the Housing Ministry was US\$ 450 as of 2011. Among the survey respondents, 41 percent earned between US\$ 250 y US\$ 500, placing them at level C, while 37 percent had an income between US\$ 501 and US\$ 750, higher than the level C average, but less than the level B average (US\$ 925). 6 percent earned more than US\$ 1,000, which would place them as a level B beneficiary. More importantly, *only 5 percent had an income lower than US\$ 250, which would make them part of levels D and E*.

On the other side, 62 percent of the homeowners were formal workers (made social security contributions), while in Lima as a whole, formal employment hovers around 45 percent. This shows that AVN is addressing the needs of poorly paid formal workers, government officials such as policemen and teachers, who would qualify for the Program requirements. But it is not addressing the needs of informal workers. Only a minority of the homeowners were self-employed (18 percent).

airport of Collique in Comas (Sol de Collique Program) was sold at 30 US\$/ m², while the market price was some 200 US\$/ m². See Paco Moreno (*La Primera* 7/25/2010, page 9) “Great Deal in Collique” and Riofrío, 2010: 77-83.

¹³We should point out that the owners occupied their homes in 2004-2006, and it is possible that at the time of the survey (January 2012) their income was higher.

Finally, and no less importantly, in AVN housing projects there are quality of life issues associated with the lack of public spaces and recreational areas, lack of connection with the rest of the city, lack of social interaction (affected by the presence of tenants) and citizen safety problems (table 5), which have not been adequately addressed by the government.

Table 5—Problems Reported by Beneficiaries

Problem	Cause	Solution
Lack of public space and community facilities	“Fraud” committed by builders who did not comply with open space and recreation area requirements.	More information to the population.
Lack of paved roads to access the settlement.		Greater governmental control/regulation of the builders.
Social interaction. Tenants and empty homes. Difficulties in paying the maintenance fees.	Illegitimate beneficiaries, due to lack of public control and corruption among public officials, which lead to the presence of tenants. There is nowhere to file a grievance.	More public control in identifying beneficiaries, closing the entry of non-legitimate occupants
Greater citizen insecurity, thefts, drugs.		Identify government instances where homeowners can file grievances.
Social stigma	Lack of public safety.	Government-provided safety.
	Low reputation of the settlement.	

Source: Julio Calderón based on interviews with beneficiary homeowners.

Final Remarks

The crux of the urban development discussion in Latin America, and in Peru, is how to produce formal housing to counteract urban informality, which implies that the policies of regularization and improvement of informal settlements have reached their limit and have negative consequences for the city. Although they will continue to exist to address the demand that has been generated (which has, by the way, give ample room to cronyism), it would be advisable to think about formal solutions for the cities. This is the explicit promise made by affordable housing in Latin America.

The results of this study show shortcomings in Peru's affordable housing policies. A program that achieved only 30 percent of the stated goals, problems in configuring a profitable affordable housing supply at the prices established by the authorities, subsidies that are oriented toward the middle class (levels B and C) that take over the best locations in the city, etc. These shortcomings, while difficult to understand using a linear thought process that believes that all things, housing included, are solved by the economic growth and market mechanisms, have a multi-causal explanation. An increase in urban land prices is produced by factors related to economic growth, such as construction boom, growth of the middle class, reduction of poverty, configuration of the real estate market, and the dispute over returns to land.

However, the historical failure of the first attempt at affordable housing, explained by the increase in land prices, is now extended to explain this second attempt.

For the elites, i.e. the government, builders and developers, the problem is the high land prices and not the landowners as such. An ideological perspective is used—an unmitigated defense of private property—to separate the price of land from the economic agents that generate it. Given this view, and within the framework of the predominant economic theory, public policy is once again restricted to a solution whereby the government's role is to supply urban land at lower prices. The approved mechanism is for the government to acquire land, urbanize it and auction it at low prices to developers and builders. As demonstrated by experience, this policy will probably have little effect.¹⁴ In the meantime, and this is the issue at hand, we will not achieve the goals of social integration and inclusion established by affordable housing programs. Their failure will cause a proliferation of land invasions and room rentals: the informal and illegal city.

We observe a disconnect between the goals of a public policy (affordable housing for social inclusion) and the behavior of the real estate and land markets, which is obscured by the very policy model adopted, where solutions are left to private initiatives and the government is reduced to play a mere facilitating role.

