



The Missing Foundations of Housing Finance:

**Incomplete Markets,
Fragmented Policies and
Emerging Solutions in
Guatemala**

**Mario Cuevas
Sigfrido Lée
María Isabel Bonilla**

**Inter-American
Development Bank**

Department of Research
and Chief Economist

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Abstract¹

In Guatemala there are substantial and growing imbalances in the housing market; at the same time, financial markets remain shallow and underdeveloped. The analytical framework applied in this paper starts by identifying the types of market failures responsible for the underdevelopment of the housing finance system. The working hypothesis is that there is a correlation between the nature and scope of market failures, and the kind of public interventions actually implemented. Evidence collected points to a rejection of the policy adequacy hypothesis. Nevertheless, it is encouraging that solutions have begun to emerge as economic agents learn to overcome market failures; these experiences are reinterpreted as “natural experiments” showing what could happen if market failures could be fixed at a large scale through appropriate government policy. Building on this framework, the paper proposes guidelines for the design and implementation of housing finance policy in Guatemala.

JEL classifications: G10, G18, G21, G22, G28, H54, H81, R31, R38, R51

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Executive Summary

Housing plays a key role in social development and improvement of household welfare; however, there are growing geographic, qualitative and quantitative housing imbalances. At the same time, financial markets in Guatemala remain shallow and underdeveloped in comparison to prevailing regional standards. Additionally, housing finance is but a minor component of bank credit despite the fact that a state-sponsored mortgage insurance system has been available for several decades.

Most market failures in Guatemala are of the horizontal type (e.g., poor protection of property rights, low incomes and labor informality), while most vertical-type distortions are the unintended result of public policies (e.g., restrictive tax provisions, non-transparent guidelines for home appraisal, or an overly narrow mortgage insurance system). It is found that public policy is generally failing to effectively address horizontal market failures although some failures are addressed within the mortgage insurance system.

The analytical framework applied in this paper starts by identifying the types of market failures responsible for the underdeveloped housing finance system. It then looks at the nature of explicit policy interventions and classifies them along two dimensions; the first dimension describes the orientation of policy in terms of the use of government power to either influence markets or directly dictate outcomes; the second dimension describes policy in terms of its intended scope incidence over one or more economic sectors or subsectors. The working hypothesis underlying policy analysis is that there is a correlation between the nature and scope of market failures, and the kind of public interventions actually implemented. We call this the “policy adequacy hypothesis.” The identified set of market failures together with the policy adequacy hypothesis yield a set of criteria for public policy recommendations; we attempt to establish whether or not the set of policy actions currently under implementation agrees (qualitatively at least) with the criteria just described. Qualitative deviations from these criteria would suggest that the hypothesis can be rejected.

The “policy adequacy hypothesis” holds that: first, public policy seeks to address key market failures and is not spuriously influenced by collateral objectives; second, the design and implementation of policy instruments match the objectives of public policy; and third, the instruments of public policy vis-à-vis housing and housing finance do not result in undesirable

externalities. Application of the analytical framework just described points to a rejection of the “policy adequacy hypothesis.”

Policies are also analyzed in terms of their target population. The population is not homogeneous and different social groups have differentiated needs; we hold that public policy ought to serve the needs of all social groups through the most appropriate instruments available, both in terms of effectiveness and efficiency. Evidence suggests that certain social groups are being overlooked by public policy (e.g., lower-middle income groups) and that sometimes the type of public intervention used is relatively inefficient (e.g., tax exemptions accruing to lenders even if borrowers are high income households taking advantage of mortgage insurance).

Public policy toward housing finance has implementation shortcomings in addition to the design issues already discussed: there is an overly complex institutional framework responsible for policy implementation. In principle, the Ministry for Communications, Infrastructure and Housing plays a policy coordination role; however, housing and housing finance policy has not been formally evaluated or updated in a comprehensive manner resulting in policy and institutional inertia.

It is encouraging that solutions have emerged; microfinance has been booming in Guatemala for the last decade, and the profitability of housing microfinance can be enhanced creatively through business partnerships. In this context, positive experiences with housing finance in Guatemala are discussed and it is found that the key to success of these market-based examples is that economic agents have learned to overcome existing market failures. In fact, these experiences can be reinterpreted as “natural experiments” that show what could happen if market failures could be fixed on a large scale through appropriate government policy. This supports the view that to achieve substantial and fundamental results in housing finance, market failures would have to be addressed systematically through public policy. Building on this evidence, we propose broad guidelines for the design and implementation of housing finance policy in Guatemala.

1. Introduction

Access to housing and housing finance plays a key role in household welfare. In fact, access to credit is one of the most significant challenges in achieving growth and improving household welfare. In Latin America financial markets are underdeveloped compared with those in advanced and other emerging economies and, Guatemala is no exception to this pattern. This paper provides a framework for policy reform and development by: i) describing the current state and evolution of the system for housing finance as well as government policy; ii) linking outcomes in the market for housing finance with the corresponding policy inputs; and iii) assessing the effectiveness of public policy toward housing finance.

In its description of the state and evolution of the housing finance system and government policy, this paper highlights key factors that constitute market failures and, therefore, constrain housing credit in Guatemala. Market failures affecting the housing finance system are identified on the basis of standard economic theory applied to financial markets, as well as international experience that suggests market failures have serious empirical consequences in emerging markets, holding back the development of housing finance systems. At a fundamental level, existing market failures are mirrored in the incompleteness, underdevelopment and inefficiency of housing finance markets.

Building on the premise that policy is meant to address key market failures, we look for a match between the issues to be addressed (i.e., market failures, and the existing policy framework and instruments). The main hypothesis to be tested is that at various stages there is a match between public policy and the housing finance issues that need to be addressed—the “policy adequacy hypothesis.” As understood in this paper, the hypothesis can be broken into three parts: first, public policy seeks to address key market failures and is not spuriously influenced by collateral objectives; second, the choice, design and implementation of policy instruments match the objectives of public policy; and third, the instruments of public policy vis-à-vis housing finance do not result in unintended market distortions or undesirable externalities. Relying on a matrix of market failures, the paper’s main hypothesis produces content that can be checked against facts, thus providing the basis for a qualitative test of the hypothesis.

Using public information on the design and implementation of housing finance policy in Guatemala, the main hypothesis is tested and rejected. In particular, it is found that: i) there is a noisy mapping between market failures and policy objectives; ii) there is a noisy mapping

between policy objectives and the chosen set of policy instruments; and iii) the chosen policy instruments themselves are noisy, sometimes causing undesirable spillovers. This motivates the search for policy reform and consideration of emerging alternatives.

To strengthen the case for policy reform and development, the last few years of success of housing microfinance in Guatemala and other locations is reinterpreted in this paper as a collection of “natural experiments,” corroborating that the selective removal of key market failures through creative means effectively unlocks the flow of credit to disadvantaged households. By showing how housing microfinance selectively addresses the type of market failures identified earlier, the paper suggests that adequate design of public policy holds the potential to generate positive results at a larger scale, leading to enhanced market efficiency and much improved household welfare nationwide.

2. Literature Review

Research has been conducted examining the causes behind the slow development of housing finance systems in Latin America and other emerging economies. For example, Galindo and Lora (2005) focused on low incomes and legal obstacles to seizing collateral in the event of default, as well as macroeconomic volatility, as key factors slowing down the development of housing finance systems; Warnock and Warnock (2008) suggested that countries with stronger legal rights for borrowers and lenders, deeper credit information systems and stable macroeconomic environments, tend to have deeper housing finance systems. Also, Broner, Martin, and Ventura (2007) proposed that enforcement problems constitute a barrier to the development of primary mortgage markets; but, that the emergence of secondary markets and the effects of weak enforcement institutions tend to restore market efficiency. Recently, Chiquier and Lea (2009) edited a handbook on housing finance policy in emerging markets which looks at the structure and evolution of housing finance systems, mortgage instruments and market infrastructure, enforcement of mortgage rights, consumer information and protection, risk management and regulation, state housing banks, housing funds and savings schemes, mortgage securities and insurance, housing microfinance, and housing finance subsidies.

Despite the growing literature on housing finance around the world, there are few publications that describe and analyze in detail the state of housing finance in Guatemala. Examples include Velasco’s contribution in Velasco and Solo (2007), focusing first on the

conditions of lower income households and community development, and then on the linkages between the lack of basic infrastructure, labor informality and financial sector exclusion. Chiquier and Lea (2009) included a brief section on the size of the housing microfinance sector in Peru and Guatemala. Also, other publications focus on successful experiences implementing housing microcredit schemes through NGOs and housing funds in Guatemala, including Stein et al. (2007) and Vance (2008). Similarly, Alvarez et al. (2007) address the role of the private sector and government in community development; Gwinner et al. (2007) propose overcoming financial exclusion by increasing private investment in community development in Guatemala.

Existing literature on housing finance in Guatemala provides useful information on different aspects of the nexus between housing and housing finance, often from a social perspective; in general, this literature highlights the importance of housing in household welfare and in many cases identifies key barriers to the flow of housing finance at low income levels. Also, existing literature looks at the role of the public sector mainly from the perspective of social policy. However, there is no work that identifies the causes behind the failures of the housing finance market and assesses systematically and comprehensively the adequacy of public policy toward housing finance in Guatemala.² This paper seeks to fill this gap in the literature, applying a framework for policy analysis that starts with a typology of existing market failures and then looks at policy instruments, thus providing a qualitative assessment of public policy toward housing finance in the country.³

² This study builds on primary analysis of laws, regulations, official publications, government statements on housing policy, as well as a few independent studies analyzing the housing market in Guatemala (e.g., those dealing with the housing gap, social funds and property registries). The following types of documents have been reviewed in the preparation of this paper: the country's political Constitution, Municipal Code, and Law on Housing and Human Settlements. Also, the founding charter of the National Mortgage Bank, the National Institute for Mortgage Insurance, and the Guatemalan Housing Fund, have been reviewed. In addition, the contents of the Peace Accords, the National Housing and Human Settlements Policy (2004), and the current government program (2008 - 2012) have been analyzed. This paper has also relied on various statistical sources, including the National Construction Chamber, the National Statistics Institute, the Bank of Guatemala, as well as various international development organizations. In the preparation of this study, we have also referred to selected presentations used in recent workshops on the housing sector.

³ Application of this analytical framework to analysis of public policies in Guatemala is consistent with and builds on previous work including Cuevas and Bolaños (2007), Artana et al. (2009), Cuevas et al. (2009), and Cuevas, Lee and Pineda (2010). This analytical framework has proved fruitful in analyzing and assessing the state of public policy toward the agricultural, industrial and services sector in Guatemala.

3. State of the Housing and Housing Finance System

3.1. What Are Markets Like in Guatemala?

According to the Guatemalan Construction Chamber, there are currently approximately 3 million housing units in Guatemala; the housing gap is increasing on average 5 percentage points per year and is estimated to reach 1.5 million by 2010. This figure comprises both demand for new homes (over 90,000 new households every year) and outstanding demand for higher quality homes (nearly 1 million households live in poor quality homes). To further compound shortages, note that the typical lifespan of homes is approximately 50 years and that the housing stock depreciates at a rate of between 1 percent and 2 percent per year. In contrast, around 37,000 new homes were built yearly in 2004-2007, and 25,000 yearly in 2008-2009. It follows that demand is growing at a faster rate than supply, thus explaining the continued expansion of the housing gap.⁴

Additionally, it is estimated that almost a third of existing homes are unfit for habitation and around half of all property is held without formal title. There is also a significant geographic imbalance as almost half of demand for housing is concentrated in the metropolitan area, while housing gaps occur mainly in the southwest and northwest regions of the country. There are substantial housing shortcomings in terms of both quality and quantity. According to the 2002 Housing Census—the most recent available—the quality gap was 27.8 percent, while the quantity gap was 18.6 percent. Velasco and Solo (2007) argue that the main bottleneck is, in fact, the quality gap, as the expansion of supply has often been accompanied by a reduction of the average quality of homes. Also, they point out that 70 percent of the quantity gap is affecting the top quintile of the income distribution of households, while 75 percent of the quality gap is affecting the bottom half of the income distribution.⁵

Historically, the financial sector has been organized around the banking system, which has been furthered by regulatory trends that encouraged the emergence and registration of “financial groups.” Such financial groups include insurance companies, offshore banks and other financial companies under the leadership of a domestic bank. The recent reform of the financial system started with the approval of a law which allowed the public to freely use

⁴ See CGC (2009).

