HOUSING FINANCE MECHANISMS
IN MEXICO

UN HABITAT
FOR A BETTER URBAN FUTURE

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FOREWORD

At the dawn of this new urban era, UN-HABITAT research shows that by 2030, two-thirds of humanity will be living in towns and cities. We thus live at a time of unprecedented, rapid, irreversible urbanisation. The cities growing fastest are those of the developing world. And the fastest growing neighbourhoods are the slums. Indeed, the global number of slum dwellers is now at or close to the 1 billion mark. Excessive levels of urbanization in relation to the economic growth have resulted in high levels of urban poverty and rapid expansion of unplanned urban settlements and slums, which are characterized by a lack of basic infrastructure and services, overcrowding and substandard housing conditions.

Yet housing and the services that should be provided with it are one of the most basic human needs. It is enshrined in various international instruments, including the Habitat Agenda. And reducing the number of slum dwellers around the world is a cornerstone of the Millennium Development Goals set to fight poverty around the world. So if we fail to achieve the Goals in towns and cities, we will simply fail to achieve them at all.

It was with this crisis in mind that the United Nations General Assembly decided in its resolution of 26 February 2002 to transform United Nations Commission on Human Settlements into a fully pledged programme. The General Assembly in its resolution called on UN-HABITAT to take "urgent steps to ensure a better mobilization of financial resources at all levels, to enhance the implementation of the Habitat Agenda, particularly in developing countries." It also stressed "the commitments of member states to promote broad access to appropriate housing financing, increasing the supply of affordable housing and creating an enabling environment for sustainable development that will attract investment".

The Habitat Agenda recognizes that housing finance systems do not always respond adequately to the different needs of large segments of the population, particularly the vulnerable and disadvantaged groups living in poverty and low income people. It calls UN-HABITAT to assist member states to improve the effectiveness, efficiency and accessibility of the existing housing finance systems and to create and devise innovative housing finance mechanisms and instruments and to promote equal and affordable access to housing finance for all people.

In our quest to reach as many people as possible, a cornerstone of our agency's new Medium-term Strategic and Institutional Plan is partnerships. We have no choice but to catalyze new partnerships between government and the private sector. This is the only way to finance housing and infrastructure at the required scale – the scale needed to stabilize the rate of slum formation, and subsequently reduce and ultimately reverse the number of people living in life-threatening slum conditions.

It is clear that in the coming 20 years, conventional sources of funds will simply be unavailable for investment at the scale required to meet the projected demand for housing and urban infrastructure. Many countries around the world continue to face deficits in public budgets and weak financial sectors. Local governments have started to seek finance in national and global markets, but this is only in its initial phase.

New mortgage providers have emerged, including commercial financial institutions and mortgage companies. But only middle and upper income households have access to such finance, while the poor are generally excluded. Although social housing is becoming less important in Europe and in countries with economies in transition, the need to provide shelter that is affordable to low income households still exists, including in developing countries.

This is why the exchange of information and knowledge on human settlements finance systems is so important. It is why it receives increased recognition in facilitating the development of human settlements finance systems and in turning knowledge into action for developing practical human settlements finance methods and systems for these pressing problems.

Our Human Settlements Finance Systems series documents the state, evolution and trends of human settlements finance in member states, and examines the factors and forces which drive the development of human settlements finance systems and the roles of different institutions and actors in shaping the systems and trends, and reviews human settlements finance systems. It presents an interesting review of policies, instruments, processes and practices. It examines the strengths and weakness of these systems and practices, their relations to the housing sector and the broad economic and social sectors, and lessons learned from practices.

Indeed, the country review studies we present are a valuable resource for member States because it is a body of work that also shows how human settlements finance systems and models can be applied to local use and thus provide a wider range of options for human settlements finance. The series also serves as guidebooks for policy makers, practitioners and researchers who have to grapple daily with human settlements finance systems, policies and strategies.

Joan Clos
Under-Secretary-General,
United Nations,
Executive Director, UN-HABITAT

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ABBREVIATIONS AND ACRONYMS

ABM	Asociación de Bancos de México (Association of Mexican Banks)
AFORE	Administradoras de Fondos para el Retiro (Administrators Retirement Funds)
AHM	Asociación Hipotecaría Mexicana (Mexican Mortgage Association)
AMFE	Asociación Mexicana de Entidades Financieras Especializadas (Mexican Association of Specialized Financial Institutions)
AMFII	Asociación Mexicana de Fondos Inmobiliarios y de Infraestructura (Mexican Association of Real Estate and Infrastructure Funds)
AMPI	Asociación Mexicana de Profesionales Inmobiliarios (Mexican Association of Real Estate Professionals)
ANNM	Asociación Nacional del Notariado Mexicano (National Association of Mexican Notaries)
BANXICO	Banco de México (Bank of Mexico)
BANOBRAS	Banco Nacional de Obras y Servicios Públicos S.N.C. (National Bank of Public Works and Services, S.N.C.)
BID	Banco Interamericano de Desarrollo (Inter-American Development Bank)
BMV	Bolsa Mexicana de Valores (Mexican Value Market)
CABIN	Comisión de Avalúos de Bienes Nacionales (Committee of National Property Appraisal)
CANADEVI	Cámara Nacional de la Industria de Desarrollo y Promoción de Vivienda (National Chamber of Industry Development and Promotion of Housing)
CAT	Costo Anual Total (Total Annual Cost)
CBF'S	Certificados Bursátiles (Market Certificates)
CEDEVIS	Certificados de Vivienda Económica (Affordable Housing Certificates)
CETES	Certificados de la Tesorería (Treasury Certificates)
CNSF	Comisión Nacional de Seguros y Finanzas (National Commission of Insurance and Finance)
CNBV	Comisión Nacional Bancaria y de Valores (National Baking and Securities Commission)
COLMEX	El Colegio de México (The Collage of Mexico)
CONASEF	Comisión Nacional de Seguros y Fianzas (National Commission of Insurance and Surety)
CONAVI	Consejo Nacional de Vivienda (National Housing Council)
CONAFOVI	Comisión Nacional de Fomento a la Vivienda (National Commission for Housing Development)
CONSAR	Comisión Nacional del Sistema de Ahorro para el Retiro (National Savings and Retirement Commission System)
CONAPO	Consejo Nacional de Población (Nacional Public Council)
CONDUSEF	Comisión Nacional para Protección y Defensa de los Usuarios de los Servicios Financieros (National Commission for the Protection and Defense of

Financial Services Clients)

CORETT	Comisión para la Regularización de la Tenencia de la Tierra. (Comisión for Property and Tenant Regularization)
COPARMEX	Confederación de Patronal de la Republica Mexicana (Mexican Heritage Confederation)
CROC	Confederación Revolucionaria de Obreros y Campesinos (Revolutionary Confederation for Workers and Farmers)
CMIC	Cámara Mexicana de la Industria de la Construcción (Mexican Chamber of Construction Industry)
CNBV	Comisión Nacional Bancaria y de Valores (National Bank and Values Comisión)
CNUAH	Centro de las Naciones Unidas para los Asentamientos Humanos (United Nations Center for Human Settlements)
CTM	Confederación de Trabajadores de México (Works Confederation of Mexico)
DDF	Departamento del Distrito Federal (Department of the Federal District)
DUIS	Desarrollos Urbanos Integrales Sustentables (Integrated Sustainable Urban Developments)
ENIGH	Encuesta Nacional de Ingreso y Gasto en los Hogares, INEGI (National Household Earnings and Spending Survey)
FIVIDESU	Fideicomiso de Vivienda, Desarrollo Social y Urbano (Housing, Social, and Urban Development Trust)
FONADIN	Fondo Nacional de Infraestructura (National Infrastructure Fund)
FONHAPO	Fideicomiso del Fondo Nacional de Habitaciones Populares (National Trust Funds for Popular Habitations)
FOGA	Fondo de Garantía y Apoyo a los Créditos para la Vivienda de Interés Social (Guarantee Fund and Credit Support for Social Housing)
FOMERREY	Fideicomiso Fomento Metropolitano de Monterrey (Monterrey Metropolitan Development Trust)
FOVI	Fondo de Operación y Financiamiento Bancario a la Vivienda (Operating Fund and Housing Bank Financing)
FOVIMI	
ISSFAM	Fondo de la Vivienda Militar del Instituto de Seguridad Social para las Fuerzas Armadas Mexicanas. (Military Housing Fund of the Social Security Institute for the Mexican Armed Forces.)
FOVISSSTE	Fondos para la Vivienda del ISSSTE (Funds for Housing Authority)
FSTSE	Federación de Sindicatos de Trabajadores al Servicio del Estado (Federation of Unions of Workers in State Service)
GDF	Gobierno del Distrito Federal (Federal District Government)
HIC	Coalición Internacional Hábitat (International Habitat Coalition)
HiTo	Hipotecaria Total (Total Mortgage)
IMSS	Instituto Mexicano del Seguro Social (Mexican Social Security Institute)

INDECO	Instituto Nacional para el Desarrollo de la Comunidad y la Vivienda (National Institute for the Development of Communities and Housing)
INEGI	Instituto Nacional de Estadística, Geografía e Informática (Nacional Statistics, Geography, and Informatics Institute)
INFONAVIT	Instituto del Fondo Nacional de Vivienda para los Trabajadores (Institute National Housing Fund for Workers)
INPC	Índice Nacional de Precios al Consumidor (National Consumer Price Index)
INV	Instituto Nacional de la Vivienda (National Housing Institute)
ISSSTE	Instituto de Servicios y Seguridad Social para los Trabajadores del Estado (Institute of Services and Social Security for State Workers)
LGAH	Ley General de Asentamientos Humanos (General Law on Human Settlements)
ONAVI	Organismo Nacional de Vivienda (National Housing Agency)
ONG	Organismo No Gubernamental (Non-Governmental Organization)
OREVI	Organismo Estatal de Vivienda (State Housing Agency)
PAN	Partido Acción Nacional (National Action Party)
PRD	Partido de la Revolución Democrática (Democratic Revolution Party)
PIB	Producto Interno Bruto (Gross Domestic Product)
PMPL	Programa de Mejores Prácticas y Liderazgo Local (Program for Best Practices and Local Leadership)
PNDUOT	Programa Nacional de Desarrollo Urbano y Ordenación del Territorio (National Program of Urban Development and Planning)
PRI	Partido Revolucionario Institucional (Institucional Revolutionary Party)
PROSAVI	Programa Espacial de Créditos y Subsidios a la Vivienda (Spatial Housing Credits and Subsidies Program)
PSV	Programa Sectorial de Vivienda (Housing Sector Proram)
PT	Partido del Trabajo (Labor Party)
PVEM	Partido Verde Ecologista de México (Green Ecological Party of Mexico)
RH	Rezago Habitacional (Housing Need)
RPP	Registro Público de la Propiedad (Public Property Registry)
ROLAC	Regional Office Latin America and Caribbean (Regional Latin American and Carribean Office)
RUV	Registro Único de Vivienda (Single Housing Register)
SAB	Sociedades Anónimas Bursátiles (Stock-market Companies)
SAPI	Sociedades Anónimas Promotoras de Inversión (Corporations for the Promotion of Investments)
SAPIB	Sociedades Anónimas Promotoras de Inversión Bursátil (Corporations for the Promoting of Stock Market Investment)
SDUOT	Subsecretaría de Desarrollo Urbano y Ordenamiento del Territorio (Undersecretary of Urban Development and Land Management)
SEDESOL	Secretaría de Desarrollo Social (Secretary of Social Development)

SHCP	Secretaría de Hacienda y Crédito Público (Secretar of Housing and Public Credit)
SHF	Sociedad Hipotecaria Federal (Federal Mortgage Company)
SMG	Salarios mínimos general. (General Minimum Wage)
SNIIV	Sistema Nacional de Información e Indicadores de Vivienda (National Information and Housing Indication System)
SOFOLES	
SOFOM	Sociedades Financieras de Objeto Limitado (Limited Objective Financing Companies) Sociedades Financieras de Objeto Múltiple (Multiple Objective Financing Companies)
S R E	Secretaría de Relaciones Exteriores (Secretary of Foreign Affaire)
UAM	Universidad Autónoma Metropolitana (Autonomous Metropolitan University)
UDI	Unidad de Inversión (investment unit)
UNAM	Universidad Nacional Autónoma de México (National Autonomous University of Mexico)
VIVAH	Programa de Ahorro y Subsidio para la Vivienda Progresiva (Savings Program and Progressive Housing Allowance)

INTRODUCTION

1.   The United States of Mexico (Mexico) is a federation comprised of 31 states and one Federal District, which is where the powers of the nation are concentrated. The Mexican republic is guided by a Constitution, which gives power to two juridical bodies – the federal and the state – and to three governmental branches: the federal, state, and municipal levels. Executive power is held by the President of the Republic, who is in charge of assigning administrative duties to the Secretaries of State (Ministries), Administrative Departments, and other state agencies belonging to the federal government. Legislative power is represented by the Congress, which is divided into the House of Representatives, who are elected every three years by majority and proportional representation, and into the Senate, which renews positions every six years, with representatives from each state. Half of these positions are elected by majority, one quarter is elected by proportional representation, and the remaining positions are assigned to the largest minority. Judicial power is held by the Supreme Court of Justice, an Electoral Tribunal (which take care of special situations), in Collegiate Courts, and in Unitary Circuit and District courts.

2.   Mexico has a population of 104 million citizens. Of these, 66 percent live in the 364 cities that comprise the National Urban System (SUN)[1]. Of the 68.8 million inhabitants that comprise Mexico's urban populace, 54 percent reside in one of the 9 major metropolitan areas of the country[2]. Continuing with these current trends, Mexican cities are projected to house more than 85 percent of the national population growth in the next three decades. The enormous concentration of citizens and of economic activities in Mexico is best reflected in its geographical configuration: The cities that comprise the National Urban System make up only 0.4 percent of the overall national territory and generate approximately 80 percent of the national income (Gross Domestic Product, GDP).

3.   In 2009, the Mexican economy registered a record level contraction, the strongest in the last seventy years, and one of the most intense contractions recorded in Latin America in this crisis. As mentioned, this negative trend is primarily a result of Mexico's strong dependence on the U.S. economy, which has been experiencing its own economic crisis. Moreover, the economic decline has been further aggravated by factors such as the decline in petroleum prices and outbreaks of the H1N1 influenza virus. Because of these reasons, as well as because

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[1] The Mexican National Urban System consists of 364 urban locations with a population of over 15 thousand inhabitants.
[2] The major metropolitan areas with a population of over 1 million: Mexico City, Monterrey, Guadalajara, Toluca, Leon

of changes in the global financial sector, there was an interruption in access to credit, both nationally and internationally. Among the immediate consequences resulting from this was the plummet in consumer credit, with a drop of 21.3 percent between June of 2008 through June of 2009 according to the Secretary of Housing and Public Credit. This contributed to the sharp decline observed in the trade sector.

4.   Mexico's economic decline, which initiated during the last trimester of 2008 (-1.6%), triggered a negative effect so that during the first half of 2009, all the economic sectors registered negative results. Those most affected were those involved in imports and exports, trade, manufacturing, and transport. For 2009, the value of exported goods was $19.361 million dollars. This figure does not include petroleum exportation, which amounted to $16.540 billion dollars. Exportation of petroleum-based products amounted to $2.821 million dollars. In that same year, total exports registered a drop of -26.6 percent when compared to 2008 levels. This overall drop in exports included a drop of -0.4 percent in non-petroleum exports and a drop of -49.5 percent in petroleum exports. The drop in petroleum exports broke down to a -20.5 percent drop in sales to U.S. markets and a -20 percent drop in all other worldwide sales.

5.   Official figures set a national per capita GDP of $6,250 USD, the highest in Latin America. In terms of income distribution, it is estimated that 68 percent of employed citizens has an income of less that 3 minimum wages ($12.9 U.S. dollars per day). Regarding household income levels, it was found that 64 percent of households have an income that is less than 6 minimum

wages ($25.8 U.S. dollars per day). The growing concentration of poor families in cities has resulted in the urbanization of poverty. The available figures describing this social dimension estimate that 38 percent of the 15.7 million urban-situated households in the country (housing 44 percent of the total urban population) are in "asset poverty", that is, they are living with incomes under $4 U.S. per day. Additionally, it must be considered that 24 percent of urban households (4 million urban households) are located on informal settlements. Furthermore, 577 thousand neighborhood blocks of the 690 thousand blocks that make up the 364 cities corresponding to the SUN are in situations of poverty, although drastic levels of poverty are experiences by roughly 194 thousand (28 percent) of these blocks.

6.   In terms of housing, it is estimated that in Mexico there are about 26.8 million housing units, and of these 68 percent are located in urban areas, with an average of 4 persons per household and about 1.3 persons per room. Regarding basic housing accommodations, it is estimated that 89 percent of homes have drinking water, 78 percent a sewage system, and 95 percent electricity. According to official figures, 20 percent of the country's homes (5.4 million households) exist in inadequate conditions. Of these, 58 percent (3.2 million homes) needed to be rehabilitated, improved, or expanded. Furthermore, 42 percent (2.2 million households) need to be completely replaced.

7.   The amassed research and analysis conducted on the subject of housing proposes that Mexico is currently undergoing a reconstructive period, derived from a long process of

adapting to policies, institutions, and legislation, as well as from existing within and transforming complex social issues of inequality, poverty, and marginalization. The structural problems encountered by the Mexican state in guaranteeing the constitutional right to housing climax in their difficulty when dealing with the fact that a large segment of the Mexican population is characterized by very limited in education, low wages (in the best cases), and confront social inequity and barriers in the labor market ranging from informal employment (40 percent of the occupied population) to complete unemployment.

8. Despite the observed decrease in the rate of population growth in recent years, the requirements put on both creating new housing projects and on improving existing housing units are still high. It is estimated that currently the deficit in housing stock reaches towards 8.9 million needed homes. If we take into consideration the current rates of population growth, the number of marriages and their growth rate, as well as divorced and widowed individuals, then in order to improve the housing shortage, an average of 760 thousand homes would have to be built annually and 400 thousand would have to be improved annually. This implies an investment of an estimated 26 billion dollars U.S. annually.

9. The poverty conditions faced by 68 percent of the Mexican population, the current state of the economy, and public finances continue to be the central points of fragility that the country faces. Additionally, growth

expectations are limited by factors such as public finance deficits and low tax revenues, which significantly threaten the planning and financing of housing stock credits that can be made available to vulnerable populations. In this context, the position take by the legislature is essential in: aligning and streamlining available public resources; guiding the impact of the creation of policies that aim to improve social development; and monitoring the strict enforcement of laws that provide certainty to investors and public action.

10. The current household situation reflects the particular characteristics and the specific issues in accordance with the problematic conditions faced by the territories on which they are settled. Currently, 67.5 percent of the homes are located in urban areas (with a population of over 15 thousand inhabitants), 13.14 percent of homes are located in semi-urban areas (with a population between 2,500 and 15,000 inhabitants), and the remaining 20.65 percent of homes are situated in rural areas (with populations less than 2,500 inhabitants)[3]. The number of residents per household is 4.0 persons, with 1.3 persons per room and 2.2 persons per bedroom. The data take on distinctive values when describing urban or rural areas. For example, the number of inhabitants per home in semi-urban areas is 4.2 persons, and in rural areas it is as much as 10.3 percent higher than it in urban areas, reaching an average of 4.4 residents per household.

11. The population projections estimated by the National Population Council

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[3] According to data collected by the National Home Income and Spending Survey (ENIGH), INEGI, 2008.

(CONAPO)[4] state that by 2010 their will be nearly 30 million households in Mexico, and by 2030 an additional 15.6 million homes will be built, bringing in a total of 45.6 million homes. This implies an average annual growth of up to 780 thousand households that require construction. The need for housing, according to figures provided by the National Housing Program 2007-2012: Towards a Sustainable Housing Development, published by the National Housing Commission (CONAVI: 2009), implies that 3.9 million new homes need to be built by 2010. This information is coupled with the fact that there are 2.1 million families than need housing and with the estimated 2.9 million home improvement projects which includes homes that need to be replaced and homes than need to be expanded or repaired. This totals 8.9 million housing projects to be completed in Mexico. Based on these figures, the Federal Government has proposed to create the conditions that are necessary that, together, government and society can reach an ongoing annual rate of up to 750 thousand housing units constructed annually[5].

12. One of the crucial challenges of the housing development in Mexico is to make available access to housing finance to lower income families and to prevent the production of social housing from growing in a disorderly manner without consciousness of sustainable parameters. Currently, the least expensive homes in the urban Mexican market cost $13,000 U.S.

dollars, and the ability afforded to lower income families to purchase homes on credit barely covers only half of those families that are with current need. An additional problem is that the supply of homes in this price range is especially scarce, which is mainly due to the impact of land costs in cities.

13. Of the new families that are expected to be integrated into the demographic structure by 2030, 8 million will earn up to four minimum wages ($17 US dollars a day), as estimated based on the current conditions of income distribution. At the start of 2012, half of all housing needs will come from families with incomes up to four minimum wages, while over a third will earn up to three, and a fifth will earn up to two. Attention given to this housing need requires the support of governmental subsidies to supplement the purchasing power of families. A major demographic factor that should be acknowledged in defining the priorities of these needs is the tendency towards separating familiar homes in favor of those homes with no family. This is particularly true in big cities.

14. Because of the aforementioned reasons, the general document that is presented contains the results of the analysis to document a National Report on the home financing mechanisms in Mexico, by way of evaluation with the objective that a UN-HABITAT develop an institutional strategy to share experiences that can be reproduced in other countries.

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[4] Projected Mexican Demographics, 2003-2030, CONAPO, 2003.
[5] According to representatives from the private sector, meeting this goal will require annual investments of 26 billion dollars

CHAPTER 1: **THE NATURE AND SCOPE OF THE HOUSING PROBLEM IN MEXICO**

1.1. Recent economic performance of the Mexican economy[6]

1.1.1 The economic crisis of the mid-1990s and the recent macroeconomic performance of the Mexican economy. First, it highlights the relevance of low and stable inflation and interest rates, the moderate use of financial resources by the public sector, and the process of financial deepening as key elements to support funds availability to finance the private sector. Second, the financial system strength and adequate regulatory and supervisory financial framework also play an important role in the sound performance of credit market.

1.1.2. During the early 1990s, the Mexican economy experienced an important credit expansion. In 1994, commercial bank credit to the private sector reached 34 percent of gross domestic product (GDP). This episode took place in an environment characterized by poor banking management and weak supervisory and regulatory practices. In the late 1994, as a result of a sudden reversal of foreign capital flows, Mexico was forced to abandon the exchange rate peg and adopted a flexible exchange rate regime. As a result, the peso adjusted significantly – from 3.4 pesos per dollar in November 1994 to 7.5 pesos per dollar in November 1995 – and the annual inflation rate jumped from 7.1 percent in 1994 to 52 percent in 1995.

