



SOCIEDAD HIPOTECARIA FEDERAL

Mortgage Market in Mexico: Projects, Strategies and Challenges Ahead



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Autonomía, Independencia, Estabilidad, Desarrollo

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Antecedentes | Indicadores | Estrategia de Desarrollo

I. The Mexican Economy



I. The Mexican Economy



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I. The Mexican Economy

- Surface : 1,972,550 km²
- Population : 106,682,518*
- Population Rate : 0.82%*
- Economy
 - GDP 2008 : USD \$1,098 billion **
 - GDP per capita 2008 : USD \$10,292 **
 - Domestic Public Debt 2008: USD \$228 billion (20.78% of GDP)***
 - Foreign Public Debt 2008: USD \$24 billion (2.21% of GDP)***
 - Total Public Debt 2008: USD \$252 billion (22.99% of GDP)***
 - Currency: Mexican Peso (MXN) about 13 to the dollar
 - Total Foreign Debt 2008: USD \$75 billion (6.79 of GDP)****
- Top Five Industries: Trade, Real Estate, Construction, Mining, Transport



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II. Structure of the Mexican Housing Market



II. Housing Market:

General Structure

- The Mexican Housing Market has a unique structure due to its different participants, the role they play and to its general economics.
- Main market participants:
 - Strong Government and Cuasi-government mortgage institutions.
 - Private financial institutions: Banks and Sofoles
 - Private housing developers market
- General economics
 - Large unattended demand.
 - Households demanding their first home
 - Stable market prices with no signs of a “bubble market,
 - Improvement in housing finance products and competition.
- Strong federal government support, and consolidated coordination among all players



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II. Housing Market, Main market participants.

Government and cuasi-government Housing Institutions



Previously FOVI (Established in 1963). **SHF** was created in 2002 as a **government federal development bank, enjoying the full faith and credit of the Mexican government**, with the purpose of attending the low and medium income sector of the population by providing mortgage loans and guarantees at market conditions. It acts as a Second Tier Bank, and works directly with SOFOLES (Non-bank banks) and with INFONAVIT, FOVISSSTE, and Banks.



Created in 1972, governed by Board representing Government, Labor and the Private Sector. Represents near 60% of the total of originated mortgages. It's an institution with a double role: it acts as a housing finance organism and as a pension fund for private sector workers. It receives a 5% obligatory deduction of the wage income of private sector affiliated workers (14 million workers) and collect mortgage payments mandatory through the payroll. INFONAVIT has granted around 4.5 million mortgage loans.



Created in 1973. Represents 7.5% of the total loans granted in the mortgage market. It's an institute focused on attending state workers (around 2.5 million workers) with mortgages and acting as a pension fund. It also receives 5% of the wage income of its affiliates. Works in association with banks and SHF.



Created in 2001. This commission is in charge of designing, coordinating and promoting public policies for the housing market. Conavi also manages de subsidies program that help Mexican families attain adequate housing.



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II. Housing Market, Main Market Participants: **BANKS**

- Until 1994, banks were the only private intermediaries granting mortgages in Mexico.
- In 1995, the “Tequila Crisis” had a big impact on the solvency of the Mexican banking system and hence private banks abandoned the mortgage market. Past-due loans became rampant, specially in the mortgage portfolio of banks. At that point Banks did not have efficient collection mechanisms or foreclosure procedures.
- By 2004 it became clear to banks that they were in the sidelines of a profitable market, so they entered back aggressively by:
 - Concentrating in middle income and residential housing
 - In some cases buying Sofoles to move into the low income market.



II. Housing Market, Main Market Participants: **SOFOLES (NON BANK – BANKS)**

- Sofoles were created in 1992 as a result of NAFTA. They are Non-bank banks similar to mortgage banks in US.
- They have two basic characteristics :
 - Cannot take deposits from the public.
 - Can only lend to a specific sector: housing, automobiles, education, etc.
- Recently, a new entity was created called Sofom which is similar to a Sofol but it can diversify its loan portfolio in various sectors and is not regulated. Some Sofoles were transformed into Sofomes.
- Since then, mortgages Sofoles and Sofomes have successfully been originating and servicing loans under FOVI & SHF programs:
 - Relatively homogeneous originating and servicing standards, as well as standardized loan product.
 - Fund the construction loans for developers that produce the low income houses.
 - Offer individual loans for low income housing.

II. Housing Market, Main Market Participants: Housing Developers

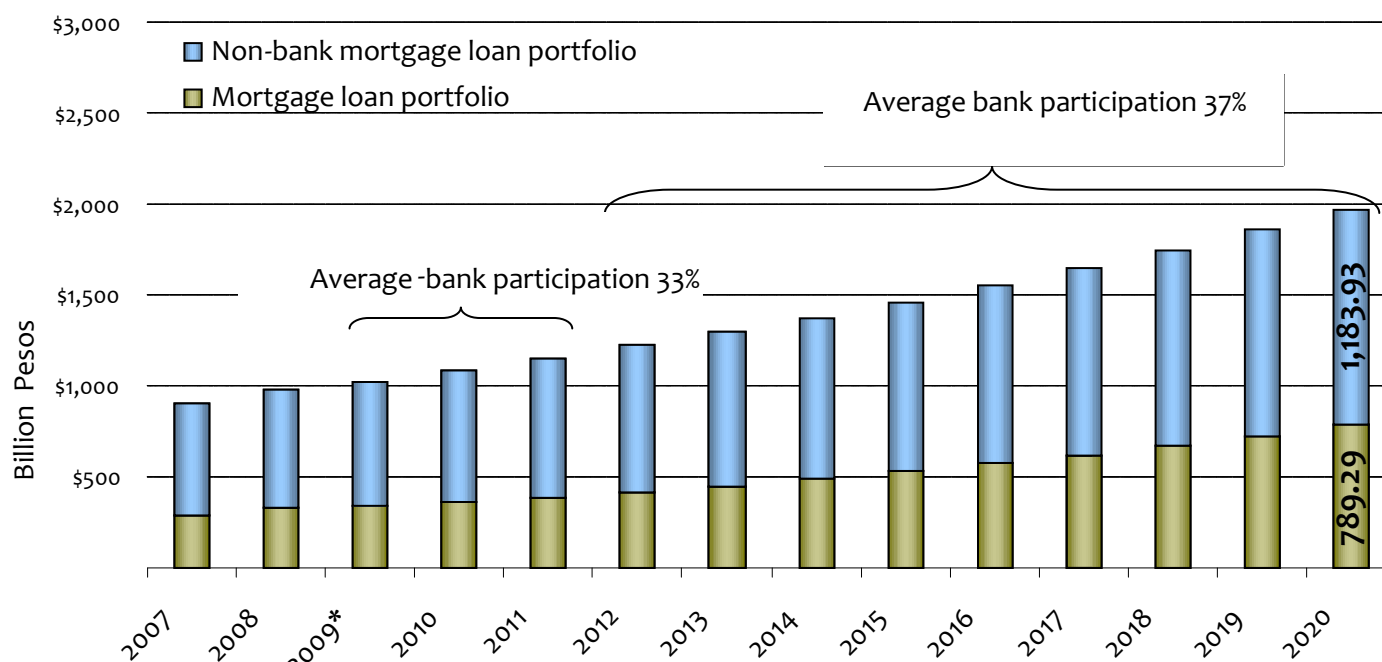
- The Housing Developers Market is a competitive one, comprise of more than 2,000 private companies.
- The seven larger companies (GEO, Urbi, Homex, ARA, SARE, SADASI and Viveica), some of which stocks are quoted in the market, do not have more than 25% of the market. They together produce more than 110,00 homes yearly.
- There is a group of more than 1,000 medium sizes companies that have been in the market for a long time and have a clear understanding of the local and regional markets in which they operate. They produce individually between 500 and 5,000 homes yearly.
- Finally, there is a group of new venture and small firms which come in and out of the market depending on economic cycles.



II. Housing Market, Current Economic Situation

Mexican Housing Market

Taking into account the recent dynamics of the mortgage market and the projected demand for housing, SHF estimates that the mortgage outstanding balance will evolve from USD \$67 billion in 2007 to USD \$150 billion in 2020.



*2009: Observed data as of first quarter, Banxico.

Mortgage loan portfolio composition

Period	Bank (%)	Non Bank (%)
2007	31.9	68.1
2008	33.5	66.5
2009* - 2011 ^e	32.9	67.1
2012 - 2020 ^e	36.8	63.2

Assumptions:

- Exchange Rate: MXP around \$14MXP per dollar.
- Annual average growth of portfolio, according to GPD, is 6.0% and 5.9% for 2010 and 2011 respectively.
- Average bank participation in the mortgage portfolio remain steady during 2009, 2010 and 2011.

II. Housing Market, Current Economic Situation:

Foundations of the Mexican Housing Market: Demand

- The Mexican population includes **26.7** million families:
 - 17.8** million already own a proper house.
 - 8.9** million represents the population without a house or that do not have a proper house.**
 - Yearly **500,000** new households are formed of which **54%** are able to demand a loan.
- There are 4 components that together generate the annual housing demand.

Estimation of the Housing Demand in 2009

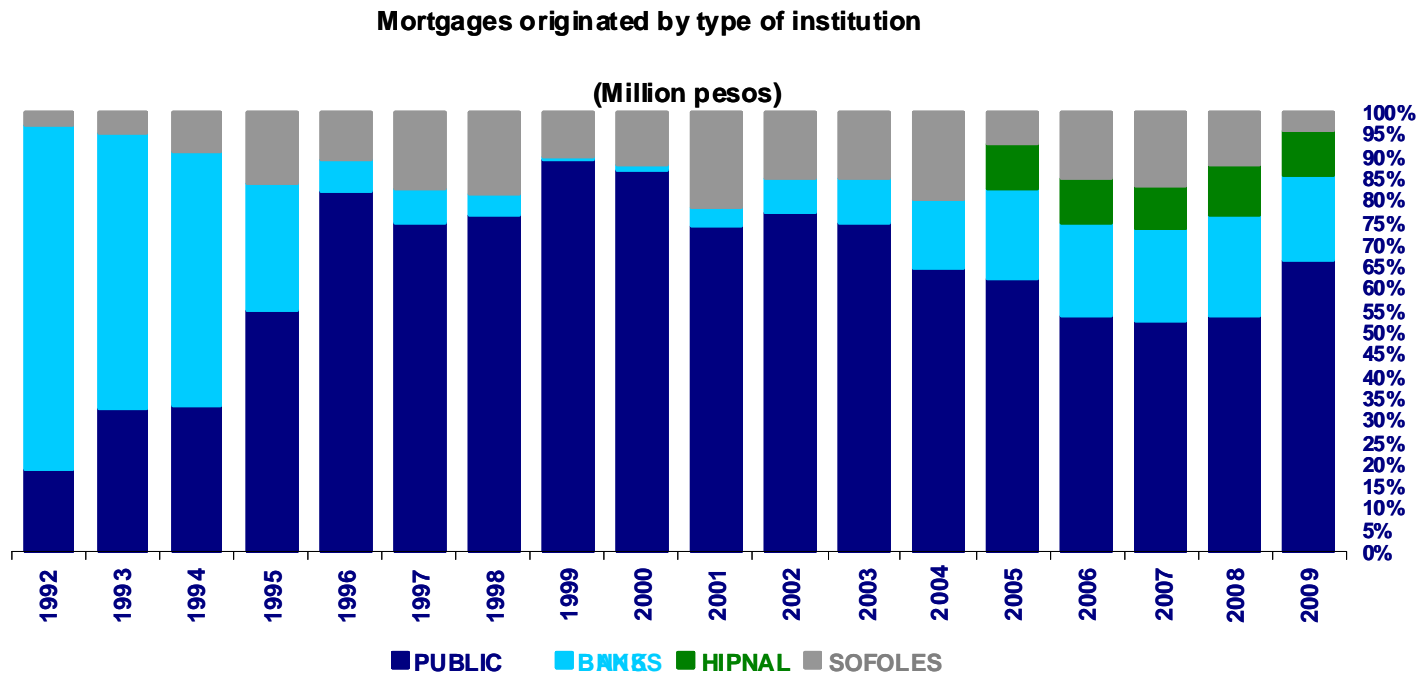
Componentes	2009
Reduction of unattended demand (Families without a proper house/**)	648,437
New Families/*	271,000
Families Demanding a better house	71,131
Families that improves their economic situationa and can demand a loan now	35,807
TOTAL	1,026,375

* / Comprise families who are able to obtain a loan due to their income level & geographic location.