⁵ The quality gap is understood to include various types of substandard homes, including huts, poorly constructed and overcrowded houses and apartments.

international currency in private contracts and transactions. The reform continued with the approval of a package of financial laws aimed at reassuring the public that the monetary and financial systems are sound—including a new central bank law, monetary law and financial supervision law. Reform of the capital markets also started with approval of a new law, but no supervisory agency was created; there has been no reform of the pension system in Guatemala and capital markets have failed to develop satisfactorily.⁶

Despite its preeminence within the financial system, the banking sector is relatively small.⁷ Market depth measured by dividing M2 over GDP is around 30 percent, implying a rather shallow system compared with the rest of the region. El Salvador for example, is the country with the highest credit depth within Central America, reporting M2 equivalent to 46 percent of GDP; Nicaragua has the lowest depth indicator with 8 percent, while Costa Rica is at around 34 percent of GDP.

Funds to be directed to housing finance primarily come from the banks' own capital, deposits from the public and general international credit lines negotiated by banks. In a few cases, and in relatively small amounts, banks negotiate a specific credit line meant for housing loans with second tier banks like the Central American Bank for Economic Integration. In general, it can be argued that there are no sources of housing finance in Guatemala aside from domestic sources, both formal and informal.

At the end of 2009, construction accounted for only 8 percent or about US \$38.9 million of total credit flow (US \$479 million⁸), of which around two-thirds is housing credit (US \$26.5 million). Despite its small size and high concentration, the product market in Guatemala offers choices in terms of loan products. Specifically, with regard to maturity and currency, the maturity of housing loans ranges from 10 to 25 years, but most of the existing credit portfolio is between 10 and 15 years. Construction lending is about 17 percent of the total amount of credit in local currency and about 8 percent of credit is denominated in foreign currency. The size of the non-performing portfolio, at between 3 percent and 5 percent of outstanding loans, is not a significant concern.

⁶ In Guatemala, there are two stock exchanges, the Bolsa Nacional de Valores, S.A. and Corporación Bursátil, S.A. These are regulated by the Ley del Mercado de Valores y Mercancías.

⁷ Loewenthal reached similar conclusions by comparing the ratio of credit to the private sector and GDP across several countries in Latin America. See Gwinner et al. (2007).

⁸ All figures are expressed in US\$ using the average exchange rate of the reference year 2009.

A few banks finance the whole housing sector across the country: Citibank and G&T Continental holding nearly 55 percent of the value of Institute for the Promotion of Mortgage Insurance (FHA)-insured mortgages; BANRURAL, Banco Industrial and Banco Reformador hold around 35 percent of FHA-insured mortgages; and the remainder is distributed among other banks and financial institutions. In other words, around 80 percent of the portfolio of FHA-insured mortgages is held by five banks and about 10 financial institutions handle most FHA-approved projects. It is important to note that the FHA plays a central role in housing credit, implying that housing represents a very small share of the total risk taken by the banking system: most housing credit is fully insured by the FHA indicating that almost no bank capital is exposed to the housing sector. For example, in 2009 the FHA approved insurance policies linked to about \$19 million worth of housing loans, equivalent to 72 percent of the total flow of housing loans.⁹

The framework for mortgage finance has evolved relatively slowly. The Guatemalan legal framework sets the stage for using collateral mainly under the Civil Code. The main problems affecting the creation of a secured interest are the weaknesses of procedures for filing a claim as well as clumsy foreclosure procedures. In most countries the majority of credit instruments include some form of security interest; however, in Guatemala only 39 percent of outstanding loans do and barely one fifth of bank loans are backed by mortgage security.

When banks work within the FHA system interest income accruing to the bank is exempt from income tax. This creates a very powerful incentive for banks to grant housing loans mainly within the FHA system; doing so outside the system carries a high opportunity cost.¹⁰ Another characteristic of the existing framework for mortgage insurance is that transferring insured mortgages to an entity not approved by the FHA is prohibited.¹¹

⁹ These figures match closely the historical averages analyzed by Loewenthal in Gwinner et al. (2007). According to Irungaray in Alvarez et al. (2007), one of the advantages of the FHA system is that it increases the volume of lending to the housing sector. Granting that this may be the case within the limited universe of qualifying projects and home buyers, it is also clear that even the generous benefits provided under the FHA system have been insufficient to increase loan volumes sufficiently enough to turn around the adverse trends reported in terms of the overall housing gap.

¹⁰ Mortgage insurance provides some relief from existing tax distortions. FHA has its own set of exemptions in order to make it easier to buy a home as well as to provide incentives to entities that work with the institution to finance more projects. The tax exemptions are established in Article 34 of its charter law.

¹¹ According to Irungaray in Alvarez et al. (2007), the FHA system has created a primary market for mortgage insurance and, therefore, "it has created the conditions for the emergence of a secondary mortgage market and for mortgage securitization." However, this overlooks the fact that specific features of the current FHA system introduce barriers to the emergence of a secondary market (e.g., prohibition of resale to entities not approved by the

Banks granting FHA-insured loans structure them in accordance with the terms set by the FHA, with amounts, terms and insurance premiums approved by the FHA. Insurance is granted to loans intended for the purchase of an existing home to be owner-occupied, construction of a home to be owner occupied, home improvement, construction of rental homes, mortgage refinancing and exceptions approved by the FHA board of directors. In addition to interest rates, mortgage pricing includes charges set by FHA regulations, including an annual mortgage insurance premium of 1 percent over the outstanding loan balance, an insurance premium against earthquakes, fire and other contingencies, and an administration fee.¹²

The FHA plays additional roles in the housing finance market when it analyzes credit risk. Banks seem to appreciate the support provided by the FHA, as this agency has demonstrated that it is able to gauge risks well,¹³ thus improving the system's overall performance. Unfortunately, though, the close involvement by the FHA in risk management has reduced the need for capacity development within banks.

Refinancing and restructuring is not a common practice. Refinancing is useful when restructuring the debt of clients in cases like death or changes in employment status. It is important to note that refinancing was not allowed by FHA until 2008. Currently, the FHA board of directors may approve a refinancing or restructuring operation, including changes in loan terms or debtor substitution. Banks argue that this is useful as it prevents some loans from becoming non-performing, although in practice, there have been only a few mortgage loan restructuring cases.

The formal reach of the FHA system goes beyond the market for housing finance. In an effort to reduce its risk exposure, the FHA makes sure that the price of an asset corresponds to its market value and it closely supervises construction specifications and compliance throughout the full project cycle. To some extent the FHA is playing the role of consumer watchdog, as it sometimes receives complaints from owners dissatisfied with construction issues and standards and then directly deals with building companies in seeking solutions or redress.

FHA); note that this is a relatively minor challenge that could probably be overcome through regulatory reform. A greater challenge is also posed by the country's tax code, which makes it expensive to resell mortgage securities. The combination of these factors works against the emergence of a secondary mortgage market.

¹² As Irungaray holds in his description of the FHA system in Alvarez et al. (2007), there is an advantage to home buyers in that the FHA carries out "quality control" of participating projects.

¹³ According to the FHA, only 5 percent of insured mortgages come to a point where claims have to be paid by the FHA.

The complexity of foreclosure procedures is said to be deterring banks from developing mortgage lending, as the system is perceived to overprotect debtors: foreclosure procedures via the judicial system are said to take three-and-a-half years on average (Tejada, 2010). Under its legal charter the FHA has the executive power to transfer and register a mortgaged asset in favor of a creditor, thus bypassing judicial procedures. In practice, this power is exercised sparingly by the FHA but the possibility of recourse provides comfort to creditors.

In Guatemala, two types of taxes influence the housing market:

- The Value Added Tax (VAT) rate is set at 12 percent and is applied to every home sale (new or used). There is an exemption available for first-time home purchasers and applied on the sale of homes with construction area under 60m², or land with basic services and area under 120m². In both cases, the sale value of the property must not exceed US \$17,500.
- The property tax, which is progressive and rates vary with the registered value of real estate. Property is exempt if it is valued at less than US \$245; between US \$245.01 and US \$2,451.00 the rate charged is 0.2 percent; between US \$2,451.01 and US \$8,579.00 the rate rises to 0.6 percent; and if value of property is greater than US \$8,579.01, 0.9 percent is charged.

A common measure to promote home ownership is a total or partial VAT exemption on the purchase of homes (e.g., in El Salvador, Nicaragua and Costa Rica); in addition, interest paid on home mortgages is often deductible from income tax. Unlike other countries, Guatemala has no general tax breaks to promote home ownership and no tax credit accrues to households on mortgage interest payments. Interest on FHA-mortgage loans accruing to creditors (on loans of any size) is exempt from income tax, i.e., in Guatemala the income tax exemption benefits first mortgage lenders rather than homeowners.

3.2. Are There Market Failures in Housing Finance in Guatemala?

Since the formal housing finance system in Guatemala is highly concentrated, particularly vis-à-vis mortgage lending, there may be grounds for concern about market competition, performance

and efficiency.¹⁴ For example, Balsells (2007) holds that in Guatemala, most banks behave like price followers and that the largest banks mainly compete for market share, adding that there are “oligopolistic factors” at play in the banking sector.¹⁵ Although there is no conclusive study on competition conditions in the Guatemalan banking sector—particularly the market for housing finance—we believe that at minimum the issue ought to be taken into consideration in policy discussion.

Financial institutions are often expected to provide incentives and savings instruments to the public.¹⁶ However, without savings and with low levels of “formal” wealth, many households lack the resources to meet existing equity requirements for buying real estate; typically, the required down payment is 20 percent of the value of the property (Tejada, 2010). Guatemala as a whole reports a relatively low savings rate of approximately 15 percent of GDP and, moreover, the lack of “formal” savings is especially dire and prevalent in the urban informal markets (e.g., according to CIEN, 2007) only 13 percent of workers have savings accounts.¹⁷ In general, it would appear that lack of resources to meet down payment requirements constitutes a barrier to the flow of housing finance in Guatemala.¹⁸

Property rights are important because they set the stage for economic growth by securing individual rights to use certain goods for consumption, transfer or production (Besley and Ghatak, 2008). When property rights are not well established or enforced, there is credit rationing and the cost of credit tends to increase. In Guatemala, many failures are detected in the

¹⁴ The relationship between market concentration, competition and performance is not a simple one. For a brief discussion of the role of concentration and competition in financial markets, the reader may refer to Micco and Panizza (2005).

¹⁵ Cuevas (2007) analyzed trends toward increased concentration in the banking system in Central America, especially given the impact of large mergers and acquisition activity in the region, as well as the sale of large regional financial conglomerates to a few extra-regional banks. However, the paper acknowledged that market concentration *per se* is not a sufficient condition for inefficient performance. Nevertheless, there may be a case for competition advocacy and the promotion of a competition culture in the financial sector in Central America.

¹⁶ See Velasco and Solo (2007).

¹⁷ This figure is close to that reported by Velasco and Solo (2007). According to these authors, 14.7 percent of individuals in the informal sector build monetary savings through banks or cooperatives, while others seek alternative means (11.1 percent). Almost three-quarters of people in the informal sector do not report monetary savings.

¹⁸ This situation can also be viewed from another angle. Real property is a common form of saving in Guatemala, where housing is often viewed as the main pillar of household wealth. It follows that those unable to buy a home are also hindered in their capacity to save. Also, note that the main source of finance in the informal sector is “family and friends”—between 70 percent and 80 percent according to Velasco and Solo (2007). From this we may tentatively infer that the difficulties in obtaining resources to put a minimum equity share in the purchase of a home are network-dependent, as individuals belonging to relatively poor social networks are able to mobilize fewer resources than members of wealthier social networks.

justice system, which makes the enforcement of property rights costly, lengthy and uncertain. This failure creates two problems to finance housing: it reduces the expected value of collateral and makes it difficult to access credit.¹⁹

In housing finance, it is crucial for the lender to establish the value of assets to be used as security, as this is one of the factors that determines the size of a mortgage. However, in Guatemala there are no transparent and well-established mechanisms to appraise real estate, thus increasing the risk of credit misallocation.²⁰ Lenders usually hire professional appraisers, but the process of appraisal is largely unregulated aside from minimal regulations set by the Finance Ministry and FHA.