1.1.3. Economic activity declined sharply, as nominal interest rates increased to levels close to 80 per cent. Under these conditions, households and firms faced difficulties in servicing their loans; thus banks' non-performing credit portfolios increased markedly. The second half of the 1990s was characterized by fiscal, monetary and exchange rate policies to stabilize the economy and to correct macroeconomic imbalances. In addition, a new set of financial regulations was introduced to strengthen the banking sector's supervisory and regulatory framework[7]. As a result of the crisis, commercial banks' size – measured by total assets – contracted from 76.4 percent of GDP in 1994 to 63.9 percent in 2000. For one thing, the banking structure experienced a profound transformation characterized by banking mergers and acquisitions and increasing foreign banking participation. For another, households and firms underwent a

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[6] Financial Innovations and Developments in Housing Finance in Mexico. Jazmin Carballo-Huerta and Juan Pedro Gonzalez-Ibarra. The Irving Fisher Committee on Central Bank Statistics (IFC), Bulletin 3, 2009.

[7] Several financial reforms were implemented after 1995 to promote market discipline: i) establishment of a limit to deposit protection insurance; ii) disclosure requirements were increased to enhance market discipline; iii) credit bureaus; iv) capital adequacy rules; v) elimination of limits to foreign ownership (recapitalization); v) new accounting standards; vi) prudential regulation; vii) corporate governance; and, viii) creation of risk management units (see: J Sidaoui, The Mexican financial system: reforms and evolution 1995–2005).

period of adjustment in their financial balance sheets, and their credit demand contracted sharply. In 1994, the ratio of commercial banks' credit to the private sector to GDP was 39.5 percent, compared with 12.7 in 2000. Meanwhile, the ratio of private sector total financing to GPD dropped from 61.8 percent in 1994 to 30.5 in 2000.

1.1.4. In recent years, the private sector credit market in Mexico has been positively affected by the consolidation of a stable macroeconomic environment, supported by monetary and fiscal policies that have allowed a significant reduction of the inflation rate and subsequently its stabilization. The year-to-year inflation rate, measured by the Consumer Price Index (CPI), dropped from12.3 percent in 1999 to 3.8 in 2007. Between 2001 and 2007 the average annual inflation rate was 4.3 percent. Moreover, the implementation of a sound fiscal policy has reduced the absorption of financial resources by the public sector. The public sector balance, measured by the public sector borrowing requirements (PSBR), decreased from 3.4 percent of GDP in 2000 to 1.3 percent in 2007[8].

1.1.5. The combination of a decreasing inflation rate and narrowing public sector borrowing requirements, among other factors, favored a decline in interest rates. In 2000, the nominal interest rate of federal government three-month bonds (91-day CETES) was, on average, 16.2 percent. In 2007,

the average short-term nominal interest rate was 7.4 percent. Meanwhile, shortterm real interest rates dropped from 7.8 percent on average in 2000 to 3.8 percent on average between 2004 and 2007. In recent years, a stable economic environment, financial deregulation, and the introduction of strategies to broaden the access to the banking system have favored financial deepening[9].

1.1.6. The ratio of total financial savings, measured by the broad monetary aggregate, to GDP increased from 41.7 percent in 2000 to 55 percent in 2007. In this context, the private sector credit market started to show a more favorable performance. The supply of financial resources to finance the private sector has been positively affected by a growing availability of domestic savings, a decreasing public sector deficit, and the strengthening of banks' financial indicators. In addition, as individuals and firms restored their financial position and perceived a stable and certain economic environment, they have shown more willingness to demand credit from financial intermediaries. For instance, in 1994 the ratio of total financing to the private sector to GDP was 61.8 percent and reached its lowest level in 2004, 27.6 percent. Thereafter, total financing to the private sector followed a positive trend and, in 2007, it represented 32.9 percent of GDP.

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[8] Public sector borrowing requirements (PSBR) measure the financing needs of both public entities and nonpublic and social entities that act on the government's behalf. PSBR include, among others, i) the traditional public balance; ii) resources channeled to finance the private and social sectors; iii) IPAB's (Mexican deposit insurance corporation) borrowing requirements net of federal government transfers; iv) the financing needs of public investment projects financed by the private sector (PIDIREGAS); and v) the borrowing requirements of the toll road rescue program (FARAC).

[9] The number of banking accounts increased from 22.8 million in 2000 to 47.9 million in 2007. In ddition, the number of investment funds accounts was 1.7 million in 2007, 1.2 million more than in 2000. (Source: Comisión Nacional Bancaria y de Valores, CNBV).

1.1.7. Recently, commercial banks have been recovering their role as primary players in financing private sector activities. From 2004, commercial banks' lending to the private sector rose as a result of both increasing bank deposits and the settlement of an important fraction of credit portfolios related to bank-restructuring programs[10].6 Commercial banks' participation in total financing to the private sector expanded. In 2007, it reached 45.8% of total financing, compared to 34.2 percent in 2004. The surge of commercial banks' credit portfolio to the private sector was not generalized; rather, it has been selective. It is possible to identify three stages in this process: i) in 2002, commercial banks began to increase their consumer credit portfolio, in particular, through credit card lending; ii) in 2005, they started to participate more actively in the mortgage credit market, primarily in the residential mortgage segment; and iii) in 2007, commercial banks began to increase their business credit portfolio.

1.2 Characterization and size of the housing sector in Mexico

1.2.1. The number of homes in Mexico (2009) rose to 24.8 million; 5 million (22.3 percent) of which are located in rural areas inhabited by less than 2,500 people. In the opposite extreme, nearly 7 million (28.8 percent) homes are located in urban areas with a population greater 500,000. Together, these two extreme poles make up more than 51 percent of total habitation situations in Mexico. Of all homes, 50 percent have a total of 3 rooms or less.

1.2.2. The problems and characteristic situations faced by housing communities are in accordance with the areas in which they are located. Rural communities, being highly dispersed and accumulating low numbers of newly constructed homes, have been void of governmental attention and assistance. In sharp contrast, an increase in the construction of new homes exists solely within Mexico's principle cities and metropolitan areas, where there also exists a concentration of both citizens and economic activity. Moreover, this is in part a byproduct of an intense urbanization processes, these housing expansion projects have been guided and assisted by government-funded programs.

1.2.3. The National Population Council (CONAPO)[11] estimates that by 2010 there will be nearly 30 million homes in existence and that by 2030 15.6 million new homes will have been built, creating a grand total of 45.6 million homes in Mexico. This implies that 780,000 new homes will need to be built annually. According to authorities, reaching this goal will require annual investments of 280 billion dollars.

1.2.4. The number of homes that are

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[10] In 1995, as a result of the financial crisis, the federal government established several banking rescue programs, which included the exchange of commercial banks credit portfolio for bonds backed by the federal government (Fobaproa bonds) with a maturity of 10 years. In 2004 and 2005, commercial banks liquidated a significant amount of these assets, making resources available for other purposes, in particular, to finance the private sector. In contrast, in 2007 bank deposits played a more important role as a source for commercial bank lending to the private sector.

[11] Demographic Projections of Mexico 200-2030, CONAPO, 2003.

significantly below living standards, according to the National Housing Commission 2007-2012: Towards a sustainable housing development, published by the National Housing Commission (CONAVI: 2007), implies that there is a necessity to construct 3.9 million new homes by 2010. This is in addition to the 2.1 million homes that need to be built for families that are currently without one, along with the estimated 2.9 million improvement projects required to rebuild, repair (such as those that are below living standards), or expand existing homes. This brings a total of 8.9 million required housing-related projects in Mexico.

1.2.5. Private, national, and regional housing institutions invested 720 billion dollars between 2001 and 2006, allowing for the acquisition and improvement of 3.1 million homes. Taking into consideration the projected housing needs between 2007 and 2012, it is estimated that 150 billion dollars will be required to meet these needs[12].

1.2.6. Of the total investments made in Mexico in the period 2001-2009 (96 billion dollars), 4.4 percent came from securities. The goal for the following years is to raise this percentage to the 6 or 7 percent level. The potential contained in this type of operation in financing housing is currently undergoing a developmental process that is guided by the modernization and homogenization of the structures, operation models, and methods of awarding credits employed by housing financing entities. This process is also simultaneously improving

the transparency and efficiency by which these institutions operate the administration of their mortgage portfolios.

1.2.7. Because of the recent growth and development of credit systems, the Mexican government has begun supporting the aid of private banks as another legitimate resource for financing housing projects. Bank-based financing rose from 0.3 to 9.4 percent between 2000 and 2006, although this was mainly directed towards the construction of middle and residential sized homes. Annual interest fees lowered from 30.3 percent in 2000 to 12.7 percent in 2006, with an average annual 10 percent decline. Moreover, initial fees have lowered considerably. This overall fee decline has made private lines of credit, acquired either directly or through co-finance plans, more accessible to low-income individuals[13].

1.2.8. Mexico continues towards urban growth and as such is experiencing an accelerated urbanization and "metropolization" process. 78.6 percent of the country's population lives within 364 of Mexico's major cities. Each of these cities has a population of over 15,000. This rapid growth situation simultaneously creates a weak infrastructure for providing services and an overall lack of resources. Difficulties to be dealt with include: providing acceptable living conditions, shortages of physical space for continued urban development, and an inability for governmental institutions to properly maintain sustainable living conditions.

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[12] According to the National Housing Commission (CONAVI), 2007

[13] Information provided by the Bank of Mexico http://www.banxico.org.mx/polmoneinflacion/estadisticas/tasasInteres/tasasInteres.html

1.2.9. Fifty-six metropolitan zones in Mexico account for 56 percent of the population and 80 percent of the country's gross commercial output. Between 2000 and 2005, demographic growth within these zones was 1 percent larger than the growth of the entire country.

GRAPHIC 1: **Total financing Percentage of GDP**

Total Financing to Private Sector   Total Financing to Public Sector
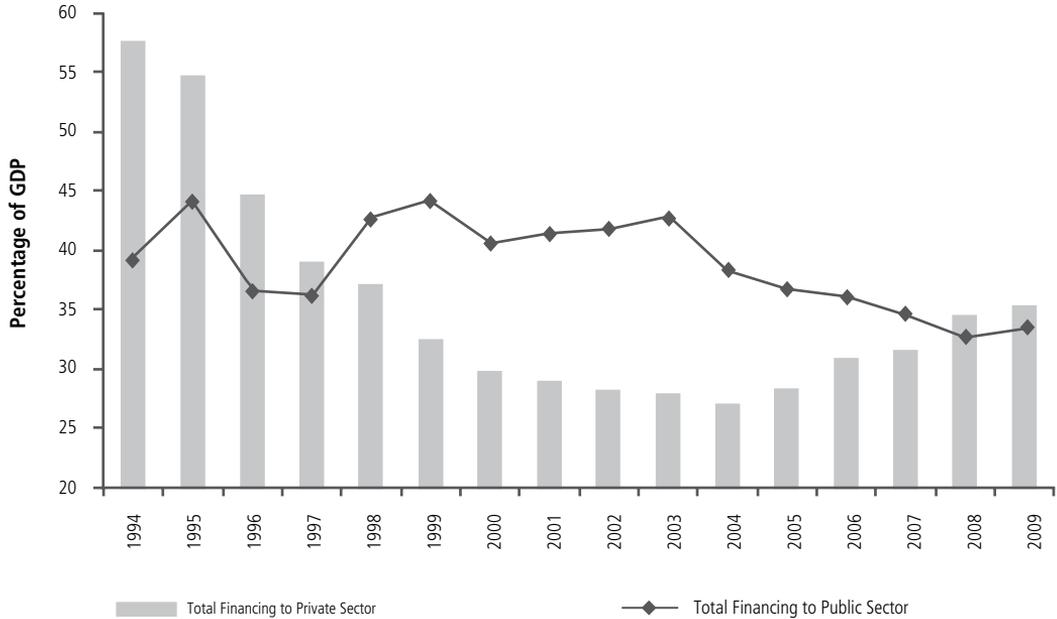
1/ Includes domestic and external financing
Source: Bank of Mexico and Ministry of Finance (SHCP), 2009.

1.2.10. According to results published by inter-institutional group INEGI-SEDESOL-CONAPO (2005), 56 metropolitan areas were identified as having a combined population of 57.9 million people in 2005. Of these, nine metropolitan areas have individual populations reaching over 1 million inhabitants: Valle de Mexico, Guadalajara, Monterrey, Puebla-Tlaxcala, Toluca, Tijuana, Leon, Juarez, and La Laguna. Combined, these metropolitan areas inhabit 36.6 million people, more than a third (35.4%) of the national population.

Furthermore, 18 of these etropolitana reas have individual populations between 500,000 and one million: San Luis Potosi-Soledad de Graciano Sanchez, Queretaro, Merida, Mexicali, Aguascalientes, Tampico, Cuernavaca, Acapulco, Chihuagua, Veracruz, Morelia, Saltillo, Villahermosa, Reynosa-Rio Bravo, Xalapa, Cancun, Tuxtla Gutierrez, and Oaxaca. Combined, these metropolitan areas inhabit over 13.5 million people (13.0% of the national total). The rest of the 29 metropolitan areas have individual populations falling between 100,000

TABLE 1: **Population and Housing Units in Mexico**

	1970	1980	1990	1995	2000	2005
TOTAL HOUSING UNITS (thousands)	8,286	12,075	16,035	19,403	21,954	30,412
POPULATION (thousands)	48,200	66,847	81,247	91,120	97,483	103,263
POPULATION GROUTH RATES	3.2 %	2.0%	2.1%	1.6%	1.0%	

Source: INEGI, Census of Population and Housing 1970-2000, and Count of Population and Housing, 2005.

and 500,000, with the exception of Moroleon-Uriangato which has a population just under 100,000. Combined, these last 29 metropolitan areas inhabit 7.8 million people, which is equivalent to 7.6 percent of the total national population[14].

1.2.11. In terms of the availability of public services in urban areas, in 2005, 11.5 percent of homes did not have running water, 14.2 lacked sewage systems, 6.6 did not have toilets, and 2.5 lacked electricity. Additionally, the lack of basic accommodations suffered by many of these homes is quite staggering: 1 in every 7 homes (13.3 percent) has a dirt floor; nearly 1 in every 5 homes (20.7 percent) does not have walls made of solid material; more that every 1 in 3 homes (36.7 percent) has as roof made of flimsy or natural material; more than 4 in every 10 home (41.2 percent) do not have running water; 1 in every 6 homes (17.3 percent) uses firewood or charcoal to cook, and more than 1 in every 5 homes (21.5 percent) does not have a sewage system.

1.2.12. Most often, within these homes, which exist in conditions of poverty and vulnerability, the head of the household is female. Homes headed by a female have quickly risen in number in the last 25 years. The rate has risen from 1 home in every 8 in 1976 to 1 home in every 5 in 2000. This means that the number of homes headed by females is currently around 4.6 million, while it was around 2.8 million in 1990.

1.2.13. That females are heads of households appears to be a condition that is closely tied to situations related to urban living. This can be most clearly illustrated when it is noted that in urban areas 8 out of every 10 homes is headed by a female. These women participate in relatively high levels of economic activity, although they earn approximately 20 percent less compared to men. Considering this, it is important to create governmental policies that aim to resolve the severe economic problems faced by many Mexican households.

1.2.14. The distribution of homes per level of income illustrates the enormous social inequality in Mexico: 53 percent of accumulated income is concentrated only within 2.3 percent of the entire national population. Moreover, of the 22.3 million households (according to 2005 data) in Mexico, 41 percent (9.1 million) generate an income equivalent to 0-3 minimum wages (m.w.), 27 percent (6 million) generate between 3-6 m.w., 18 percent

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[14] Delimitación de las zonas metropolitanas de México (Delimitations of the metropolitan areas of Mexico), INEGI, SEDESOL, CONAPO, pg.31, Mexico, 2005.

(4 million) generate between 6-10 m.w., and the last 14 percent generate more than 10 m.w . This means that 80 percent of the total population (17.8 million households) generates a family income that is less than 10 m.w.[15] There is particular difficulty meeting daily living expenses for 68 percent of households in Mexico, which generate no more than 6 m.w., (equivalent to approximately 22.8 US dollars a day). Taking these numbers into consideration, t is estimated that of the 800,000 new families created annually, at least 540,000 of these will not qualify for any type of credit with the established housing financing systems.

1.2.15. Along with the low levels of income earned by the majority of the Mexican population, there is not, as of yet, a "savings culture". Currently, Mexicans with earnings of up to 3 m.w. (13.2 US dollars per day) will on average hold on to only 2 percent of their monthly income (around 80 US dollars). In comparison, Americans hold on to 8 percent of their annual income. For families that are at poverty level and seek to build or expand their homes, their low wages combined with a lack of access to financing mechanisms lead to what is known as "auto-construction" or "social production of houses". These families personally purchase the materials needed to build there home from specialty stores and do the work themselves or through contracted labor. The significance of this is illustrated in the fact that 40 percent of all concrete sales a from auto-construction purchases. The purchase of these materials goes towards building and remodeling of homes, as allowed by particular budgets. This is a most profitable clientele for those in the business of producing home construction materials, since these populations purchase materials in small volume and therefore pay the highest prices.

1.2.16. According to private institutions, the Mexican government invests approximately 1.5 percent of its internal gross production into mortgage financing plans. That is, around the equivalent of 9,750 million US dollars go into FOVISSSTE, INFONAVIT, banks, SOFOLES, and SHF. However, considering the federal government's goal of constructing 680,000 new homes in 2009, Mexico will need to increase its internal gross production based investments from 3 to 3.5 percent. The principle home financing entities are: a) private institutions, consisting of banks and the mortgage financing SOFOLES ; b) ONAVI, the National Housing Institutions which include SHF, FONHAPO, INFONAVIT, and FOVISSSTE; and c) the State Housing Institutions (OREVI).

1.2.17. The interests charged by mortgage financing institutions are highly variable and fluctuate between a monthly 5 and 12 percent fee. Repayment periods fall between 5 to 15 years. According to strict finance theory, the amount of interest charged by creditors should compensate the

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[15] CONAFOVI, "Vivienda: Prioridad de gobierno. Avances del cambio estructural a dos años de gobierno (Housing: Government Priorities. Advances in structural change in two years of governing)", Mexico, 2006, pg.913

[16] The SOFOLES are financial intermediaries established by the legislation since 1995 that has as their objective the disbursement of credits to be used for home mortgages. The SOFOLES are distinctive from banks because they can't receive deposits or leasing plans through tellers.

risk that is run when lending money, which, in this case, is clearly not applicable since mortgage financers take back property when individuals can no longer pay. These exorbitant fees are due, from one end, to the large operation costs. But, this is primarily due to the lack of competence and regulation within this sector. So long as financing options continue to be non-existent for low-income families, a housing development market that is accessible to only 32 percent of the population will continue to exist. It is therefore necessary to conduct an in-depth analysis that will clarify the issue of whether the amount of interest charged to populations earning less that 6 minimum wages (26.5 US dollars a day) should be regulated, and whether private and national housing institutions should have their operations costs adjusted.

CHAPTER 2: **THE STATES ROLE IN SUPPORTING HOUSING DEVELOPMENT**

2.1. Government Policies

2.1.1 The governmental intervention needed to assist the housing problems in Mexico must acknowledge and confront the long-standing issues that began in 1925 with the creation of certain public institutions such as the Director of Civil Pensions. Further issues that also need to be addressed originated from the establishment of the National Urban Mortgage and Public Works Bank in 1933, and from granting the DFF, the Department of the Federal District in 1934 (now the Government of the Federal District) the authorization to build houses. Lastly, current issues also date back to 1943 when the Banco de Fomento a la Vivienda (Housing Assistance Bank) was founded during the time that the IMSS, the Mexican Institute of Social Security, was creating home mortgage programs. The problems of this particular issue are due to the fact that this public intervention was limited to assisting government agents only and did not create encompassing national policies, limiting its responsibilities to the armed forces, federal employees, and employees of the IMSS and the DFF.

2.1.2. During the 50's and 60's, in response to the rapid growth of cities, especially in the metropolitan area of Mexico City, the state's intervention model widened and began the development of "habitat units". The construction of these apartment complexes signaled the first

efforts toward planning urban housing projects. This model was far-reaching, with an end goal of benefiting specific social sectors, such as teachers and bureaucrats. These public actions were managed by the Instituto Nacional de Vivienda (National Housing Institute) which was created in 1954 and by the National Mortgage Loan and Public Works Bank.

2.1.3. The federal government, operating amidst a large housing demand, insufficient resources, and the necessity to promote and regulate the participation of private banks in the housing development sector, put into place in 1963 the Programa Financiero de Vivienda (The Home Financing Program). It was planned that this mechanism would utilize a portion of public savings that had been captured by the banking system and use this money towards financing the construction and assignment of homes. This housing finance plan was meant to benefit salaried individuals. Branches were created within the Bank of Mexico to coordinate and promote this program and to provide financial and technical assistance to participating banks. These braches were the Housing Operations and Banking Discount Foundation (FOVI) and the Guarantee and Housing Credit Assistance for Social Interest (FOGA) programs. These two branches were fused together in May of 1985 and identified as simply FOVI, which

became part of the Federal Mortgage Society (SHF) in 2002.

2.1.4. From the 70's into the 90's the federal government notably expanded its executive participation in this sector with the creation of three national institutions which are now emblematic of the housing policies that are particular to Mexico: the Institute of the National Foundation for Housing for Workers (INFONAVIT), the Housing Foundation of the Social Security Institution for the Workers of the State (FOVISSSTE), and the National Funds for Popular Housing (FONHAPO). Other notable programs that were created in during this time were OREVIS and certain specific institutions like the Federal Housing Fund, Social and Urban Development (FIVIDESU), and the Metropolitan Fund of Monterrey (FOMERREY). In 1983 Article 4 of the Federal Constitution was modified, newly stating that all families had the right to a respectful and dignified home. In 1984 the Federal Housing Law was established to secure this constitutional mandate. With these policies in place, the Mexican government constructed, possessed, and assigned housing among active employees in the working sector. The government also developed national financial structures to oversee and attend to housing issues and problems.

2.1.5. Housing policies in Mexico generated a working model that was highly influenced by the pressures that were brought about by unions (above all others, the large and powerful syndicates belonging to the Mexican

Workers Confederation (CTM), the Regional Confederation of Laborers and Farmers (CROC), and the Federation of State Workers Syndicates (FSTSE). This seriously limited the ability of these policies to assist salaried workers that did not belong to these institutions, and of course, only reinforced the policies' exclusion of non-salaried workers in the country from receiving any type of assistance.

2.1.6. In the mid-90's, as a result of the grave economic and financial crisis that hit the country in 1995, the private banking system withdrew from leasing and financing, leaving the market solely in the hands of the national housing institutions. INFONAVIT and FOVISSSTE bared most of the weight, both of which had been, since 1993, restructuring themselves to become, principally, financial institutions. From 1995 on, FOVI promoted the recovery of private financing through the creation of the SOFOLES, which were new organizational entities focusing on home mortgage credit. These new organizational entities played an important, although limited, role in the national home mortgage market.

2.1.7. Currently, the SOFOLES have primarily focused on assisting salaried individuals and individuals of medium to medium-low income. This has created difficulties among low-income populations, who usually work for themselves, in obtaining access to housing. It is estimated that at least 40 percent of all homes have been constructed directly by the homeowners without public or private help.