The solution, inspired by other experiences in the region, is to create an alternative model for providing affordable housing, which takes advantage of market mechanisms and business initiatives, but assigns the government greater weight and initiative. A different kind of initiative is sometimes mentioned: the Colombian housing policy, which is not without its detractors. Despite criticisms, in one year (2008) the Metrovivienda land bank of Bogota produced some 18,400 housing units at a prices ranging from US\$12,000 to US\$ 17,500 (Maldonado, 2012: 196), the equivalent of 60 percent of the AVN units produced in all of Peru between 2003 and 2012.

This study has confirmed that builders and public officials have an adequate and relatively detailed knowledge of alternative proposals to the model currently applied in Peru. Some of them find these initiatives attractive. With housing subsidies currently being three times greater for the middle class, the time has come for Peru to try other options that provide greater housing subsidies for lower income sectors, declare some expansion areas of priority development to combat speculation by conservative landowners, assign greater responsibility to municipalities for the control of housing programs and access land, and create management and urban development options that allow for the joint active participation of the government, builders and farming communities where the city is expanding illegally.

¹⁴There were some projects implemented 5 or 6 years ago in which low cost public land was only partially used for affordable housing, and the new legislation also contemplates the use of these lands for “private initiatives” that are not necessarily related to affordable housing.

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Annex 1. List of Persons Interviewed

- Rodolfo Santa María, Fondo Mivivienda Lima.
- Luis Tagle, Director Nacional de Urbanismo del Ministerio de Vivienda, Construcción y Saneamiento.
- Wilmer Sánchez Ruíz, Fondo Mivivienda de Trujillo.
- Ethel Martínez, Instituto Metropolitano de Planificación, Municipalidad de Lima.
- Arq. Talía Rodríguez, Área de Planificación Metropolitana de Municipalidad de Trujillo.
- Guido Valdivia, asesor de CAPECO.
- José Luis Ayllón, Instituto de la Construcción y Desarrollo de CAPECO.
- Nil Salinas, constructor.
- Arq. Carlos Ravello, asesor de constructores en Trujillo.
- Harold Noriega, Gerente de Trazza Estudios SAC.
- Ing. Jorge Quispe, constructor en Chiclayo.
- Paola Polo, Caja de Ahorros de Trujillo.
- Marciano Matos, dirigente Los Parques de El Agustino.
- José Luis Ruesta, dirigente de Santa Rita.
- José Mauricio, dirigente Residencial Campoy.
- Lucy Silva, dirigente de Martinete.
- José Luis Cajas Ramírez, poblador proyecto El Milagro.

Annex 2. AVN Project in Lima

COD. DE PROY.	PROYECTO	RAZÓN SOCIAL DE LA EMPRESA	AÑO DE REGISTRO	TOTAL VIV. INSCRITAS	DISTRITO	OBSERVACIONES
0001	Martinete	Banco de Materiales SAC	2002	343	Cercado de Lima	Terminado
0002	Conj. Residencial Campoy	China International Water & Electric Corp.	2002	1200	San Juan de Lurigancho	Oferta vendida
0028	El Mirador de Pachacutec	Banco de Materiales SAC	2003	1512	Ventanilla	Terminado
0030	Conj. Hab. La Estancia de Lurín	Negociaciones Ara del Norte S.A.C.	2003	2670	Lurín	Paralizado. Redefinición del proyecto. Problemas de terreno.
0046	Rastros de San Francisco RU (La Muralla)	EMILIMA S.A.	2003	70	Cercado de Lima	Terminado
0047	Nuestra Señora de Monserrate(RU)	EMILIMA S.A.	2003	0		RETIRADO
0048	Virgen del Carmen(RU)	EMILIMA S.A.	2003	0	Cercado de Lima	RETIRADO
0050	Rosario de Fatima(RU)	EMILIMA S.A.	2003	0		RETIRADO
0052	Santa Rita	Constructora e Inmobiliaria Santa Rita S.R.L.	2004	323	San Juan de Lurigancho	Terminado. Reducción de oferta de 08 viviendas.
0115	Urb. Los Jardines de Ventanilla	Vida Armonia SAC	2007	485	Ventanilla	Estructurando Fianza Solidaria con Banco de Crédito. Reducción de 504 a 485 viviendas.
0132	Los Parques del Agustino AVN más concurso público	G y M S.A.	2008	100	El Agustino	Oferta vendida.
0134	Las Terrazas de Comas	MIRANDA CONSTRUCTORES S.R.L.	2008	207	Comas	Sin oferta disponible. Cambio de precio de venta de 12 viviendas.
0142	Urb. Ribera del Chillón	Inmobiliari S.A	2008	1034	Puente Piedra	Oferta vendida.
0179	Las Praderas de Lurín	Inmobiliaria Masias SAC	2010	356	Lurín	Proyecto
0188	Nueva Urbanización Torreblanca III Etapa	Total Inmuebles SRL	2010	981	Carabayllo	Observado. Promotor ha presentado solicitud para reducción de oferta a 416 VIS.
0205	Ciudad Sol de Collique AVN más concurso público	Consorcio DH Montt & GC & M SAC	2011	2520	Comas	Proyecto
				11316		