In Guatemala there are two taxes influencing the housing market, namely VAT and property tax (IUSI). Whether new or not, VAT is paid each time a home is sold in the market, causing a cascade effect; the tax rate is 12 percent of the registered value of a home and, by law, homes can only be sold at prices greater than or equal to their registered value. The property tax is paid on annual basis and is calculated on the basis of registered prices at rates that vary progressively with the value of property. Homes that are purchased on credit are registered at the price of the last transaction, which implies that households buying on credit tend to pay higher taxes compared to those who build their own homes, buy cash or otherwise succeed in registering below-market prices.²¹

Around 60 percent of Guatemalans own their homes (ENCOVI, 2000) but only 39 percent of them have formal title to their property.²² The high prevalence of informality reduces

¹⁹ Doing Business 2010 ranks Guatemala in position 103 out of 185. Moreover, this publication shows that the compliance of contracts takes up to 1,400 days with a calculated cost of 26.5 percent of value (World Bank, 2010). As Broner et al. (2007) point out markets cannot work well without an adequate institutional framework; however, they add a twist to the standard story, by showing that weak enforcement institutions interfere with the workings of primary markets only if secondary markets are missing. Since there is no secondary mortgage market in Guatemala, it can be argued that the weakness of the institutional framework is therefore binding, or the institutional framework does not function properly.

²⁰ For example, Warnock and Warnock (2008) consider the “ability to value property” as a precondition to the development of long-term financing.

²¹ Housing Commission (2009) acknowledges that the current tax code is a barrier to the acquisition of homes and proposes a reform of the VAT Law, Decree 27-92, exempting the following kind of transactions: i) purchase of homes under 80m² construction area and valued at under Q.250,000 (approx. US \$31,250); and ii) purchase of land plots under 120m² valued at under Q.120,000 (approx. US \$15,000). This tax exemption would apply only when a household is able to prove that they do not at present own a home or other real estate. The proposed tax reform has not been approved by Congress and it is not known if and when will the assembly discuss it further.

²² Velasco and Solo (2007) report that 86 percent of Guatemalan households live in their “own” home. The source of this number is not clear but it likely emerged from a survey of the informal sector conducted in 2005 and quoted extensively by the authors. Note that a high share of those claiming to own a home may not have formal title to it.

the proportion of real estate property that can be used as loan security.²³ One of the many factors promoting informality is the tax system, as VAT is increasing the cost of selling second-hand homes and promoting informal mechanisms of property transfer. Additionally, there are administrative costs associated with formally registering a property which, in the absence of clear compensating benefits, make unattractive the option of registering a transaction.²⁴ As a result of these factors, many people choose to keep (physical) title deeds as “proof” of ownership, although this is not equivalent to registering the transfer of property rights. These factors also promote informality in the construction or enlargement of homes.

The volatility of incomes distorts the housing market.²⁵ The volatility of household incomes can be organized in terms of the different sources of income and in accordance with different household occupations. Non-labor income is mainly composed of direct transfers, pensions and remittances. For instance, the reception of remittances accounts for about 12 percent of GDP in recent years and its volatility depends on the conditions of the foreign labor markets, migration laws and enforcement, as well as the length of time migrants choose to work abroad. Income volatility also depends on the type of occupation held by household members active in the labor market. In this context, it should be noted that the social welfare system in Guatemala is minimal and there is no unemployment insurance.

Informality is a key driver of income volatility emerging from type of occupation. Informality is pervasive in the Guatemalan labor market; about three quarters of the labor force works in the informal sector (CIEN, 2007). This creates a problem for traditional home financing as households often do not have means to prove their sources of income. Also, the income volatility and the risk of becoming unemployed are both relatively high in the informal sector, conditions which further worsen the risk profile of potential borrowers. Adding together both labor and non-labor income volatilities, it appears that the vast majority of Guatemalan households are perceived as being overly risky, including those that, on average, would have enough income to buy a home.

A lender does not always know a potential borrower well, and it is costly to check his ability and willingness to repay a loan; this often leads lenders to use second-best contracts

²³ Warnock and Warnock (2008) consider the “ability to secure collateral” one of the preconditions for the development of long-term finance.

²⁴ Stein et al. (2007) refer both to the cost of holding property informally as well as to the perception that costs are relatively high for small transactions.

²⁵ In this connection, see contribution by Maritza Canek of the FDLG in Stein et al. (2007).

depending on the borrower's characteristics (Besley and Ghatak, 2009). Two types of problems emerge in this connection: adverse selection and moral hazard. Since lenders cannot always tell the quality of borrowers, they reduce the amount of credit and increase the interest rate; however, this discourages the better quality borrowers and average portfolio quality decreases through adverse selection. Also, since lenders cannot observe the borrower's actions after granting credit, borrowers are tempted to "misbehave" and worsen their risk profile through moral hazard (Stiglitz and Weiss, 1981).

In Guatemala today the administration of information about borrowers is kept private, with no minimum standards for information-sharing among financial institutions. It is widely recognized that there are increasing returns from the use of buyer information in financial markets. Unfortunately, many households fail to join "formal" information networks and are therefore excluded from credit markets.²⁶ This situation further reduces market competition and restricts access to credit even when a household is already participating in the formal credit market.

Screening methods used in Guatemala are negatively biased, in the sense that networks transmit relatively more information about individual "bad" actions than "good" ones; in other words, lenders pay attention mainly to existing blacklists maintained by private services that track an individual credit history (Tejada, 2010). Unfortunately, this practice tends to exclude potential good borrowers who are new or reported to have a "once in a lifetime" bad action.²⁷

Many social groups in Guatemala are excluded from formal credit networks, which reinforces informal practices.²⁸ This effect is somewhat different from the individual effects described above. When developing financial services for a new population group, there may be initial costs that can be deferred to a later time when a cluster of customers has emerged; however, the "first mover" cannot fully appropriate the value of its initial investment and, therefore, the incorporation of new groups to credit networks takes place at a suboptimal rate.²⁹

²⁶ Stein et al. (2007) also refer to this issue.

²⁷ Warnock and Warnock (2008) consider the availability of information on borrowers to be a precondition to the development of long-term financing, noting that "the most informative source would include negative as well as positive transactions."

²⁸ A large share of funding provided to households in the informal sector comes directly from "family and friends," i.e., a household's social network is also its typical source of financing. See Velasco and Solo (2007). Also, Stein et al. (2007) point out that traditional credit institutions have viewed lower-income households as relatively risky and thus prefer to focus on the higher-income segments of the population.

²⁹ Warnock and Warnock (2008) address this type of issue as follows: "Absent standardized information of credit histories, standard banking relationships, in which a bank spends considerable resources acquiring information on

Institutions active in housing finance barely use capital markets directly to fulfill investment needs, relying instead on the supply of finance from the banking sector. In fact, capital markets are mostly used in the context of short-term operations to satisfy the banking sector demand for liquidity. A developed capital market could be an important alternative to the provision of long-term financing to housing projects and would, therefore, increase the intensity of competition within the financial sector.³⁰ It is reasonable to expect that greater competition and increased supply of capital would lead to lower interest rates.

The set of market failures previously described, whether policy-induced or not, are interrelated and have common transmission mechanisms that lead to distorted outcomes in the housing finance system. In this case, these mechanisms comprise heightened country and credit risk, as well as the emergence of multiple equilibriums and imperfectly competitive markets. On the basis of standard economic theory, the ultimate results to be expected from these conditions are credit rationing (in the sense of lower credit volumes than would prevail under perfectly competitive markets) and the prevalence of relatively high interest rates (in comparison with the rates that would prevail under perfect conditions). We will subsequently use this “map” of market failures to assess the adequacy of public policy toward housing finance in Guatemala.

It has been established already that a large number of households are excluded from the formal housing finance system and that this is associated with large and growing imbalances in the housing market. Even though resources might be available for lending, myriad micro-level distortions prevent households from taking full advantage of existing credit sources: the market’s “quantity dimension” is distorted. A relatively elevated country risk is keeping interest rates high at the macro level.³¹ There are also micro-level distortions worth discussing; for example, loan rates outside the institutional financial sector are estimated to be at least twice the average interest rate within the sector. Furthermore, interest rates charged by “informal” lenders are even higher, with monthly interest rates approaching and even exceeding 10 percent or more. This

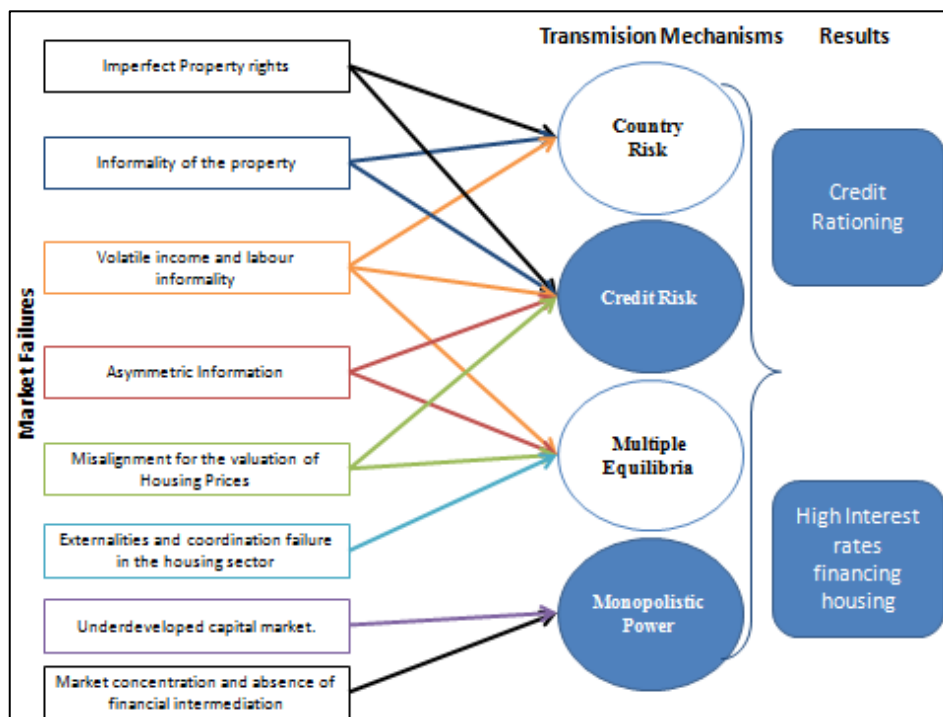
potential borrowers, would work but would limit (at least geographically, if not in other ways) the loan-creation capabilities of the lenders and of the housing finance system as a whole.”

³⁰ Warnock and Warnock (2008) consider access to a capital market as a factor that promotes the mobilization of funds, part of the “basic infrastructure” that enables a well-functioning housing finance system.

³¹ In 2010, Fitch ratified Guatemala’s country ratings in national and international currency as +BB, which means the country is regarded as a speculative investment and there is a non-trivial probability of a credit event (Fitch, 2010). In fact, Guatemala falls into a high-cost cluster of countries with (formal sector) spreads and interest rates that are at least twice the average that prevails in more advanced countries (Artana et al., 2008).

suggests that there is plenty of unsatisfied demand for credit outside formal credit networks left unsatisfied.

Figure 1. Market Failures, Transmission Mechanisms and Market Outcomes



Source: Authors' compilation.

To summarize, the price and quantity dimensions of the market for housing finance are distorted. These observations are explained by factors such as high country and credit risk, the emergence of multiple equilibriums and the prevalence of imperfect competition in credit markets. These conditions emerge as a result of combined market failures that include imperfect property rights, labor and property informality, economic volatility, information asymmetries, non-transparent asset valuation and appraisal, externalities and coordination failures, underdeveloped capital markets, as well as entry barriers and financial market concentration.³²

³² It is often said that real estate mirrors the patterns of finance and that “communities are built the same way they are financed”; in the case of Guatemala, it would appear that the substantial housing gaps that we have identified are but a reflection of multiple gaps in housing finance.