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[17] The National Development Plan (PND) 2001-2006, is the principle planning instrument, guided by the objectives and strategies printed by the Federal Executive that guarantee national security, the growth of the economy, and the political, social, and cultural development of the nation.

2.1.8. The social policies created by the National Development Plan (PND) 2007-2012[17] were established to protect the well-being of Mexican citizens. To secure Mexican well-being, the policies specially aim to assist citizens whose living conditions, personal growth opportunities, and social participation are below critical levels. One of the strategies employed by the PND is to promote housing and public policy programs. Moreover, the PND involve municipal and state governments to insure the successful execution of their policies. As an example, the PND has worked with the civil society in strengthening housing market accessibility so that the housing sector may become a vehicle towards development for all. Focusing on integration, Strategy CONTIGO (WITH YOU) focuses on the social dimension of the housing sector by promoting social and human development. Put forth by the last presidential administration with Vicente Fox, this program was a part of his plan to "form a united heritage". These elements, together with the objectives laid forth by the PND, form the basis of the Sectorial Housing Program, 2001-2006.

2.1.9. Deriving from the objectives and strategies placed forth by the President of Mexico, the National Commission of Housing Assistance (CONAFOVI) was created June of 2001. It was meant to be an extension of the department

TABLE 2: **Major Government Policies: 1925-2009**

PERIOD	HOUSING POLICIES	COMMENTS
1925	Established the Institute of Civil Pensions and Retirement (IPCyR), including the Directorate of Military Pensions (DPM).	First public funding agency for social housing.
1933	Established the National Mortgage Bank and Urban Public Works (BNHUOPSA).	First development bank to finance social housing.
1934	The Federal District Department (DDF) started the construction of housing for their workers.	The DDF (government of the country's capital) is set in 1928.
1943	Established the Housing Development Bank (BFH)	Disappears in 1947, the BFH to be absorbed by the BNHUOPSA.
1954	Established the National Housing Institute (INV) as institutions promote housing.	Establishing the Popular Housing Fund (FONHAPO) inside the BNHUOPSA.
1956	The Mexican Social Security Institute (IMSS) initiated housing programs for rental housing beneficiaries.	The IMSS was created in 1943 is the main social security institution in Mexico.
1958	The Administrative Committee of the Federal School Construction (CAPFCE) began the construction of public housing.	The CAPFCE is created in 1947 exclusively for school construction.
	The public agency Petroleos Mexicanos (PEMEX) began the construction of public housing.	The oil company PEMEX was created in 1938.
1959	Established the Institute of Social Security Services Workers (ISSSTE).	Disappears the IPCyR and is replaced by the ISSSTE.
1964	Established the Housing Finance Program (PFV) from the constitution of the Operating Fund and Housing Finance (FOVI).	The FOVI is constituted in 1963.
1966	Established the National Bank of Works and Services (BANOBRAS).	BANOBRAS is a public service banks for the development of urban infrastructure.
1970	Established the National Institute for Community Development and Popular Housing (INDECO).	Disappears the INV and is replaced by the INDEC.

1972	Established the National Fund for Housing of Workers (INFONAVIT).	Today is the institution that more housing units built in Mexico.
	Established the Military Housing Fund (FOVIM) and begin construction of public housing for the military.	In 1976, the IPM is transformed into the Social Security Institute for the Armed Forces of Mexico (ISSFAM).
	FOVISSSTE was created as the housing agency ISSSTE.	
1978	Initiate State Housing Agencies (OREVIS) promoted by the INDECO and operated with federal participation.	The OREVIS constitute state public advocates of affordable housing.
1981	INDECO disappears and its functions are absorbed by the Popular Housing Fund (FONHAPO).	The FONHAPO is a federal government agency under the urban development sector.
1983	Amendment to Article 4 of the Constitution to give every family the right to enjoy a decent and proper housing.	
1984	First Federal Housing law in Mexico.	
1991	Financial restructuring FOVISSSTE.	FOVISSSTE stops building the house and becomes a financial mechanism.
1992	Start the Limited Purpose Financial Companies (SOFOL) as mechanisms for housing finance.	SOFOLS are corporations specialized in the provision of housing credits.
1993	Start INFONAVIT financial restructuring.	INFONAVIT stops building the house and becomes a financial mechanism
1997	The National Indigenous Institute (INI) began construction of housing programs for Indians.	The INI was created in 1949 by President Miguel Aleman Valdez.
2001	Established the National Commission on Housing (CONAFOVI), as a decentralized coordination of SEDESOL to promote housing.	
2002	FOVI disappears and instead creates the Federal Mortgage Society (SHF).	The SHF was established as the leading financial institution in Mexico owned development banks.
2006	The Chamber of Deputies approved the new Federal Housing Law, which determined the establishment of national housing	
	Created the National Housing Commission (CONAVI) as a decentralized agency coordination and promotion of housing development.	The CONAVI replacing to CONAFOVI with the same functions
2009	On the 13th of March of 2009, the National Housing Pact for Better Living was signed among representatives from state governments, legislators, business people, bankers, and housing development officials	

of the Social Development Secretary (SEDESOL). Its function was to reduce the existing administrative transactions by carrying out tasks involving financial, territorial, production, and inter-institutional coordination issues related to housing.

2.2. New Housing Law in Mexico, 2006

2.2.1. The Mexican Congress approved a new housing law, which was the same one that was published in the Official Diary of the Federation on Tuesday, the 27th of June, 2006. This entry was the realization of much hard work and struggle put forth not only by the legislators of all the parliamentary factions that constitute the Deputy and Senate Housing Commission, but also of all the individuals who played active roles in working towards solving the country's housing issues. The new housing law is a regulation of Article 4 of the Political Constitution of the United States of Mexico on housing

issues. It concerns public order and social interest and has as an objective the establishment and regulation of national policies, programs, instruments, and support structures so that all families can enjoy living in respectful and dignified housing conditions.

In relation to the previous law (1984), the new housing law conceives housing not only as a basic human need, but as a crucial factor in creating social order. In this light, it recognized the National Housing System as the permanent coordinating and concentrating mechanism among the public, social, and private sectors. The new law creates an inter-secretarial commission whose goal is to assure that federal executive power entities create uniform and coherent public policies. Moreover, the new law descriptively states the contents and elements that are required to establish an effective participation and correspondence between the three branches of the government when creation solutions to housing problems.

The new law incorporations criteria to assure that housing benefits are primarily used to assist populations in poverty, as well as used to support the societal-forming aspects of housing, giving preference to low-income families. The law describes, moreover, the design and execution of an integral policy that provides assistance to homeowner so they may obtain floors for their homes. Again recognizing the societal-forming aspects of housing, the law guarantees housing support to rural and indigenous communities.

In this sense, the law protects rural and indigenous customs by proposing that housing policies and programs recognize their cultures and respect their habilitation customs. Another one of the advantages that emerges from implementing the new law is the creation the National System of Housing Indicators, which is a collection of data acquired by the public, social, and private sectors. Its organization permits one to take a look at the current housing situation and at the housing market. The system has as its objective the integration, generation, and dispersing of information that is needed to plan, observation, and evaluation of the National Housing Policy. Moreover, the new law proposes to impart housing policies and urban development under the coordination of the National Housing Commission and the Secretary of Social Development[18].

2.2.2. Currently, the most relevant advances made by national housing policies are related to institutional policy reforms, concerning the principal national housing institutions and the private financing institutions. The most important reforms are as follows:

a) INFONAVIT reorganized structurally; its economic housing program began, which was in favor of supporting low-income families; improves how it controls fiscal matters, and how it controls its collections portfolio; it made public made its operations; it focused more attention towards registered users; and promoted the participation of private financing

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18 According to the ""Minuta con Proyecto de Decreto por el que se expide la Ley de Vivienda" (Project Decree Memordum that signals the Housing Law" published in Gaceta Parlamentaria, LIX Legislation of the Chamber of Congress Union Members, Mexico, 2006.

systems through the program Support INFONAVIT.

b) FOVI evolved into a developmental assistance bank through its connection with SHF, which, as a mandate, has to assist in the development of the private financing market. This is a governmental bank dedicated working with the housing sector, and is responsible for being a catalyst in the development of primary and secondary home lending markets. To accomplish this, it makes use of a new and necessary tool: the guarantee of the federal government.

c) FOVISSSTE substantially increased its participation in the housing sector by first reorganizing its operations structure and by established the Extraordinary Credit Program, which authorized more than 100,000 home lending credits through public raffles. Through this program, it has reached annual financing amounts that are double to what they had been the previous years.

d) FONHAPO established itself as a primary institution in housing development assistance by increasing the number of allowance programs that are in favor of helping low-income populations. Because of its excellent results, governmental assistance will be increased to support the new Housing Subsidiary Acquisition Program which is designed to improve correspondence among benefactors and the three governmental branches.

e) An agreement was signed between CONAFOVI, INFONAVIT, FONHAPO, and SEDESOL to design a program aimed to

economically (through allowances) support low-income families. This complements the actions taken by the Progressive Housing Savings and Benefits Program (VivAh) and the Special Housing Credit and Subsidiary Program (PROSAVI).

f) Mortgage interest deduction rates were set into place, the Multiple Bank developed new mortgage financing products, and the Limited Object Finance Companies (SOFOLES) increased their importance as financial intermediaries in housing matters with developers and individuals desiring to become home owners.

g) Currently, in order to reach its objectives, CONAVI plans to implement the Housing Sector Program and plans to continue the National Housing System. Beyond this work, it still coordinates the efforts of the different Public Federal Administration entities and of the diverse productive actors that participate within the sector.

2.3. Housing Sector Program (2007-2012)

2.3.1. The federal government has established a specific program for the housing sector, the Housing Sector Program 2007-2012: "Toward a sustainable housing development". Its goal is to increase the quality and sustainability of accessible housing among a large number of families. It also aims to increase efficiency among housing sector constituents. It plans to reach these goals through meeting the following four objectives: a) Objective 1. Increase the amount of housing financing available to

citizens, particularly to low-income families; b) Objective 2. Stimulate the development of sustainable housing; c) Objective 3. Consolidate the National Housing System through implementing improvement in its public administration; y, d) Objective 4. Consolidate a supportive policy from the Federal Government that facilitates low-income populations in acquiring financing for housing and that supports the development of sustainable housing.

Agencies responsible for housing issues in Mexico

Secretary of Social Development (SEDESOL)

2.3.2. SEDESOL is regulated by the department of the Federal Executive Power (Secretary of the State), and is responsible for the formulation, navigating, and evaluation of the general social development policies that aim to combat poverty. In particular, these

include habitation and urban housing development, along with overseeing and coordination the participation of federal, state, municipal, social, familial, private sector, and academic community activities in these areas.

National Housing Commission (CONAVI)

2.3.3. The National Housing Commission is the governmental agency in charge of overseeing the function of housing programs, such as insuring that federal government housing goals and objectives in the National Housing Program 2007-2012: Toward developing sustainable housing are met. It was created in July of 2001 with the original name National Housing Support Commission (CONAFOVI) and in June of 2006 it changed names to the National Housing Commission (CONAVI). It is a decentralized organization, and is in service of social interests. It is non-sectional, has legal authority, and its own assets. In

FIGURE 1: **Government institutions involved in the housing sector**
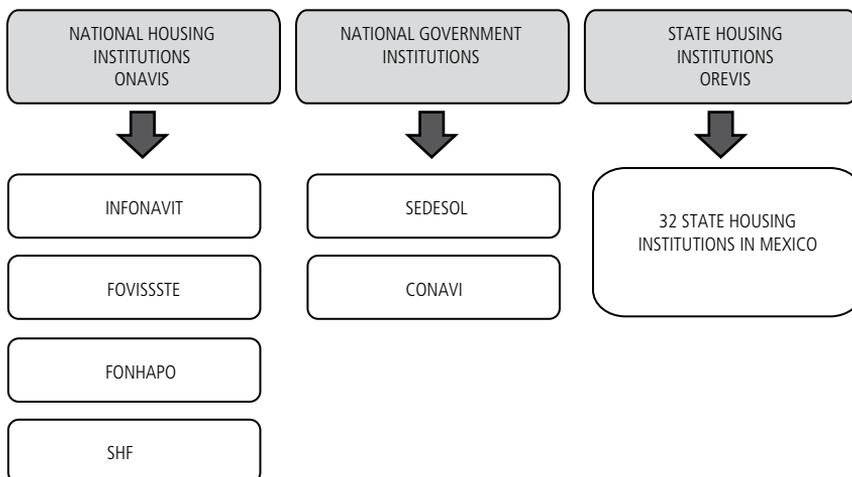
Source: CONAVI, 2008

accordance with the Federal Housing Law, as was resolved in June of 2006, CONAVI is responsible for supervising the country's urban development and assuring that it occurs in an orderly and sustainable fashion.

As such, it serves the function of creating impetus and agreement among the public, social and private sectors regarding programs that provide floors for homes. It is also responsible for developing, executing, and promoting schemes and mechanisms for home financing, subsidiary, and savings toward home owning programs. CONAVI must also assist and support issues which increase housing quality, facilitate in the simplification of processes and protocols concerning housing development projects, and establish institutional ties, technical assistance agreements, and information exchanges with national and international institutions.

National Housing Pact

2.3.4. On the 13th of March of 2009, in the presence of the President of Mexico, Felipe Calderon, the National Housing Pact for Better Living was signed among representatives from state governments, legislators, business people, bankers, and housing development officials. The Pact establishes an investment of 150 million dollars to construct or improve 800,000 homes. This, also, has the potential to create and conserve jobs within 37 lines of work. The pact also requires that the Federal Home Lease Society (SHF) funds serve as intermediates among financing entities such as Sofoles so that these entities may approve applications for housing credits that are for less than 25,000 dollars.

2.3.5. The intermediate financing entities committed themselves with the President of Mexico (2009) to guarantee to make a minimum of 150,000 credits available for 700,000 dollars. Those that provide house construction materials, such as cement, signed an agreement stating that they would guarantee accessible prices. Discounts were offered by such industries as cement and copper, but also by industries specializing in domestic appliances and other goods. With this Pact, a cohesive agreement was formed among private and public institutions to guarantee integrity in making construction materials and housing development accessible. This also provides for a more orderly urban growth process. The central objective of this Pact is to maintain housing development in Mexico through an increase in home construction and to provide resources that allow for accessible home mortgaging options.

2.3.6 Midway through 2009, The Senator Housing Commission, in conjunction with SEDESOL, held the Advances in the Pact Commitments Forum to evaluate their progress. The forum brought together the directors of the Onavis, the developers and intermediary private financers, the providers of construction materials, and the authorities of the housing sector to present to the legislators the advances made in taking action and providing resources. In the month of June 2009, the accumulated finances among INFONAVIT, FOVISSSTE, FONHAPO, SHF, and CONAVI totaled 465,000 units of activity, representing completion of 58.1 percent of their set goal with expenses totaling 500 million dollars

CHAPTER 3: **THE HOUSING MARKET SITUATION IN MEXICO**

3.1. Mexican housing market overview

3.1.1. In order to have a better grasp of the housing credit market structure, the Mexican housing demand, housing stock, and residential real estate sector must be analyzed. In Mexico, housing demand has been driven, among other factors, by shifts in the demographic profile. In particular, baby-boomers boosted the demand for new housing during the 1980's and 1990's. In recent years, this growth trend has been sustained by the aging population. Even though population growth rates have decreased, household growth rates have increased [19]. Therefore, housing demand is expected to continue growing more rapidly than population during the coming years.

3.1.2. In the last decades, the housing stock in Mexico has changed in both quality and size. For instance, housing conditions such as dimension, regular features and availability of urban services, have improved in general [20]. Nevertheless, rural housing conditions are still limited compared to their urban counterparts. The significance of the housing market in the Mexican economy can be measured by several indicators. Mexican housing stock significantly increased in size over the last decades. In 2005, housing stock had more than tripled relative to the 1970's. Preliminary figures indicate that in 2007 the housing stock at replacement cost is estimated to have been 86 percent of GDP. In that year, the ratio of residential investment to GDP was 5.8 percent [21].

3.1.3. The Mexican residential real estate sector is composed of two segments. On the one hand, the informal sector is characterized by the lack of well-defined property titles, tax-payments evasion, insufficient access to public services and utilities, and non-eligibility for conventional financing. A large portion of this housing stock was built by its owners (self-construction) with their own resources, since they have limited access to credit. Although informal housing represents a quick solution to fulfilling low-income households' needs, the Mexican government has

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[19] From 1970 to 1990, population growth was 68.5 percent, while the number of households increased by 66.1percent. Between 1990 and 2005, household growth (53.1percent) surpassed population growth (27.1percent). Source: InstitutoNacional de Geografía y Estadística, INEGI.

[20] Urban services include tap water, electricity, gas for cooking, and sewerage.

[21] Financial Innovations and Developments in Housing Finance in Mexico. Jazmin Carballo-Huerta and Juan Pedro Gonzalez-Ibarra. The Irving Fisher Committee on Central Bank Statistics (IFC), Bulletin 3, 2009.

TABLE 3: **Mexican housing conditions** (% of housing units with)

	1970	1980	1990	2000	2005[2]
Tap water	49.4	65.8	76.4	84.3	87.8
Sewerage	41.5	48.0	60.9	75.0	84.8
Electricity	58.9	74.8	87.5	95.0	96.6
One room[1]	40.1	29.9	27.0	23.1	N/A
Two rooms[1]	28.9	28.7	26.6	24.2	N/A
More than three rooms[1]	31.0	41.4	46.4	52.7	N/A

[1] *Excludes the kitchen.*
[2] *na: not available.*

been encouraging the development of formal construction. For instance, the government has supported self-construction housing programs and promoted the regularization of informal housing. On the other hand, the formal sector mainly includes housing units built and commercialized by real estate developers, as well as self-construction units under the standards established by the authorities. Therefore, these housing units have well-defined properties titles, are registered in the cadastre for tax purposes, and have access to public services and utilities. This segment of the housing market has access to housing finance, and home-owners are usually part of the formal sector of the economy.

3.1.4. Housing finance is highly correlated with developments in the economic activity, specifically in the formal sector of the residential real estate market. Although a large share of construction activity occurs outside formal channels, the formal sector has increased its participation in the total construction market in recent years. Available data on the residential real estate market showed a positive trend in the number of units built by real estate developers of the formal sector. For instance, in 2000 this figure was

282,000 units, compared to 512,000 in 2007; ie it increased by 81.5 percent in seven years. In the last five years, this market grew at an average annual rate of 8.7 percent. In 2009, the formal market accounted for around 55 percent of total housing construction in Mexico.

3.2 Situation of the housing stock in México

3.2.1. In 2008 the total amount of houses in Mexico reached 26 million units, with an accumulate growth of 12.05 percent from figures in 2000. Annual interest rates averaged at 1.4 percent. 48.2 percent of housing developments, including single homes, condominiums, and apartments have a surface area smaller than 75m², while 21.4 percent have a surface area between 76 and 100m², and 21.9 have a surface area larger than 100m². On average, houses have 3.9 rooms[22], of which 2.1 are bedrooms. 28.1 percent of homes lack a complete bathroom, while 55.8 have one, 13.1 percent have two, and 3.0 percent have three or more complete bathrooms. 67.5 percent of housing complexes are located in urban areas (with population rates over 15,000).

13.14 percent of housing complexes are located in semi-urban areas (with population rates between 2,500 and 15,000) and 20.65 of housing complexes are located in rural areas (with population rates below 2,500)[23].

3.1.4. The number of residents per household is 4.0, while per room it is 1.3 and per bedroom it is 2.2. These figures take on specific values depending on whether they belong to urban or rural areas. For example, the number of individuals per household in semi-urban areas is 4.2 and en rural areas it is 4.4, which is up to 10.3 percent larger than what is found in urban areas.

3.1.5. 71.5 percent of the housing stock in Mexico are inhabited by the homeowners. The size of the rental housing market is 14.3 percent, of which 12.8 percent are paid housing, 1.4 per cent they're in litigation, intestate or invaded. Of all proper living spaces, 3.5 million were acquired in the last 10 years through finance plans, of which 59.7 percent were through INFONAVIT, FOVISSSTE or FONHAPO, 28.0 were through commercial banks, Sofoles or through savings and 12.3 percent were acquired through other private or familial lenders.

TABLE 4: **Housing in Mexico, 2000-2008**

SOCIO DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS	2000	2008	Variation % 2000-2008
Total housing (units)	23,364,983	26,180,793	12.05
Total household	23,667,479	26,732,594	12.95
Total housing resident	99,280,124	106,866,209	7.64
Total household members	98,310,615	106,719,348	8.55
AVERAGE			Var 00-08
Households per housing	1.01	1.02	0.01
Household size	4.2	4.0	(-) 0.16
Age of head of household	45.4	48.2	2.8
Household members younger than 14 years of age	1.3	1.1	(-) 0.20
Household member between 14 and 64 years of age	2.6	2.6	0.00
Household members older than 65 years of age	0.2	0.3	0.10
Household members 14 years or older that earn wages	1.7	1.8	0.10
Household members 14 years or older than do not earn wages	1.3	1.1	(-) 0.20
Household members 14 years or old that are employed	1.7	1.7	0.00
Income recipients per household	1.9	2.3	0.4

Source: Created by author with situations from ENIGH-INEGI, 2008.

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[22] Bathrooms, patios, basements, and garages are not considered rooms.
[23] According to data provided by the National Housing Income and Spending Survey (ENIGH), INEGI, 2008.

3.3. Mexican mortgage market structure[24]

3.3.1. In Mexico, several financial institutions participate in the mortgage credit market. These financial intermediaries can be classified according to different criteria, such as the population segment they serve, the products they offer, the regulation they are subject to, the sources of their funding, their market share, or the economy sector to which they belong. In this paper, intermediaries are classified, for simplicity, into two groups: public and private.

3.3.2. The most important public sector intermediaries (government-sponsored agencies) in the housing credit market are Infonavit and Fovissste. Infonavit provides credit to households who belong to the formal private sector of the economy. Fovissste provides housing finance to employees of the public sector[25]. In general, these institutions are oriented to financing low-income households[26]. However, Infonavit also provides credit to other segments of the market under different programs and initiatives. Fovissste and Infonavit obtain funding through a scheme based on employees' compulsory savings. Therefore, their sources of funding have a long-term profile to finance mortgage credit. Moreover, an important proportion of Infonavit's assets are channeled to finance mortgage loans (93.6 percent in December 2007).

3.3.3. Infonavit was created in 1972 to develop and build housing projects, and to give long-term mortgage credit to low-income workers. This institution was the primary regulator of low income housing in Mexico. In 1993, Infonavit gave up its role as a constructor and price regulator in the housing sector. Ever since, it has focused on offering housing finance. The redesign of Infonavit's role changed the mortgage credit market in two ways. First, under the new regime, borrowers can freely choose the house they want to buy; under the former regime, Infonavit assigned the housing units mainly to unionized workers. Second, residential real estate developers take on the risk of funding, building and selling the properties.