** Proper house: Houses made of adequate materials.

II. Housing Market, Current Economic Situation: Recent mortgage evolution.

- From 2000 to 2007 the private sector, through banks and sofoles, increased its market share in housing finance in the mortgage market up to 26%. This trend was reversed in 2008 due to a liquidity and credit crunch experienced worldwide.
- In order to have a balanced funding in the mortgage market, the private sector has to recover the previous trend.
- The Sofoles represents 29% of the mortgage outstanding originated during 2005-2009.

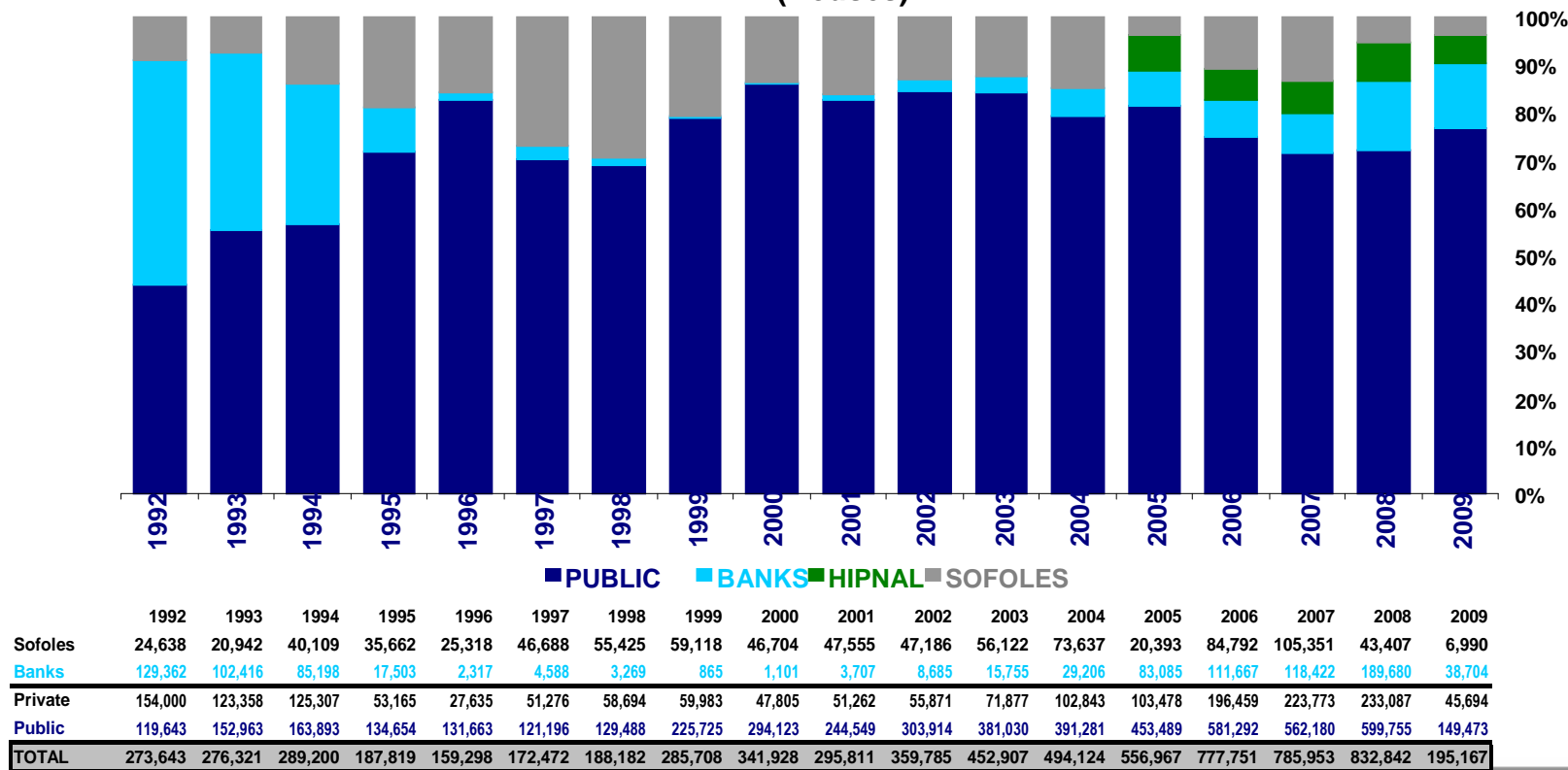


II. Housing Market, Current Economic Situation:

Recent mortgage evolution.

- In terms of yearly mortgage production, the market has growing significantly from 273,643 to 832,842 in 2008.
- The dynamism of the housing market has contributed to reduce the underserved.
- Infonavit and Fovissste recent transformation allow them to produce yearly 500,000 and 100,000 new mortgages respectively.

Mortgage originated by type of institution
(Houses)



Note: In 2005 Bancomer acquired the largest Sofol and this explains the change in mortgages between banks and sofoles

Source: SHF, 2009 : figures as of April 15



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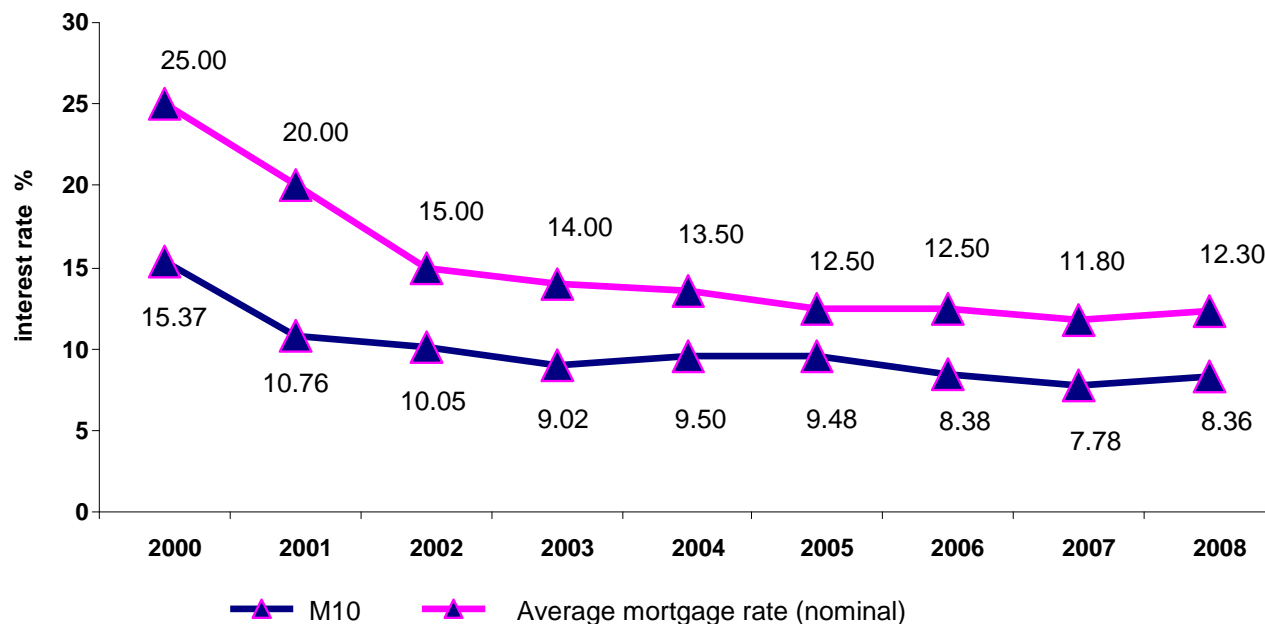
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II. Housing Market, Current Economic Situation: Evolution of mortgage financial products.

Macroeconomic stability and competition in the financial system has improved the affordability through:

- Lower **rates** that reduce the payment made by families.
- Longer **terms** of loans: up to 20 years in UDIS and 25 years in pesos.

**AVERAGE INTEREST RATE AND PAYMENT FOR A PESO
DENOMINATED MORTGAGE LOAN.**

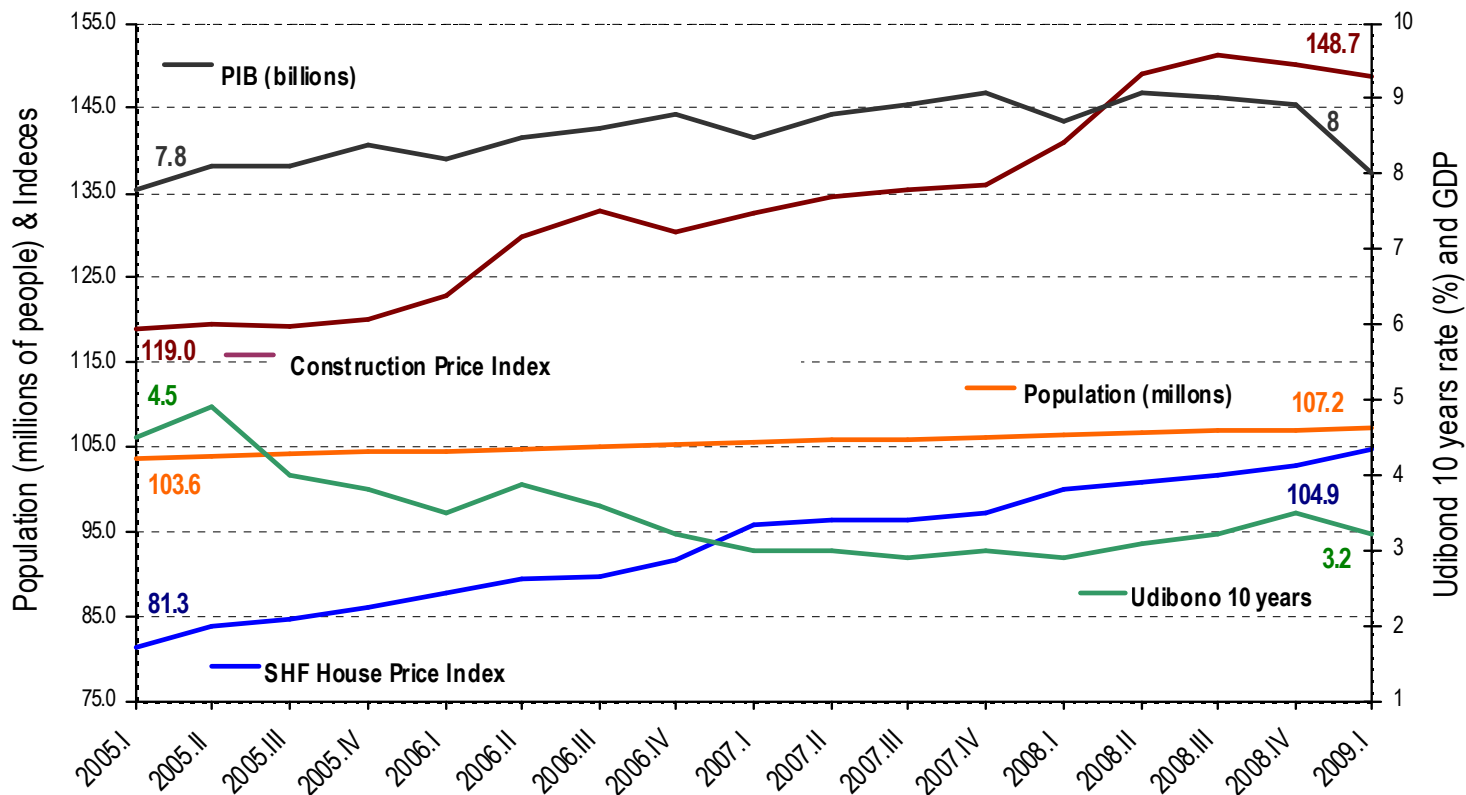


M10: Government 10-year benchmark

III. Current Housing Situation in Mexico

Mexican Housing Market

- Between 2005 and 2009 the SHF House Price Index showed total nominal appreciation of 29.0%, equivalent to a 6.6% annual increase.



- SHF HPI had a 2.2% real appreciation in the period.

III. Current Housing Situation in Mexico

Mexican Housing Market

- Prices in the United States rose 99.1% between 1991.I and 2009.I to set on 199.09 units. This level is just 0.35% higher than the observed in 2005.I.
- On the other hand, Mexican housing prices measured with the SHF House Price Index (HPI) showed a total nominal appreciation of 29.0% between 2005.I and 2009.I, equivalent to a 6.6% annual increase. (see Chart 2).
- This clearly shows that there is not a “bubble” in prices in the Mexican housing market.