3.3. Is the Policy Framework Well Designed?

There are different types of policies to reduce the presence of market failures. For example, we may distinguish between public actions which seek to improve or complement the market, and those that use government power to directly determine outcomes. We can also make the distinction between horizontal and vertical policies. Horizontal policies are those that influence several economic sectors, while vertical policies are meant to influence one sector specifically (e.g. housing finance). Therefore, it is possible to construct 2 x 2 matrices which combine the Horizontal/Vertical dimensions with the Public Intervention/Market Regulation for each of the failures found in housing finance. The idea is that the nature of a policy intervention should match the type of market failure that it is meant to address, in accordance with the following classification:³³

- The **horizontal-public (HP)** intervention quadrant mainly represents policies that are implemented on a large scale with the goal of directly determining certain outcomes. For example, this would include large-scale efforts to develop otherwise marginal locations that include financing the construction and improvement of homes as well as the provision of public services and goods (e.g., “community development” projects).
- The **horizontal-market (HM)** quadrant describes policies that seek to regulate key characteristics of various markets and influence, for example, the entire construction sector—of which housing is but a small part. This would include for instance setting broad construction and safety standards.
- The **vertical-public (VP)** quadrant comprises public actions that directly determine outcomes, although in a relatively narrow field of activities (e.g., in the market for housing finance). This would include, for example, direct grants and subsidies for home construction and improvement.
- The **vertical-market (VM)** quadrant contains public actions that seek to influence the market say, through market regulation, but that do not directly

³³ The authors have successfully applied a similar analytical framework to other economic sectors in Guatemala. In the context of business process outsourcing and medical services, see Cuevas, and Bolaños (2007); in the agricultural sector, see Cuevas et al. (2009); and in the industrial sector, see Cuevas, Lée and Pineda, (2010).

determine market outcomes (e.g., regulating standards for risk management in the housing sector).

Tables 1A and 1B below lay out the set of market failures in housing finance in Guatemala in terms of the previous section and the system of classification just described. Also, the Table attempts to map as accurately as possible existing policy interventions with the type of market failures they are meant to address.

Most market failures hurting the performance of the housing finance market are of the horizontal type, that is, they influence the entire credit market or, in some cases, the entire economy. For example, the lack of appropriate foreclosure procedures causes problems across the entire credit market, while the lack of complementary services, as well as labor and property informality, constitute problems for many economic sectors.^{34, 35} In contrast, market failures of the vertical type, i.e., those that primarily affect the market for housing finance, turn out to be adverse side effects of otherwise well-meaning policy measures. Examples of this include the FHA prohibition of the resale of insured mortgages to non-FHA approved entities, or the decision to charge VAT at its full rate on the sale of homes.

³⁴ Note that this type of market failure requires broad-ranging government action, since a piecemeal sector-by-sector approach is likely to cause confusion and would take a long time to reach minimum effectiveness. Currently, few, if any, such policy actions can be identified.

³⁵ Velasco and Solo (2007) link the qualitative gap in housing at low-income levels to the underdevelopment of local public services, thus providing a rationale for an association between community and housing development; although the language is different, this characteristic of the qualitative gap is correlated with the high incidence of unresolved externalities and coordination failures at the community level. Also, Velasco and Solo (2007) present the results of a 2005 survey of people active in the informal sector; they highlight that 80 percent of individuals in the informal sector do not have bank accounts. Given that most of the Guatemalan labor force is in the informal sector (CIEN, 2007), lack of access to complementary financial services poses a non-trivial barrier to the development of finance, including housing finance. The data provided by Velasco and Solo is consistent with the assessment presented in this paper that market failures in housing and housing finance in Guatemala are predominantly of a horizontal-type, not exclusive of housing finance.

Table 1A. Market Failures and Direct Public Intervention in Housing Finance

	Horizontal –H-		Vertical –V-	
	Market Failure	Activity	Market Failure	Activity
Public Input	POVERTY AND INCOME ISSUES			
	Labor informality	Little progress directly promoting the formalization of labor.		
	Income volatility	No state programs for income employment stabilization.		
	SUPPORTING INFRASTRUCTURE			
	Imperfect property rights	Little progress improving land titling, modernizing property registries, improving judicial procedures.		
	Complex foreclosure procedures	FHA framework addresses this in terms of home mortgages, only a partial solution.		
	Incomplete bankruptcy framework	FHA framework provides for mortgage restructurings, only a partial solution.		
	FINANCIAL STRUCTURE			
	Undeveloped capital markets	No state sponsorship of institutions/agencies that promote capital market development.		
	Lack of savings instruments and complementary financial services	State ownership meant in part to promote savings (e.g., CHN and Banrural); also, home grants by FOGUAVI supplement savings.		
	MARKET ISSUES			
	Asymmetric information	No state-sponsored credit registries or similar measures. FHA involvement in credit risk process.		
	Externalities and coordination failures	No direct efforts by government to address externalities and coordination failures.		
	Imperfect competition in financial markets	State ownership (e.g., CHN and Banrural)		
			HOUSING MARKET ISSUES	
			Non-transparent valuation of housing	No state provided means for valuation or appraisal.
			HOUSING POLICY ISSUES	
			Housing specific, tax-induced distortions	Tax benefit accruing first to lenders, only under FHA framework.
			Unintended effects of FHA framework	The FHA framework strongly conditions creditor behavior in the mortgage market.

Table 1B. Market Failures and Regulations

	Horizontal –H-		Vertical –V-	
	Market Failure	Activity	Market Failure	Activity
Market regulation	POVERTY AND INCOME ISSUES			
	Labor informality	Labor informality is in part due to overly restrictive regulations.		
	Income volatility	No framework for non-state networks that seek to reduce income volatility.		
	SUPPORTING INFRASTRUCTURE			
	Imperfect property rights	No measures meant to support non-state agencies that seek to improve access to titling, promote property rights, or provide non-judicial resolution procedures.		
	Complex foreclosure procedures	Complexity of foreclosure procedures caused by obsolete framework.		
	Incomplete bankruptcy framework	Lack of framework for individual bankruptcy that easily provides for debt restructuring.		
	FINANCIAL STRUCTURE			
	Undeveloped capital markets	The FHA framework has not promoted the development of secondary mortgage market.		
	Lack of savings instrument and complementary financial services	Minority state participation in Banrural. No framework for the operations of microfinance services.		
	MARKET ISSUES			
	Asymmetric information	Some risk and credit regulations issued by the financial regulator.		
	Externalities and coordination failures	No efforts by government to indirectly address externalities and coordination failures.		
	Imperfect competition in financial markets	No competition law-policy.		
			HOUSING MARKET ISSUES	
			Non-transparent valuation of housing	Little regulation of valuation and appraisal standards.
			HOUSING POLICY ISSUES	
			Housing specific, tax-induced distortions	Tax laws are distorting housing markets in general (e.g., VAT).
			Unintended effects of FHA framework.	The FHA framework strongly conditions the supply of housing in selected market segments.

Starting from the set of market failures previously identified and building on the proposed typology, specific instances emerge in which the existing policy framework can be said to have weaknesses:

- There is a noisy mapping between market failures and policy objectives, especially because horizontal market failures are not being adequately addressed or, in other words, the focus of policy is misplaced.
- There is a noisy mapping between policy objectives and the chosen set of policy instruments, this occurs, for example, when vertical interventions are being used to try to resolve what in fact are horizontal market failures (e.g., a special foreclosure procedure for FHA-insured mortgages) or when a vertical measure addresses a horizontal market failure that is otherwise being addressed through more general means (e.g., the role of the FHA in credit risk assessment).
- The chosen policy instruments themselves are noisy vis-à-vis their own objectives, causing further market distortions and undesirable externalities; examples of this include the undesirable side effects of tax policy on the development of the housing market or the unintended effects of prohibiting the sale of mortgages outside the FHA system in terms of the development of a secondary market.

To the credit of the FHA system, its design correctly identifies many market failures and includes some measures to overcome them. As Tables 1A and 1B show, the key issue with the FHA system is that it does not have the mandate or the power to correct market-wide failures, as remedies are available only to a restricted set of participating institutions and beneficiary households.

3.4. What about the Implementation of Housing Finance Policy?

There is a legacy of institutions and programs relating to housing and housing finance. We have established that the existing institutional framework owes its inspiration to policies of various institutions and time periods e.g., National Mortgage Bank (CHN) to the early 1930s and late 1970s, FHA to the early 1960s, National Peace Fund (FONAPAZ) to the early 1990s and

Guatemalan Housing Fund (FOGUAVI) to the late 1990s. Each institution embodies the understanding and priorities that prevailed at the time of its creation, with paradigm evolution taking place slowly and within the narrow margins permitted by legal charters. The particular mix of policy instruments put in place in Guatemala has failed to trigger a self-sustained acceleration in market development.³⁶

Although in principle MICIVI (the Ministry for Communications, Infrastructure and Housing) plays a key coordinating role, its effectiveness is limited in practice. First, policy is not clearly articulated and there is no policy statement detailing how the various institutional actors contribute to the achievement of objectives.³⁷ Second, the Colom Administration has set, as a broad target, the provision of 200,000 homes annually as part of the Solidarity Plan, focusing on the most vulnerable population; however, it is not stated how exactly the government intended to reach such ambitious goal except that the FOGUAVI is supposed to be responsible for its accomplishment.³⁸ Finally, important actors in the housing finance system such as FONAPAZ and the FHA enjoy great autonomy and hardly rely on the MICIVI for policy guidance. In fact, there is no detailed information from the MICIVI or other official sources on overall policy performance. Without clearly defined targets and performance indicators, conducting a detailed quantitative policy evaluation is difficult. Nevertheless, it is quite clear that the housing deficit is expanding nationwide.

Other institutions also influence the performance of the market for housing finance. There are institutions that directly or indirectly influence the performance of the housing and housing finance markets, although they do not necessarily fall under the umbrella of sector policy. These institutions include the following:

³⁶ In this connection, Housing Commission (2009) states that “With existing data it can be concluded that FOGUAVI has failed to fulfill its purpose and, on the contrary, it has become a highly inefficient institution because, among other things, it has devoted itself to land development projects that in many cases do not enjoy even the most basic public services.”

³⁷ For example USAC (2010) states “Currently, state institutions in the housing sector are completely atomized.” That document further adds that the existing administrative structure “...characterized by weak oversight, operating with little coordination and in a dispersed manner... with low technical and administrative capacity at the level of municipalities to organize and regulate urban growth.”

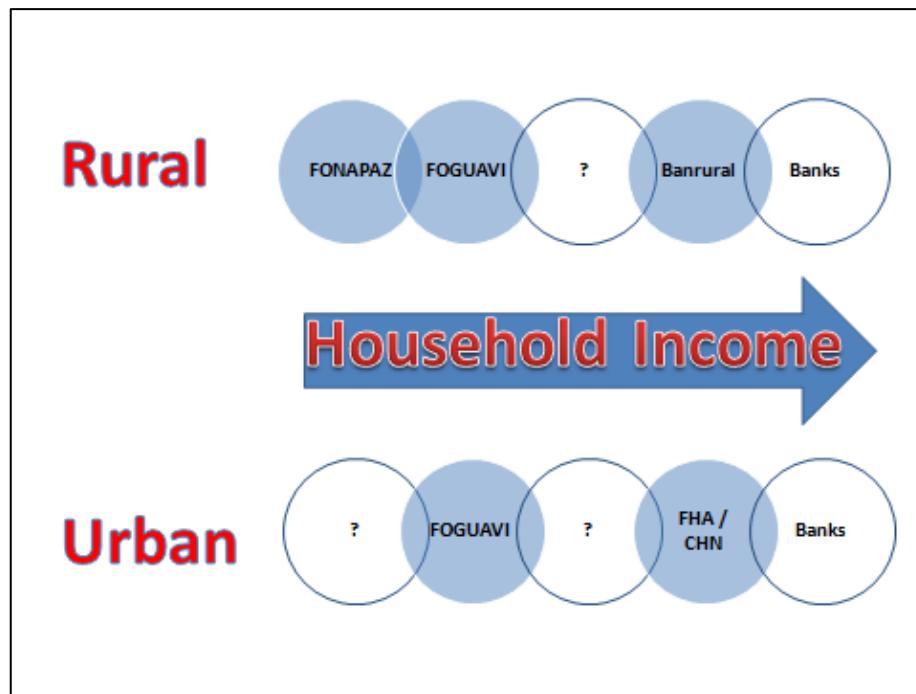
³⁸ The current government set very ambitious housing targets and made FOGUAVI responsible for their achievement. On August 2008 the National Housing Strategy 2008-2011 was unveiled, aiming at overcoming the housing shortage of over “a million two hundred thousand homes.” The aim was to foster the provision of housing that have at least two bedrooms, living room-dining room-kitchen, and one bathroom.