3.3.4. Under the Infonavit scheme, employees of the private formal sector of the economy allocate a monthly contribution of 5 percent of their wage to an individual account[27]. Households have two choices for accessing their resources. First, if they meet the eligibility criteria, they can use their accumulated funds to obtain a direct mortgage loan, or any other loan from other Infonavit-related programs[28]. The resources are used as down payment or credit guarantee to purchase a house[29]. Second, if the worker does not demand a mortgage loan by retirement age (around 65 years), the accumulated resources are added to his or her pension fund.

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[24] Financial Innovations and Developments in Housing Finance in Mexico. Jazmin Carballo-Huerta and Juan Pedro Gonzalez-Ibarra. The Irving Fisher Committee on Central Bank Statistics (IFC), Bulletin 3, 2009.

[25] Fovissste provides mortgage loans in pesos, with a credit limit of 341 monthly minimum wages (equivalent to US$ 72,247 at purchasing power parity of 2007) and with a maximum term of 30 years.

[26] Other public institutions that participate in the mortgage credit market are Fonhapo (Fideicomiso Fondo de Habitaciones Populares), and Orevis (Organismos Estatales de Vivienda). Their function is oriented to provide subsidized housing support to low-income households in the informal sector of the economy.

3.3.5. The segment of private financial intermediaries comprises commercial banks and non-bank institutions specialized in mortgage credit: Sofoles and Sofomes[30]. On the one hand, commercial banks obtain most of their funding through short-term deposits, and most recently through the securitization of their mortgage credit portfolio. Commercial banks usually finance medium to high-income households. On the other hand, non-bank institutions specialized in mortgage credit obtain funding from several sources, such as commercial banks, Sociedad Hipotecaria Federal (SHF) –the Federal Mortgage Company– and the securitization of their mortgage credit portfolio .These institutions are oriented to financing low- to medium-income households, mainly from the formal sector of the economy.

3.3.6. Between 1995 and 2007, the structure of the Mexican mortgage market changed considerably as a result of the financial crisis and reforms to the financial regulatory framework. After the economic crisis of 1995, commercial banks' market share declined significantly. Their position in the mortgage credit market was partially taken over by other financial intermediaries, such as non-bank institutions and public sector institutions, which nowadays play an important role in housing finance. For instance, Infonavit's market share of total housing financing increased considerably from 25.9 to 58.8 percent during this period[32]. In fact, Mexico has one of the largest market shares of government-sponsored institutions in Latin America. Commercial banks' market share decreased sharply from 72.6 percent in 1995 to 31.4 in 2007, during the same period. However, in recent years, commercial banks have been more involved in the mortgage credit market and have started to recover their importance. Credit bureaus have supported commercial banks' expansion in this market. They have provided updated credit records that help to assess credit applicants' default and prepayment risks.

3.3.7. Under this market structure, government strategies play an important role in housing credit market developments. Government strategies oversee, among other things, determining mortgage loan products characteristics and mortgage loan origination conditions. However, the behavior of the formal sector of the economy, in particular the labor market, affects public sector institutions' mortgage credit origination through

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[27] From 1992, as a result of the introduction of a new pension system based on well-defined contributions, workers' housing contributions have been deposited in individual accounts.

[28] The eligibility criteria, based on a parametric model, consider age, salary, amount accumulated in the individual housing account, period of time contributing without interruption to the Infonavit, period of time working for the same employer, and amount of voluntary savings.

[29] Infonavit's mortgage credit is granted at a fixed-interest rate and a monthly payment tied to the behavior of the minimum wage. The interest rate charged is between 4 and 10 percent.

[30] Sofoles (Sociedades Financieras de Objeto Limitado) are special-purpose non-bank institutions, and Sofomes (Sociedades Financieras de Objeto Multiple) are multiple-purpose non-bank institutions. These entities grant consumer credit, mortgage loans, and business credit. However, they are not depository institutions and are subject to different supervision and regulation than banks. The main difference between Sofoles and Sofomes are that the latter are not specialized in only one credit market as Sofoles.

[31] SHF is a development bank. It provides mortgage credit as a second-floor bank. Appendix (1)

[32] Fovissste is not included in the analysis due to the lack of reliable mortgage credit statistics.

different channels. First, available funding to allocate credit, which depends on workers' contributions, is closely related to employment and payroll levels. Second, applicants' credit score depends, among other things, on the number of consecutive periods contributing to the housing fund. Third, current and expected economic conditions affect households' mortgage credit demand.

3.3.8. The mortgage credit market is clearly segmented into public sector institutions and private financial intermediaries, depending on the population segment they serve. Based on data on the second semester of 2007, Infonavit provides most of its financing, 55 percent of total mortgage

loans, to households with an income level below four times the minimum wage (a monthly income equivalent to US$ 847.50 at purchasing power parity (ppp) of 2007)[33]. On the other hand, private commercial banks and other private credit institutions (Sofoles and Sofomes) allocate their total mortgage credit portfolio among households with income levels above four times the minimum wage. Regarding the use of mortgage loans, the mortgage credit market in Mexico is primarily oriented to finance the acquisition of new housing. For example, figures for the first semester of 2007 indicate that 85.7 percent of total mortgage loans granted by Infonavit were used to purchase brand-new housing units.

GRAPHIC 2: **Residential real estate lending by financial institution Percentage structure**

December 1995	December 2001	December 2007

Commercial Banks   Infonavit   Development Banks   Non-Bank Institutions   Saps

Total mortage loans:
657.25 Billion Pesos
(real terms, Dec-2007)

Total mortage loans:
612.11 Billion Pesos
(real terms, Dec-2007)

Total mortage loans:
907.06 Billion Pesos
(real terms, Dec-2007)

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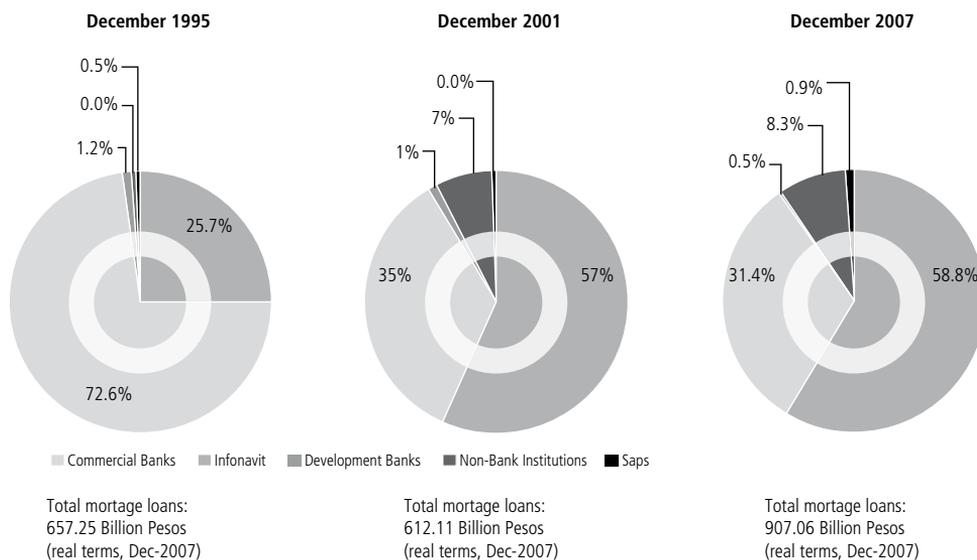
[33] In 2007, the monthly minimum wage was MXN 1,538, equivalent to US$ 211.90 at purchasing power parity of 2007. Source: Comisión Nacional de Salarios Mínimos and World Bank.

3.4 Present Housing Market Situation

3.4.1. During Vicente Fox's administration (2000-2006) credit interests rose sharply. In that period, investment profits rose from 5,946,000 dollars in 2000 to 22,325,000 dollars in 2006. This reflects a 40 percent increase in comparison to values observed in 2005 and constitutes the largest amount ever registered, brought on principally by competitive housing lenders and favorable economic conditions. In relation to the gross internal produce, these gains represented 1.1 percent in 2000 and rose to 2.4 percent in 2006 (INVERTIA: 2007). According to official sources (INEGI: 2005) between 2000 and 2005 2.5 million homes were built, creating a total of 24 million homes in existence by the end of the year, which housed 100 million individuals and averaged 4.2 individuals per home.

3.4.2. In 2006, INFONAVIT dispersed 421,475 housing credits, which represented a 12 percent increase from 2005. Having dispersed approximately half of its total credits, along with an increase in activity among government-based financing institutions such as FOVISSSTE, SHF, and FONHAPO, has resulted in a significant increase in participation, beginning in 2000, from commercial banks and home mortgage agencies. Currently, there are twelve participating banks in the market, which is responsible for 8 percent of the total home financing that occurs in the country.

With the objective of increasing support and momentum for housing development, the government created a series of social programs aimed at increasing credit disbursements to low-income individuals through the programs National Housing Program, AHORRASIF, and Credit for Migrants.

TABLE 5: **Number of mortgage loans by credit institution and income level** (Second semester of 2007)

	Income Level				
Institution	Up to four minimum wages[1]	Per cent	More than four minimum wages	Per cent	Total
Infonavit	134,370	55.0%	109,939	45.0%	244,309
SHF (Development bank)	1,232	8.0%	14,162	92.0%	15,394
Fovissste	26,332	60.0%	17,554	40.0%	43,886
Financial intermediaries			116,268	100.0%	116,268
Other public institutions2	68,932	93.9%	4,451	6.1%	73,383
Total	230,866	46.8%	262,374	53.2%	493,240

[1] In 2007, a monthly income of up to MXN 6,153, equivalent to US$ 847.50 at purchasing power parity of 2007. Source: Comisión Nacional de Salarios Mínimos and World Bank. 2 Includes Fonhapo (Fondo de Habitaciones Populares), Orevis (Organismos Estatales de Vivienda), ISSFAM (Instituto de Seguridad Socialpara las Fuerzas Armadas Mexicanas), Pemex (Petróleos Mexicanos), CFE (Comisión Federal de Electricidad) and Lyf (Luz y Fuerza del Centro).

Source: CONAVI.

President Felipe Calderon Hinojosa's administration (2007-2012) has signaled that housing policies will be one of the priorities of its government, and as such, has established a goal to disperse 7 million housing credits during this period.

3.5 Demographic Factors

3.5.1 The results of the 2005 census published by the National Statistics, Geography, and Information Institute (INEGI)[34] indicate that on the 17th of October of this year, Mexico had a population of 103.3 million. This is 1.6% of the world population. Of these 103.3 million, 53.0 million (51.34 percent) are women and 50.3 million (48.66 percent) are men. In the 5.7 years following the 2000 census and the 2005 Count, the countries population rate increased by 5.8 million people. That results in 1,018,000 new individuals on average per year. This is an average annual growth of 1.02%, which is a sharp decrease from the 1.6% growth occurring during 1995-2000[35].

3.5.2. In the first decade of the last century the population grew at a rate of 1.1% annually and decreased by 0.5% yearly during the decade of the Revolution (1910-1920). It accelerated toward its maximum point in the 70s with an annual growth rate of 3.4 percent. Following the 70s, the growth rate has decreased to an average1.0 percent during the first five years of this century. Two factors are involved in explaining the decrease in the growth rate: A drop in birthrate (the number of children per woman decreased from 4.4 in 2000 to 3.7 in 2005, with a range of 45 to 49 years in age), and immigration to other countries[36].

3.5.3. According to estimates proposed by CONAPO, population growth will begin a steady increase until 2044, when the population will grow to 122,844,000. Beginning in 2008 and moving through 2028, the

GRAPHIC 3: **Population growth in Mexico: 1900-2010 Million of inhabitants**

1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010
13.6	15.2	14.1	16.6	19.7	25.8	34.9	48.2	66.8	81.2	97.5	106.2
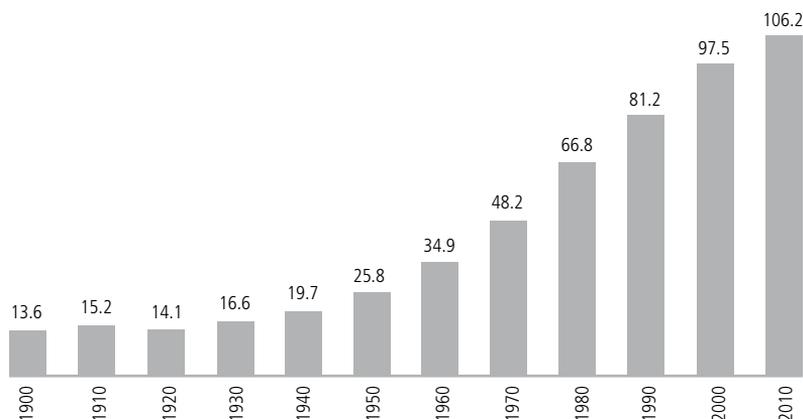
[34] 2nd National Population and Housing Count, INEGI, 2005.
[35] Information produced by Vector Economico: http://vectoreconomico.com.mx/

GRAPHIC 4. **Population growth in Mexico: 1900-2010 and annual growth rate**
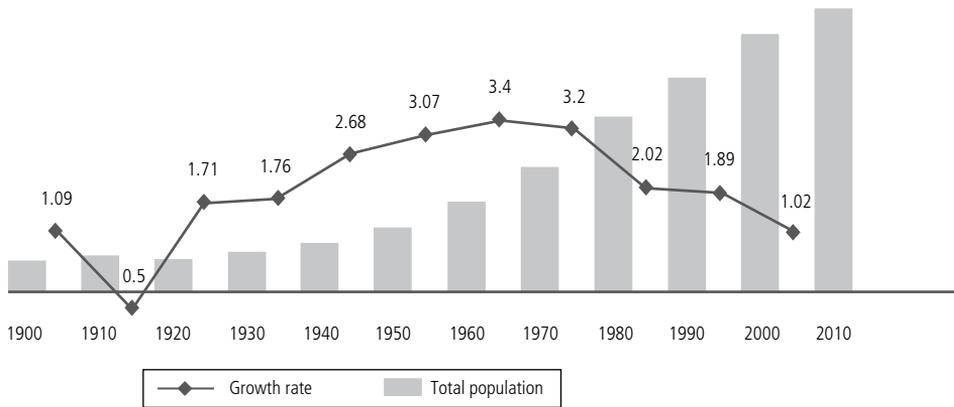
population structure will modify and the majority of the population will fall within 25-50 years of age. This change constitutes what is commonly known as the demographic bond and will have important consequences in the Mexican housing market.

GRAPHIC 5: **Mexico Population Projections 2005-2050**

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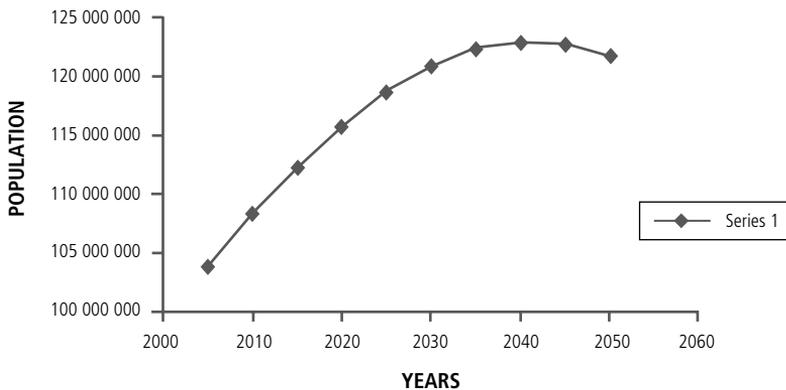
[36] Idem.

3.5.4. The demographic bond will imply an increase in populations that are of family-forming age, and, for the most part, want to purchase a home. It is for this reason that it is anticipated that the housing demand will continue to increase for at least the next 20 years. Furthermore, owing to the fact that there will be a large number of working-age individuals, there will be a large amount of income available for the acquisition of a home, so long as labor market conditions are favorable and there is a good employment rate.

3.5.5. In the last three decades the number of available houses in Mexico has shown a bigger growth rate than that of the population. It hasn't been able to completely cover the demand for housing. In 2000 the National Commission estimated a housing lag for homeless families, housing displacement, and inadequate housing for 4.3 million homes, and a new housing deficit of 1.8 million homes.

3.6 Employment and interest rates

3.6.1. There exist two indicators that present a significant correlation with the housing market and that may serve as an approximate gauge of the future of this sector: employment and interest rates. However, there lies an important different between both variables, considering that financial conditions impact the home mortgage market almost immediately while studies have shown that variations in the labor market can take up to a year to show signs of impact in the housing market.

3.6.2. The vital signs of these two indicators have been favorable in the last years. Data collected by the IMSS show that during 2006 895,000 jobs were generated, which is historically the largest number of new jobs generated in a year. In 2007 there was an increase of 525,386 formal and insured workers. The evolution that certain variables have shown have brought with them lowered expectations for the future, considering that in 2008 there was a decrease in the labor market with a loss of 37,573 formal jobs among both permanent and temporary employees (Official data collected by IMSS: 2008).

3.6.3. Looking at home credit interest rates, or CAT (Total Annual Credit Cost) published by the Bank of Mexico which lists costs related to interest rates, commissions, bonuses, obligatory securities, and costs related to other services, we can observe that a decrease has taken place in the last two years. Rates have dropped from 17.45 percent in December of 2004 to 14.91 percent in April of this year. In the next moths we will observe reductions in the mortgage interest rates because of the recent 5 point increase of reference rates experienced by the Bank of Mexico. This was after a year of maintaining a stable monetary policy rate.[37]

3.7 Houses that have been "Left Behind"

3.7.1. Houses that have been "left behind"[38] are defined as particular homes where two or more families reside, and that

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[37] Annual Information 2008, Bank of Mexico. http://www.banxico.org.mx/

[38] Houses that have been left behind and the possibility of satisfying future housing needs are closely related to levels of income. In Mexico there exist two statistics that permit income and housing estimates:

are constructed with deteriorated materials[39] most of which have roofs or walls that last less than 30 years[40]. The number of homes housing multiple families reaches over 551,000 in the country. Of this total, 92 percent house two families, 0.3 percent house three families, 0.6 percent house four families, and 0.1 percent house five families.

3.7.2. A total of 1.14 million homes have walls or roofs constructed with flimsy material. These homes fall into the overall count of the 1.7 million homes that have lagged in acquiring basic accommodations. 7.2 million homes were constructed using regular materials. 8.9 million homes in Mexico can be described as generally having been left behind. That is, 36.7 million individuals live in homes with some type of basic accommodation lag. Additionally, their exist approximately 7.1 million homes that are not inhabited by the home owners (the home is rented) but are in left-behind home status that are not calculated in the overall left-behind home total[41].

3.7.3. Comparing this result with the estimated 9.5 million homes falling into a general category of homes that have been left behind in previous years (2004) shows that there has been a reduction of 6.3%. This is attributed to the large number of families taking advantage of accessible home development financing plans. From 2004 to 2008, 4.8 million credits were distributed to acquire or improve homes. Of these credits given, 3.1 million were used to buy a new home and 1.5 million were to used to complete home improvement projects[42].

3.7.4. 40.1 percent of homes constructed with regular or flimsy materials were built by independent laborers; 40.3 percent were built by a family member of the household; and 2.0 percent were built by professional contractors. Only 0.6 percent utilized the services of architects and engineers. This serves as an important indicator of the structural fragility of most homes.

3.7.5. In 2009, the number of homes that have been left behind in the country decreased by 7.0 percent. Other decreases in this category include the 9.5 million to 8.9 million families who lack a proper home (SHF: 2009). Currently, 36.7 individuals live in housing conditions deemed as "left behind". The most vulnerable families living in these conditions are those who earn less than 3 monthly minimum wages (earnings of less than a monthly average of 390 dollars), who are not salaried, and who don't have social security.

3.7.6. In 2009, the housing demand will be for 966,000 units, signaling a drop of 17 percent from the previous year's demand. It is important to consider not only the historical backwardness, but also the demand that is generated every year with the formation of new households. In this regard it is noted

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The general population and housing census and the income and spending surveys that are conducted by INEGI. http://www.inegi.gob.mx/

[39] In Walls: material made of garbage, carton, reeds, bamboo, palm. In roofs: material made of garbage, carton, palms, or clay.
[40] En Walls: metal or asbestos, wood o adobe. In walls: metal or asbestos, wood, or clay tile.
[41] Current Housing State in Mexico, CIDOC-SHF, 2009, pg. 38
[42] Idem.

that the number of families who require a mortgage financing is estimated at 550,000 units while the formation of new households is a demand of 300 thousand dwellings that are little more than 60 percent of total annual demand housing.

3.7.6. En 2009, la demanda de vivienda será de 966 mil unidades, representando una disminución de 17 por ciento en relación con el año anterior. Es importante considerar no sólo el rezago histórico, sino también la demanda que se genera cada año con la formación de nuevos hogares. En este sentido es de señalarse que el número de familias que requerirán algún financiamiento hipotecario se estima en 550 mil unidades mientras que la formación de nuevos hogares representa una demanda de 300 mil viviendas que constituyen poco más de 60 por ciento del total de la demanda anual de vivienda.

3.7.7. The general category of houses that have been left behind include not only those that lack respectful living conditions, but also those that are built using already deteriorated materials that most likely last less than 30 years. Currently, half of these homes that

have been left behind are concentrated in the states of Mexico, Nuevo Leon, Federal District, Tamaulipas, Veracruz, Jalisco, Colima, Chiapas, and Guanajuato. The total population for these states reaches approximately 53.6 million people. This is 51.9 percent of the nation's population. The rest of the incidences of homes that have been left behind are dispersed among the remaining 32 states.

3.7.8. The distribution of income in the country serves as a gauge that allows a prediction of what type of housing will be demanded. The Sectorial Housing Program 2001-2006 distinguishes 5 categories pertaining to type of home[43]: a) Basic: an average of 30m² in size and inhabited by individuals earning up to 3 minimum wages; b) Social: Between 31 to 45m² in size and inhabited by families earning between 3 to 5 minimum wages; c) Economic: Between 46 to 55m² in size and affordable to families earning 5 to 10 minimum wages; d) Medium: Between 56 to 100m² in size, over 10 minimum wages; e) Medium High: Between 101 and 200m² and over 10 minimum wages; f) Residential: Over 200m² in size and affordable to families earning over 10 minimum wages

TABLE 6: **Number of General Left Behind Homes by State, 2009**

State	Homes occupied by multiple families	Deteriorated	Houses constructed with regular materials	Total in category of left behind homes
Estado de México	46,632	96,411	613,032	756,074
Nuevo León	38,612	79,829	507,595	626,035
Distrito Federal	32,053	66,269	421,377	519,700
Tamaulipas	31,567	65,264	414,986	511,817
Veracruz	28,565	59,058	375,525	463,149

[43] Sectorial Housing Program, 2001-2006, pg. 46.