Annex 3: AVN Projects in Trujillo

COD. DE PROY.	PROYECTO	RAZÓN SOCIAL DE LA EMPRESA	AÑO DE REGISTRO	TOTAL VIV. INSCRITAS	DISTRITO	OBSERVACIONES
0034	Proyecto Cuatro Suyos	Banco de Materiales SAC	2003	164	La Esperanza	Terminado
0060	Cuatro Suyos-Techo Propio Deuda Cero	Banco de Materiales SAC	2004	87	La Esperanza	Terminado
0090	Las Terrazas de Huanchaco	Construit S.A.	2005	0	Huanchaco	cancelación de código de registro
0102	Habilitación urbana "La alameda de Trujillo" II Etapa	IKKA SAC	2006	157	Huanchaco	Aprueba cambio de precio para 2 viviendas.
0111	La Alameda "Construcción Simultánea de Viviendas Plan Techo Propio	COAM Contratistas SAC	2006	159	Huanchaco	Terminado
0113	Urb. Los Alisos del Bosque	Grinsa SRL	2007	68	Trujillo	Promotor redujo oferta a 65 viviendas (20/04/2011)
0120	Cuatro Suyos-La Libertad	Consorcio G Y D	2007	261	La Esperanza	Informe de Verificación de Obra mantiene observaciones del informe anterior.
0126	Las Palmeras de Las Delicias	FECA S.A.C.	2007	259	Las Delicias	Informe de Verificación de Obra.
0141	El Milagro Nuevo Horizonte	CNN CORPORACION CONSTRUCTORA DEL NORTE SAC	2008	112	Huanchaco	En venta.
0157	Residencial Santa Verónica	Grupo 5 Promotores Constructores SAC & Delgado Lira S.A	2009	126	La Esperanza	Informe de verificación 06/12/2010
0165	Los Sauces	L & G Contratistas SAC	2009	114	Victor Larco Herrera	Informe de Verificación
0173	Vallesol Ciudad Piloto	Santa Isabella SAC	2010	662	Laredo	Informe de Verificación de Obra
0175	Villa Florencia	COAM Contratistas SAC	2010	319	Victor Larco Herrera	Informe de Verificación.
0177	Residencial Santa Verónica II	Consorcio G y D 2	2010	91	La Esperanza	Informe de Verificación de Obra
0178	Residencial Los Angeles del Porvenir	Consorcio Roga SAC	2010	100	El Porvenir	Informe de Verificación de Obra
0183	Urb. Villa Santa María	Grinsa SRL	2010	328	Trujillo	Proyecto
0189	Urbanización San Francisco	KVC Contratistas SAC	2010	369	Huanchaco	Aprobado. Reducción de oferta de 488 a 369

						viviendas.
0201	Alto Salaverry II	Construcciones e Inmuebles SAC	2011	4346	Salaverry	Nuevos apoderados en la empresa marzo 2011. Incremento de 3400 a 4346 VIS.
0207	Residencial Santa Verónica III	Grupo 5 SAC	2011	130	La Esperanza	Proyecto
0209	Valles Sol II Etapa	Santa Isabella SAC	2011	2593	Laredo	Proyecto

Fuente: FMV.