- **Local Governments (municipalities).** Local governments are responsible for the regulation of construction projects, the urbanization of the cities, and public services such as electricity, roads, and water and sewerage. The availability and quality of municipal services influences property prices and also the extent to which a given property qualifies for certain benefits under the housing finance system (e.g., FHA mortgage insurance).
- **Property Registry.** The objective of the Registry is to strengthen the enforcement of property rights by endorsing contracts made within the relevant legal framework. Note that the Registry does not grant rights but only registers them, for example, upon proof of their existence or transfer. In the absence of adequate titling—a common issue in rural and marginal urban areas—registration of property rights becomes problematic and this in turn constitutes a barrier to the flow of credit.
- **Ministry of Interior.** This institution is responsible for the maintenance of domestic order and civil security, as well as immigration. Poor security conditions adversely affect the price of the housing stock and therefore increase financial risks. To the extent that lenders are necessarily risk-averse, the flow of housing credit is negatively affected by the poor performance of the Ministry of Interior and civil security policy.

At the bottom of the income distribution both FOGUAVI and FONAPAZ are active, although both are biased toward serving rural areas; this implies that there is a national coverage gap in urban areas at the bottom of the distribution. There is also a gap at the middle income level in both rural and urban areas; these households are not targeted by FONAPAZ and FOGUAVI and do not necessarily qualify for service under the FHA framework or from traditional banks. The FHA and banks, including both CHN and Banrural, are mostly serving the needs of the upper-middle and upper income groups. Note that FOGUAVI serves mainly lower-middle income households, leaving the most vulnerable social groups to FONAPAZ—an institution that otherwise clearly lacks defined targets from the perspective of housing policy. This situation is notionally illustrated in Figure 2.³⁹

³⁹ This situation is broadly consistent with the international experience described in Stein et al. (2007.) However, these authors attribute the emergence of such situations to factors such as certain social groups being “better

Figure 2. Notional Coverage of Public Policy by Income Group



Source: Authors' compilation.

Housing finance policy is failing to serve large segments of the population. This failure can be interpreted from two mutually reinforcing perspectives: some segments of the population are being overlooked by policy, and other population groups are formally being targeted but the policy instruments effectively fielded on the ground fail to reach large portions of the target group. There are also questions as to the adequacy of instruments chosen by income level; aside from the nature of underlying market failures, one may expect direct government intervention to target households living in poverty, with the incidence of direct action falling as income levels increase. This is not the case in Guatemala, as direct government intervention is prevalent at both the lower and upper levels of the income distribution.

3.5. Is Housing Policy Mobilizing Adequate Resources?

Public policy instruments fail to reach target population groups occurs, to a substantial extent because available resources are insufficient relative to the ambitious goals that have been set. For example, the FHA only covers 0.34 percent of the housing deficit, although it does it with

informed” or “better connected to decision-making centers.” It is unclear whether or to what extent the emergence of coverage gaps and clusters in Guatemala can be explained by information or connections with centers of decision-making, or instead by instrument design.

great efficiency. In contrast, FOGUAVI and FONAPAZ reach a much greater number of households, but their level of efficiency is harder to establish.⁴⁰

Table 2. Impact on Housing Deficit

Impact on Housing Deficit.		
	Interventions	% of Housing Deficit
FHA	4,206	0.34%
FOGUAVI	56,000*	4.59%
FONAPAZ	43,232	3.54%

Source: FHA data are from 2008 Memoria de Labores and the Finance Ministry.

*The current government's target is to subsidize through FOGUAVI around 56000 homes, although there is no data on the extent to which this goal is being reached. Note that FONAPAZ provides only partial solutions in terms of construction materials; the number shown in the table refers to households that received metal sheet for roofing.

Resources are not being spent progressively. A substantial amount of public expenditure on housing has been executed by the FHA (over 40 percent in recent years) even though it covers a small portion of the housing deficit at relatively high income levels in mostly urban areas around the Metropolitan region. Nevertheless, the FHA's share of total housing expenditure is low in relation to GDP (0.05 percent).

Table 3. FHA as Percentage of GDP and Housing Expenditures

	FHA as % of GDP	FHA as % of housing expenditures
2005	0.0732%	55%
2006	0.056%	42%
2007	0.0504%	43%
2008	0.0473%	44%

Source: FHA data is from 2008 Memoria de Labores and the Finance Ministry.

⁴⁰ According to Velasco and Solo (2007) citing World Bank calculations, given the current level of resources allocated to housing, it would take the public sector around 35 years to close the current housing gap. This calculation excludes the likely expansion of the gap over time.

The mix of instruments fielded by the government to promote housing finance in Guatemala diverges from the pattern generally followed in the region. On the one hand, the Guatemalan version of mortgage insurance is essentially unique in Latin America. On the other hand, Guatemala is almost unique in that to promote home ownership it does not provide tax incentives directly to households, only to lenders. Instead, Guatemala imposes VAT at the full rate for the resale of homes. In addition, there are no interest rate subsidies and there is little direct government involvement in the construction of low-income housing. Divergence from an international pattern is not positive or negative in itself, but it should motivate a discussion among policy stakeholders on the reasons for such divergence.

Table 4. Types of Policy Instruments Used in Selected Countries

Instruments	Guatemala	Colombia	Peru	Mexico	Chile
Social Housing Funds					
Mortgage Insurance					
Housing Grants					
Other Monetary Transfers					
Other					

Source: Authors' compilation.

Public expenditure on housing in Guatemala is small by international standards. Aside from the peculiar mix of instruments utilized by the government to implement housing finance, another characteristic is the magnitude of resources devoted to housing finance in relation to the regional pattern. Guatemala spends a lower percentage of the public sector budget than Chile, Peru or Mexico and, to make matters worse, expenditures have been falling over time as a proportion of total government expenditures. This suggests that, in practice, the housing sector is not a high-priority expenditure.

Table 5. Housing Expenditure as Percentage of Total Budget

Year	Guatemala	Chile	Peru	Mexico
2005	0.93%	3.87%	0.61%	5.81%
2006	0.88%	3.54%	0.53%	6.14%
2007	0.88%	3.93%	0.71%	
2008	0.75%	3.88%	1.13%	

Source: Authors' compilation with information of the Finance Ministry of Guatemala, Finance Ministry of Peru, Finance Ministry of Mexico, Finance Ministry of Chile, World Bank and Banguat.

3.6. Are There Any Solutions Emerging in the Housing Finance System?

3.6.1. What is the Role of Housing Microfinance?

Most Guatemalans today build a home incrementally, since they do not have access to housing credit and few affordable housing options exist for the low income population. The majority of households must build their own homes “incrementally” or “progressively” funding construction with family savings over a period of decades. The attitude of traditional banks toward housing credit at lower income levels has been recently changing and there are now opportunities to implement new business models.⁴¹ Growth of credit at the bottom of the income spectrum is tied to the provision of complementary inputs—lack of which has been identified as a market failure—such as property titling, technical assistance and basic services. A bank alone is not likely to successfully package all necessary complementary inputs, but business alliances provide the bundles required at the bottom of the income pyramid.

Microfinance has been booming in Guatemala for the last decade.⁴² The number of microfinance institutions (MFIs) has grown rapidly—mainly in the form of savings and loans cooperatives. These cooperatives have often entered the housing microfinance market but, nevertheless, the supply of housing credit is still limited; however, the development of microfinance shows that upstream barriers at the funding level caused by the underdevelopment of capital markets and lack of long-term funding are not insurmountable.⁴³ In other words, there is no need to wait for a long-term capital market to develop as there are lucrative measures that

⁴¹ Sections A and B draw on Vance (2008).

⁴² See Stein et al. (2007).

⁴³ For example, Vance and Solo (2007) state that Guatemalan financial institutions approve annually about 20,000 credits for home improvement.

may be employed to promote the development of housing microfinance.⁴⁴ Nevertheless, downstream barriers at the distribution and retail level may still be a challenge. The following sections illustrate the types of challenges that need to be overcome “downstream” to successfully develop the housing finance market; the discussion that follows is illustrative only and is not meant to exhaust the range of experiences in Guatemala.⁴⁵

3.6.2. The Experience of G&T Continental Bank

G&T Continental Bank is the second largest commercial bank in Guatemala and traditionally it has been one of the major mortgage finance providers. In 2006 the Bank made the decision to go down market to make smaller loans to lower income households.⁴⁶ The bank has taken concrete steps to adapt its business model to reach lower income households and a microfinance unit has been established within its existing institutional structure. Creation of the microfinance unit within the Bank’s structure has required a fundamental change in the culture of the Bank at all levels with a major part of the microfinance unit start-up phase focusing on the transformation of centralized to decentralized management systems.⁴⁷

The Bank has expanded its downstream network through partnerships, reaching out to underserved clients and areas through registered business agents such as gas stations, hardware stores, pharmacies or general stores, which all serve as retail outlets for its services. In addition, the Bank is building alliances and channeling resources to microfinance institutions such as credit cooperatives, offering credit lines for on-lending to lower income households.

The Bank is actively targeting households with monthly incomes between US \$200-US \$1,000, including salaried employees, self-employed workers or families that receive remittances. Products and services include loans for micro and small enterprises, home

⁴⁴ The Trust Fund for Local Development in Guatemala (FDLG) is a second-tier finance institution supported by the Swedish International Development Agency (SIDA). Since 2000 FDLG aimed at the development of housing microfinance by providing lines of credit and technical assistance to interested financial institutions. FDLG has worked with several financial institutions in Guatemala, including G&T Continental Bank.

⁴⁵ Stein et al. (2007) provides a discussion of the experiences of Genesis Empresarial and the Trust Fund for Local Development in Guatemala.

⁴⁶ G&T Continental now has a significant market share in microfinance in Guatemala. The active microfinance portfolio has exceeded US \$100 million and there are about 20,000 active clients. The housing microfinance active portfolio is still small, about US \$5 million, with over 2,000 active clients. The average housing loan is around US \$3,000, two thirds of the portfolio carries a 5-year term and loan guarantees are mostly fiduciary. Loans for housing improvement amount to about half the loan portfolio, followed next in importance by construction on a land plot.

⁴⁷ A specialized team has been trained, both by hiring new staff and re-training existing personnel. After the initial pilot phase, a process of decentralization of microfinance followed.

improvement, new construction, construction on sites and services developments, and new home purchases. The maximum amount of a housing microloan is US \$21,000 with terms ranging from one to five years for housing improvements and up to 15 years for home construction or new home purchases. The interest rate charged is in the range between 16-18 percent. Fiduciary guarantees are accepted up to US \$6,000, mortgages are required over US \$6,000 and mixed guarantees are acceptable.

The profitability of housing microfinance is enhanced through partnerships. Clients are physically dispersed and the extra step in technical evaluation of each individual client adds to operating costs. Also, remodeling existing homes adds complexity given that each improvement process is unique. In response to these challenges, the Bank has sought to develop in-house capacity to provide microloans bundled with technical assistance in construction, as well as develop suitable business partnerships.

Partnerships have been established with developers, construction companies as well as the largest cement manufacturer in Guatemala (CEMPRO). The partnerships have three main objectives: first, partners reach a large number of customers; second, they allow for diversification and development of new products; third, they take advantage of economies of scale. Essentially, these partnerships amount to a recognition that housing finance for lower income segments requires new business models capable of resolving market failures. Partners offer clients the same type of technical assistance that G&T Continental directly offers. In fact, the bank trains the staff of its partners in the application of standardized techniques which cover needs assessment, house layout and design options.