Chart 1. **U.S. Housing prices.**
(Federal Housing Finance Agency, before OPHEO)

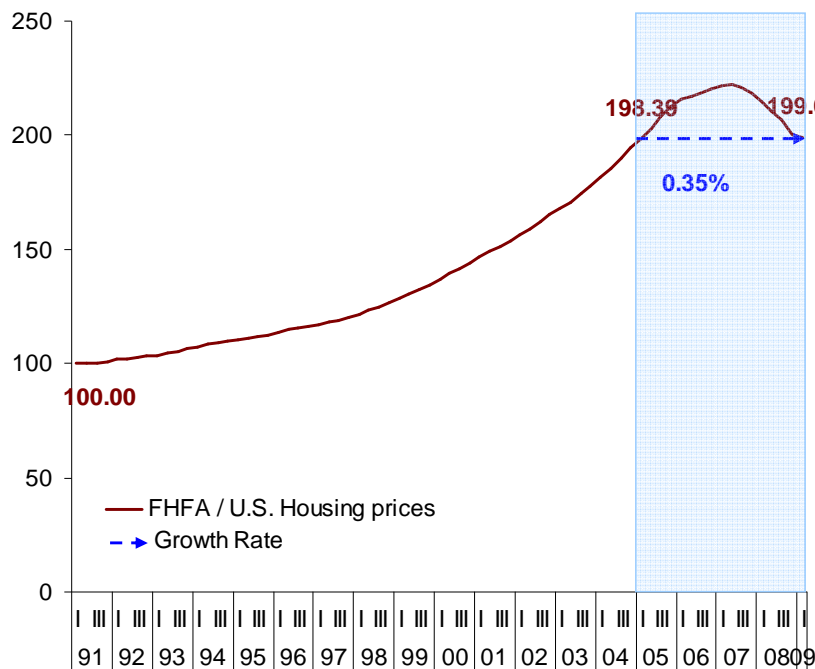
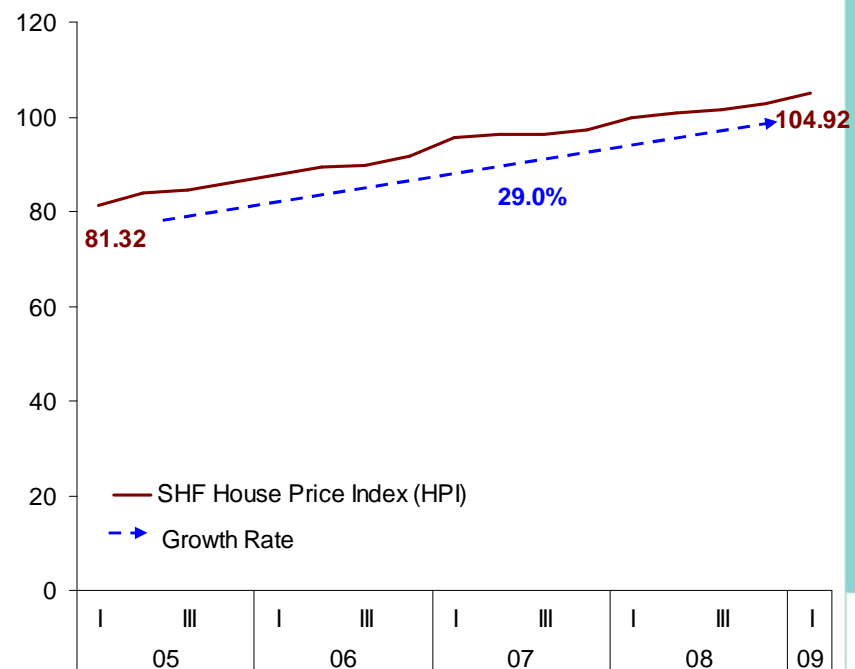


Chart 2. **Mexican housing prices**
(SHF House Price Index)

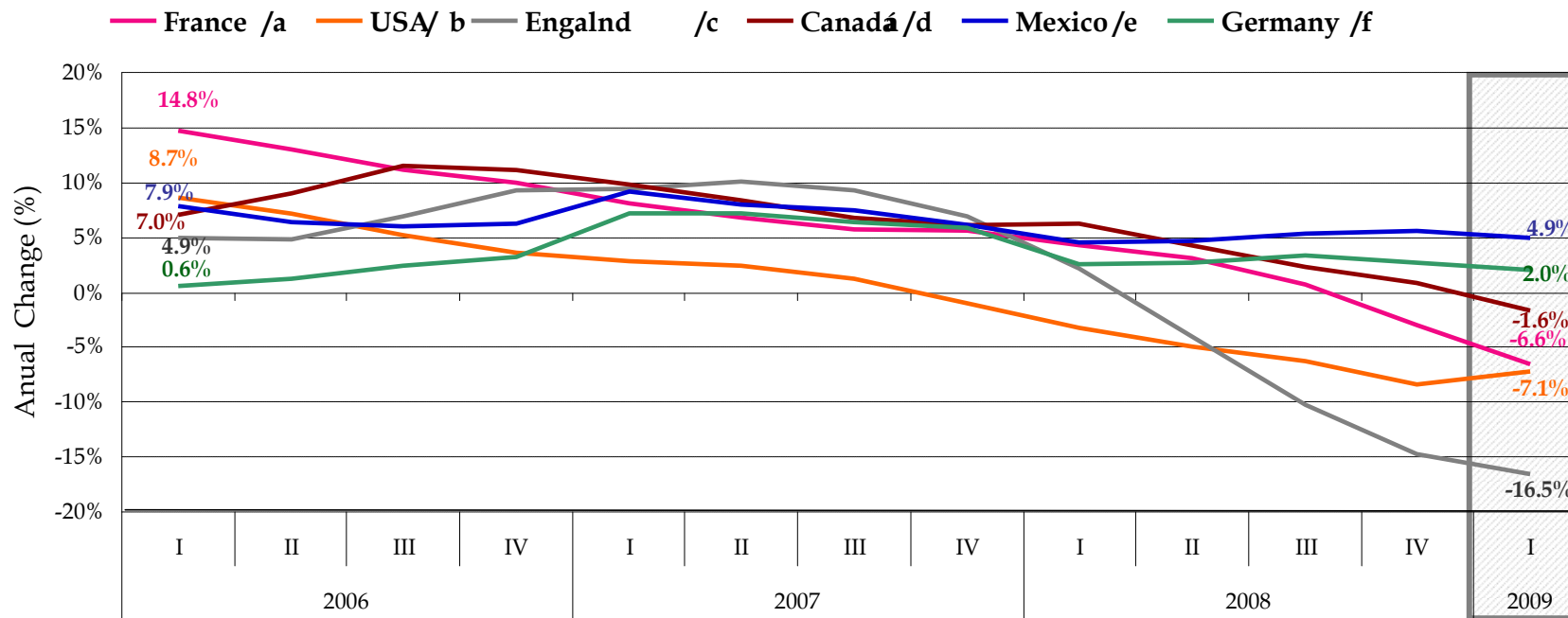


II. Housing Market, Current Economic Situation:

Recent home prices evolution

- France, United States, England, and Canada show a severe decrease in house prices which represents a correction of the price bubble previously experienced in the mortgage market.
- On the other side, Mexico and Germany showed an appreciation of 4.9% and 2.0% respectively, during the first quarter of 2009.

House Prices, 2006.I - 2009.I



Sources:

a/National Institute of Statistics and Economic Studies of France , b/ Federal Housing Finance Agency, c/ Land Registry in the United Kingdom, d/ Statistics Canada, e/ Sociedad Hipotecaria Federal, f/ Federal Statistical Office of Germany.



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III. SHF's Role in the Housing Market

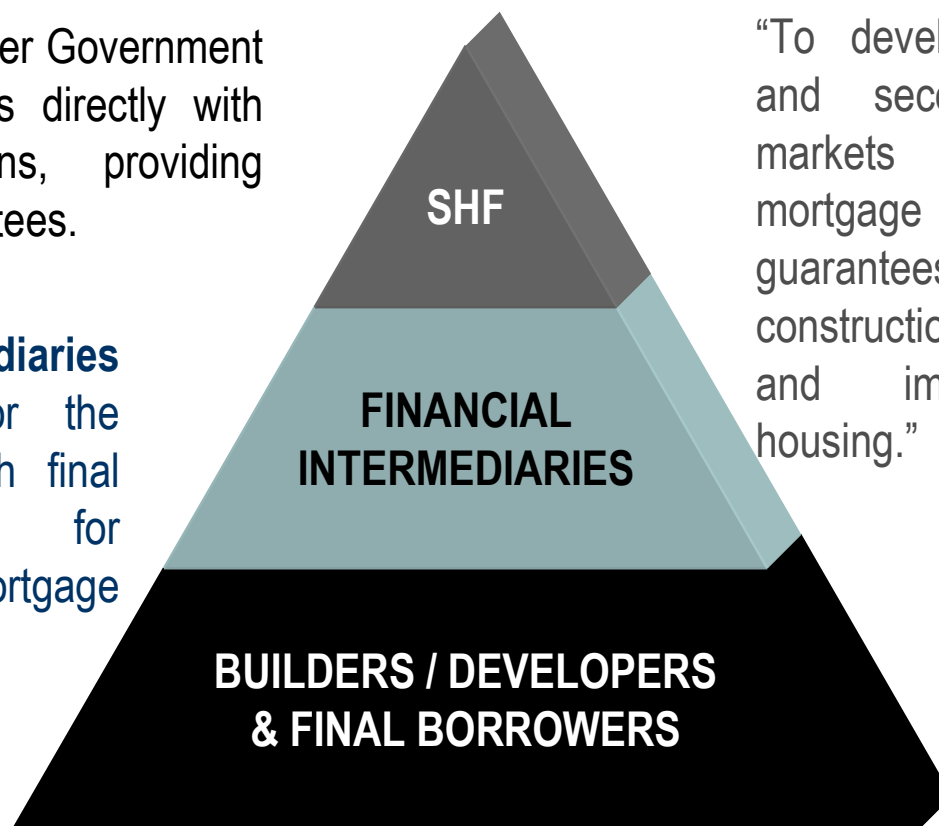


III. SHF's Role in the housing market

SHF: Mandate, Activities, Mission and Vision

SHF is a Second Tier Government Bank that operates directly with financial institutions, providing funding and guarantees.

Financial Intermediaries are responsible for the direct operation with final borrowers (both for construction and mortgage loans).



SHF's OBJECTIVE:

"To develop the primary and secondary housing markets by providing mortgage funding and guarantees focused on the construction, acquisition and improvement of housing."

SHF has developed alternative funding tools for financial intermediaries. SHF provides credit enhancements focused on the development and promotion of these alternative ways.



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III. SHF's Role in the housing market

SHF Companies

- SHF as a group, has participation in different companies that support its objectives to develop the mortgage markets in Mexico:
 - **SHF Bank:** as a second tier bank operates directly with financial institutions, providing funding and financial guarantees.
 - **SHF Mortgage Insurance:** fully owned subsidiary of SHF. Constituted as an insurer to provide mortgage insurance to individual mortgages granted by intermediaries for up to a determined percentage in the event of a default of the borrower.
 - **HITO:** 26% participation with other private partners. It is a services company dedicated to develop and implement the Danish model of securitization with financial intermediaries.
 - **Xterna:** fully owned company to provide services to the mortgage market such as file and master servicer. It is promoting bringing private partners to its capital.

III. SHF's Role in the housing market

- SHF, as a Government development bank, has three main roles in order to develop the primary and secondary housing markets:
 1. Develop the housing markets for underserved sectors: low income and rural population.
 2. Develop a healthy mortgage back securities market in order to attract institutional investors to complement the need of funds.
 3. Provide liquidity to the market under stress situations, which also comprises acting as the main market maker in the RMBS(BORHIS) market.



III. SHF's Role in the housing market

- The housing market in Mexico relies on solid foundations:
 1. Existent **demand** for the next ten years, and,
 2. Stable House **prices**,
- These factors and the availability of sufficient sources of financing from private and public institutions, will make possible the goal of the Federal Government to grant sufficient mortgages to the population.
- The participation of a specialized federal development bank such as SHF in the housing sector provides **certainty** about the availability of funds to finance each stage of the **housing production chain**:

Stage I: Construction loans for social housing

Stage II: Individual loans

Stage III: Securitization



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1. Liquidity Provider.