Annex 4. Total AVN Investment and Average Home Value

Proyecto	Ubicación	Empresa	Fecha de registro	Inversión Total (US \$)	Valor promedio de la vivienda (US \$)	Valor promedio M ² (US \$)
Miramar	Lima	Constructora Mariana SAC	11/06/08	1'184,464	11,964	311.8
Garrido Lecca	Arequipa	MULTISERVISUR	11/06/08	897,321	11,964	313.36
Renacer, Pisco	Ica	Promotora Renacer SAC	09/05/08	12'922,714	11,237	254.2
Las Terrazas de Comas	Lima	Miranda Constructores SRL	07/05/08	2'476,607	11,964	398.8
Parque de El Agustino	Lima	G y M S.A.	Lecca'?	658 071	6,580.7	110.6
El Edén	Huancayo	OSEDAL SAC.	21/02/08	1'098,381	11,939	300.9
Las Palmeras de Virú	La Libertad	Constructora Inmobiliaria Merino SAC	20/12/07	789,642	11,964	398.8
Las Delicias	Trujillo	FECA SAC	22/10/07	3'098,750	11,964	341.8
Los Sauces de Tarapoto	San Martín	Corporación de Construcciones e Inversiones SAC	14/08/07	4'546,642	11,964	331.3
Las Casuarinas	Ica	IVC Contratistas Generales	05/07/07	19'011,250	11,964	384.7
Teresa de Calcuta	Chiclayo	Pedro Baca sucesores y asociados SRL	03/07/07	1'062,428	9,571	306.7
La Encalada	Chiclayo	T&T Constructora e Inmobiliaria	20/04/07	3'111,226	10,440	307.0
Los Jardines de Ventanilla	Lima	Vida Armonía SAC	12/03/07	20'602,500	11,964	329.9
El Molinito	Chiclayo	Inmobiliaria El Molinito SAC	11/08/06	1'108,571	11,429	423.2
Las Leñitas	Sechura	Consorcio Procasa	15/12/05	741,048	5,835	148.47
Villa California	Piura	Proyectos del Norte SAC	01/02/05	2'774,690	6,086	206.17
Estancia de Lurín	Lima	Negociaciones Ara del Norte SAC	13/04/03	26'700,000	10,000	303.21
Campoy	Lima	China International	18/10/02	9 614 798	7999	193.82

Nota. En la tabla 5 no se ha incluido los Parques de El Agustino por sus características especiales (subsido público en terreno y financiamiento) que distorsiona el análisis.

Annex 5. Changes in the *Techo Propio Program* (AVN) 2006–2009

Concepto	DS 029	R.M 358	R.M. 125	R.M 666	R.M. 733	R.M 128
	07/10/2006*	19/10/2006	06/05/2007	20/10/2008	29/11/2008	05/04/2009
Valor de la vivienda	S/ 13,400 (US\$ 4,000) a S/ 26,800 (US\$ 8,000)	26,800 soles a 33,500 soles	Mayor a 18,425 hasta 33,500 soles	Mayor a 5 UIT hasta 12 UIT (S/ 42,600)	S/ 42,000 (12 UIT)	Mayor a 5.5 UIT hasta 12 UIT (42,600 soles)
Valor del BFH	S/ 12,060 (US\$ 3,600)		S/ 13,400	5 UIT S/ 17,750	3 UIT S/ 10,500	5 UIT S/ 17,500
Ahorro mínimo	S 1,340 a S/ 3,350			10% del valor de la vivienda	10% del valor de la vivienda	3% del valor de la vivienda
Ingreso bruto mínimo		S/ 1,360	S/ 1,360	0.45 UIT (S/ 1,597)	0.45 UIT (S/ 1,643)	0.45 UIT (S/ 1,643)

Fuente: SASE, 2010: 66.