Jalisco	27,828	57,534	365,831	451,192
Colima	24,512	50,679	322,246	397,438
Chiapas	22,703	46,939	298,461	368,103
Guanajuato	22,530	46,581	296,186	365,297
Michoacán	22,164	45,823	291,366	359,352
Sonora	21,852	45,178	287,265	354,295
Puebla	21,054	43,529	276,781	341,364
Oaxaca	20,582	42,553	270,576	333,711
Baja California	20,077	41,509	263,937	325,523
Coahuila	16,700	34,528	219,548	270,776
Sinaloa	15,054	31,123	197,899	244,076
Guerrero	13,249	27,391	174,168	214,808
Yucatán	12,608	26,067	165,750	204,425
Querétaro	12,595	26,039	165,572	204,206
Hidalgo	12,580	26,009	165,379	203,967
San Luis Potosí	11,054	22,825	145,323	179,232
Zacatecas	10,794	22,317	141,903	175,015
Quintana Roo	10,540	21,791	138,561	170,892
Aguascalientes	10,039	20,754	131,969	162,762
Morelos	8,777	18,147	115,387	142,311
Durango	8,304	17,168	109,167	134,639
Nayarit	6,202	12,823	81,536	100,562
Chihuahua	5,309	10,976	69,791	86,076
Tabasco	5,302	10,963	69,706	85,971
Tlaxcala	4,777	9,876	62,796	77,449
Campeche	3,859	7,978	50,726	62,562
Baja California Sur	3,327	6,879	43,739	53,945
Total	551,801	1,140,839	7,254,085	8,946,725

Source: Estimates published by the SHF with information obtained by the ENIGH, 2008

3.7.9. In Mexico, families living in 52 percent of the 8.94 million homes that are in left-behind status obtain their income working for an employer, 17.4 percent earn their income working independently, 19 percent earn an income from working both for an employer and independently, while the last 11 percent acquire money through other means. It is also important to note that per household, the number of individuals learning an income is 4.3 percent greater for those who live in left-behind homes.

TABLE 7: **Distribution of left-behind homes according to job status**

Homes in General Left Behind Status	Income earned from working for an employer	Income earned from working independently	Income earned from working independently and for an employer	Other earned income/*	Total
Total	4,661,490	1,557,281	1,727,653	1,000,301	8,946,725
%	52.1%	17.4%	19.3%	11.2%	100%

*/ These are homes that report income not earned through employment. For example: financial awards, pensions, scholarships, retirement funds, etc

Source: Federal Mortgage Society (SHF) with data from ENIGH, 2008.

3.7.10. 3.7 million homes (41.6 percent) of left-behind homes earn a monthly income that is less than three general minimum wages (GMS) . This is less than 390 US dollars per month). 34.6 percent earn 3 to 6 minimum wages (between 390 and 780 US dollars). The remaining 23.8 percent earns over 6 minimum wages, which is acquired through the combined earnings of 4.1 individuals living in the home.

TABLE 8: **Distribution of left-behind homes according to income level**

Homes in general left-behind status	From 0 to 3 GMS	From 3 to 6 GMS	More than 6 GMS	Total
Total	3,724,606	3,096,971	2,125,148	8,946,725
%	41.6%	34.6%	23.8%	100%

Source: Federal Mortgage Society (SHF) with data from ENIGH, 2008.

3.7.11. With respect to the location of left-behind homes, 41.0 percent are located in rural areas, 16.5 percent in semi-urban areas, and 42.5 percent in urban areas. The number of homes in a left-behind situation is similar between rural and urban areas. However, rural left-behind homes have larger instances of being created with flimsy materials, while urban left-behind homes are more likely to house multiple families (ENIGH, 2008).

[44] Valid from the 1st of January, 2009, established by the National Minimum Salary Commission, guided by public resolution in the Official Federal Diary on the 23rd of December, 2008.

TABLE 9: **Distribution of left-behind homes by size and location**

Homes in general left-behind status	Rural	Semi-urban	Urban	Total
Total	3,666,153	1,481,197	3,799,375	8,946,725
%	41%	16.5%	42.5%	100%

Source: Federal Mortgage Society (SHF) with data from ENIGH, 2008.

3.8. Housing Provision in Mexico

3.8.1. Suffering from the global financial crisis of 2009, in Mexico, as in the rest of the world, major structural changes occurred within the finance sector and the general economy. The housing sector was no exception to these changes, as it was drastically impacted by the lack of liquidation and by the lack of available credits, affecting the production of homes.

3.8.2. According to data published by the Mexican Home Mortgage Association (AHM), in August of 2009, 650 housing credits had been registered as disbursed, which is the equivalent of just over 100,000 housing units. Compared to the 1,066 credits registered as disbursed on the same day in 2008, which was equivalent to 139,000 homes, this current number indicates a 39 percent drop in the disbursement of housing credits.

TABLE 10: **Housing Goals 2009: National Housing Program**

Institutions	Closure 2008		Goals 2009			
	Credits	Investment (USD Billion)	Credits	Variation 2008/2007	Investment (billion)	Variation 2009/2008
Infonavit	488,563	8.85	500,000	2.3%	8.77	-0.7%
Fovissste	90,140	2.87	100,000	10.9%	3.52	25.3%
Financial institutions:	233,087	10.16	235,000	5.0%	10.82	64.4%
Sofoles-Sofomes (SHF)	33,392	0.98	35,000	4.8%	1.64	64.8%
Sofoles-Sofomes (own funds)/1	199,695	9.18	200,000	0.2%	9.18	-0.3%
Others /2	17,911	0.82	15,000	-16.3%	0.82	-3.0%
Subtotal	829,701	22.7	850,000	2.0%	23.85	86.1%
(-) Co-funded credits/3	- 133,838	-	- 150,000	12.1%	-	-
(+) Subsidy program/4	-	0.34			0.42	21.1%
Total /6	695,863	23.0	700,000	0.6%	24.35	5.7%

1/ No fund from the SHF
2/ Others: OREVIS, ISSFAM, PEMEX, CFE, LFC.
3/ Co-financed.
4/ The number of credits does not include initial or improvement housing.
5/ Subsidy program to supplement credits.
6/ Investment includes loans to improve housing nearly 11.5 million (pesos) in 2008.
Source: CONAVI, 2009.

3.8.3. From the point of view of credit operations, a decrease has been observed in the development of new home construction. Those that operate in the Mexican Stock Exchange have observed a 3 percent decrease in the development of new home construction. The developers that don't operate within the stock market have experienced a decrease of 9 percent in constructing new homes. Lastly, small and medium-sized developers experienced a 21 percent decrease in home construction in comparison to 2008.

3.8.4. In 2008 the number of homes available for purchase dropped by 9 percent in comparison to 2007, leaving a total of 500,000 newly available houses. At the end of September 2009, the number of homes dropped by 39 percent in comparison to numbers from the previous year.

3.8.5. Because Mexican families have not paid debts, housing development has suffered. This in turn has affected the initiation of new housing constructions. The number of developers that have registered housing construction plans has been falling since 2007. By September of 2009, only 821 developments have registered development construction. This is 47 percent of the total development plans registered in 2007.

3.8.6. According to data published by Infonavit (2009), there was an increase in housing construction between 2004 and 2007, while the period between 2008 and 2009 has had a severe decline that will most likely carry over into 2010. Moreover, this will possibly indicate major structural changes in how housing developers carry their operations.

GRAPHIC 6: **Housing Developers: 2004-2009**
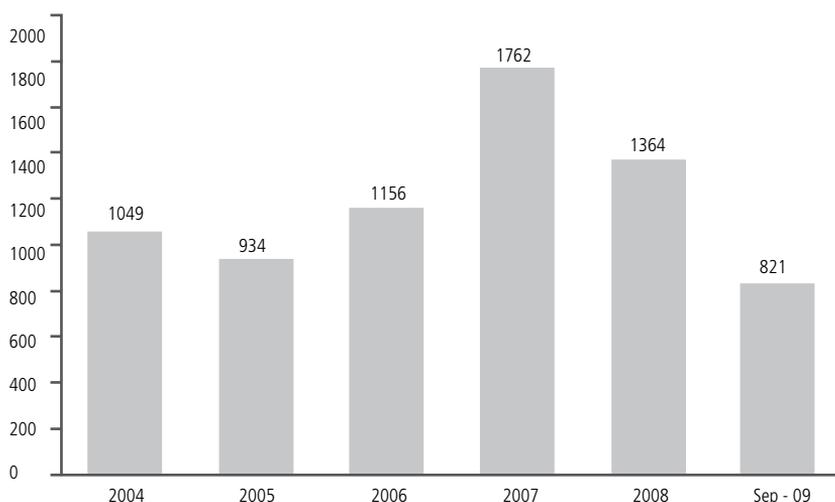
3.8.7. The proportion of developers with more than one thousand registered constructed homes decreased by 28 percent in 2009, in comparison the previous year. It is evident then, that developers, who in previous years took on large scale projects have, due to the necessity of maintaining profits and reducing investments in infrastructure and urbanization, oriented their plans in 2009 toward smaller projects.

3.8.8. In 2008, 10 percent of registered homes were part of larger housing projects consisting of more than a thousand homes. In 2009, this was true for only 2 percent of homes. If the number of registered housing projects is inspected, we find that in 2008 0.5 percent of registered projects consisted of over one thousand homes. In 2009, this number of large-scale projects was reduced by two thirds.

3.8.9. Of the developers that registered projects of 50 or less homes in 2008, 358 of these developers did not registers projects of this size in 2009. That is, 43 percent of the developers that registered projects of 50 or less homes in 2008 did not register projects of this size in 2009. Of the developers that registered projects of 50 or less homes in 2008, 614 developers did not register any projects in 2009. That is, 45% of the developers that registered projects of 50 or less homes in 2008 have not registered any projects in 2009.

3.8.10. Large-sized, in decreasing the size of their projects, took the business that was done by small and medium-sized developers, given that small developers have registered fewer projects in 2009. This can be attributed to redistribution in the construction of homes, since in 2009 there were more small-scale projects. This has lead to reduced access of credit by way of small and medium sized developers and has reduced the profits earned by large developers. Developers, classified by the number of credits actualized with Infonavit during 2008 and 2009 are presented in the following table. The first five developers are companies that operate through BMV. In the month of September they were responsible for 22% of all housing credits given. These developers, because of their high credit volume, have begun to participate in the Institutional credit program.

TABLE 11: **Principle developers, classified by the number of actualized credits with Infonavit**

Number of Developers classified by number of actualized credits	2008	Participation	2009	Participation
1 – 5 (1)	68,200	14%	68,431	22%
6 – 10	26,820	5%	26,883	9%
11 – 15	13,973	3%	14,237	5%
16 – 50	33,560	7%	37,602	12%
Total	29%		47%	
(1) Number of companies that operate through BMV. Top five developers.				

Source: Infonavit Institutional Plan, 2010-2014.

3.8.11. The volume of home sales that were made by the top five developers showed a decline in June of 2009, in comparison to the previous year. However, two of the top public developers saw an increase during their second trimester, surpassing previous year sales by 10 percent. 92 percent of sales made by these companies are accounted for by low-income housing. Both of these companies experienced growth in this line of business, with an increase of 9 percent and 12 percent by the 31st of June of 2009. In contrast, small-sized developers registered a decrease in their sales volume during the second trimester of 2009 when compared to the previous year.

TABLE 12: **Sales figures from the 5 principle private developers in Mexico.**
Housing units compared to the second trimester 2008-2009 (2T08 vs 2T09)

Sales Volume	ARA			GEO			HOMEX			URBI			JAVER		
	2T09	%	Vs 2T08	2T09	%	Vs 2T08	2T09	%	Vs 2T08	2T09	%	Vs 2T08	2T09	%	Vs 2T08
Social Homes	3,226	80	2%	13,165	92	9%	13,723	92	12%	9,280	98	-11%	1,896	52	-8%
Medium Homes	823	20	-33%	1,192	8	26%	1,205	8	1%	176	2	-62%	1,761	48	98%
Total	4,049	100	-3%	14,357	100	10%	14,928	100	11%	9,456	100	-13%	3,657	100	-12%

Source: Infonavit, with data from the Mexican stock exchange and financial states in its second trimester of 2009

3.8.12. The average size of newly purchased homes shows distinctive trends that are in accordance with the level of income of the workers that purchase them. During 2009, the average size of a home that was purchased by individuals earning less than 4 minimum wages (559 US dollars) decreased by 2 percent when compared to sizes from 2006 (41 m²), while the number of bedrooms shows a positive trend from 2007 on.

However, the trend still does not reach an average of two bedrooms. Opposite consumer behavior is seen in individuals who purchase a home and earn more than 4 minimum wages. For this segment of the population, the size of purchased homes reached 66m² in 2009, which is an increase of over 2 m² from the sizes of purchased homes in 2006.

3.9. Housing Demand

3.9.1. Income indicators, the weak state of the labor market, and the decrease in credits given point to a low housing demand that is due to traditional, special and housing-specific reasons. Estimates of the housing demand (SHF: 2009) are guided by: the construction of new homes according to economic, labor, and geographic situations; Left Behind housing, referring specifically to the number of families that are in need of some sort of home mortgage program; Home mobility, which applies to those families who already possess a home and have enough income to acquire another home; Cure of Origination, which refers to those people who solicited home mortgage credit but were denied the first time, or who were registered with the Credit Bureau, but, through savings programs or by

improving in their credit score, were given home mortgage credit.

3.9.2. According to data produced by the SHF, the housing demand in Mexico in 2009 was for 966,063 units, signaling a 17 percent drop with respect to numbers from 2008. There were 194,000 fewer homes demanded in 2009 than in the previous year.

TABLE 13: **Housing Demand in Mexico, 2009**

Component	2009	%
Formation of new homes	301,000	31.2
Left-behind homes	550,647	57.0
Habitation Mobility	78,609	8.1
Priests	35,807	3.7
Total	966,063	100.0

Source: Federal Mortgage Society (SHF) with data from ENIGH, 2008.

CHAPTER 4: **THE HOUSING FINANCE SECTOR IN MEXICO**

4.1. Financial system in Mexico

4.1.1. The financial system in Mexico has grown in the last four years at an average yearly rate of 10 percent. This growth has been mainly driven by the multiple banking [45], the Afores [46] and the investment companies[47]. After the 1995 crisis the multiple banking participation fell below 50 percent of the total of assets, mainly because of the reduced financing given to the private sector.

4.1.2. Due to the recovery of credit given to the private sector, starting in 2001, multiple banking has increased its participation, and by December of 2007 it represented 54 percent of the total assets of the financial system. In the past four years the Afores and the investment companies have grown at an 18 percent yearly rate for the former and at a 19 percent yearly rate for the latter. The regulated Sofoles and Sofomes are crucial participants in giving credit to the private sector, mostly in housing and automotive.

4.1.3. In March of 2008 one of the six largest banks split, for corporate reasons, its credit card portfolio to a regulated Sofom, subsidized by the same bank (the bank participated with 27.3 percent of the credit card market). This corporate movement will be reflected in the credit aggregates of the banking and regulated sectors.Based on operations, seven of the newly authorized banks are small or medium sized, four are banks associated to commercial chains (BACC), and four are small branches. These banks seek to attend specific or regional business niches, and in the case of the BACC accomplish the spread use of banking services to population segments that didn't have access to them.

4.1.4. The total amount of assets of the multiple banking has steadily grown for the past four years. The participation of the six largest banks in the total amount of assets in multiple banking has declined from 87 percent in December of 2003 to 83.5 percent in December of 2007.

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[45] MULTIPLE BANKING institutions are anonymous companies empowered to handle operations that involve resources uptake from the public through the creation of direct liabilities and/or contingents, for its public placement. These operations are called bank and credit services. These institutions are regulated by the Credit Institutions Law (LIC).

[46] AFORE (Retirement Funds Administers) are mexican companies, specialized in managing and investing the workers voluntary retirement savings. They are regulated by the Social Security Law (LSS); they started operating in 1997 with the purpose of offering the workers personal accounts so that their savings generated through years of labor could grow with the generated returns. Its operation is authorized by the Treasury and Public Credit Secretary and is supervised by CONSAR (National Commission for the Retirement Savings System).

[47] The INVESTMENT COMPANIES acquire and sell assets object to investment with resources coming from the investing public. The assets of these companies are representative of their own portfolio. They are governed by the Investment Companies Law, which classifies them in function of the kind of instruments they handle in: a) variable rent companies; b) debt instruments companies; c) capital investment companies; d) limited object investment companies.

4.1.5. 85 percent of the assets of the financial system, not considering the assets of the Development Bank, are in intermediaries which form part of various financial groups and 15 percent in non-grouped financial intermediaries. While most banks, brokerage institutions, investment companies and Afores belong to a financial group, the opposite occurs with insurance and surety companies, Sofoles, regulated Sofomes and auxiliary credit institutions.

4.1.6. Many institutions offer housing credit in Mexico: Infonavit, Fovisste, banks, Sofoles, Sofomes, some credit and saving unions, and self-financing enterprises. Each of these institutions offers different products under different conditions of service, credit cost, requirements, commissions, Total Annual Cost (CAT)[48] and the amount of the monthly payments that must be paid during the loan.

4.2. Financial market authorities in Mexico

4.2.1. The treasury and public credit secretary (SHCP): it's a department of the federal executive power. The SHCP plans and delineates the Mexican Financial System by authorizing or denying the constitution of diverse financial intermediaries.

4.2.2. The Bank of Mexico: it's the central bank of the Mexican state; constitutionally independent, it's main goal is to provide the economy with current currency, and has as main objective maintaining the purchasing power of the peso. It also handles the healthy development of the financial system and the proper functioning of the payment systems.

4.2.3. National Banking and Value Commission (CNBV): the CNBV is a decentralized organ of the SHCP with technical autonomy and executive faculties in the terms of the law of the National Banking and Value Commission. The CNBV supervises and regulates, in the ambit of its faculties, the financial entities, to maintain their stability and proper functioning. It also maintains and develops the healthy growing of the financial system, always looking after the public interest. It also supervises and regulates the activities within the financial system of the physical and moral persons.

4.2.4. National commission for the Protection and Defense of the Users of the Financial Services: also known as the CONDUSEF, it's a decentralized public organism that promotes, advices, protects and defends the rights and interests of the persons who use financial services offered by the financial institutions that operate within the national territory. It also aims to develop an adequate culture in the users of the operations and financial services. The CONDUSEF is governed by the dispositions of the Law of Protection and Defense of the User of Financial Services.

4.2.5. Institute for the Protection of Banking Savings: also known as IPAB, it's

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[48] The Total Annual Cost (CAT) refers to all inherent charges in financing, such as interests, commissions and additional charges, among others. It's an instrument of financial regulation established in the Mexican legislation, which has the purpose to force all financing institutions to inform the costumer about guarantees, weekly payments and interest rates, this to take better buying decisions. This measure summarizes all the expenses a housing credit generates.

a decentralized organism of the Federal Public Administration with legal personality and own heritage, created in accordance to the Law for the Protection of Banking Savings. According to this law, published in the Official Diary on January 19 of 1999, the IPAB must conclude the healing processes of banking institutions, as well as administering and selling the goods that are left at its charge to obtain the best possible value of recuperation (credit portfolios recuperated for its restructuring).

4.2.6. National Commission of Insurance and Finance: also known as CNSF, it's a decentralized organ of the SHCP which function is to supervise that the operations of the insurance and finance sectors stick to the regulatory framework, preserving the solvency and financial stability of the institutions to guarantee the interests of the public users. The CNSF is governed by the dispositions stated in the Organic Law of the Federal Public Administration, the General Law of Mutual Insurance Institutions and Companies, the Federal Law of Financial Institutions and its own internal regulations.

4.2.7. National Comission of the Safe System for Retirement Savings: also known as CONSAR, it's a decentralized administrative organ of the SHCP, whose object is to protect the savings for the workers retirements. The CONSAR is governed by the dispositions stated in the Law of the Systems for Retirement Savings.

4.3. Operational Entities

4.3.1. Issuers: they are public or private entities which demand funds to develop or expand projects, in other words, enterprises that seek credit. To achieve the former the offer assets (stocks, debt titles) to the interested investor through stock-exchange intermediaries; all the instruments that are offered must comply with the necessary requirements that guarantee their legality. This form of financing is agile and transparent, so many companies prefer them over other alternatives, such as direct credits.

4.3.2. Investors: they're moral or physical persons who through an intermediary offer their resources in exchange for assets of which they expect to receive attractive performances. An investor can be Mexican or foreign and they can generally be grouped into three large sectors: physical persons investors, non-financial moral persons investors, financial moral persons investors (best known as Institutional Investors).

4.3.3. Stock-exchange intermediaries: they're entities that make operations relating to realty, commission, or relative to putting in contact the supply and demand of assets in the market; they also do operations of assets issued or guaranteed by a third party to be offered publicly. They also handle the management and administration of portfolios owned by a third party (customers). The most common authorized intermediaries by the CNBV are: brokerage companies, banking institutions, operators and distributors of investment companies, Afores, etc.

4.3.4. Auxiliary enterprises: they are all the support companies or organisms which provide means and mechanisms for the correct operation made between intermediaries, issuers and the investor public. Some of them are: rating agencies, institutes for the deposit of

assets, price providers, brokers, central counterparts, investment companies appraisers, etc.

4.3.5. Financial organisms for support: the support organisms are conformed by the stock market, including the derivatives; its functions include the establishment of locales, installations, mechanisms, subsidiaries and other entities or systems which facilitate the operation of assets. They also gather and give information related to registered assets, emissions and operations that are done through it. Two established stock markets exist in Mexico: the Mexican Stock Market (BMV) and the Derivate Mexican Market Stock Market (MEXDER). Both organisms are self-regulated.

4.3.6. Commercial banks or credit institutions, or multiple banking institutions: companies that through several products receive the public's money (savers and investors), and place it, which means they loan it to the persons or enterprises who need it and comply with the credit requirements.

4.3.7. Development bank or second floor bank, or promotion bank: they're banks run by the federal government whose purpose is to develop certain sectors (agricultural, textile, auto-industry), to attend and solve regional or municipal financing problems, to promote certain activities (exportation, provider development, new businesses creation). They are called second floor banks because their support programs or financing lines are made through the commercial banks, which are left in first place before the companies or users which require credit.

4.3.8. Financial companies of limited object, or Sofoles: they are limited because they only loan for a sector (for example: construction, auto-making) or activity (for example: consumption through credit cards), but instead of receiving deposits or capturing resources they have to obtain money by the placement of assets or soliciting credits. They were established in 1992; however it wasn't until 2000, the year in which the cycle of housing expansion was key in the financing pushed forward by the Mortgage Sofoles[49], when they made a positive impact in the sector.