III. SHF's Role in the housing market

Liquidity Provider

- Since 1995, Sofoles obtained their main source of funding to give mortgage loans through the Federal Fund for Housing Finance called FOVI
- SHF began operations in 2002, having as its responsibilities the management of FOVI and to strategically reduce the dependence of Financial Intermediaries from its funding. For that purpose, several alternative sources for financing were developed, including:
 - Individual and construction loans securitization,
 - Warehousing lines with private banks and multilaterals, and
 - Unsecured debt issuance.
- Aiming to send a clear message to Sofoles to find alternative and diversified sources of funding, and to become independent from SHF, its law established that direct funding would no longer be available after 2009.
- The Organic Law of SHF was reformed through an initiative approved by the Congress and its main elements were:
 - To eliminate the restriction of ending the SHF funding in 2009.



III. SHF's Role in the housing market

Liquidity Provider

- In September, 2008 the international crisis became more relevant affecting the renewals of unsecured debt of Mortgage Sofoles and Sofomes (SSH). To deal with this situation and avoid a potential default from intermediaries, SHF and banks instrumented an agreement in October 2008 to help these institutions renew 45% of the debt at the expiration dates, and SSHs provided resources to repay the remaining 55% with the support of loans from SHF or their own funds.
- Under this agreement, on February 2009, USD \$646 million of unsecured debt were liquidated.
- However, the renewals of the 45% became difficult to be completed and the financial margins of SSHs were significantly reduced as they were offered higher rates for this loans.
- Aiming to solve this situation and reestablish financing for the mortgage market, in march an agreement between SHF/ Banks /SSH was reached.



III. SHF's Role in the housing market

Liquidity Provider

- On May 11th, this agreement was signed with the following characteristics:
 - It affects all unsecured debt expiring in **2009 and 2010**.
 - Assures the financing for up to 3 years (until may 2012). This new bonds will have these conditions:
 - market rates
 - a partial guarantee from SHF covering **65%**
 - SSHs susceptible to enter this program are those that issued unsecured debt and count with sound and healthy finances and enough collateral to support the guarantee from SHF.

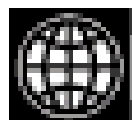


III. SHF's Role in the housing market

Housing finance market evolution

- With this actions, SHF supplied liquidity to the housing market in Mexico, to continue with the sector dynamism.
- SHF will mobilize around USD \$4,615 million for two objectives:
 - 1) Bring enough **liquidity** to the sector, particularly Sofoles and Sofomes.
 - 2) To have enough funding to maintain housing production, specially **low income homes**, considering the existent demand and the population that still needs proper housing.

SHF will also fund these activities through the markets and with **two loans** that have already been approved by World Bank and IDB:



The World Bank Group

\$1,000 million USD



IDB

\$2,500 million USD



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2. Attending the underserved population.



III. SHF's Role in the housing market

Underserved population

- 33% out of 26.7 million houses in Mexico belong to the sector with no social security that have not been attended.

- 66% of homes do not count with an adequate supply of mortgage products.

Hence, SHF will focus its strategy to the unattended sectors: informals, low income and rural population.

Market Segments by Income and Social Security Access
(Houses percentage)

	0 - 3	3 - 6	6 - 9	9+	Total
With Social Security / 1	23.8%	21.1%	9.7%	2.4%	67%
Without Social Security / 2	11.3%	10.8%	4.7%	6.2%	33%
	Monthly Income (SMGM)				

■ INFONAVIT / FOVISSSTE
■ Underserved segment ■ SOFOLES/ Bancos

Market Segments by Income and Locality
(Houses percentage)

	0 - 3	3 - 6	6 - 9	9+	Total
Urban*/	14.8%	22.1%	11.8%	16.8%	65.5%
SemiUrban **/	6.1%	4.1%	1.4%	1.8%	12.4%
Rural ***/	13.2%	5.7%	1.8%	1.4%	22.1%
Total	34.1%	31.9%	15.0%	19.9%	100.0%
	Monthly Income (SMGM)				



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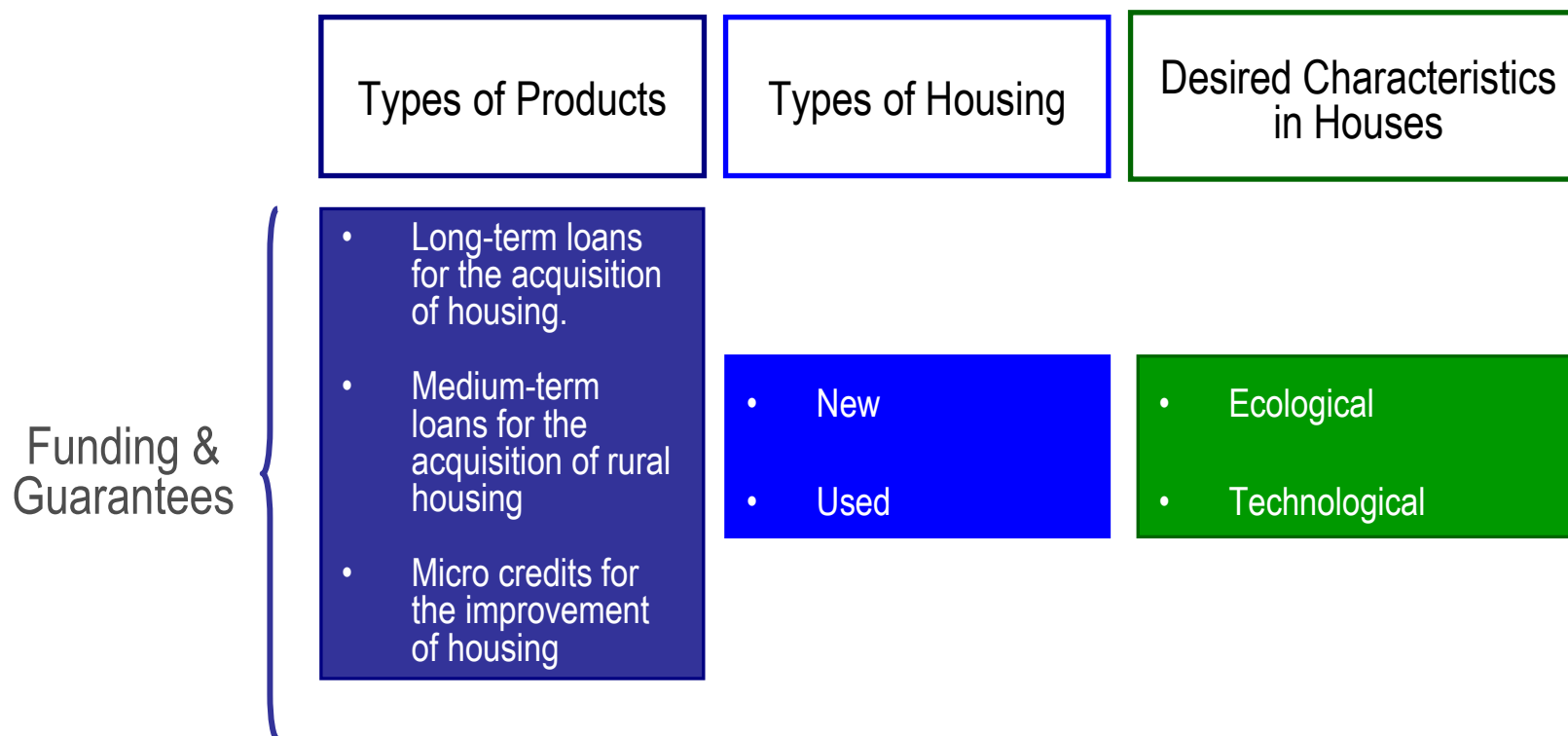
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III. SHF's Role in the housing market Products

- Given the amendments to the Law in 2008, SHF will continue granting funding to financial institutions in order to serve the low-income, rural, and informal (lack of access to social security) sectors of the population.
- With the objective of promoting a generalized access to housing, SHF will focus itself in the funding and granting of guarantees to the following products:



III. SHF's Role in the housing market

Diversification of Financial Intermediaries

- SHF is building a net of regulated intermediaries that have traditionally attended the underserved population : Popular Savings and Credit Institutions, Microfinance, etc.
- The net of financial intermediaries that works with SHF has increased its size and diversity during the last months.

SHF'S NET OF INTERMEDIARIES

	SOFOLES	POPULAR SAVINGS AND CREDIT INSTITUTIONS AND MICROFINANCE	BANKS	TOTAL
ACTIVE	10	2	3	15
INACTIVE	3	5	3	11
IN PROCESS	1	17	0	18
TOTAL	14	24	6	44

- SHF will grant to the new intermediaries loans for houses with a value of 150,000 UDIS or below.
- SHF will support the new intermediaries with funding, guarantees and technical assistance to help them develop their mortgage areas.

III. SHF's Role in the housing market

Actions to access the target market

- Proof of income is difficult in these riskier markets. Through its experience SHF has created two products as proof of income and as a way to generate a down payment for this sector:
 - **Savings Program.**
 - **Leasing with the Option to Buy .**
- SHF is successfully promoting the offer of **micro credits** for the improvement of houses.
- Alternative housing solutions are being created for rural and **semi-urban** communities.

III. SHF's Role in the housing market

Green Mortgage



- SHF developed and implemented a new mortgage for housing and urban sustainable developments denominated green mortgage. This effort will provide the possibility to issue Certified Emission Reductions pursuant to the Clean Development Mechanism of the Kyoto Protocol or to apply for the some Multilaterals Carbon Finance for Sustainable Development program.

Features

- Green Mortgage SHF is to purchase a house with certificated eco-technologies differentiated by bioclimatic zones.
- The eco-technologies must be registered as a part of the house specifications.
- The eco-technologies will limit the use of water, gas and energy resulting in direct savings for borrowers, and protecting the environment.



III. SHF's Role in the housing market

Modernization of Public Property Registry (RPPs)

1. Aiming to promote the existence of legal certainty regarding the property of housing, SHF started in 2005 a project with funds from the IDB to modernize the RPPs in Mexico.
2. The outputs of such project were the following:
 1. An **integral model of the RPP**,
 2. Methodology for **Standardized Evaluations**,
 3. Methodology of **validation and migration of the documentary heritage**.
3. SHF also participated providing capital to develop the project and start the **digital migration of the files and promoted the participation of the Federal Government with resources**, given the required funds to achieve the Program.
4. Finally, an **Evaluation Committee** was formed in order to support the action to modernize the RPPs with **contributions during 2007, 2008 y 2009 for almost USD \$100 million from the Federal Government** and a **similar amount from the States that were approved**.

III. SHF's Role in the housing market

Integral Model of the Public Registries: Standard Evaluation

- A methodology designed with resources from SHF that allows to quantify the compliance with the best practices.
- The resources provided by the Federation through the Committee help reduce the gap by component with respect to the evaluation methodology, guaranteeing advances in the process of modernization with public resources.
- The components measured in the evaluations are:
 1. **Legal framework.**- required norms and rules to develop an autonomous registry.
 2. **Registry Processes.**- improve the entire registry operation.
 3. **Information Technologies.**- automatization of the registry processes and consults in order to have an efficient and modern operation.
 4. **Quality Certification.**- certify the registry processes under best practices.
 5. **Professionalization of Registry Functions.**- promote improvements with the staff and their professional careers.
 6. **Institutional Policies.**- promote Registry Institutes with personality and budget autonomy.
 7. **Documentary Heritage Management.**- digitalize the documentary heritage and access to electronic data bases.
 8. **Participation and linkage with other sectors.**- relationship and data exchange with other governmental institutions.
 9. **Behavior statistics.**- to constantly measure and improve services.