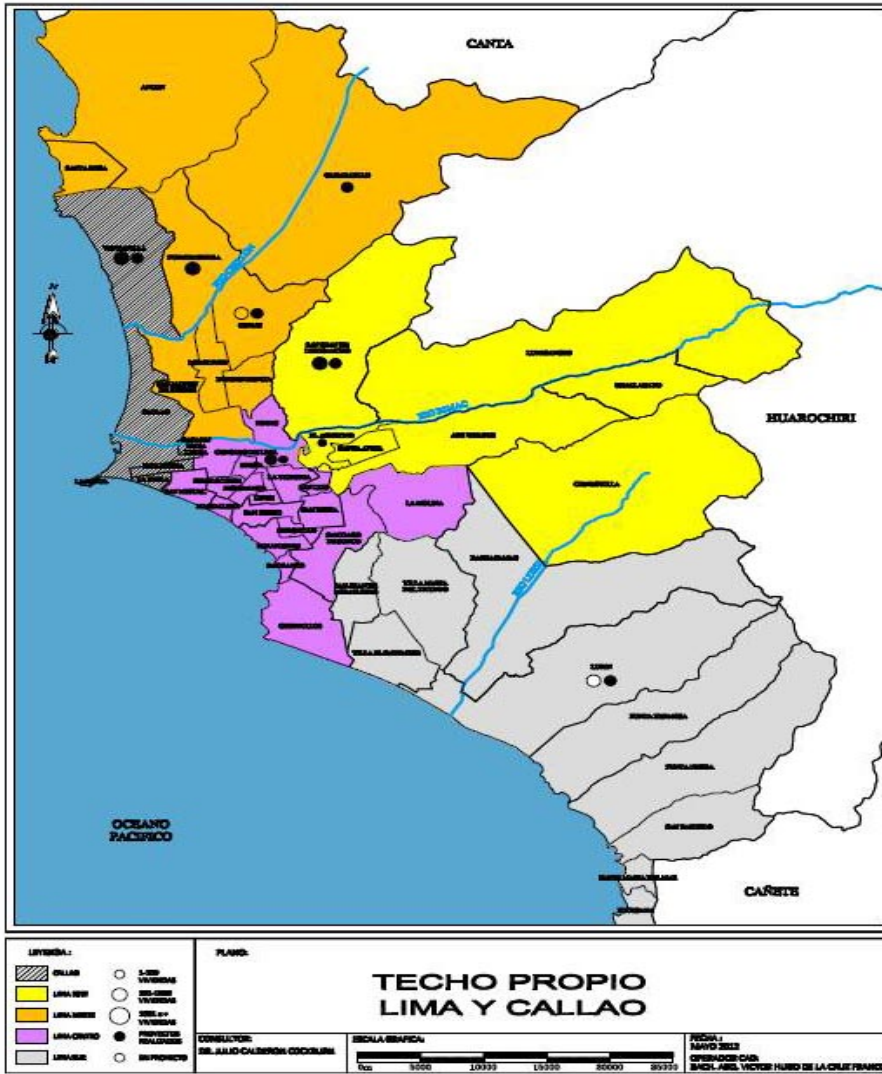
*Esta norma no establece el crédito como requisito.

Annex 6. Average Price by m² of AVN houses in Trujillo

Nombre	Distrito	Total viviendas	Tipo	Precio promedio (US\$)	Area construida	Precio M ²	Financiera
Realizados							
Cuatro Suyos	Esperanza	164	Unifamiliar	8,000	45	177.7	Banmat
4 suyos deuda cero	Esperanza	87	Unifamiliar	4,000	21	190.4	Banmat
La Alameda II Etapa	Huanchaco	157	Unifamiliar	8,000	31	258.0	IKKA SAC Lima
Las Terrazas Alameda	Huanchaco	459	Unifamiliar	8,571	35	244.8	Construir S.A. Lima
Los Alisos	Trujillo	68	Unifamiliar	11,366	28	405.9	COAM Contratistas SAC
Cuatro suyos	Esperanza	261	Unifamiliar	11,928	40	298.2	Grimsa S.R.L
Promedio				8,947	33.1	273.05	Consorcio G y D Arequipa
Aprobados							
Villa Florencia	Larco	319	S.I.	16,301	S.I.	S.I.	Coam Contratistas SAC
Los Ángeles	Porvenir	100	S.I.	16,169	S.I.	S.I.	Consocio Roga SAC
San Francisco	Huanchaco	369	S.I.	16,301	S.I.	S.I.	KVC Contratistas SAC
Villa Marina	Salaverry	4346.	S.I.	16,396	S.I.	S.I.	Construcciones e Inmuebles SAC
Valle Sol II Etapa	Laredo	2593.	S.I.	8,301	S.I.	S.I.	Santa Isabella SAC

Fuente: FMV (2009, 2006), documentación entregada por las oficinas de Lima y de Trujillo.

Annex 7. Map: Location of *Techo Propio* (AVN) Projects in Lima



Annex 8. Map : Location of Techo Propio (AVN) Projects in Trujillo