From the perspective of this policy assessment, what is most interesting about the microfinance business model is the way it deals with key market failures. For example, it successfully addresses issues such as coordination failures, information asymmetries and lack of complementary services, as well as weaknesses in property valuation and appraisal. Also, the microcredit approach bypasses weaknesses in the framework for housing finance, such as the lack of adequate debt restructuring mechanisms and foreclosure procedures.

3.6.3. The Experience of Real Estate Developer Amadeus

Amadeus is a private firm engaged in real estate development across the country, though generally outside of the Metropolitan area. In 2010 it had 65,000 clients nationwide and is one

of the largest firms in the industry; its main activity is to purchase large tracts of land, break the property into smaller plots and develop integrated housing projects, provide basic infrastructure and services while leaving individual landowners to arrange for eventual construction of their home. Amadeus finances the purchase of land plots by households but does not finance construction. The company relies on its own capital to provide financing to its customers, which under the current business model is a constraint on growth.

Amadeus helps in resolving key market failures that would otherwise block home financing as it found that many of its clients wanted to build a home on their land but had difficulty tapping formal sources of credit. They found that customers could gain access to credit by providing them with a credit history and partnering with formal lenders that would be willing to accept client histories. Currently, the CHN is working with Amadeus in providing financing for the construction of housing in selected projects.

From the perspective of this study, what is important to recognize is that Amadeus directly helps resolve important market failures such as problematic land titling, lack of access to basic services, lack of complementary financial and other services. The success of this type of activity shows the practical impact of the removal of key barriers to the flow of housing credit—most of them of the horizontal type.

3.6.4. What Can Public Policy Learn From Market-Based Approaches?

The previous discussion indicates that market-based approaches are facilitating the flow of credit. The approaches taken by MFIs and real estate developers show that it is possible to unblock the flow of housing credit through business model innovation. The key to understanding the success and potential of innovative business models in housing finance is the way that underlying **market failures** are being addressed. Table 7 shows that the emerging business models in housing finance are addressing almost all identified market failures--both horizontal and vertical. These business models address market failures by either directly resolving the issue (e.g., lack of titling, lack of complementary inputs and information asymmetries) or bypassing it (e.g. labor informality and income volatility).⁴⁸

These solutions serve the needs of otherwise underserved households. The experience with innovative business models shows that it is possible to profitably serve the needs of broad

⁴⁸ See Stein et al. (2007) for a description of how microfinance programs under implementation in Guatemala successfully address the typical market failures identified in this paper.

population segments, including the lower and lower-middle income levels in both urban and rural areas outside the Metropolitan region. These include both population segments overlooked by prevailing instruments of public policy, as well as households nominally targeted by public policy but are beyond the reach of policy instruments.⁴⁹

Table 7. Market Failures Addressed by Private Agents through Innovation

	Horizontal –H-		Vertical –V-	
	Market Failure	Activity	Market Failure	Activity
Private sector, market-based solutions	POVERTY AND INCOME ISSUES			
	Labor informality	Innovative credit risk assessment through microfinance models. ¹		
	Income volatility	Innovative credit risk assessment through microfinance models. ¹		
	SUPPORTING INFRASTRUCTURE			
	Imperfect property rights	Land / property titling. ¹		
	Complex foreclosure procedures	Microfinance relies less on collateral. ¹		
	Incomplete bankruptcy framework	Microfinance facilitates debt restructuring.		
	FINANCIAL STRUCTURE			
	Undeveloped capital markets	--		
	Lack of savings instruments and complementary financial services	Provision of complementary inputs and services. ¹		
	MARKET ISSUES			
	Asymmetric information	Construction of credit records.		
	Externalities and coordination failures	Building downstream business partnerships.		
	Imperfect competition in financial markets	Entry of non-traditional competitors. ¹		
			HOUSING MARKET ISSUES	
			Non-transparent valuation of housing	Close inspection of homes facilitates valuation. Focus on home improvement. ¹
			HOUSING POLICY ISSUES	
			Housing specific, tax-induced distortions	--
			FHA-induced distortions	No recourse to FHA is necessary.

Source: Authors' compilation.

Note: For a description of how microfinance models address each market failure in Guatemala, see discussion in Stein et al. (2007).

⁴⁹ For example, the Genesis Empresarial foundation is able to split its housing credit portfolio about evenly between rural and urban areas; also, this foundation is active in almost all areas of the country. See Stein et al (2007) for a discussion.

3.6.5. What Can Public Policy Accomplish That Private Solutions Cannot?

Private ingenuity has been able to address market failures typically on a case-by-case basis. The examples given above can be regarded broadly as “natural experiments,” showing what the correction of certain market failures can accomplish.⁵⁰ However, a broader and more fundamental solution to several of the market failures blocking the flow of housing finance in Guatemala can only be provided at relatively low cost through policy reform. This would include reform of the legal framework, improvement of public services and removal of policy-induced distortions. It can be expected that if public policy addresses effectively the underlying failures blocking the flow of credit, the positive outcomes would replicate at a much larger scale the results obtained through purely private solutions.

4. Conclusions

4.1.1. What are the Main Findings of this Paper?

What is blocking the flow of housing credit? This paper has identified the following types of horizontal market failures that are blocking the flow of housing finance in Guatemala:

Poverty and Income Issues

- Labor informality
- Income volatility

Supporting Infrastructure

- Imperfect property rights
- Complex foreclosure procedures
- Inadequacy of bankruptcy framework

Financial Structure

- Undeveloped capital markets
- Lack of complementary inputs and services

Market Issues

- Information asymmetries
- Externalities and coordination failures

⁵⁰ Gwinner et al. (2007) includes a discussion of the international experience promoting housing microcredit. The general thrust of their discussion is consistent with the conclusions of this paper.

- Imperfect competition in financial markets

In addition, the paper has highlighted the following vertical-type failures:

Housing Market Issues

- Non-transparent housing valuation and appraisal

Housing Policy Issues

- Taxation-induced distortions
- Unexpected effects of FHA system

How is public policy relating to market failures? This paper shows that there is a noisy mapping between failures and policy objectives, and that there is a noisy mapping between objectives and instruments. Specifically, it is found that most market imperfections in Guatemala are of the horizontal type, and that these are not being adequately addressed by public policy; also, it is found that there are a few vertical-type distortions that are largely policy-induced. In addition, it has been argued that policy instruments are noisy vis-à-vis their objectives, for example by causing undesirable spillovers.

Existing policy instruments embody paradigms of various standards and therefore, contrasting visions of the role of policy and state action are in place. It is further argued that this explains, to some extent, the low cohesion of the institutional system. Moreover, current policy instruments target population groups unevenly, thus leaving gaps at certain income levels (e.g., lower-middle income) and locations (rural vs. urban areas). Furthermore, the direct nature of interventions at the higher income levels may be suboptimal, though it may be deemed adequate at lower income levels. Finally, it has been established that the size of direct intervention in housing finance is, in any case, of low significance given the scarcity of resources presently mobilized by the government to finance housing (e.g., in relation to the resources mobilized in other countries in the region).

The main hypothesis tested in this paper is that existing public policy toward housing finance is adequate (the “policy adequacy hypothesis”). We reject this hypothesis on due to the following: i) there is a noisy mapping between existing market failures and policy objectives; ii) there is a noisy mapping between policy objectives and the chosen set of policy instruments; and

iii) the chosen policy instruments themselves are noisy, causing further market distortions and undesirable spillovers.

4.2. How Can the Redesign of Public Policy Be Organized?

The rejection of the “policy adequacy” hypothesis” motivates the search for policy alternatives and reform. The paper takes advantage of a reinterpretation of private market-based solutions described earlier as “natural experiments,” showing what happens once market failures are adequately addressed, finding that it is indeed possible to unblock the flow of housing finance. We believe that the effective resolution of market failures at a fundamental level through public policy action and reform holds the potential to unblock the flow of housing finance at a larger scale than is possible through a case-by-case approach.⁵¹

It is proposed here that the inventory of market failures previously presented be used as an organizing paradigm to guide the redesign of public policy. In the final paragraphs of this paper we go further and propose some corrective actions. Specific corrective actions attached to each market failure do not necessarily follow from the analysis presented in this paper and further research would be required to determine their adequacy:⁵²

- **Strengthen property rights.** Priority should be given to strengthening activities and institutions that promote land titling, the modernization of the property registry system and the development of mechanisms for conflict resolution within and outside the judicial system. This recommendation is also linked with improvement of security conditions and strengthening of the rule of law.
- **Reduce labor informality.** There is no single cause of the high incidence of labor informality in Guatemala. In broad terms, there is a need to make the formal labor market more flexible so as to facilitate job creation, reduce tax on other costs associated with the creation of jobs in the formal sector and

⁵¹ This conclusion coincides with Loewenthal’s in Gwinner et al. (2007). Subsequently, Loewenthal asks the question “how can the flow of bank and cooperative credit be promoted given that NGOs have found the housing microcredit market to be profitable and safe?” The remainder of this paper attempts to answer Loewenthal’s question.

⁵² Complete overhaul of public policy toward housing and housing finance would require an innovative restructuring of the institutional framework for policy implementation.

increase the relative advantages to workers and firms arising from formal labor markets.

- **Reduce income volatility.** Income volatility is in many ways linked with labor informality; therefore, measures to promote job creation in the formal sector will likely promote greater income stability.⁵³ Additional measures might also be considered on their own merit including the introduction of funded unemployment insurance, or the promotion of non-governmental or community-based welfare schemes.
- **Provide complementary inputs and services.** Support the emergence of complementary activities and instruments such as microfinance, advisory services, the promotion of financial services to households and the emergence of new business models in the private sector.⁵⁴ When the missing complementary input is adequate savings for a down payment at low income levels, there is scope for direct assistance by the government (e.g., through a fund equivalent to FOGUAVI).
- **Reduce information asymmetries.** The promotion of innovative business models such as microfinance and the role of companies that build credit records might be one way of accomplishing this; additional policy measures might be considered such as the introduction of unbiased credit registry systems (e.g., such that both blacklists and whitelists are kept) as well as borrower data exchanges.
- **Resolve externalities and coordination failures.** Innovative business models such as microfinance and non-traditional business partnerships facilitate the bundling of inputs and resolve the issue of externalities and coordination failures. Public policy might therefore promote such business partnerships nationwide. Another coordination failure that needs to be addressed is the absent and disorderly basic services, especially in rural areas, through community development initiatives.

⁵³ According to Velasco and Solo (2007) improvement of access to basic services would positively influence the earnings capacity of lower income households, thus further reducing risks arising from income volatility in the informal sector. Also, see contribution by Maritza Canek in Stein et al. (2007).

⁵⁴ Velasco and Solo (2007) makes similar proposals, calling for innovation in “methods and service technologies” to match the characteristics of households currently excluded by the formal banking system.

- **Develop capital markets.** There is no single cause behind the underdevelopment of capital markets in Guatemala. One missing element often highlighted is that there has been no comprehensive reform of the pension system, as well as the absence of investment funds in the hands of the insurance industry. A secondary mortgage market cannot be developed unless certain tax issues are resolved.⁵⁵
- **Simplify foreclosure procedures.** Although legal reform might ultimately be required, the problem, in essence, derives from the inefficiency of the country's judicial system. Among the alternatives that might be considered to simplify foreclosure procedures, there is the possibility of creating a "single window" with quasi-judicial powers to expedite foreclosures. This is akin to the existing arrangements under the FHA framework, but the idea is that the special window would have a wider scope of action.
- **Improve the bankruptcy framework.** It is necessary to improve the Bankruptcy Law. Today, bankruptcy is regulated in the Civil and Commercial Code and the problem that arises is that the framework is outdated. Further study is required to establish the nature of reforms necessary to develop a bankruptcy framework that deals adequately with personal and household insolvency.⁵⁶
- **Promote competition in financial markets.** The promotion of competition as a goal of public policy is fairly non-controversial, but there is generally great controversy around the means to be used to accomplish such goal. However, there is a need in the financial sector to balance the objective of promoting competition with the promotion of adequate industry standards.⁵⁷ Nevertheless, in the current context there is scope for promoting competition at least to the extent that more financial institutions can be enticed to try the types of business models discussed earlier.