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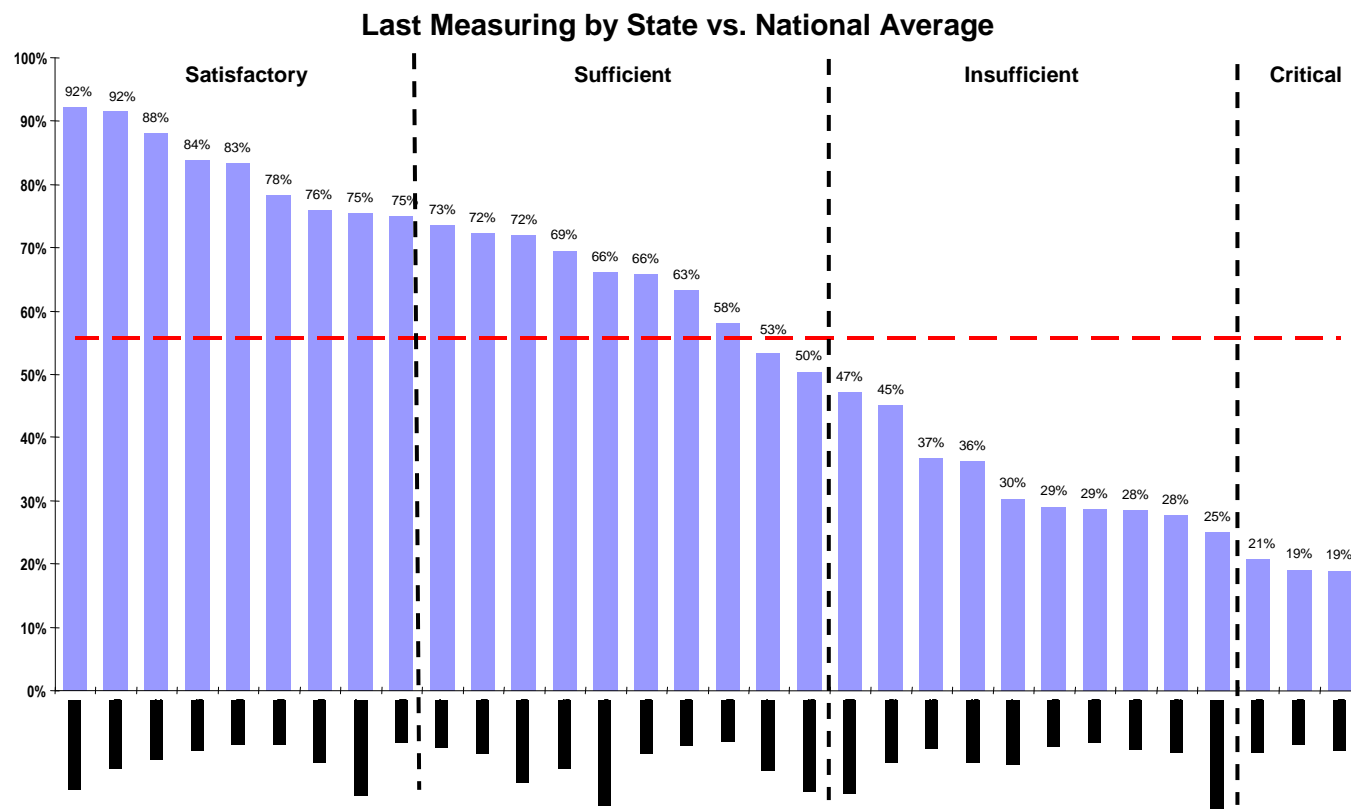
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III. SHF's Role in the housing market

Modernization of Public Property Registry: Achievements



Approximately 60% of RPPs have reached sufficient levels of modernization.

Source: SHF
Data to August, 2009

The main accomplishments are:

1. Modifications to the legal frameworks leading to the autonomy of RPPs to protect the project from public policy changes.
2. Reengineering, automatization and optimization of the processes of each RPP.
3. Professionalization of the staff of RPPs.
4. Participation of some private entities providing resources for the modernization.



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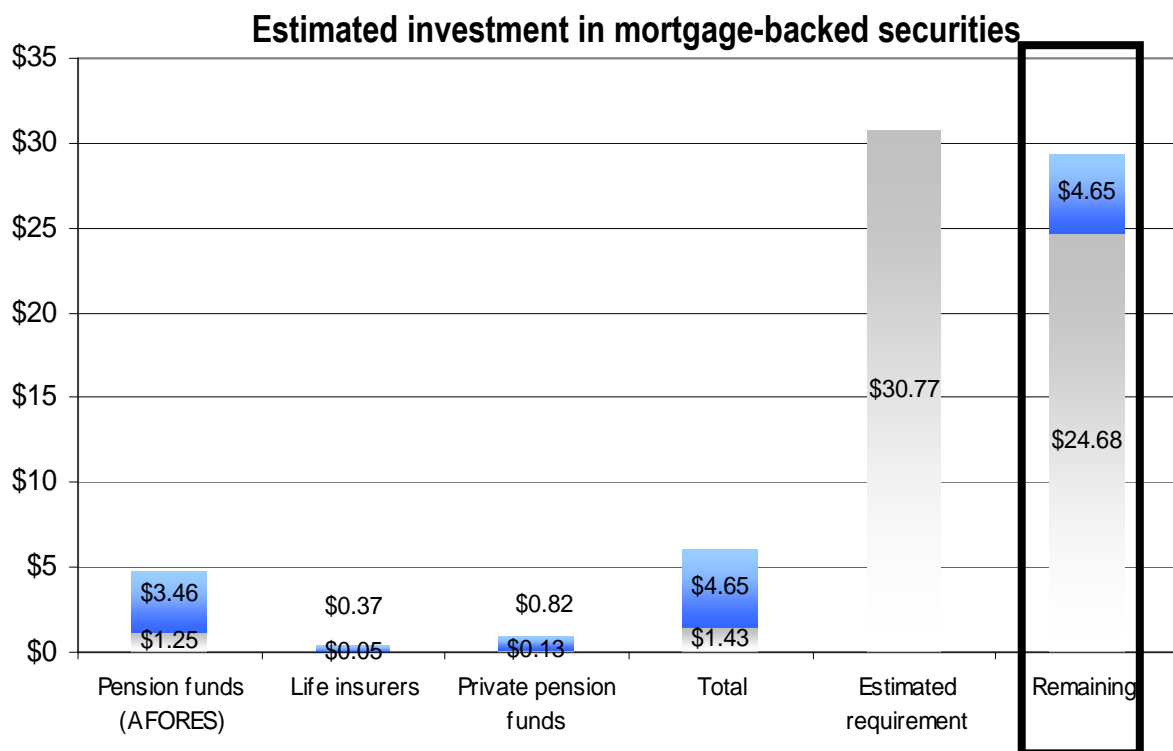
3. Develop the MBS market



III. SHF's Role in the housing market

Securitization of mortgages

- The flow of financial savings in the country will not suffice to finance the growth of mortgage portfolios. The sale of mortgage portfolios to domestic institutional investors as well as foreign investors is needed to maintain the growth of the mortgage sector.

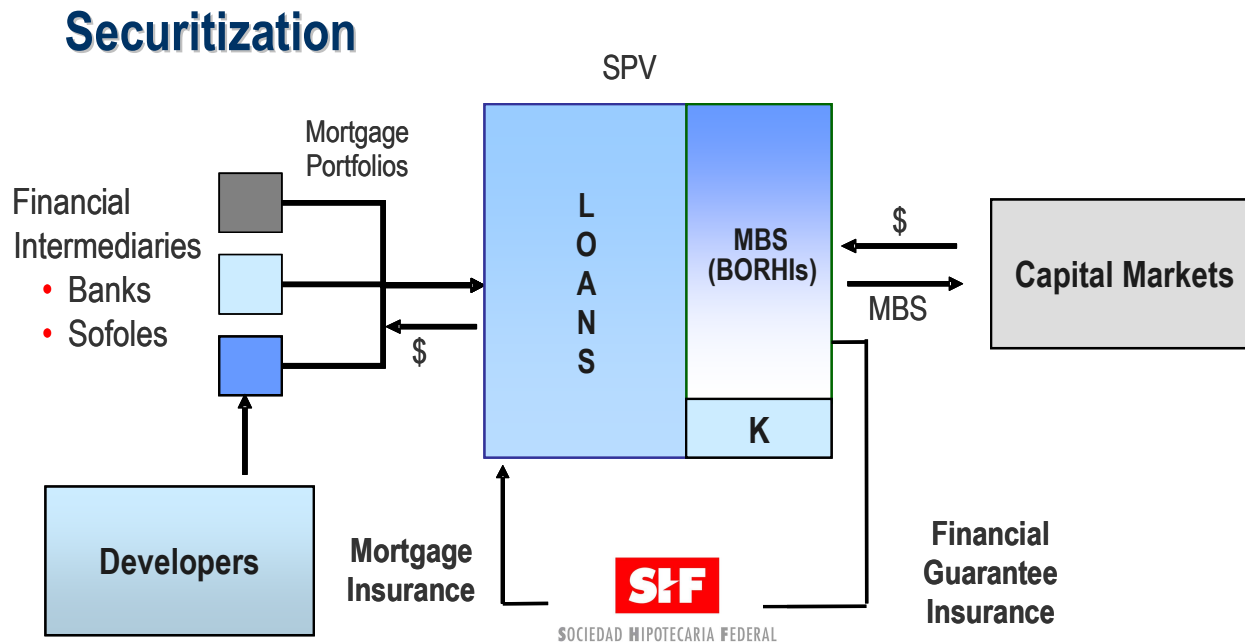


If local investors direct between 2% and 5% of their total resources to the mortgage backed securities market, international capital markets would still need to absorb between USD \$24.7 billion and USD \$29.3 billion.

	Pension funds (AFORES)		Life insurers		Private pension funds		Total	Estimated requirement	Remaining
Min. contribution	\$	1.25	\$	0.05	\$	0.13	\$ 1.43	\$ 30.77	\$ 24.68
Max. Contribution	\$	3.46	\$	0.37	\$	0.82	\$ 4.65	-	\$ 4.65

III. SHF's Role in the housing market

Securitization of mortgages (BORHIs)



SHF participates on this stage as:

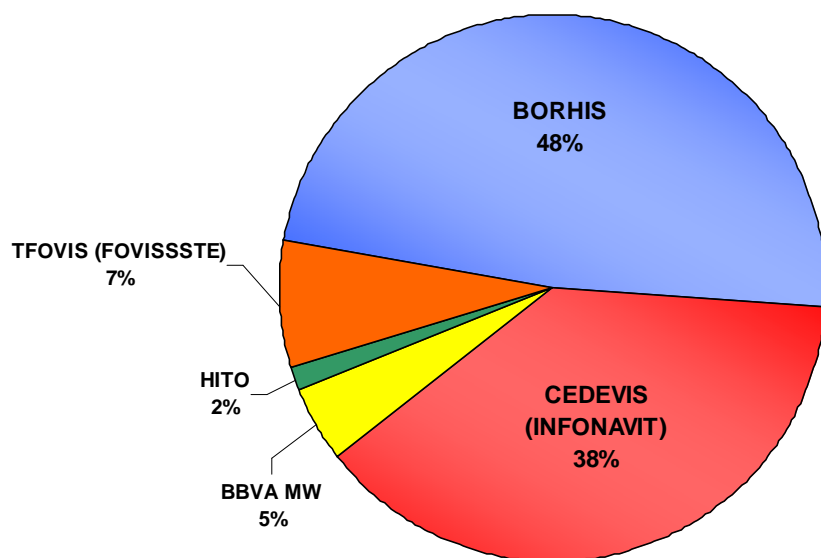
- A Financial Guarantee provider,
- Investor, and
- Individual Loan Insurer.

III. SHF's Role in the housing market

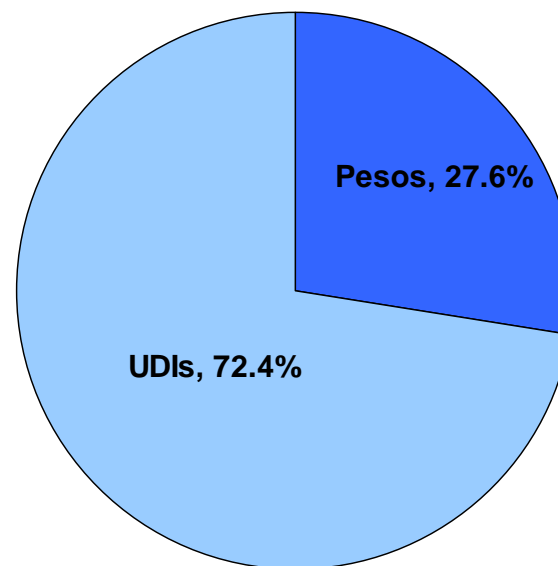
Mexican RMBS Market

- There are currently four types of issues in the Mexican RMBS market, with the 2 biggest being BORHIS (Banks and Sofoles) and CEDEVIS (Infonavit).
- Fovissste just started to issue CEDEVIS-like issuances in May of this year, while BORHIS and CEDEVIS started out in 2003 and 2004 respectively.
- The amount outstanding in the RMBS market is now close to USD\$8 billion.