4.3.9. National savings and financial services bank (BANSEFI): previously known as National Savings Patronage (PAHNAL)[50], it's an institution (development bank) whose purpose is to promote savings, financing and investing, as well as offering financial services and instruments between the members of the sector. Said sector is formed by the Popular Credit and Savings Entities, which are: Cooperative Companies of Loaning

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[49] Since 2002, the relative importance of the SOFOLES in housing financing has decreased. That year it represented 16.4 percent, lowering to 8.3 percent in 2005 and, finally, reaching 5.7 percent by the end of 2008. The smaller market penetration obeys to certain financial factors, such as: a) the securitization of a substantial part of the credit portfolio; b) the purchases some banks made of the credit portfolios of some Mortgage Sofoles in 2005 and 2006; c) The acquisition of several Sofoles by banking institutions; d) The renaming of certain Mortgage Sofoles to Sofomes, which affects the available information, because the latter aren't obliged to reveal their statistics; e) The renaming that took place in 2007 done by the National Banking and Values Commission (CNBV) of the developers credit to business credit and no longer as housing promoters; f) The participation of the commercial banks in this type of financing.

[50] It was created by presidential decree on December 31, 1949 in the Official Journal of the Federation. Became operational from December 1950 with the aim of promoting the habit of saving among the Mexican population. Ceased operations on December 31, 2001 to become, as from 1 January 2002, the National Savings and Financial Services, National Credit Development Banking Institution (BANSEFI).

and Savings, and Popular Financing Companies.

Savings System and Popular Credit

4.3.10. Mexico's Saving System is integrated by Savings and Popular Credit entities, formed by Cooperative Companies of Savings and Loans and the Popular Financial Companies. The former are constituted companies that operate according to the General Law of Cooperative Companies, while the latter are anonymous companies constituted to operate under the General Law of Mercantile Companies. Both are also governed by the Savings and Popular Credit Law and the applicable legislations. They are considered as financial intermediaries, and because of that they must have the authorization of the SHCP and the CNBV. Said entities get resources from the general public (costumers) or from their associates, later they'll place them through financing schemes, on micro, small or medium sized enterprises (costumers), as well as on some associate if required.

4.3.11. The federations are conformed by a minimum of 10 Savings and Popular Credit Entities and must have the authorization of the CNBV. Its function is to stand by the legal frame and exercise the faculties of supervision and vigilance in an auxiliary manner, to the faculties the CNBV holds, which means that each Federation polices and supervises in an auxiliary manner each Entity that's affiliated to it, and also those that aren't affiliated that the Commission assigned. This function is performed through a Supervision Committee, which is authorized by the CNBV.

4.3.12. A Confederation is constituted by the voluntary grouping of at least five Federations, and must be authorized by the CNBV. The Confederations perform the faculties of administration of the Protection Funds, they also serve as collaboration organs with the federal government for the design and execution of programs which facilitate savings and popular credits activities. The Protection Funds primary goal is to cover the cash deposits of each saver, considering the amount of the principal plus its accessories.

4.3.13. The Savings and Loan Companies (SAPS) are entities that promote popular savings which have allowed that many low-income persons living in zones where there aren't any banking services, can have access to credit for developing businesses in the commercial, industrial or service fields, as well as credits to repair, enlarge or build their houses. For all of this they have a great importance for the economic development of large, medium and small communities all across the national territory.

4.3.14. Currently, the federal government has authorized many institutions of Savings and Loaning, such as Banco Azteca, which to this day has more than four million small saving accounts and has recently opened branches in countries like Panama and Peru. Other examples are: Banco Wal-Mart de Mexico (with 855 branches), Bancoppel (478 branches) Banco Facil (97 branches inside Chedraui supermarkets), Banco Famsa, Autofin (which will operate with Barclays Bank) and Prudential Bank (17 branches).

Insurance and Bond System

4.3.15. The Mexican insurance and bond system is regulated by the National Commission of Insurance and Bonds (CNSF), which is a decentralized organ of the SHCP, it exercises the faculties and attributions conferred by the General Law of Institutions and Mutual Companies of Insurance and the Federal Law of Bonds Institutions, among other legal instruments and applicable rules. The National Commission of Insurance and Bonds (CNSF), was established on January 3, 1990. The CNSF is responsible, inter alia, the following functions: 1) The supervision of solvency of insurance and bonding institutions; 2) The approval of insurance intermediaries and reinsurance; and, 3) Supporting the development of insurance and surety sectors.

4.3.16. Insurance institutions: they are companies that in exchange of a fee, known as premium, take responsibility to pay the beneficiary a limited amount of money, or repair the damage the insured person or object suffers after the happening of a predicted sinister, as long as it complies with the requisites indicated in a document called policy. There are various types of policies: to cover problems such as accidents or personal illness, damage or theft, or even to cover for retirement.

4.3.17. Bonds Institutions: they are companies which purpose is to provide bonds on onerous title and practice re-financing operations. These institutions are also regulated by the SHCP, which has the power to interpret, apply and resolve, for administrative purposes, all that is related to the Federal Law of Bonds Institutions.

Capital Market

4.3.18. With the approval of the new Stock Market Law (LMV) by the Congress of the Union and published by the Mexican executive power this past June of 2009, the Mexican stock market suffered a drastic transformation by giving it a bigger economic dynamism with the creation of the following financial entities:

- Anonymous Companies for Investment Promotion (SAPI): these anonymous companies can be constituted as companies for investment promotion observing the special dispositions which are contained on General Law of Mercantile Companies.

- Anonymous Companies for Stock-Exchange Investment Promotion (SAPIB): These kinds of companies can apply for inscription in the Share Register representative of its social capital or credit titles which represent said shares, as long as it is formalized through agreements of the share-holders assemblies, before the inscription of the assets.

- Stock-Exchange Anonymous Companies (SAB): they're anonymous companies which representative shares of the social capital of credit titles represented by said shares are registered, will form its denomination freely according to what's stated in the General Law of Mercantile Companies, having to add to its social denomination the "Stock-Exchange" expression.

4.3.19. The new Mexican juridical frame makes it possible for the mercantile companies to participate in the

Financial Market, for that they must be transformed into promoting or stock-exchange anonymous companies, these to provide greater transparency in the trading operations so that the investors have more security in their activities. For the medium sized enterprise to participate in its financing via the capital market, all that must be done is to adopt any type of the previously described companies to gain access to said financing at a low cost.

4.4. Organisms for Housing Financing and Subsidy

4.4.1. Within the finance market for housing in Mexico, the presence of national housing organisms stands out. Together they are referred to as ONAVIS[51] and they offer mortgages in housing programs to the entitled population, such as the ones affiliated to INFONAVIT or FOVISSSTE; credits and guarantees destined to the general population in the case of the Federal Mortgage Society (SHF); and the subsidies of the National Fund of Popular Housing (FONHAPO) and the National Housing Commission (CONAVI).

4.4.2. Federal Mortgage Society (SHF): initially called the Operation and Financing Fund for Housing (FOVI), constituted in 1963, transformed in Development Bank under the name of Federal Mortgage Society in 2001. Its purpose is to boost the development of primary and secondary housing credit markets, doing so by giving credit and guarantees destined to construction, acquisition and improvement of housing, preferably of social interest,

as well as the increment of the productive capacity and technological development, related to housing. It absorbs 5.3 percent of the housing financing market with an investment of $365 million dollars, which represent 3.1 percent of the total yearly investment in the sector.

Its primary function is to operate credit programs, saving and guarantees to achieve the right conditions for Mexican families, have access to mortgage credit and to enjoy adequate housing. This means Financial Intermediaries. They are financial intermediaries who are responsible for granting and administering loans, from its opening until its conclusion.

It operates through the following financial intermediaries: commercial banks, insurance institutions, Limited Purpose Financial Companies (SOFOLES) Multiple Purpose Financial Companies (SOFOMES) and Savings and Loan Associations, acting alone or in as trustee, as well as economic development trusts that have the Federal Government's guarantee on the operation concerned.

4.4.3. National Housing Commission (CONAVI): it's a decentralized organism of the Federal Public Administration, non sectorized, through it the Federal Executive exercises the coordination attributions of the housing sector which were granted in the Housing Law (2006) and others. It was preceded by the National Commission for Housing Promotion (CONAFOVI), which was created in 2001. This organism has the faculties to formulate, execute,

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[51] National Housing Organisms (ONAVIS)

conduct, coordinate, evaluate and track the National Housing Politics and the national program on the matter. It's a legislative instance of the Schemes of Financing and Federal Subsidy Program called "This is your House" since 2007, in conjunction with the SHF. It now registers 17 percent of the total housing units developed with an investment of $312 million dollars, or 2.7 percent of the total investment in the area.

4.4.4. Institute of the National Fund for Workers Housing (INFONAVIT): it's instituted in 1972 as a tripartite fund (employers, employees and government) for housing financing to workers employed in the private sector, from bimonthly contributions from the employers, with those funds a sub-account for housing is constituted under the name of the employee. Within its institutional objectives, it administers the contributions of all parts with the double obligation of giving yields to the sub-account for housing and operating a financing system for workers with the purpose of: acquiring, building, repairing, enlarge or improve their houses, as well as covering the payment of liabilities. It is the organism that does more housing actions in the country since it contributes with 37 percent of the total financed units, with an amount that reaches almost to 5 billion dollars each year, which represents 42.7 percent of the total investment in housing.

4.4.5. ISSSTE's Housing Fund (FOVISSSTE): it's created in 1972 as a decentralized organ of the Security and Social Services Institute for State Workers (ISSSTE). Each public worker has a sub-account for housing that is administered by this organism. It has the attribution to manage the contri-

butions made by the dependencies and public entities affiliated to ISSSTE, destined to credits for the acquisition, reparation, enlargement or improvement of the State workers houses. It gives credits to the State workers. It coordinates and finances housing programs with its own resources and with the participation of public and private entities. This organism barely contributes with 7.7 percent of the financed housing units, however, these shares are backed up with two and a half billion dollars which amount to 20 percent of the yearly investment in the sector.

4.4.6. Popular Habitations National Fund (FONHAPO): it's a dependent organism of the Federal Public Administration, it counts with a governing organ, technical and fund distribution committees, it tends to the non-employed population with an individual income of up to 2.5 times the monthly minimum wage ($350 dollars) or a family income of up to 4 times the monthly minimum wage ($560 dollars) through credit or federal subsidy.

4.5. Alternative Financing Options for Housing in Mexico

4.5.1. Financing with capital funds: capital funds seek a greater profitability at a greater risk for which a risk capital and corporate government culture is promoted, so it can contribute to the financing destined to the acquisition of fit land for urbanization. It has been observed that a trigger for the growth of the sector is financing mixed with capital. The funds are being more careful in the evaluation of projects and

seek to diminish risks. This indicates that a smaller number of projects will be able to be funded using risk capital.

4.5.2. The Mexican Association of Real Estate and Infrastructure Funds (AMFII): it groups the most important investment funds of private capital that invest on real estate or infrastructure projects. It estimates that in Mexico there are 25 real estate funds operating. According to AMFII numbers, 6,000 million dollars have been invested in Mexico from his creation in 2007, and plans to destine 21 billion dollars for real estate projects (among them housing projects) in the upcoming five years.

For his nature, the funds act with total transparency in the process of investment and bring with it technologies, experiences and the best practices in the areas of investment, property development and development of infrastructure. All of them proved in other parts of the world. The partners of AMFII operate across vehicles of investment, with an average of life between five and seven years. In this period, there is invested the capital, which in the main is of foreign origin.

4.5.3 Financing with bridging credits: in the secondary urbanization and housing edification stage, it's convenient to maintain the bank or market debt in the same levels, where the bridging credits and securitizations drive the flow to lower risks for having more discernible flow paths. The decreasing behavior of the housing registry for INFONAVIT could be a partial reflection of the lag in giving bridging credits, since only 650 credits of this type were placed until august of 2009, a 39 percent drop from last year, and it corresponds to 35 percent drop of the

total amount of bridging credits. This environment of lack of liquidity could represent a challenge to the housing production in the upcoming years. The nonperforming loans of the bridging credits increased from 4.36 percent in august of 2008 to 16 percent in september of 2009.

4.5.4. The sofoles have securitized a total amount of 2 billion and 989 million dollars in the markets, which represents 30.2 percent of the market participation considering all emissions since 2003. During 2009, no market emissions have been issued by the sofoles. The institutions that have done emissions are INFONAVIT, FOVISSSTE, National Mortgage (HiTo) and BBVA Bancomer, for a total amount of 1 billion and 977 million dollars, equivalent to the fifth of all emissions in 2003. From the point of view of the total outstanding balance of the emission stock indexes, the three sofoles with the bigger index of outstanding balance in Mexico, at the end of august of 2009, showed a percentage of 21.8, 17.8 and 10.9. The deterioration of the portfolio that supports these emissions explains why these haven't been able to access the market financing.

4.5.5. Financing with individual credits: another of market alternatives for housing financing is the individual mortgage that tends to all levels and sectors of the population. Financing in this stage represents the lowest risk. It has been observed that greater financing to home-buyers requires greater bridging financing for the developers. The lack of housing offer which has been observed in 2009 is mainly attributed to the lack of bridging credits.

4.5.6. In 2009, the INFONAVIT replaced the impact for the crisis, in the decrease of the structural income with CEDEVIS's[52] emission to ratify the goal of 500 thousand credits. Although the exercised credits have shown constant growth since 2001, reaching more than 494 thousand credits (98.8 percent of the goal) in 2008, a 10 percent deceleration in the formalization of credits was observed during 2009, since at the end of September 314 thousand credits were given, compared to 349 thousand that were given at the end of the same period last year. His behavior can be explained mainly by the reduction of the housing supply. Facing this problem, the INFONAVIT adopted different strategies to increase the housing demand. For example, it launched the Special Support Program to Housing Buyers of Infonavit and promoted the creation of new credit products such as Cofinavit AG[53] and Infonavit Total AG, which provide, among other benefits, the purchase of houses with greater value, co-financed by the commercial banks and the sofoles.

4.5.7. The acceptance of alternative sources of housing financing was more beneficial, at first, to persons that weren't affiliated to Infonavit or Fovissste. Later, the reform that in 2005 created the National Mortgage allowed the combination of Infonavit support along with other commercial and development banks.

4.6. Financing programs for housing in Mexico

4.6.1. Together, the national housing organisms (Infonavit, Fovissste and FONHAPO), as well as SHF and CONAVI, finance 82 percent of the total credits and subsidies, while the remaining 18 percent it's exercised through the financial entities, the state housing organisms and other entities that finance programs or give housing credits as benefits to their workers.

4.6.2. The federal housing subsidies programs[54] are mainly concentrated in CONAVI and FONHAPO, organisms which in 2009 determined a joint goal of 292 thousand subsidies from the instrumentation of the This is your house program, which consists in giving a subsidy to people with a monthly income of up to 4 minimum wages ($552 dollars), together with a credit for home acquisition or for building or improving their actual homes, with a budget of little more than 400 million dollars.

4.6.3. In July of 2004 the SHF introduces to the housing market the Non-fulfillment guarantee (GPI), a mechanism that's

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[52] The Housing Certificates (CEDEVIS) are stock indexes certificates backed up by mortgages originated in the National Fund for Workers Housing Institute (Infonavit). The cedevis constitute a source of alternative financing to Infonavit, because the resources that come from the placement are re-invested in the new credits that will be given to affiliated workers. Currently the Infonavit has obtained 3 thousand 340 million dollars in resources since the program started in 2004.

[53] Cofinavit AG: crédito de cofinanciamiento de INFONAVIT para trabajadores que ganan más de $18,500 pesos.

[54] Mexico's Federal Government's allocations which are given for the development of priority activities of general interest through dependencies and entities of different sectors of society, with the purpose of: supporting their operations; maintaining stable prices; supporting consumption, distribution and marketing of goods; motivate investment; cover financial impacts; promote technological innovation; promotion of agricultural, service or industrial activities. These subsidies are granted through direct allocation of resources through fiscal stimulus; expected public resources in the Federation's Spending Budget destined to the social and private sectors, as well as to states and cities. In the case of National Accounts subsidies, its allocation doesn't imply any consideration by the part of the receptor and the registry of its use goes to a lost fund, without active counterpart, merchandise or service.

a precursor of Credit Insurance for Housing in Mexico (SCV)[55]. The creation of this SCV branch has allowed the development, toughening and consolidation of the market, as well as the incursion of private participants who offer housing units directly to the finance intermediaries. This situation allowed the constitution of the company Credit Insurance for Housing SHF S.A. de C.V., which started operations in March of 2009.

4.6.4. Co-financing allows the right-holders the chance to obtain a better home. The Federal Mortgage Society has two co-financing programs: COFINAVIT and COFOVISSSTE[56]. Both help to potentiate the resources of the accredited workers and allow them to acquire a house of greater value, mainly among the workers who earn between $830 and $1,380 dollars per month. These programs function in the following way: the balance of the subaccount is added to the initial payment. The accredited worker receives two credits: one by INFONAVIT or FOVISSSTE (up to the balance of the subaccount) and another by SHF through a financial intermediary.

4.6.5. Until 2006, the COFINAVIT constituted more than half of the credits administered by the SHF. However, starting from 2007, its participation declined until reaching 34 percent by June of 2009. This decline was related to the stimulus generated by the commercial banks programs when in 2007 the limit value of the property

was extended, and by February of 2008, completely eliminated. This led to a premature exhaustion of funds for the program in 2008, so the following year the program went through some changes. On the other hand, it wasn't until December of 2006 when SHF started to operate the co-financing program with FOVISSSTE. This scheme has the particularity that the credit given to the financial intermediary with SHF resources is limited to 1,877 SMMGVDF. By June of 2009, the COFOVISSSTE represents 8.9 percent of the total credits given by SHF.

4.6.6. FOVISSSTE has three traditional financing programs for housing: the Traditional Credit program, which is used to acquire new or previously owned houses or grounds with services. It is given to the right-holders that win the yearly housing credits sweepstakes. The maximum credit amount is 60 thousand dollars plus the balance of the housing subaccount of the winner; the program Pensiona2, which is designed to solicit redemption of liabilities credit for the workers who have a mortgage debt and want to enlarge, repair or improve their houses. The maximum credit amount is 32 thousand dollars for individuals or 54 thousand dollars for joint couples; the FOVISSSTE-INFONAVIT Conjugal Credit it's a program where both organisms work together to give married right-holders financing for housing acquisition. If one of the spouses is affiliated to FOVISSSTE and the other to

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[55] It's a mechanism to transfer to an insurance company the credit risk in mortgages that carry low initial payments. It promotes the secondary mortgage credit market and brings certain benefits to the country's financial market.

[56] This credit is for people that receive a salary through payroll and are affiliated to the Mexican Institute of Social Security (IMSS) and the Security and Social Services for State Workers Institute (ISSSTE) which can be used for the acquisition of a property for housing use, either old or new. The savings in the housing subaccount can be used and it's complemented by the mortgage acquired through banks or sofoles. In these scheme, the INFONAVIT share is covered by the balance of the subaccount plus future employer contributions and the rest will be paid in monthly installments to the bank or sofoles.

INFONAVIT, the maximum credit amount reaches 90 thousand dollars per marriage.

4.6.7 Recently, FOVISSSTE has introduced two new financing programs: ALIA2 which constitutes a co-financed credit between FOVISSSTE and another financial entity, where the former brings the balance of the worker's housing subaccount of the Retirement Savings Program (SAR) plus the amount of the authorized credit, while the latter gives the amount negotiated with the worker which can go up to 260 thousand dollars; and the RESPALDA2 program, which is an individual credit in which FOVISSSTE gives the equivalent of the balance of the worker's housing subaccount of SAR to complement the credit acquired through another financial institution. In this case, the maximum amount is determined by the financial entity according to the workers possibilities.

4.6.8. The co-financing programs have been a great success among the Infonavit affiliates, since it allows them to acquire a home according to their needs, using the institute's credit conditions and complemented with credit given by financial entities. It also reduces the credit risk for the financial institutions since applicants have to meet the requirements stated by both entities. The balance of the workers housing subaccount is used as the initial payment, and once the Infonavit credit has been paid, the employers contributions are used to amortize the financial entity's credit. Since the beginning of the co-financing programs in 2004 to the closing of 2008, 263, 114 credits have been placed.

4.6.9. A novel financing program in Mexico is called Green Mortgage, which is

an Infonavit credit that counts with additional funds so workers can afford a "green" home so they can enhance their quality of life, with the bonus of saving in their monthly expenses thanks to the green technologies that lower the costs of electricity, gas and water, contributing to the efficient and rational use of these resources and taking care of the environment.

4.6.10. The objective of the green mortgages is to contribute in the care of the environment and to back up the national strategy to combat climate change. Its goal is to encourage the construction of housing with ecological criteria; generate favorable conditions for the right-holders to acquire houses of greater value with innovative technologies that assure the reduction of energy and water while reducing their expenses. This increases the workers chances of paying the credit in full. In 2008, 1778 credits were formalized with a credit investment of more than 36 million dollars, along with a 1.8 million dollar investment in green housing technologies which allowed savings of up to 30 dollars per month, per household.

4.6.11. According to the preliminary closing of the National Program of Mortgage Financing 2008 (CONAVI) during that year 1 million 422 thousand financings were given in all its modalities, with an investment of 23,438 million dollars. Of the total financings, 68.7 percent were for housing and 31.3 percent were for housing improvements. Of the total investment, 95.9 percent was to finance the purchase of homes and 4.1 percent was to support housing improvement.

4.6.12. According to numbers given by National Banking and Value

Commission (CNBV), the balance of nonperforming housing loans stood at 12,376 millions of pesos in May of 2009, which is an increment of 24.9 percent compared to the same data published in December of 2008, caused by the loss of jobs and the deterioration of the household's income. The lack of liquidity in the financial system, mainly the anchor of bridging credit given to housing developers has caused an economic deceleration in the construction industry and the closing of an important number of micro, small and medium sized businesses, reducing remuneration and job numbers.

4.6.13. In 2009, 1 million 348 thousand financings were planned, with an investment amount of 24 thousand 700 million dollars. The financial entities reports up to august of 2009 point that 747 thousand financings were given in all their modalities, which represents a yearly decrease of (-) 12.4 percent. The investment increased to 11 thousand 709 million dollars which meant 587 thousand housing solutions (67 percent for acquisition, 33 percent for improvement or others), which indicates an advance of 43.5 percent of the government's goal established for 2009.

TABLE 14: **Investment in housing credits by agency**

Organism	Housing Acquisition (Units)	Improvements and other credits (Units)	Total (Units)	Investment in dollars (USD $)
INFONAVIT	272,951	3,841	276,792	4,993
SHF	10,814	28,811	39,625	363
FOVISSSTE	57,842		57,842	2,255
BANJERCITO	6,149		6,149	139
CONAVI	86,113	39,955	126,068	312
FONHAPO	17,512	101,205	118,717	139
Financial entities	82,515	3,162	85,677	3,076
OREVIS	5,837	19,788	25,625	148
Other entities	3,720	7,213	10,933	285
Financings	543,453	203,975	747,428	11,709
Reduction	-151,892	-7,551	-159,443	
Equivalency	391,561	196,424	587,985	11,709

Source: CONAVI, National program for housing financing 2009.