⁵⁵ The fact that FHA-insured mortgages cannot be sold outside the FHA system might also play a role in limiting the development of a secondary mortgage market.

⁵⁶ Note that the FHA deals to a limited extent with debt restructurings and refinancing. However, the framework needs to be much more general.

⁵⁷ Note the role played by the FHA system in this context.

- **Improve housing valuation and appraisal.** There is a need to promote coordination between different institutions that oversee construction standards, to the extent that substandard construction adds risks on the value of homes. Local governments play a role in this connection, as well as in the terms of the reliability in the provision of public services. Since many homes are self-built in Guatemala, there is opportunity for government action in providing advisory services and technical assistance, assuring that construction is of sufficient quality to be eventually eligible as security to a loan. There is also a general role for government in setting standard procedures for property valuation and appraisal to be applied nationwide.⁵⁸
- **Remove tax-induced distortions.** The most evident distortion emerges as a result of VAT provisions. Further study is required to assess the impact of the FHA-exclusive income tax exemption, although it might be suggested that the exemption—should one exist—be available under a broader scheme than the FHA provides at present.
- **Remove unintended FHA effects.** The FHA is likely deemed to be successful within the scope of its mandate and this is also reflected in its sound financial performance and recognized technical standards. However, the closed nature of the FHA system seems to introduce biases that impair the development of a more dynamic mortgage market. Further study is recommended to analyze options for opening up the FHA system and eliminating some of the distortions that exist today.⁵⁹

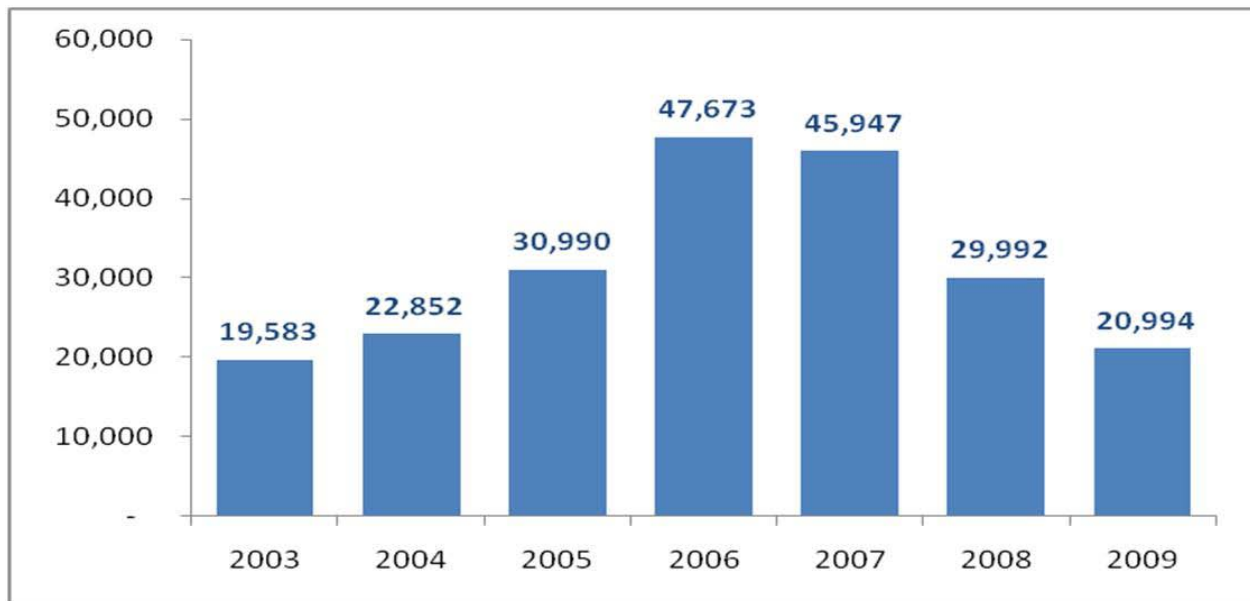
In addition to these recommendations, it is clear that to adequately monitor the evolution of housing and housing finance in Guatemala, stronger statistical tools are needed. The redesign of housing finance policy should therefore go hand in hand with the deployment of improved statistical tools in the field.

⁵⁸ Within its narrow market niche, the FHA is doing exactly this. The idea here is that the type of activities undertaken by the FHA may become more the rule than the exception in the housing market.

⁵⁹ For example, Gwinner et al. (2007) propose the creation of a guarantee fund, not unlike the FHA, but aimed at low-income population segments currently not served by the FHA. Their recommendation, however, is for the provision of partial guarantees, so that participating banks provide an efficient service as well as to reduce moral hazard; in these particular aspects, their proposal diverges from the FHA model and is more pro-competitive. Also, the proposal in Gwinner et al. (2007) does not necessarily include tax incentives.

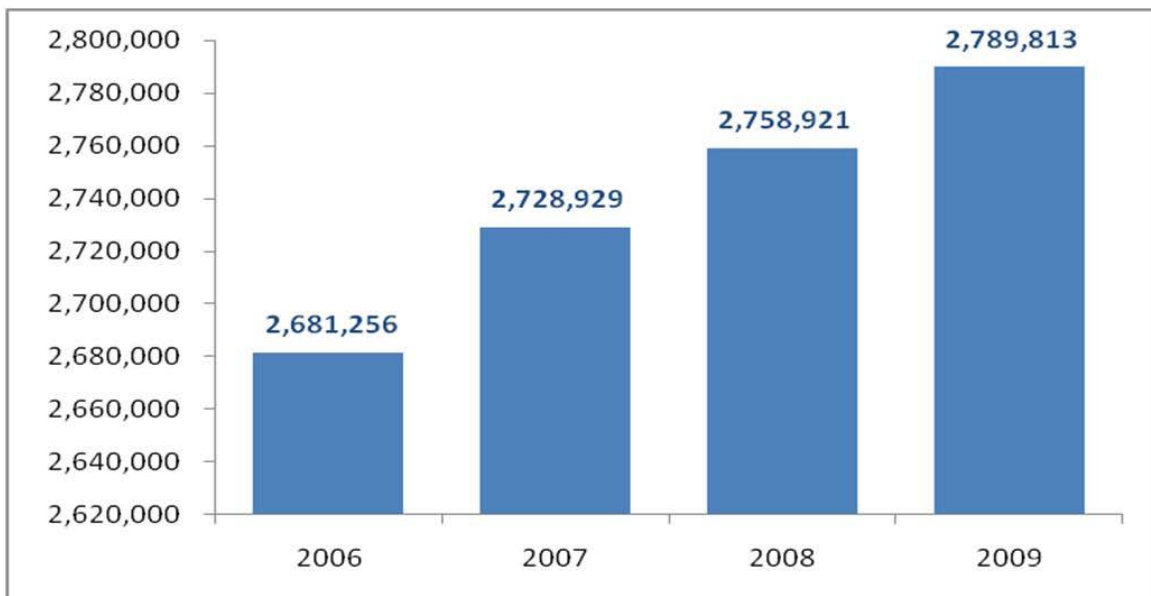
Appendix 1. Key Statistics of the Housing Market

Table A1. Home Construction in Guatemala, Units



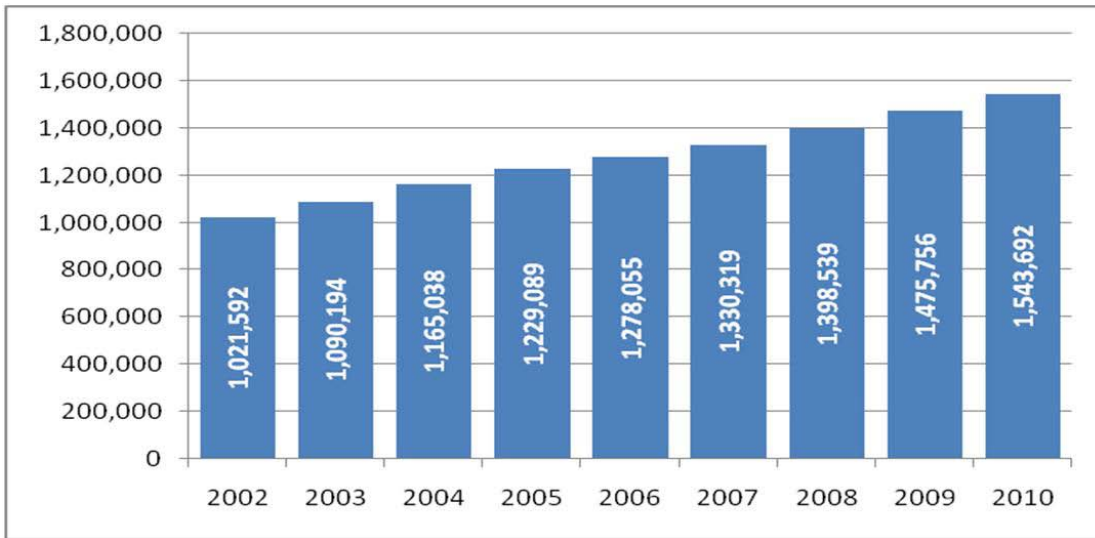
Source: Statistics Department, Guatemalan Construction Chamber.

Table A2. Stock of Housing in Guatemala, Units



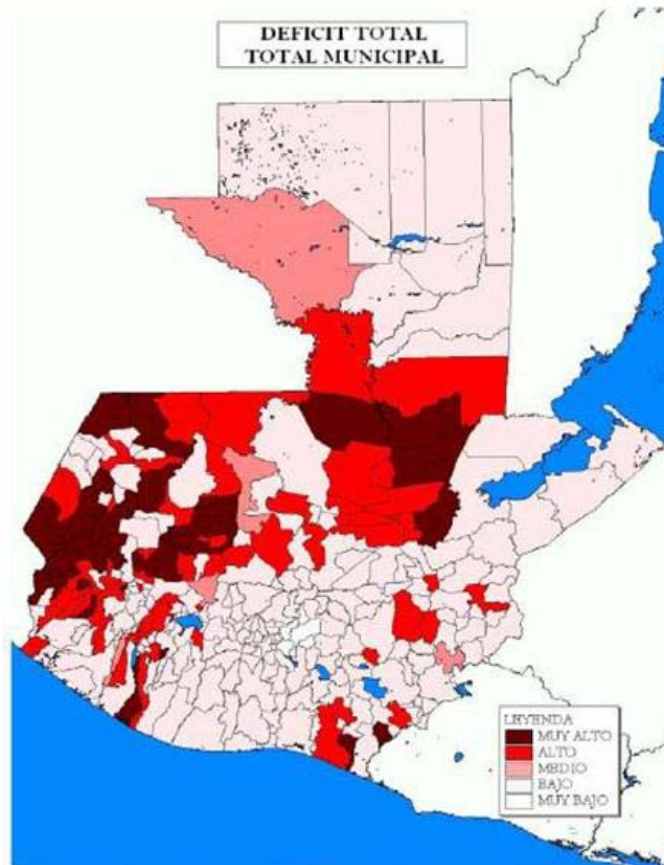
Source: Statistics Department, Guatemalan Construction Chamber.

Table A3. Estimated Housing Gap in Guatemala, Units



Source: Statistics Department, Guatemalan Construction Chamber.

Table A4. Geographic Distribution of Housing Gap



Source: Presentation by Eduardo Velásquez, Housing Seminar, 23 November 2010.

Appendix 2. Current Institutions Embody the Policies of the Past

The Legal and Institutional Foundations of Public Policy

There is a Constitutional mandate for government policy in housing. According to the Political Constitution of Guatemala (1985), articles 105 and 119, the State has an obligation to promote low-income housing and to promote home ownership. The National Housing Policy finds a very broad framework in the Housing and Human Settlements Law, Decree 120-96 issued by Congress, approved in November 1996. The purpose of this law is to strengthen, promote and regulate government action to develop housing and human settlements. This is a general law and, therefore, all housing and human settlement plans, programs and projects, public or private, must comply with it.