Mexican RMBS Market Composition



Mexican RMBS Market Composition by Currency



III. SHF's Role in the housing market

Securitization of mortgages (BORHIs)

Securitized Mortgages: Comparison and contrast between BORHIs and U.S. MBSs

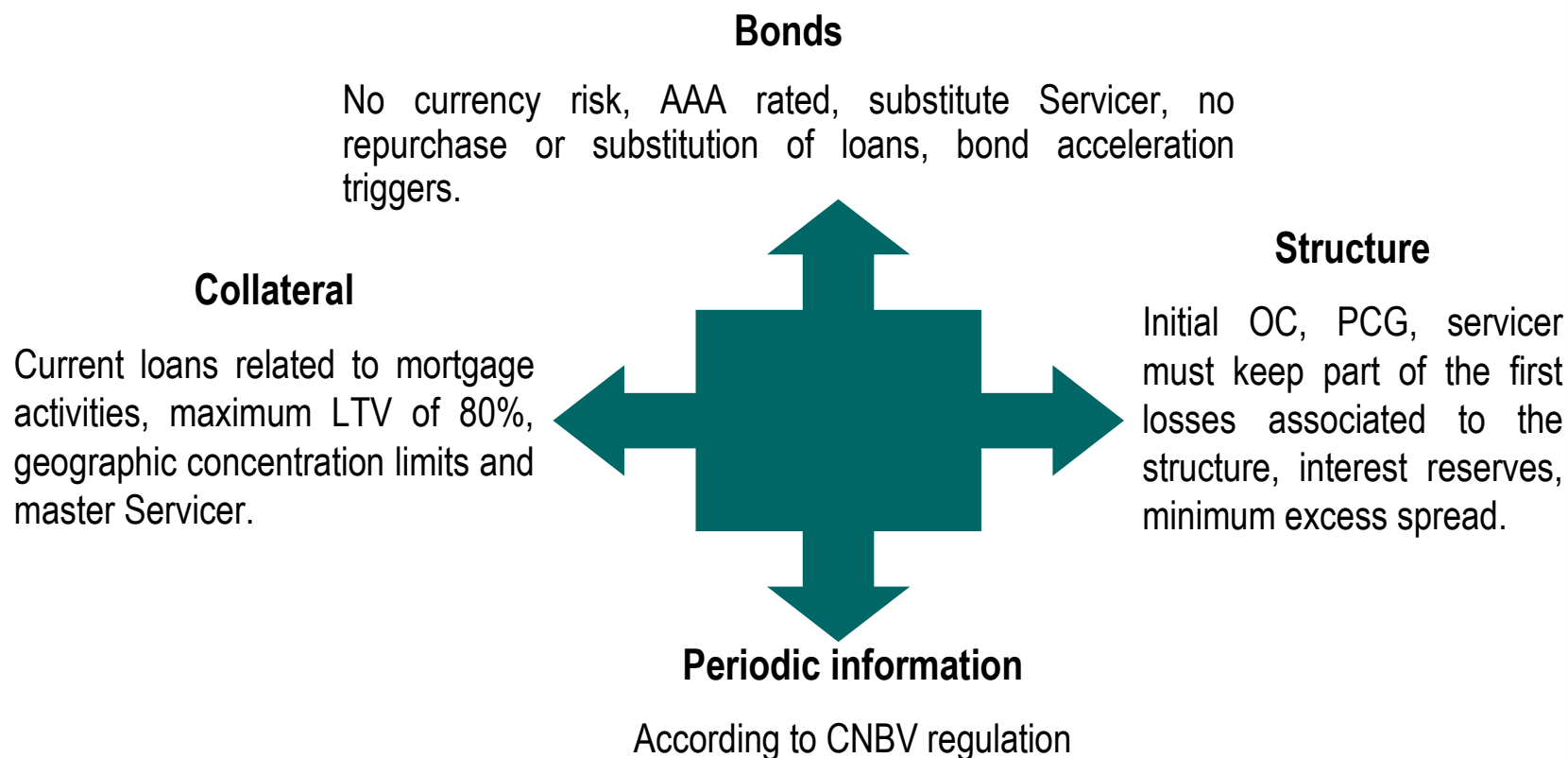
	BORHIs	Subprime MBSs
Interest rate	Fixed	Fixed, variable or a mixture
Down Payment	In all cases	Some did not include a down payment, or needed a second loan for this purpose.
Documentation	In all cases	An important proportion did not count with complete documentation, or income statements
LTV	LTV limited to 70%; or if LTV is higher, mortgages were insured.	No limit
Value of property	No speculative bubble	Speculative bubble
Ratings	Highest in local scale	Different ratings
Interest or currency rate	Does not exist	Both are present
Default levels	Structures provide high levels of protection to the investor	As structures did not have enough credit enhancements, payments to investor were not made a few months after subprime borrowers defaulted.

- All of the Borhis structures issued have conformed to highest standards.
- Recently these standards were tightened, by requiring larger residuals and that the financial institution that originated the portfolio must retain it in its balance sheet for a certain period of time. This will align the incentives between the originator and investors.

III. SHF's Role in the housing market

Measures to strengthen the market

Standardization of eligibility criteria: SHF is promoting standardization and improvement of these criteria, to bring back liquidity to these type of loans:



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Vivir Mejor

III. SHF's Role in the housing market

Securitization of mortgages (BORHIs)

Measures to consolidate the securitization market

1. Redefine the investment regimes of pension funds and insurance companies to widen the proportion they can invest in attractive products such as RMBS.
2. Equity retention from originators of securitized loans to align the incentives for all participants of these transactions.
3. Additions to CNBV's regulation regarding Issuers of Securities:
 - ⇒ Requirements to provide to the market standardized and timely information for investors: monthly information of the evolution of the loans is being required.
 - ⇒ Trustees and servicers will comply with the Securities Market regulation.
 - ⇒ Public calculators to price these securities properly.
4. Minimum criteria for substitute servicers.
5. Requirement to have a Master Servicer to provide information to the market.



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III. SHF's Role in the housing market

Securitization of mortgages (BORHIs)

- Since 2003 \$5,470 million USD have been securitized from banks and sofoles (BORHIs), this represents 184,349 mortgages.
- Despite market conditions during 2009, 17,495 loans from Banks and Sofoles have been securitized accounting for \$549 million USD.
- The market value current outstanding of BORHIs is \$3,940 million USD

TOTAL MORTGAGE BACKED ISSUANCES			
	USD (million)	No. Of Issuances	Mortgages Securitized
2003	\$ 44	1	1,979
2004	\$ 205	3	9,562
2005	\$ 214	5	8,359
2006	\$ 933	14	35,293
2007	\$ 1,967	18	60,041
2008	\$ 1,557	9	51,620
2009	\$ 549	4	17,495
Total	\$ 5,470	54	184,349

*Figures as of September 10, 2009.



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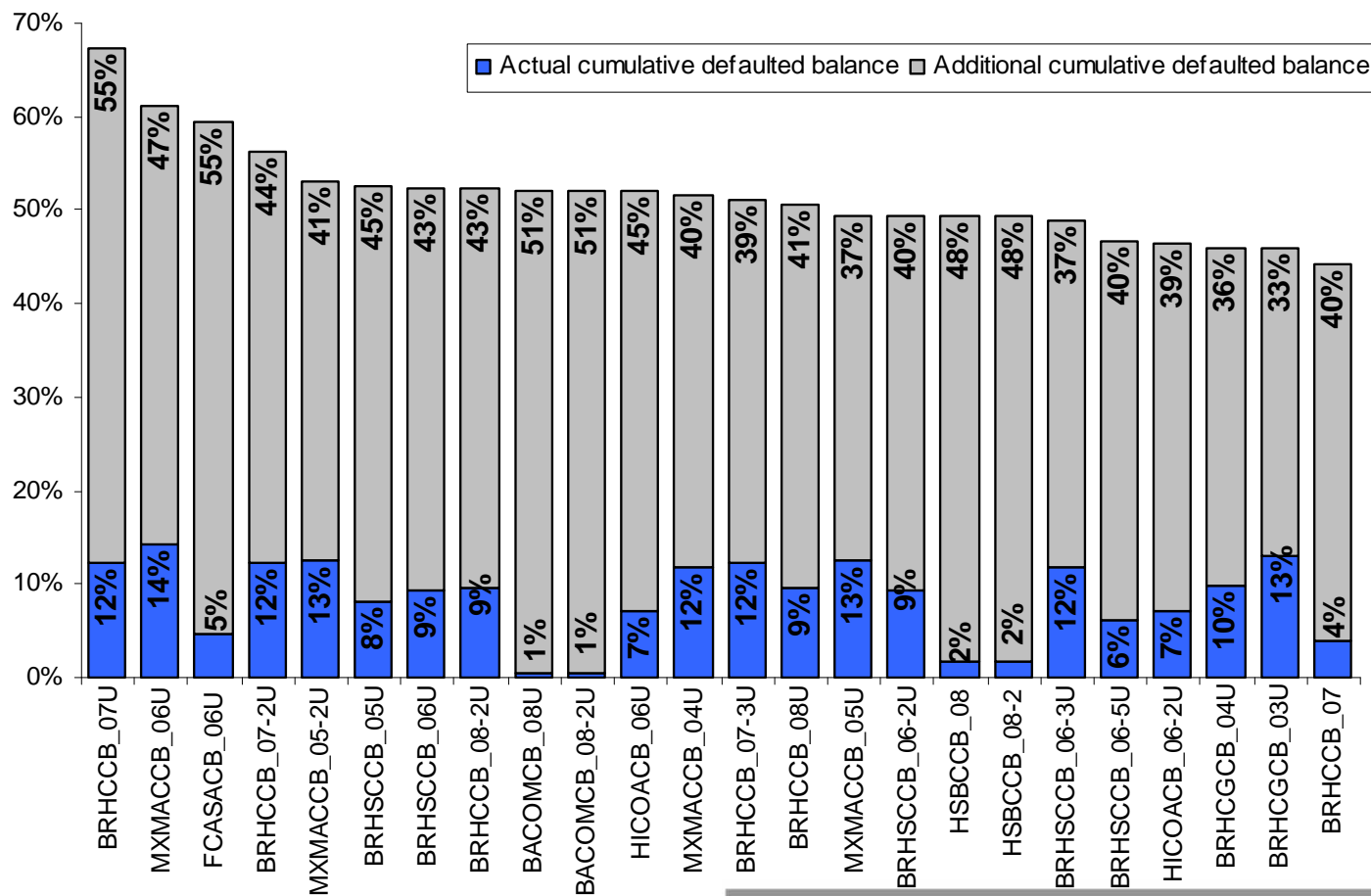


Vivir Mejor

III. SHF's Role in the housing market

BORHI's market performance

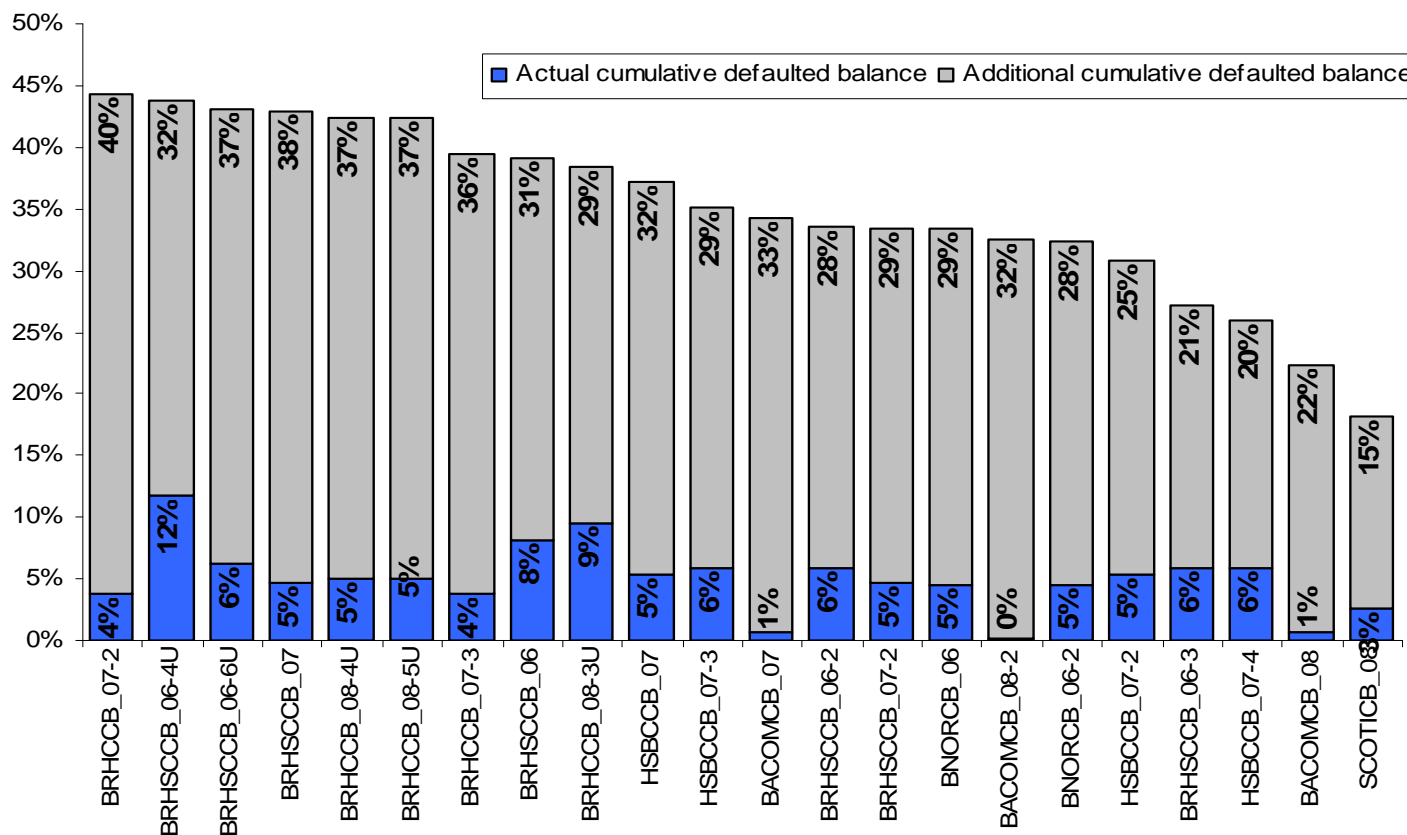
Borhis' credit enhancements allow them to support high additional levels of cumulative defaults.