INFONAVIT/   *Includes 4,401 financings from the program Apoyo INFONAVIT, 67,668 co-financings and 66,189 subsidies.*
FOVISSSTE/   *Includes 3,049 financings through Alia2, 131 through Respalda2, 988 through pensions and subsidies and 1,151 through Manconmuna2 (Fovissste-Infonavit).*
OTHER ENTITIES / *Includes: ISSFAM (666), PEMEX (973), CFE (1,981), PEFVM (4,017) and LFC (3,296).*
REDUCTION/   *It refers to the financing (credits or subsidies) which are considered in two or more institutions.*

CHAPTER 5: **THE MORTGAGE SYSTEM AND CAPITAL MARKET IN MEXICO**

5.1. Financial system regulation and its institutions

5.1.1. In the last years, several regulation reforms fostered the development of housing finance[57]. First, in 2000, a reform to the foreclosure law (Ley de Recursos Mercantiles) improved the conditions and reduced the waiting time for creditors to take over the collateral (real estate) in case of non-payment or bankruptcy. Second, during the same year, the reform to the credit operations law (Ley General de Títulos y Operaciones de Crédito) permitted certain financial intermediaries to act as a trustee in asset securitizations. Third, in 2001, modifications to the securities market law (Ley del Mercado de Valores) allowed the issuance of stock certificates, known as certificados bursátiles, which are the financial instruments used in assets securitization. Fourth, in 2004, the new law to foster transparency and competition in the credit market (Ley de Transparencia y Fomento a la Competencia del Crédito Garantizado) was approved. This law promoted the fee-free prepayment of loans and encouraged the standardization of mortgage credit contracts between financial institutions.

5.1.2. Recently, in 2007, a reform to this law was passed, empowering the Bank of Mexico to supervise credit commissions and interest rates of financial intermediaries. Moreover, in order to foster both competition and transparency within the financial sector, financial intermediaries have to publish their annual percentage rate of change (Costo Anual Total, CAT) for each credit product they offer[58]. In addition, brand-new financial institutions have emerged in the last years. First, in 1997, the amendment to the law on credit institutions (Ley de Instituciones de Crédito) allowed Sofoles to participate in the mortgage credit market[59]. Ever since, Sofoles have played an important role as a mortgage lender. Since 2001, they have acted as the intermediary in charge of allocating the Federal Mortgage Company (SHF) financing resources among households.

5.1.3. Second, in 2001, SHF was created, with the main objective of fostering the primary and secondary mortgage credit market through its role as guarantor and liquidity provider[60].

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[57] Ley de Concursos Mercantiles (2000), Ley general de Títulos y Operaciones de Crédito (2000), Ley del Mercado de Valores (2001), and Ley de Transparencia y Fomento a la Competencia del Crédito Garantizado(2004 and 2007).

[58] The term CAT (Costo Anual Total) refers to the total costs involved in taking a loan, such as commissions, interest rates, insurances and other fees.

[59] Ley de Instituciones de Crédito, 1997. The Sofoles were created in 1993 as a NAFTA (North American Free Trade Agreement) recommendation to create non-bank institutions in Mexico.

[60] SHF took over Fovi. In 1963, the federal government created Fovi (Fondo de Operación y FinanciamientoBancario a la Vivienda) as a Bank of Mexico trust. Its mission was to provide housing finance to low-income households.

The main functions of the SHF are to provide long-term financing to Sofoles and Sofomes, to act as collateral in non-bank institutions' issuance of mortgage-backed securities, and to supply mortgage credit insurances and financial guaranties. SHF does not give credit directly to households; however, through non-bank institutions, it provides the credit for construction, acquisition and renovation of housing – mainly to the medium- and low-income segment. Third, in 2006, Sofomes were set up as financial intermediaries that can offer mortgage credit, among other things.

FIGURE 2: **Housing financial intermediaries structure**
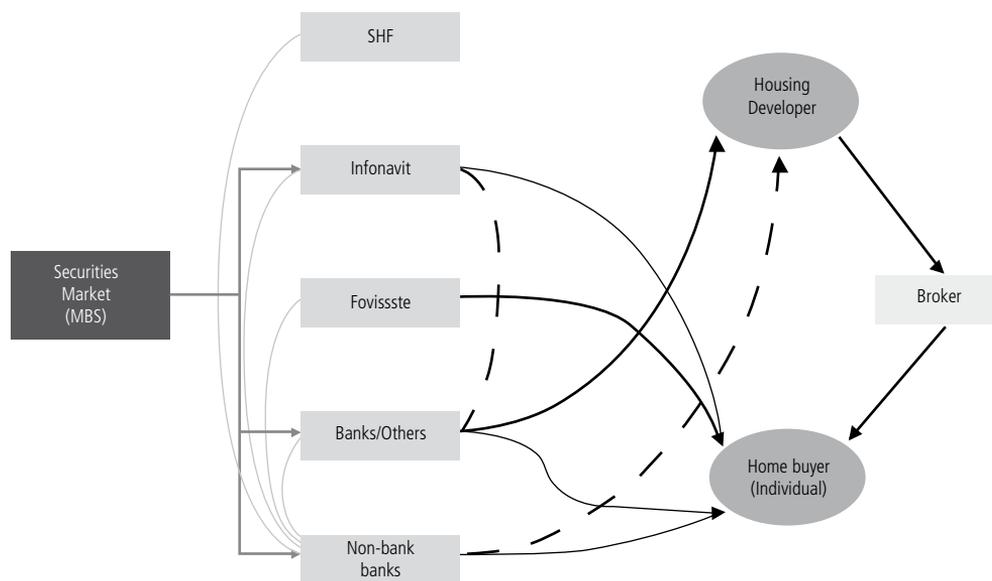
Source: Bank of Mexico.

5.2. Characteristics of the Mortgage System

5.2.1. The mortgage sector in Mexico, possessing particular characteristics in terms of its structure and agents, is distinctive from that of other countries. These special characteristics are specially set up to handles the country's economic adversities. The mortgage system includes institutions such as INFONAVIT and FOVISSSTE. These institutions continue their operations in collaboration with the SHF, a bank set up to aid developmental housing, and with the following private financial intermediaries: banks, Sofoles/ Sofomes (Limited Objective Financing Companies/ Multiple Objective Financing Companies), guarantors, and contractors and developers. These intermediaries also function to stabilize housing offers and credit activity within the country. It can be said that through 2001-2010 that the mortgage market in Mexico has been undergoing an initial developmental phase. Through this initial phase, it has experienced a solid financial system and a minimum dependency on debt

collections to finance its operations, since the acquirers of a mortgage use it to purchase a home and not as a source of liquidity.

5.2.2. The housing banks and financers, INFONAVIT and FOVISSSTE, reported an increase in reported an increase in mortgage lending during 2008, as measured by growth in both volume (number of credits) and amount (value of the portfolio originated). The Sofoles / Sofomo,

while continuing with a significant amount of participation, have reduced their levels of origination. This is a consequence of two primary situations: On one hand their were extremely adverse conditions involving general funding in the securities industry, and on another hand, some Sofoles / Sofomo showed deterioration in the quality of their mortgage portfolio. This forced them to place origination to second place within their business priorities.

TABLE 15: **Origination* of the mortgage portfolio in México** (2007vs2008), (Amounts are in millions of dollars).

Sector	2007		2008		Variation 2007-2008	
	No. of Credits	Value (millions of dollars)	No. of Credits	Value (milions of dollars)	No. of Credits	Valor
Banks	54,119	38,614	88,671	47,960	68.8%	24.2%
Sofoles/ Sofomes	110,995	51,990	99,487	45,364	-10.4%	-12.7%
Infonavit	458,701	102,124	494,073	115,029	7.7%	12.6%
Fovissste	70,528	22,279	90,140	30,783	27.8%	38.2%
Total	694,343	215,006	772,371	239,142	11.2%	11.2%

*/ Does not include adjustments made by Cofinavit, Apoyo Infonavit, Alia2, Respalda2

5.2.3. The above table highlights that 70 percent of the mortgage investment in 2008 were intended for the open market. That is, these were credits that were not associated with financial institutions and housing funds. 30 percent were used precisely for joint programs linking banks and Sofoles / Sofomo with Infonavit and FOVISSSTE. The Sofoles / Sofomo were particularly active in these joint schemes, considering that they allocated 39 percent of its funding programs with such programs. This illustrates the importance of COFINAVIT.

5.2.4. INFONAVIT funds and FOVISSSTE, together managing two thirds of the mortgage portfolio in Mexico, base their funding on the benefits awarded to their clients, as well as on revolving of its existing portfolio. Additionally, Infonavit added securities as an important alternative source of funding, an effort that began in 2004 and has more than 2.9 billion securities in its mortgage portfolio. Meanwhile, the bank has a market share exceeding 15 percent of the total mortgage portfolio. This is mainly due to credits given to construct middle and residential sized housing projects. It funds its portfolio

primarily through recruitment, which has proven to be a stable mechanism with credit institutions that enjoy financial strength, as is the case with the Bank of Mexico.

5.2.5. The Sofoles / Sofomo are the institutions that been most affected by the deterioration of financial markets, a problem that has been especially critical for those who are not part of a financial group. By addressing restrictions against financing through the collection of deposits, since 2003, this group of institutions had made significant progress in diversifying sources of funding, particularly through debt securities in all its forms: securitization of mortgages, portfolio securitization of bridge, and long and short term Unsecured Stock-Exchange Certificates. This has made these institutions particularly relevant in developing the secondary mortgage market in the country.

5.2.6. The unpaid portfolio balance consisting of loans for housing construction grew by 2.8 percent in 2008, a quite notable situation when one considers the adverse financial conditions that prevailed during the second half of this year, a situation which caused a significant contraction in the general liquidity faced by the entire corporate world. Housing developers were also affected by the adverse financial conditions. This positive growth was achieved mainly by the involvement of commercial banks, who increased their financing of housing construction by 13.9 percent. The Sofoles / Sofomo, on their part, being the institutions that fund the highest percentage of housing construction in Mexico, showed a 4.4 percent reduction in funding loans during the second half of 2008. The unpaid balances of bridge portfolios

that banks and Sofoles/Sofomes were reported. This was broken down in this latter group's portfolios, in both within-balance and out of balance stock-exchange balance portfolios.

5.2.7. In 2008 the lack of loan liquidity substantially reduced progress in housing development, resulting in a reduction in housing demand by the market. This was primarily due to the public's wariness of the risk and the impact of the economic crisis. This wariness was particularly due to unemployment concerns. Despite this, institutions affiliated with AHM urge the public that it is still a good time to take a mortgage, support the economy, and restore their confidence.

5.2.8. In general, there was a positive balance for Mexican mortgage system in 2008, which is particularly remarkable when one considers the negative financial and economic environment, or when compared with the results garnered by the U.S. mortgage system during the same period. Among the advantages to consider there is the credit made available by most financial intermediaries and the possibility of taking fixed-rate mortgages in pesos or in minimum wage to protect borrowers from any upturn in inflation. The housing prices have had stable interest rates and mortgage defaults have undergone substantial changes since the beginning of the year. It is also important to note the existence of payment protection insurance or unemployment benefits that can be used to re-contract mortgage repayment for up to 12 months.

5.2.9. In Mexico, the total mortgage portfolio balance that was managed by Infonavit, banks and Sofoles / SOFOM, during 2008 exceeded 84

billion dollars. This was an increase of 12.5 percent compared to 2007. This means that there exist more than 4 million mortgages. In regard to nonperforming loans, there has been an increase, surpassing 4.10 percent at the close of 2007 to 4.84 percent in 2008, an increase that is caused by the detrimental conditions in the country that have been a result of the of the global economic crisis and of the country's unemployment rate. However, it can be observed that the growth in nonperforming loans has been moderate, thought it will necessitate monitoring during 2010, considering that the economic downturn indicates more unemployment and continued difficulty in mortgage repayment. This is true considering the programs that have been set forth to counteract these effects, such as settlement schemes and innovative mechanisms for collection and restructuring.

5.2.10. The increased rate of nonperforming loans is more evident with the Sofoles / SOFOM , that with banks and with Infonavit. This is probably because the first group of financial institutions is the only one that covers the informal economic sector, and therefore deals with individuals who have an unstable income. This then, generates higher delinquency rates than those observed in the formal economy. We must keep

in mind, however that through these intermediaries, a higher percentage of the population has access to mortgages and thus the ability to own a decent home. This has aided urban planning as well as reduced settlements. The average rate of nonperforming loans at the end of 2008 was 2.78 percent for banks and 5.81 percent for all Sofoles / Sofomo. For Infonavit, nonperforming loans increased from 4.74 to 5.10 percent.

5.3. The Bonds Market

5.3.1. The financial instruments and institutions that provide mechanisms to transfer or distribute funds from savings accounts towards mass housing are those that are related to capital markets. Despite the impact this had on market liquidity, in 2008, 134 million in Borhis[61] and Bonhitos[62] were placed on the market. Moreover, 400 million U.S. dollars were also placed on the market in other emissions that were backed by mortgages. And, lastly 1,200 million were place in Cedevis[63]. In total, all this resulted in issuing around 3 billion dollars in the market. Between 2003 and 2009 the cumulative total amounts of mortgage-backed public offerings were valued at 10 billion dollars (this is taking into account issues by INFONAVIT and FOVISSSTE).

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[61] The BORHI is a bond backed by a mortgage that complies with specific characteristics of the Federal Mortgage Society (SHF) that allows access to resources that permit the development of financing schemes to support the demand for mortgage loans. This bond permits a connection to the primary and secondary market for mortgages, and promotes a significant reduction in interest rates paid by borrowers.

[62] The BONHITOS are mortgage-backed instruments that are managed by Total Mortgage (HiTo). This model makes it possible to standardize the securitization of mortgages so they may be funded by equally expendable bonds in terms of the expendable mortgage. This will allow them to maintain them on their books for a shorter time, and will reduce the capital required to comply with the Basilea regulation.

[63] Housing Certificates (CEDEVIS) are stock certificates that are backed by mortgages originating through Infonavit that are issued from a trust. The Cedevis are an alternate source of financing from The Institute, since proceeds from their issuance are reinvested in new loans to be granted to dependents of workers.

5.3.2. As part of its corporate strategic mission, FOVISSSTE structured a mortgage security program that amounted to nearly 2 billion dollars. This was done in order to disburse a greater number of new loans and thus contribute toward achieving the following goals: doubling the amount of credit extended, increasing housing demand coverage to 50 percent of the population's workforce, and to promote a higher quality of financed homes at the end of 2012. For this reason, an initial issuance of 8.2 million Security Certificants (CBF's) called TFOVIS 09U were issued in June of 2009. In this regard, in June of 2009, a first emmission of 8.2 million stock-indexes certificates (CBF's), denominated TFOVIS 09U, was made with the placement of backed up debt in mortgages for around 300 million pesos/dollars at an annual fixed interest rate of 5.3 percent at a 30 year term. These CBF's registered a demand close to 420 million dollars.

5.3.3. Currently, Infonavit has the operational capabilities to conduct a market issue every 2 or 3 months, meaning it could be doing from 4 to 6 issues per year. In May 2009, despite financial crisis and related complications, the Institute conducted its first Cedevis placement for the amount of $ 170 million. In July, it made its second Cedevis placement, for $ 220 million. Both are a sign of investor confidence in economic recovery and a sign of Infonavit vitality. With the amount placed into these emissions, INFONAVIT has obtained resources for 3 thousand 350 million

dollars since the programs initiation in 2004.

5.3.4. Currently, there are plans to develop an alternative capital market in Mexico: the issue of covered bonds[64], which is a mortgage finance tool used by most European and lending institutions that eventually also be used in Mexico, which is a market that emits more than 200 billion dollars annually. The financial authorities of the United States of America (USA) have been promoting the development of this market recently, as a means to achieve a return to housing finance in their country. These plans may take precedence over the current security model in the near future.

5.4. Funding sources

5.4.1. In the last few years, there have been a number of innovations that have affected the way mortgage loans are financed. For instance, securitization emerged as a convenient funding source, along with financial instruments to cover investors, and technological developments to improve its accessibility. The development of the domestic bond market has had a positive impact on the expansion of the credit market. Economic stability has extended agents' planning horizon and the bond market has increased significantly in terms of the maturity and the duration of bonds, both public and private, issued in the domestic market. Before 2000, the yield curve considered only instruments with

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[64] Covered Bonds are bonds issued by financial institutions that are backed, just as financial assets securities, by a pool of mortgages that remain on the balance sheet of the issuer. The flows they generate are used only for payment of bonds in case of non-payment. The payment of interest on the bond is made directly from the issuer's cash flow that is generated by its loans portfolio. Principal payments are made when the bond matures, which refinances its issue.

a maturity of up to one year. Now, the yield curve includes fixed-rate government bonds with a maturity of up to 30 years. Moreover, these long-term government bonds are now used as a benchmark in the issuance of other long-term liabilities. In addition, the development of the bond market has facilitated the introduction of new instruments, for example asset-backed securities.

5.4.2. Changes in the regulatory framework allowed financial institutions to put into practice asset securitization. In particular, securitization of mortgage credit portfolios speeds up financial intermediaries' asset turnover, increases the number of granted mortgage loans, and reduces the interest rates paid by borrowers. In Mexico, Infonavit, Sofoles, Sofomes, commercial banks, and other entities issue mortgage-backed securities (MBS) in pesos and UDIs, through financial trustees[65][66]. Since 2004, Infonavit has issued Cedevis (Certificados de Vivienda del Infonavit) to finance a portion of its mortgage loans portfolio[67]. Meanwhile, non-bank institutions and commercial banks have issued Borhis (Bonos Respaldados por Hipotecas) to fund part of their portfolio of bridge loans for construction and mortgage loans[68].

5.4.3. The issuance of mortgage-backed securities has contributed to the development of the private securities market in Mexico. Today, mortgage-backed securities represent 19.2 percent of this market, compared to 10.1 percent in 2005. Cedevis have gradually increased their market share; from 2 percent in December 2005 to 4.1 percent in December 2007. In 2002, Sofoles securitized Borhis for the very first time. Nowadays, non-bank institutions are still the most active players in MBS issuance (market share of 8.1 percent in December 2005 and 11.5 percent in December 2007).

5.4.4. Banks started to issue Borhis in 2006, and by December 2007 their market share was 3.6 percent. To reduce default risks, Borhis usually come with a cash flow hedging UDIs-minimum-wages swap, which allows debtors to obtain an indexed-to-inflation mortgage loan and pay it back in minimum-wages terms[69]. This financial instrument covers Borhi holders in case of inflation volatility. Besides default risk, Borhi securitization involves other risks, such as prepayment risk, trustee risk, and credit management risk.33 Consequently, the rating of Borhis (senior and subordinated bonds) depends on both institutions' ratings, the one that acquires the credit portfolio (trustee), and the one in charge of collecting the debtor payments (financial intermediary).

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[65] Other entities are real estate construction companies. UDIs are Mexican inflation-linked units.

[66] In Mexico there is a match between the characteristics of the securitized bonds and the mortgages that back them (balance principle).

[67] Cedevis are only backed by Infonavit-originated loans. They do not include other-programs loans like Apoyo Infonavit or Cofinavit.

[68] Bridge loans are short-term loans that are expected to be paid back quickly through subsequent longer-term financing. These loans are provided to housing construction companies. Only Sofoles and Sofomes issue bridge loan Borhis.

[69] The SHF funding to Sofoles and Sofomes will expire in October 2009. However, SHF will keep the role of securitization guarantor and guarantees provider (GPOs).

5.5. Securitization of Mortgage Housing Portfolio

5.5.1. Mortgage portfolio securitization began in 2003 and had a broad development and acceptance during its following years, particularly in 2006 and 2007. During 2008, the volume of security portfolios shrank. This was due to a decrease in demand for mortgage assets by institutional investors. In 2008, thirteen transactions were realized whose total amount represented 82 percent of securitization volume in 2007. It is notable to mention that INFONAVIT managed to place five Cedevis emissions totaling 1,200 million dollars. This was an increase of 47 percent over that of 2007.

5.5.2. In Mexico, less than 6 percent of the mortgage portfolio is financed through securities, while in the United States 60 percent of the mortgage portfolio is. The fact that Securitization in Mexico is a funding mechanism limited in participation decreased the of the Mexican mortgage system's vulnerability to an extremely hostile financial environment. However, the only way to keep Mexico's needed mortgage credit availability is to further develop this funding mechanism. There is a necessity get regain institutional investor's comfort in participating in the mortgage portfolio securities. TO accomplish this, improvements need to be made in key areas such as transparency and monitoring of transactions, timeliness, and strengthening corporate practices, among others.

5.5.3. In 2008, HiTo (Mortgage Total) operations began, based on the Danish mortgage system. From December 2007 (the date of the first securitization) until August 2009, en 2,740 mortgage credits have been secured through HiTo, with a total investment amount of approximately 140 million dollars. In 2008, a new emission modality began with the initiation of the product Macrocredhito, which leverages the Borhis infrastructure and allows mass securitization of loans, which is in contrast to the traditional HiTo securitizing credit model, which secures through a credit by credit approach.

5.5.4. Since July of 2008, the bridge loan securities market has decreased. This is due to a lack of liquidity. Moreover, it has suffered in recent months due to the breakdown loans bonds used in housing construction because there is as yet no guiding model for this market to follow. In addition, investors and rating agencies have expressed the need for quality measures in monitoring the assets of these structures. They have also expressed the need for periodic reporting and investment tracking that occurs within the Borhis and Bonhitos. In 2009, approximately 700 thousand individual loans are secured primarily by INFONAVIT and FOVISSSTE programs, but there is nonetheless a risk of being unable to fulfill the demand for a reduction in housing construction financing loans.

5.5.5. The securities endorsed by bridge loans have been issued principally by Sofoles and Mortage Sofomes by an approximate amount of 2 billion dollars.

CHAPTER 6: **HOUSING TYPES AND PRICES IN MEXICO**

6.1. Types of housing according to value

6.1.1. Mexico does not have a legal or institutional arrangement that formally establishes the parameters of the different types of housing. However, those involved in the housing market use similar classifications to type houses by value and price. Additionally, three denominations are used in the housing market as references for updating the change in value over time: UDIS[70], minimum monthly wage in the Federal District (SMMDF), and dollars.

6.1.2. The institutions that categorize housing by are INFONAVIT, CONAVI, and SHF. These institutions use a UDIS classification that is in accordance to information provided by the Total Annual Cost (CAT), in compliance with the Law on Transparency and Promotion of Competition in the Credit Guarantee. Moreover, it is in accordance with the definitions set in the National Register of Housing (RUV). Meanwhile, the private consultants housing market segmentation is referred to in terms of dollars and minimum wage. In general, housing agents classify housing using the terms: Low, Social, Economic, Medium, Residential and Residential Plus.

6.1.3. Given the importance of having a unique, consistent and updated framework in the housing sector, the Federal Mortgage Society (SHF) created a segment in the housing market complete with the tools and operating parameters that are needed to allow for efficient credit operations for all agents involved in the housing sector. In this regard, the following table shows different categorizations of housing by value as reported by major Mexican home financing institutions.