The Ministry for Communications, Infrastructure and Housing (MICIVI) plays a role. In accordance with Decree 74-97 issued by Congress the MICIVI is responsible for setting housing policy.^{60 61} In principle, MICIVI oversees the execution of national policy; it coordinates policy administration, evaluation and supervision; and, finally, it promotes financial institutions responsible for housing. MICIVI, through the Vice-Ministry for Housing, is the institution responsible for the design of the National Housing and Human Settlements Policy. National policy gives priority to the population living in extreme poverty and those lacking savings capacity. The Vice-Ministry for Housing is responsible for coordinating the following entities: Agency for Construction of Public Buildings, the Guatemalan Housing Fund (FOGUAVI), Agency for the Development of Low-Income Housing (UDEVIPO) and the Inter-Institutional Agency for Coordination of Vulnerable Settlements (CIAAP).

Several programs are contemplated under housing policy. General policy guidelines for the housing sector were approved in 2004 and during the Administration of President Berger (2004-2008) and the MICIVI introduced programs to address issues such as the construction of new homes to replace unsuitable ones, improvement of basic housing, improvements in the water supply and loans for home improvement.

⁶⁰ Authorities at the Municipal level play a role in housing policy but are not active in the provision of finance. The law recognizes the role of the municipalities through the Municipal Code (Article 7).

⁶¹ The state-sponsored University of San Carlos has submitted a proposal for a Housing Law, Draft No. 3869 of 2008. Although Congress has officially received the proposal, discussion has remained at the level of technical commissions and it is not clear if and when, will a legal draft be submitted for further consideration. See USAC (2010).

Housing and housing finance policy has not been formally evaluated or updated. Although the Colom Administration unveiled a new *National Housing Strategy 2008-2011*, in August 2008, in practice housing policy has been implicitly carried over from the previous government administration except that policy targets were made considerably more ambitious than in the past.⁶² Unfortunately, there has been no formal evaluation of housing policy or the MICIVI's performance in its role. This gap in the technical analysis of housing policy weakens the overall performance of the sector.⁶³

The Role of FOGUAVI in the Implementation of Policy

National Peace Fund (FONAPAZ) plays a key role in the implementation of policy toward housing finance. Since 2004, FOGUAVI plays a subsidiary role in serving the population living in extreme poverty, as well as a facilitating role in serving households above the poverty line.⁶⁴

The objectives of FOGUAVI were initially set a decade ago. FOGUAVI was meant to grant 100,000 direct housing subsidies to Guatemalan households living in poverty between the years 1998 and 1999. Since 2000, the objective was to provide 50,000 grants annually.⁶⁵ FOGUAVI reports to the MICIVI and disburses grants through a financial intermediary; it cannot deal directly with the public, buy or sell houses or construction materials. The Colom Administration (2008-2012) increased grant targets to 56,000 a year and there is a desire to eventually increase the target to 200,000 grants annually (FOGUAVI, 2010).

FOGUAVI can access several possible sources of financing. In principle, FOGUAVI can tap several sources of finance: an initial endowment provided by the government in the amount of Q.70 million, a budgetary allocation through the MICIVI, assets transferred upon liquidation

⁶² At the request of the Housing Commission of Congress, a broad Technical Commission was created to discuss issues pertaining to low-income housing, including representation from government and private sector. According to USAC (2010) the Technical Commission was active over eight months in 2009 and it is said to have reached a consensus. Also, further work was conducted in 2010 by a High Level Commission.

⁶³ USAC (2010) adds other reasons for the poor performance of the sector: "Currently, state institutions in the housing sector are completely atomized." That document also points out that the existing administrative structure "...characterized by weak oversight, operating with little coordination and in a dispersed manner... with low technical and administrative capacity at the level of municipalities to organize and regulate urban growth."

⁶⁴ In this connection, Housing Committee (2009) states that "With existing data it can be concluded that FOGUAVI has failed to fulfill its purpose and, on the contrary, it has become a highly inefficient institution because, among other things, it has devoted itself to land development projects that in many cases do not enjoy even the most basic public services."

⁶⁵ There exists under MICIVI a Unit for the Development of Social Housing (Unidad para el Desarrollo de la Vivienda Popular—UDEVIPO) which essentially follows up on the legacy of the now defunct National Housing Bank (Banco Nacional de la Vivienda—BANVI) and which, at present, does not play a significant role in housing finance.

of the now extinct National Housing Bank (BANVI), resources provided by financial intermediaries, the proceeds of FOGUAVI bond sales, foreign loans and grants. Liabilities in the balance sheet of FOGUAVI are guaranteed by the State and its operations are subject to the supervision of the financial sector regulatory and the General Office of the Comptroller.

FOGUAVI grants subsidies for various housing-related purposes.⁶⁶ Currently, FOGUAVI runs an “Integrated Financial System” meant to facilitate access to credit through three components: a housing grant, a “beneficiary fee” and a housing credit at market terms provided through a financial intermediary. Subsidy availability and amounts depend, to some extent, on the specific purpose of funds (e.g., whether a home is to be built, improved or purchased), but generally subsidies range between Q.12,000 and Q.15,750. Several programs are now under implementation: decentralization, support for low-income households, support for households earning between two and four minimum legal wages, support for households affected by the civil conflict, for neighborhood improvement, for reconstruction and for public employees.

The Role of FONAPAZ in Housing Finance

The National Peace Fund (FONAPAZ) plays a role outside the main structure of housing policy. FONAPAZ has a broad mandate which includes a program to overcome housing shortages in rural areas. The fund answers directly to the Office of the President and was created in 1991 following the Peace Accords. Originally, FONAPAZ was created to coordinate and support the goals of social integration, and to help the population affected by the civil conflict; more recently, its goals have been broadened to foster economic and social development. The resources of FONAPAZ are administered through a dedicated trust fund.

FONAPAZ has nationwide coverage and works with communities. FONAPAZ reaches the country’s 22 administrative departments. In principle, communities request a project through the fund’s regional offices and, once approved, communities implement the project with support from the fund. A technical committee assesses the feasibility of project proposals; those found to be technically feasible are submitted for consideration and approval by the Board of Directors of FONAPAZ.

⁶⁶ In 1996 FOGUAVI started operations by providing indirect subsidies at a subsidized interest rate. Starting in 1998, the Fund began to provide direct subsidies through “commercial windows” in order to foster the participation of the private sector in housing finance. Interest rate subsidies were subsequently eliminated.

The activities of FONAPAZ include the provision of housing finance. The fund can allocate resources to a broad range of activities including agriculture, industry, commerce and others approved by a technical committee. Among its approved lines of activity, the fund grants loans for construction or home improvement. However, housing has been a minor item in the institution's expenditure budget, averaging only 7 percent of the investment budget in 2004-2008. The target for 2008-2012 under the Colom Administration is to "change the living conditions of over two million people in the country;" unfortunately it is not clear whether available resources match the size of the challenge.⁶⁷

The Role of FHA in Housing Finance

The Institute for the Promotion of Mortgage Insurance (FHA) does not focus on service to low-income households. The FHA was created in 1962 following approval of Law 1448 of 1961. It is a decentralized public institution that seeks to promote the supply of housing by providing mortgage insurance. Lenders granting housing loans may recover capital if a borrower defaults.⁶⁸ In practice the FHA focuses on the metropolitan area, although its legal charter sets its mission in broad terms as offering a solution to the housing problem. In 2010 there were 69 projects approved by FHA located in 16 out of the 333 municipalities in Guatemala, with 85 percent of projects located in the Guatemala City. The criteria for approving mortgage insurance do not prioritize service to lower-income households, allowing for insurance of higher-valued homes (up to Q.2 million); it should be noted that borrowers need not be Guatemalan nationals.

Qualification requirements are relatively stringent. To approve mortgage insurance, the FHA sets conditions that include: the debt-service capacity of borrowing households, a maximum ratio of loan service to home value, loan rates within limits approved by the Monetary Board and the FHA, and that the lender appear in the FHA-approved list. The proceeds of a loan may be used for the following purposes only: purchase of new homes to be owner-occupied in

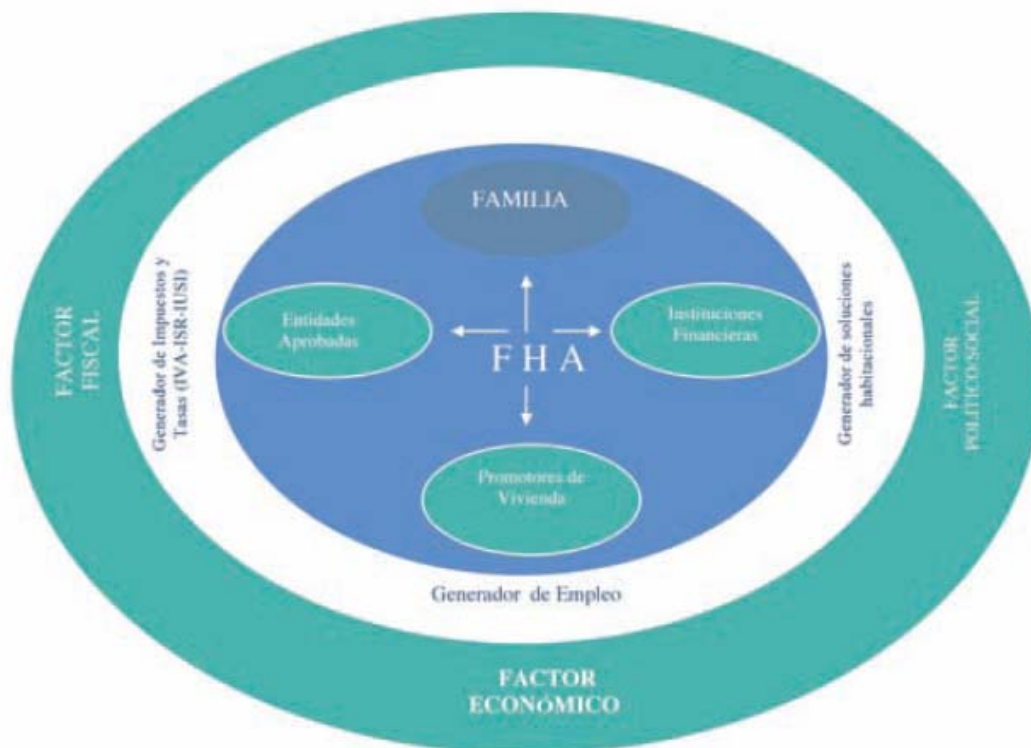
⁶⁷ Assistance for the poor and extremely poor is available under special programs run by FONAPAZ. The goal of Minimum Housing Program (PROVIMI), is to help the most vulnerable population, i.e., those living in poverty; this program provides materials for roof and wall repair and special attention is paid to households living in vulnerable areas of the country, such as remote mountains. Also, community-based support is available under the Program for Human Settlements, intended to help households living in vulnerable urban and rural areas by improving infrastructure, promoting community organization, and involving qualified workers in the execution of community projects.

⁶⁸ FHA started its operations in 1962 with a government grant. The FHA receives a budget allocation yearly from the Finance Ministry but in practice its operations are mainly self-financed. This institution is not a burden on public finances as it generates fee income for services rendered. Nevertheless, FHA bonds are fully backed by the State. FHA is supervised by the financial sector regulator.

the near future, improvement of existing homes, purchase of homes being rented by the borrowing household, and construction of rental homes.

The FHA sets strict conditions on qualifying loans. To qualify for insurance, mortgage loans must have interest rates are freely agreed to by borrower and lender, with term not exceeding 40 years. The loan amount, payment plan and insurance premium must be explicitly approved by FHA and the underlying asset must have insurance against fire, earthquake and other disasters. The FHA also sets conditions on the physical characteristics of qualified mortgaged property (e.g., construction standards, ease of access to the property, quality of access roads and sidewalks, quality of electricity, water and sewerage services).

Figure A.1. The FHA's Development Model



Source: Irungaray in Alvarez et al. (2007).

Does the CHN Play a Role in Housing Finance?

The National Mortgage Bank (CHN) is outside the structure of housing policy. CHN was created in 1930 and its legal charter was last reformed in 1979. Since its creation the bank was able to grant housing loans, although after the 1979 reforms the bank's mission was modified to grant loans with fiduciary, collateral, mortgage or mixed security, for the purpose of promoting and developing productive activities and exports. This means that the CHN is not playing a particular role in housing finance and that, after the demise of the BANVI, there is no state-sponsored bank focusing strongly on the provision of housing finance.

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