III. SHF's Role in the housing market

BORHI's market performance

Borhis' credit enhancements allow them to support high additional levels of cumulative defaults.

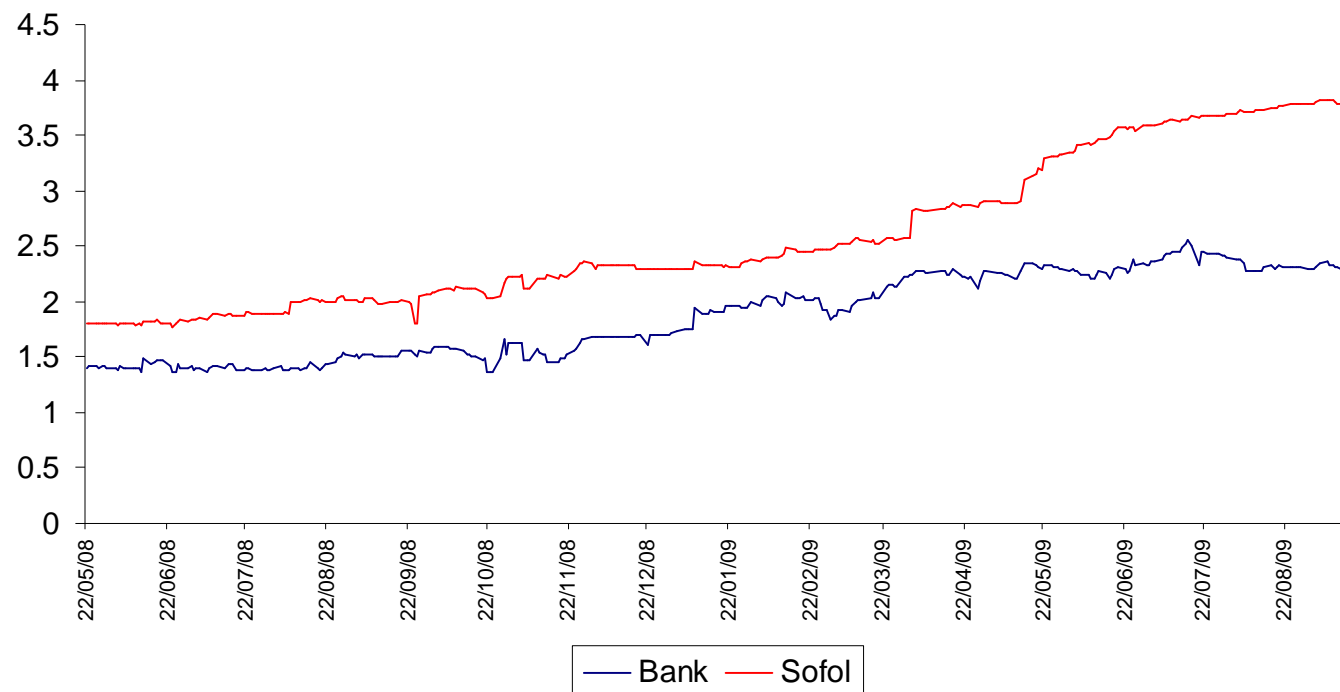


III. SHF's Role in the housing market

BORHI's market performance

The difference between the financial spreads of banks and sofols is mostly credit risk, which to date is increasing due to the economic conditions.

Bank and Sofols Spreads



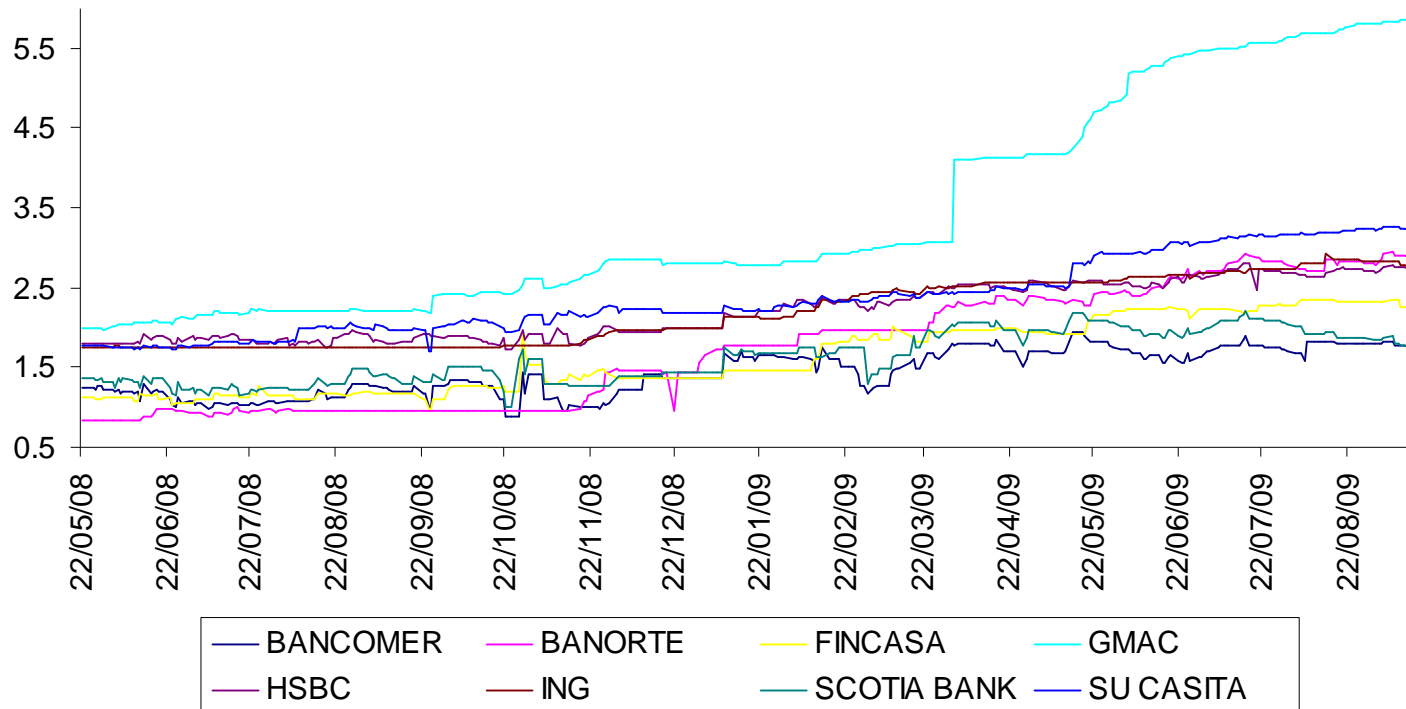
*Securities of Crédito y Casa, Metrofinanciera and Full Wraps are not considered in the chart.

III. SHF's Role in the housing market

BORHI's market performance

Investors accept the yield tradeoff of institutions like Bancomer and Scotiabank due to their minor default rate.

Spread by Financial Institution



*Securities of Crédito y Casa, Metrofinanciera and Full Wraps are not considered in the chart.



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4. Self Sustainable Housing Environments (DUIS)



III. SHF's Role in the housing market

DUIS - Background

1. Several agents that participate in the production of housing, among others State Housing Organisms, have found difficulties to develop land with adequate conditions to construct housing.
2. Different aspects affect in a negative way this productive process:
 - The **cost** of **land** available to be incorporated to urban centers and develop houses.
 - The impact of investments in urban **infrastructure** that eventually is translated to the price of the houses.
 - The **necessity** for **funds** that face States and Municipalities to attend the demand of territorial reserves, urban infrastructure, educational, health and other types of service facilities, and the implementation and operation of urban services that these developments require and,
 - The implicit **costs** to create **sustainable** cities instead of distant developments lacking basic services.



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III. SHF's Role in the housing market

Definition of DUIS

Development areas, which are integrally planned and contribute to territorial ordering in States and Municipalities and promote a more ordered, just and sustainable urban development.

Impel regional development, where housing, infrastructure, services, equipment, commerce, education, health, industry, recreation and other attributes constitute a support for regional development.

Mixed projects, as the Federal and State governments collaborate with land developers and owners to integrate their constructions to this organized policy for urban development.



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III. SHF's Role in the housing market

Promotion of DUIS

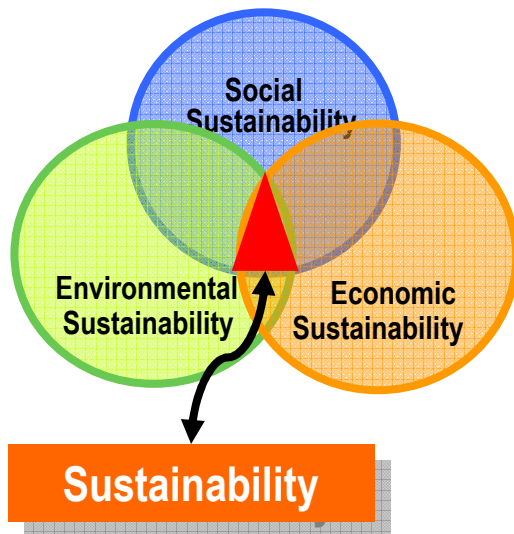
An inter-institutional Group conformed by different governmental dependencies was created to promote DUIS: SEDESOL, SEMARNAT, SENER, SECRETARIA DE ECONOMIA, CONAVI, INFONAVIT, FOVISSSTE, SHF, BANOBRAS, FONADIN and FONATUR.



BANOBRAS



SHF



This Group adds the efforts to promote **public policies** that allow the Mexican Government to grant support and initiate the development of new **Regional Development Poles** countrywide through the DUIS figure.