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[70] UDIS (Unit Investment). The investment unit is a unit of constant real value, which can be denominated as debt securities, except for checks and general commercial contracts or other acts of trade. On the 1st of April, 1995, a decree was published in the Official Gazette laying down the obligations of the UDIS. On the April 4th, 1995, the Bank of Mexico published in the Official Gazette the value (in domestic currency) of the Investment Unit for each day, according to the following: a) no later than the 10th of each month, it publishes the value corresponding to the 11th to 25th days of that month, and b) not later than the 25th day of each month publishes the value at the 26th of that month to 10th of the following month. The percentage change in value of the UDI at the 10th to 25th days of each month will be equal to the change of National Index of Consumer Prices (INPC) in the second half of the previous month. The change in value of the UDI on the 25th of a month to the 10th of the following month will be equal to the change in CPI in the first half of the month referred to initially. To determine changes in the value of the UDI for all other days, the INPC variation immediately preceding each of these periods are divided among the number of days included in the publication period that are in question, so that the change in value of the UDI in each of those days is uniform.

TABLE 16: **Classifications and Types of Housing en México by financial institutions**

TYPE (1)	UDIS RANGE	IN USD DOLLARS	UP TO USD DOLLARS
MINIMUM	Up to 24,500		$8,682
SOCIAL	From 24,501 to 60,000	$8,682	$21,261
ECONOMIC	From 60,001 to 115,000	$21,261	$40,750
MEDIUM	From 115,001 to 300,000	$40,750	$106,304
RESIDENTIAL	From 300,001 to 610,000	$106,304	$216,151
RESIDENTIAL PLUS	Over 610,000	More than	$216,151

TYPE (2)	VSMMDF RANGE (2008)	IN USD DOLLARS	UP TO USD DOLLARS
ECONOMIC	Up to 118		$16,382
POPULAR	From 118 to 218	$16,382	$30,264
SOCIAL	From 218 to 350	$30,264	$48,589
MEDIUM	From 350 to 750	$48,589	$104,120
RESIDENTIAL	From 750 to 1,560	$104,120	$216,570
RESIDENTIAL PLUS	Over 1,560	More Than	$216,570

TYPE (3)	FIX DOLLAR RANGE	IN USD DOLLARS	UP TO USD DOLLARS
SOCIAL		$8,000	$21,000
ECONOMIC		$21,000	$38,000
MEDIUM		$38,000	$100,000
RESIDENTIAL		$100,000	$220,000
RESIDENTIAL PLUS		More than	$220,000
SECOND SALES		More than	$220,000

TYPE (4)	VSMMDF RANGE (2008)	IN USD DOLLARS	UP TO USD DOLLARS
MINIMUM	Up to 60		$16,382
SOCIAL	From 60 to 160	$16,382	$30,264
ECONOMIC	From 160 to 300	$30,264	$48,589
MEDIUM	From 300 to 750	$48,589	$104,120
RESIDENTIAL	From 750 to 1,670	$104,120	$216,570
RESIDENTIAL PLUS	Over 1,670	More Than	$216,570

Classification (1)/ According to the Federal Mortgage Society, with a range in UDIS, up to July 6th 2009, with a unit value of 4.2521.
Classification (2)/ According to CONAVI and INFONAVIT, with a range at times in minimum monthly wage in the Federal District (VSMMDF) in 2008, with a unit value of USD $ 138.8 U.S. dollars per month.
Classification (3) / According to private consultants, ranging in FIX USD Dollar, which is the exchange rate determined by the Bank of Mexico to settle liabilities denominated in dollars of the United States, payable in Mexico.
Classification (4) / According to private consultants, with a range in minimum monthly wage in the Federal District (VSMMDF) in 2008, with a unit value of USD $ 138.8 U.S. dollars per month.

Source: Federal Mortgage Society (SHF), 2009.

TABLE 17: **Motion for approval of classifications and types of housing in Mexico.**

TYPE(2)	SMMDF RANGE (2008)	IN USD DOLLARS	UP TO USD DOLLARS
ECONOMIC	Up to 118		$24,890
POPULAR	From 118 to 218	$24,890	$30,264
SOCIAL	From 218 to 350	$30,264	$48,589
MEDIUM	From 350 to 750	$48,589	$90,237
RESEDENTIAL	From 750 to 1,560	$90,237	$216,570
RESEDENTIAL PLUS	Over 1,560	More than	$216,570

Source: Federal Mortgage Society (SHF), 2009.

6.1.4. The proposed approval of categorization for housing by SHF consists of classifying the previous information in terms of the monthly minimum wage so that it may be consistent with INFONAVIT -FOVISSSTE and the Mexican Association of Mortgage Bankers Association of Mexico (AHM-ABM):

6.2. Price Index for Housing in Mexico

6.2.1. In order to establish international standards in Mexico's home finance market, the Federal Mortgage Society (SHF) developed the SHF Price Index for Housing in Mexico (SHF Index)[71]. This index was produced from analyses of homes (single, condominium, apartments, and others) that are residential and subject to a mortgage. To accomplish this analysis, two statistical procedures were used and carried out in stages: the hedonic method (MH)[72] and repeated sales (VR).

6.2.2. The determination of house prices in the hedonic method is based on a decomposition process of the value of the home. Under international standards, the foundation for the composition of housing prices are the following attributes of the home: floor area, number of bedrooms and bathrooms, age of the home, the habitual depreciation of the property, the number of common areas, availability of parking spaces and elevators, among others, such as its locality and the immediate urban and/or rural environment. In Mexico, this analysis of housing attributes is referred

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[71] The SHF index is a statistical indicator, designed and calculated by the SHF, that calculates the rates of home appreciation or deprecation over time by geographical region. In using this new measuring device for the Mexican housing sector, SHF seeks to further consolidate information in the mortgage market by providing such timely and quality information about home values on a quarterly basis.
With the SHF index, and in having this essential information made available to the financing sector in general and the housing sector in particular, Mexico is part of the nations that form the Organization for Economic Cooperation and Development (OCDE).

[72] The hedonic method is a method of the valuation of intangibles and is used in labor markets and real estate with emphasis on the environment. A hedonic function is a relation between the price of the heterogeneous and differentiated features of the data contents. This involves analyzing both the production and consumption of a heterogeneous good, by disaggregating them into their most basic units, which is based on the buying and selling process: these are its characteristics, and its attributes. As each attribute is normally priced separately, the price of a good valuation represents heterogeneous whole. That is, the aggregate effect of implicit or hedonic prices of each property and the amounts of each.

to as the price index of consistent quality.

6.2.3. The repeated sales method provides longitudinal sales price for a given set of buildings in selected cities including rental and used housing markets (existing homes and those sold by the owner). As such, it considers mortgage, financial and physical aspects of the home to provide, among other things, the following indicators: a) The purchase price and current property; b) rate of appreciation / depreciation of property; c) initial mortgage amount and current; d) Loan / Value of the dwelling; e) Cost of purchase / rental price (percent); f) Number of housing transactions; g) sale through an estate agent or offered by the owner; h) Fee mortgage interest; i) Refinancing; j) Rate of absorption (median time from the building in the market); k) Expenditure on maintenance; l) level of household debt: mortgage payment / income household; and, m) New housing attributes such as environmental technology and communication technology (Internet), among others.

6.2.4. Using a statistically representative sample, since 2005, studies examining housing prices in Mexico have been conducted using the repeat sales method and Hedonic. Thus, the results obtained by both methods will be incorporated in the thus titled "hybrid method"[73] to generate continuous information of the financial conditions of supply and demand in the sector, as generated by the Continuing Residential Finance Survey. The study has generated price indices for the overall national market, by state, for new and used housing, and by class and type (for social, economic, medium, and residential housing). Between 2005 through 2009, the Index recorded an SHF cumulative nominal appreciation of 29.0 percent to an annual increase of 6.6 percent. In terms of each particular segment, houses grew by 26.8 percent, condominiums by 30.4 percent, and apartments up to 46.4 percent in a period of 5 years.

6.2.5. The percentage of household participation, by type, is segmented in the domestic market as such: 39.6 percent in social housing; 12.2 percent for affordable housing; 32.5 percent towards medium housing; and 15.7 per cent corresponding to residential and residential-plus housing. It should be noted that only social and medium homes contributed 21 percent in the increase in prices in the housing market in Mexico, while 5.2 percent corresponded to residential housing, and less affordable housing maked up only 2.8 percent. Among all the types of housing in Mexico, the overall growth during the period between 2005 through 2009 was centered within economic homes at 22.7 percent, and at 32 percent in medium and residential homes.

6.2.6. The national average price of a home in Mexico is $ 31,300 U.S. dollars, which corresponds to a medium-sized home. In contrast to Mexico City (the national capital) at least 25 percent of the prices are higher or equal to $ 71,460 U.S. dollars, that is, twice the national average. The median and mode price of housing in Mexico is $

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[73] Also known as PER. It indicates how many years are needed to wait in order to recoup the housing purchase price given its annual performance (rent). It is used to measure the possible overvaluation of home prices.

23,290 U.S. dollars, which corresponds to an economic-sized home. According to the SHF Index, average prices for new housing rose 7.4 percentage points more than for used homes. 34.5 million attributes were used to estimate, with high verisimilitude, 20 econometric models in order to determine the SHF Price Index. In the first quarter of 2009, the SHF index rose by 2.4 percent in annual nominal terms. Thus, in the first half, the annual nominal growth was 3.7 percent.

6.2.7. In order to determine the total costs of housing prices that are derived from mortgage loans in Mexico, the Law for Transparency and Ordering of Financial Services set a price indicator titeld CAT as the "total annual cost of financing expressed in annual percentage terms, for informational purposes and for comparison, including all costs and expenses inherent in the credits, loans, or financing provided by entities such as commercial banks and Sofoles. The total annual cost (TAC) and Residual Cost (RECs) are indicators used to compare the price of mortgage loans offered by different financial intermediaries. This measure is expressed in percentage terms per year and includes all costs that the customer must pay when obtaining a credit, such as interest, fees and insurance, among other costs.

6.2.8. The CAT is determined only once, at the beginning of the credit, and is calculated the same way for all products of the same type (same coin or unit, same term), which serves to distinguish very simply the cost of credit available in the market to help customers in selecting the product with the lowest cost. The TAC calculation includes the initial amount of credit, payment of principal and interest charges for opening credit,

research and socio-economic survey, appraisal, expenses or premiums prior or during the lifetime of credit to the administration, operation, insurance (life, disability, unemployment, damage, theft), and payment of value added tax (consumption tax).

6.2.9. On its part, Cost Effective Remnant (CER) is an indicator that allows one to know the price of the remainder of the term of the loan contract. This indicator is expressed as annual rate which includes all the payments that the client must make in the remaining term of their credit. The CER is calculated after obtaining credit and as many times as deemed necessary. For comparative purposes, the CER is reported each month in the statements given to the borrower. It allows the borrower to know the cost of the remaining term of the loan and to use it for comparison purposes to estimate how much it costs to maintain current credit and to opt, if necessary, to change mortgage from one institution to another.

CHAPTER 7: **LESSONS AND RECOMMENDATIONS**

7.1. Lessons of the Mexican experience

7.1.1. That the housing production in Mexico is carried out on multiple dimensions and scales, in a complex legal, institutional, and financial framework, in profoundly adverse situations that limit access to housing for most people, especially to those found in poverty and vulnerability. The historical difficulties in implementing policies and strategies to meet the minimum needs of housing have their origin in six structural features: a) lack of financial sustainability (public and private) to decrease the deficit, b) the huge current necessity and the growing demand for housing, c) lack of supply of land suitable for housing; d) access to infrastructure and basic public services, e) legal disputes on land and housing, and f) lack of proper government and inter-sectoral coordination.

7.1.2. That the global perspective of the government policy on social housing, voiced by various civil society actors, should move toward a process of integration and rationalization of the various supplying agencies. It should include, as well, a rethinking of the role of the state, in order for it to fulfill its basic function as manager of social housing programs and as manager and facilitator in funding them. In this sense, it is desirable that the government stops its role as direct provider, and instead replaces the granting of subsidies and prices for subsidies directly provided toward the demand and the production incentives of affordable, low-income housing.

7.1.3. That the analysis, design and implementation of policies and the adequacy of the legal framework for housing tends to be politicized and polarized in positions between the government and the private sector, especially in the interpretation of the responsibilities, obligations, and rights, which transit between the interest of reaffirming the state's role as guiding strategic policy and the private interest to liberate the land and housing market. These differences reflect divergent views about the role they must each play in addressing and responding to the housing problems in Mexico. In this sense, one should not omit a critical assessment of procedure and methodology as carried out by the institutions and actors involved in the process of formulating laws. In this way, they may convene and build increasingly more democratic and inclusive structures where one is allowed to hear and consider the arguments of civil society, with the end goal of contributing in the development of consistent legislation and integrated social demands.

7.1.4. That the demarcation that posits the framework containing the material of the law as the exclusive responsibility of the Federal Public Administration

reflects the complexity in the Mexican political system so that a secondary law may be created which establishes obligatory concurrence between the Federation, States (sovereign) and municipalities (autonomous). In this regard, it is desirable that the Housing Act adopts a coordinating approach between the three branches of government, and from these, with the social and private sectors. As such, it should take into account the indivisibility of universal and constitutional laws that give all families the right to enjoy a home, especially to vulnerable groups. To this end, the international framework of human rights (International Covenant on Economic, Social and Cultural Rights) and the development of human settlements (Habitat Agenda) could contribute a valuable humanitarian insight in approaching the creation of the legislation.

7.1.5   It is essential that housing legislation is directed towards those sectors of the population that are living in major poverty, marginalization, and vulnerability. To this end, the legislation should clearly sets forth the responsibilities of each level of government in terms of housing production, according to the powers granted by the Constitution, in conjunction with the broad and powerful participation of the social and private sectors. Particularly, it is recommended that the legislation provides the tools and support to promote the social production of housing and increase access to infrastructure, equipment, and basic urban services that ensure the security of monies and legal protection to the those people affected by a disaster, and that it create contingency or risk

prevention plans, and that it create a legal guarantee of evictions.

7.1.6.   That it is necessary to make such legislation a model of governance which, in turn, permits a strengthening of the production of housing, from the following five key components: a) direct subsidies to the demand, b) prior savings, c) leverage or additional credit to subsidies, d) land availability for social interests, e) support for social production. In this regard, it would seek a progressive scheme of subsidies, seeking to favor low income and vulnerable populations while promoting savings as a way to encourage participation in the private financial sector. This element is important in that it has a significant impact on the mortgage market. This would mean strengthening the existing legal framework and building a comprehensive policy that would have a greater impact on target population groups and would also permit the rationing of fiscal resources devoted to this end.

7.2. Recommendations: Themes from the Mexican Experience

7.2.1.   Modernization of the Public Registry of Property. The modernization of public records and property that are subject to registration in public real estate are key conditions in providing legal certainty, enhancing the value of heritage, guaranteeing its transfer without conflict, and accessing formal sources of funding that can support a better quality of life for Mexican society. This premise constitutes the conditions for the existence of a national program that has helped improve the regulation

that protects property rights and provides legal certainty on property. This is done through the approval of public records of property, municipal and rural cadastres, and the mandatory public registry of property.

7.2.2. The modernization of cadastres in Mexico has been based on the results of the implementation of a methodology and following of the State Modernization Programs (PEM), implemented by the states, which are aligned to an Integrated Model Registry of Public Property (RPP). In general, the achievements of a program of this type are summarized by the following aspects: a) Support from state and federal authorities toward achieving modernization, b) legal frameworks geared to the use of electronic signatures and the establishment of agencies with decentralized technical autonomy and proper resources; c) Update of technological platforms, d) Improvement of processes e) Increasing levels of customer services; f) Courses teaching professionalism to staff; g) Preservation of collected documents, and, h) Provide more accessible geographic registry services to users.

7.2.3. Following the results that have thus been achieved, it is deems appropriate to update the orientation and scope of the Model through a system of performance indicators in order to improve and adhere to best registry practices at a worldwide level. At this end, the CONAVI, in coordination with the Legal Counsel of the Presidency and SHF developed a Performance Indicator System, which aims to assess the effectiveness and operational efficiency of the Public Registry of Property, placing an emphasis on quality service, duration of

attention to clients, and costs accrued by each procedure. Similarly, there is an ongoing socio-economic assessment of the program to determine the effect of social return on realized investments.

7.2.4. Currently, the Comprehensive Model for Public Records (RPP) establishes that the Public Registry of Property must obtain data physical identification of farms as a result of their association with cadastres. Such associations should be carried out at various levels, from the simple use of shared identification keys, to the integration of registry and cadastral agencies into one body. The model does not suggest in any way, the assimilation of the institutions, since both have their own methods and principles and develop their actions in different fields. That is, while the RPP are usually state-run and pursue the registration and publication of acts and contracts in order to ensure legal security, cadastres are municipal and aim to achieve full ownership of farms, using technical elements and corresponding tax revenues.

7.2.5. While there is a political will pertaining to local entities in the linkage of registry and cadastral institutions, this commitment toward action has manifested only to a limited extent, in the form of practical actions that merely serve to exchange data between them. It is therefore important to consider the following: a) do not have a national system of efficient urban cadastres and the consequences are readily seen: low local revenues, informal settlements on private land invaded, lack of land markets and urban disorder in most cities in the country, b) limited use of global positioning systems (GPS) as tools to update properties and property embodied in cartography and to allow precise metrics systems such

as sketches, satellite images, and aerial photographs, among others; and c) lack of urban cadastral systems that are regularly updated, which in turn limit the possibility for local governments to have a source of financing for development. This restricts participation and therefore does not contribute to the transparency of governance. It is important to establish a national program to build efficient and effective cadastral institutions.

7.2.6. It is necessary to define a strategy that encourages the implementation of a Integrated Model Framework of Operations of State and Municipal Cadastres, which is likely to promote the establishment of a National Relationship Committee urban planning - land use - public record - cadastre that establishes general action plans and that relates to state committees or commissions and / or municipal authorities to define objectives, with the aim of laying the foundations of a national Comprehensive Modernization Cadastre Program.

7.2.7. The property tax is one of the few taxes that are collected by municipalities, which is why increasing their collection is of great importance. This tax multiplies the benefits of contributors and local governments to allow for an increase in the quantity and quality of services to local citizens. Given the challenges and difficulties in increasing property tax revenues nationwide, the Federal Government, through SHF and ONAVIS has formulated a program that provides mortgage credit as a tool to collect(up to the maturity of the credit), in a long term fashion, efficient and automated property taxes in conjunction with mortgages.

7.2.8. The property tax incorporated to mortgages emerges with a pilot project in Mexico in a process of adjusting the operating systems that are necessary for its implementation. During 2009 it has increased the number of public institutions (such as Infonavit) and private (including different participating Sofoles / Sofomo mortgage lenders) who will join the efforts to make this mechanism a common practice nationwide, or, at least, in the most representative cities of the country that experience a high demand for housing, as contemplated in the first phase of the implementation of the project. For this reason, they are working alongside with municipalities, financial intermediaries, and private organizations specializing in the collection, management, and dispersal of funds from property tax and with the various agencies responsible for granting credit in Mexico.

7.2.9. The mechanism suggests that the financial intermediary or the lender will proceed on behalf of their accredited to pay property tax to the municipality on pre-established dates. The incentives for local governments lie in the increased flow of income, the greater degree of certainty of obtaining revenue, and the fortification of the ability to plan work that will satisfy the needs of the residents in their jurisdiction. Due to operational complexity and to the adaptation of technological processes required for the pilot project, it is necessary to include the participation of an agency or institution that has an intermediary role as consolidator of information and payment services, so that a successful project implementation may be achieved and so that this process may be coordinated

in a way that is profitable and efficient. That is, it is necessary to include an intermediary between municipalities and the financial mortgage institutions from which property tax payment is collected.

7.2.10. To understand the national housing supply and to provide information that facilitates the decision making and strategic planning of the housing supply, is essential to have a record of all participating companies and to classify the information, offer it in its different forms and prices. Since late 2005, Mexico put together a task force that plans, designs and develops the concept of the National Register of Housing (RUV), which is a coordinated effort between the FOVISSSTE, SHF, INFONAVIT and ONAVIS, all of which cover the national spectrum of mortgage allocation options aimed at workers. The team agreed on the need to reduce paperwork, to have a comprehensive process from point to point, and to unify the criteria used in the registration of housing uppliers and housing supply. The objective of this project is geared towards meeting the following objectives: a) Standardization of criteria for business registration and supervisory labor suppliers as well as housing supply through a single housing supply log, b) To establish a process for the registration of companies and industry users in the housing development sector which will enable them to access the various operating processes of other organisms within the sector; c) Access to timely and complete information about the supply of new housing in a reliable, complete and accurate database ; d) Creation and promotion of a common language for use within the industry sector and the centralized and automated operation of critical processes, such as the authorization of the registration of home offers.

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Fondo de la Vivienda del ISSSTE www.fovissste.gob.mx

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Organización de las Naciones Unidas, www.esa.un.org/unpp/index.asp

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Sociedad Hipotecaria Federal, S.N.C. www.shf.gob.mx

Secretaría del Trabajo y Previsión Social www.stps.gob.mx/

Secretaría de Desarrollo Social, www.sedesol.gob.mx

APPENDIX (1)

The Federal Mortgage Company (SHF) and mortgage securitization

The Federal Mortgage Company (Sociedad Hipotecaria Federal) was founded in 2001 with the aim of developing the primary and secondary mortgage markets. Since then, the SHF has worked to create an alternative financing mechanism for financial institutions that grant mortgage loans, in particular for non-bank institutions. Portfolio securitization is one of the most efficient mechanisms that allow creditors to obtain funding to grant loans. The development of an active mortgage securitization market requires:

- A pool of mortgage loans originated and administered according to international best practices. The SHF has established minimum origination and administration guidelines that institutions receiving financing from the SHF must fulfill.

- Securitization structures with mechanisms to offset risk. SHF has granted two types of guaranties: 1) Mortgage credit insurance (GPI), which covers up to 35 percent of the initial loss of each mortgage; and 2) Partial financial or timely payment guaranties (GPO) to issuers of securities who fulfill certain criteria.

- Investors with long-term horizons. The SHF has increased the liquidity of Borhis by participating directly in the secondary market as market makers.

- Efficient mechanisms to allow continuous portfolio origination in order to reduce risk for those granting and administering loans.

The development of mortgage-backed securities (MBS) has enabled non-bank institutions to securitize their portfolio directly and allowed others to act as securitization pools, purchasing mortgages from smaller non-bank institutions to further securitize them. To support the development of efficient portfolio origination mechanisms and make securitization easier for small and medium-size lenders, a company called Hipotecaria Total (HiTo) was set up, with the participation of the SHF. Its purpose is to create a platform that enables an integrated link between the creation of mortgage loans and capital markets. The HiTo model is based on the experience of Denmark. The development and technological aspects of the HiTo are carried out by the Danish Central Securities Depository. Some benefits expected from the HiTo are: i) a reduction in the time between loan placement and securitization; ii) direct and continuous access to capital markets for lenders; iii) more active participation of small and medium sized financial intermediaries; and iv) an interest rate stated at the moment of credit portfolio securitization, which will eliminate the market risk due to the time between the placement of a credit and its securitization.

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