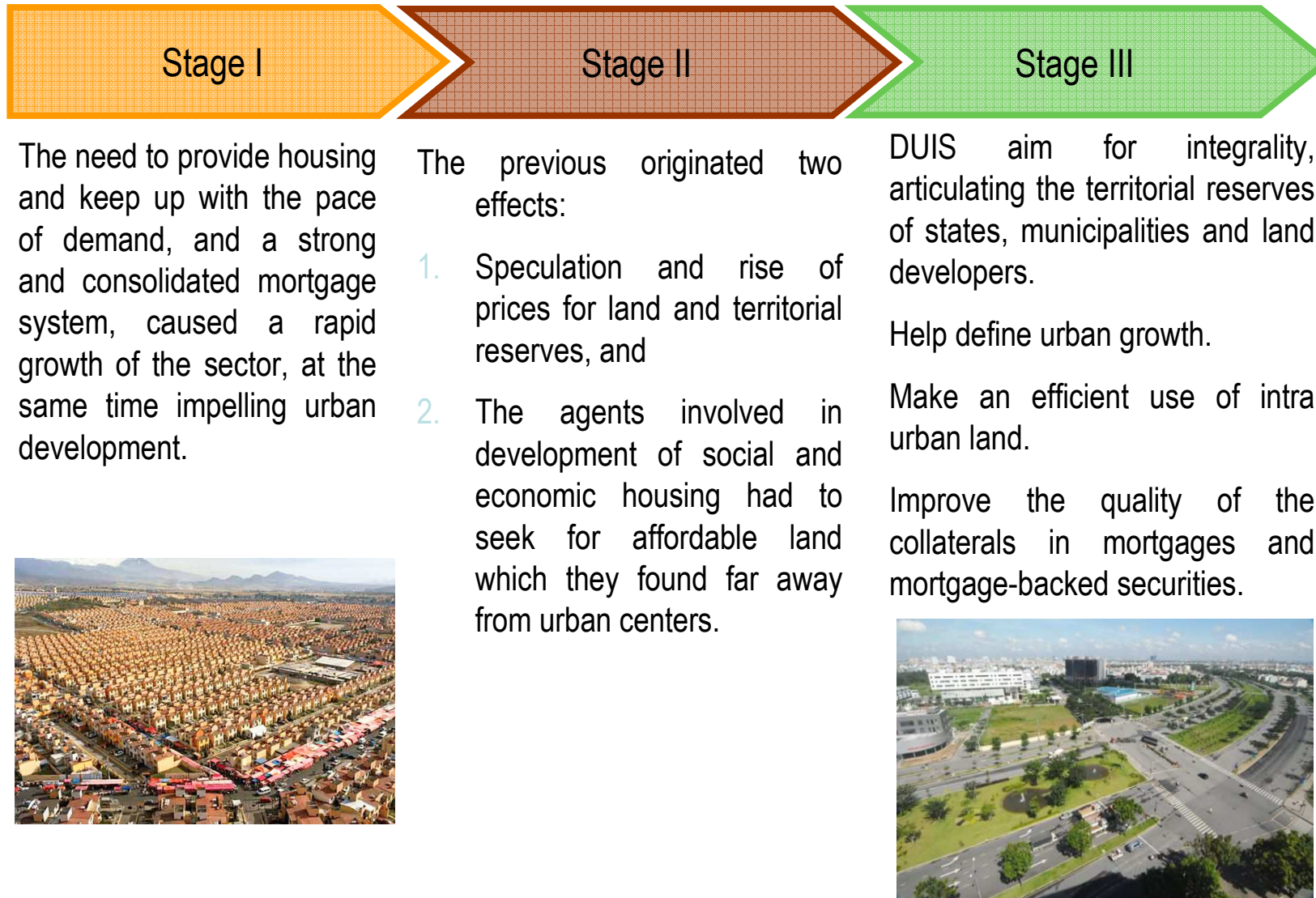
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III. SHF's Role in the housing market

Process of evolution to DUIS



III. SHF's Role in the housing market

Eligibility criteria

The members of the DUIS Group reached a consensus about the eligibility criteria for this new Regional Development Poles to be supported by these institutions:

1. Adequate **physical conditions** for the new zone to develop.
2. **Environmental** protection and territorial order conditions.
3. General conditions of **infrastructure**, services and urban equipment.
4. Architectonic concept and **sustainability** measures.
5. Study of **urban** and environmental impact.
6. Impel housing development for the **social** sector.
7. Offer **employment** for economic self sufficiency.
8. **Access** roads and public transportation.
9. **Demand** for housing from the state and Municipalities.



III. SHF's Role in the housing market

Incentives

- Once evaluated and approved, a project can count with the incentives from each member of the Group, which includes among others:

- **Support before local authorities** from the responsible dependencies of development, territorial order, environmental and economic support granting technical assistance regarding:
 1. Transport,
 2. Residue handling,
 3. Development of industrial, commercial and logistic activities;
 4. Studies to prevent and mitigate natural disasters,
 5. Plans and programs for urban development and territorial order, and
 6. Support to manage feasibilities, licenses and permits.
- Preference to facilitate **commercializing** the houses located in DUIS through the institutions that support housing, with subsidies, differentiated scoring, etc.
- **Financing** with equity, debt and/or guarantees to construct **infrastructure, equipment, construction and acquisition of housing** via the Development Banks of the Federal Government using their traditional instruments and other new ones designed for DUIS.



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III. SHF's Role in the housing market

Evaluation and Promotion

- The evaluation Group bring the benefit of a unique **window of attention** making more efficient the processes and response times.
- With the package of eligibility criteria and its weights, two independent consultants integrally **evaluate** (technically and financially) DUIS presented to the Group.
- With this, there can be additions or **modifications** to the projects.
- Those DUIS that pass the evaluation will receive a certificate to bring certainty and quality in the fulfillment of the project and can receive the **support** from the Federal Government institutions that participate.
- This will also bring **transparency** to the process.

- DUIS approved by the Group must be **monitored** periodically by the same consultant to evaluate their development and the support from the institutions of the Government.
- This ensures that the sponsor and each member of the Government completes their **commitments**.



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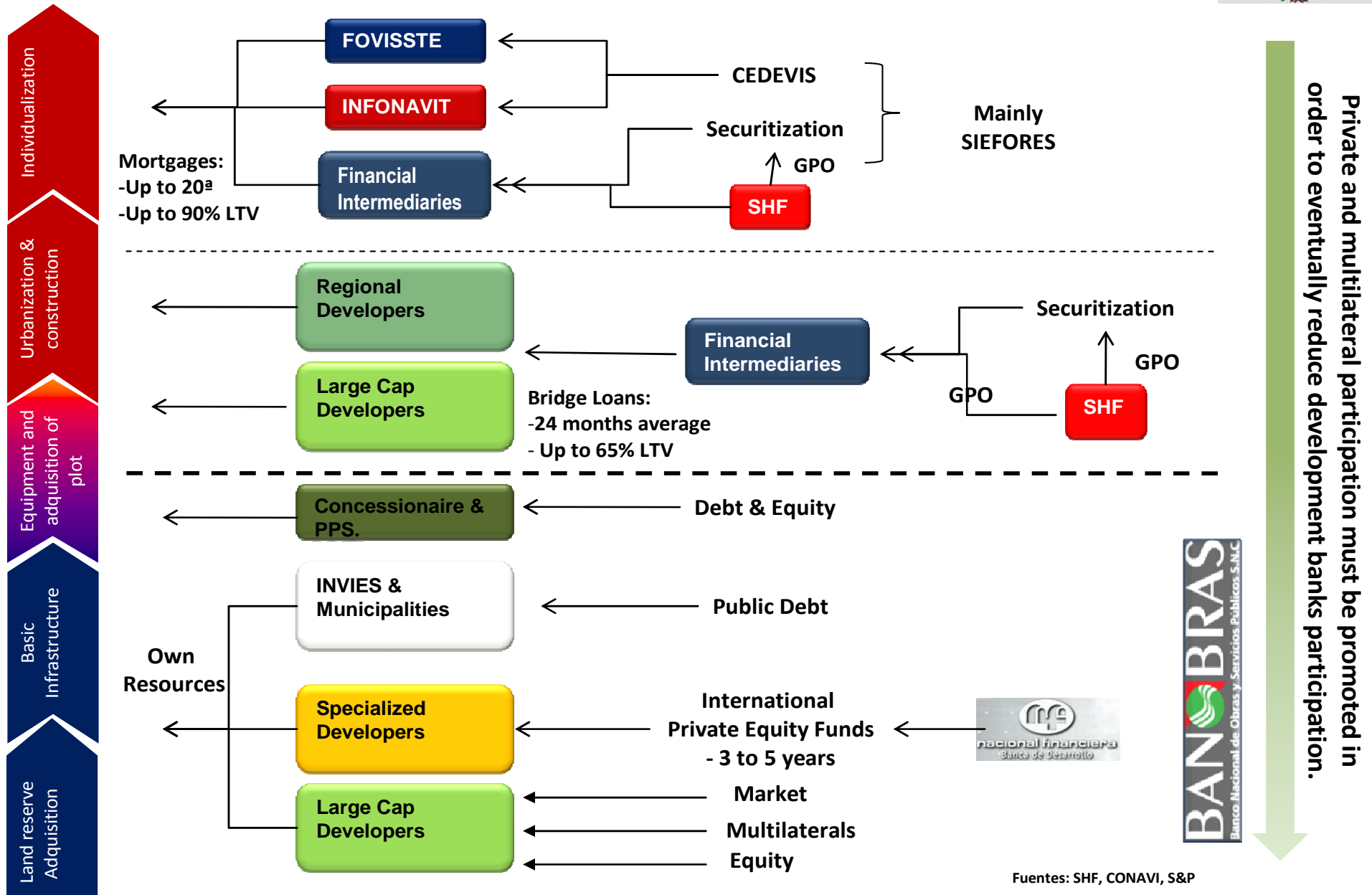
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III. SHF's Role in the housing market

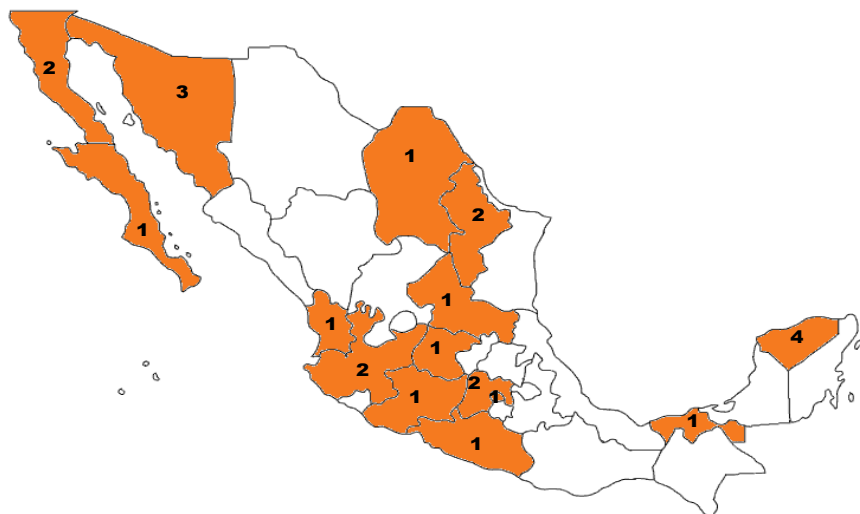
DUIS Financial Considerations



III. SHF's Role in the housing market

DUIS Projects

- There are currently 32 projects identified in 17 States of Mexico, sponsored both by public and private institutions.
- This projects represent:



1 = projects in the State

- **1,800,000 homes.**
- **7,400,000 benefited population.**
- In a **surface** of 46,000 acres.
- **Total investment USD \$22.8 billion.**

	Estado	Promotor	Superficie en Ha	No. de Viviendas	Población
1	BC	URBI	13,400	388,000	1,552,000
2	Coahuila	Industrial Condominium	1,000	30,000	120,000
3	Edo Méx.	GEOPOLIS	4,077	180,000	720,000
4	Sonora	DIXUS	1,000	52,500	210,000
5	Sonora	PRODOMUS	5,000	156,000	624,000
6	Michoacán	Municipio / PECASA	300	12,000	48,000
7	NL	Municipio	2,400	200,000	800,000
8	SLP	Gobierno Estatal	700	30,000	120,000
9	BCS	DECOPE	615	24,600	98,400
10	Edo Méx.	ARA	430	27,000	108,000
11	Guanajuato	PRUDENTIAL	300	15,000	60,000
12	Jalisco	URBI	6,000	177,010	708,040
13	Guerrero	Gobierno Estatal / CANADEVI	524	13,000	52,000
14	Yucatán	Gobierno Estatal	504	14,000	56,000
15	Yucatán	Gobierno Estatal	614	16,000	64,000
16	Yucatán	Gobierno Estatal	3,000	120,000	480,000
17	BC	PROMOCASA	300	12,000	48,000
18	Sonora	Municipio	270	10,800	43,200
19	Tabasco	Grupo VIVO	340	30,000	120,000
20	Nayarit	Gobierno Estatal	300	12,000	48,000
21	DF	CANADEVI Valle de México Gob DF	346 predios	6,700	26,800
22	Jalisco	Gobierno Estatal / CANADEVI	1,700	80,874	339,670
23	Yucatán	SARE	315	18,900	75,600
24	NL	VIVEICA	185	9,250	37,000
25	NL	HOMEX	519	24,600	98,400
26	Jalisco	HOMEX	418	22,903	91,612
27	BC	HOMEX	688	45,250	181,000
28	BCS	HOMEX	660	68,250	273,000
29	BCS	RC Homes	800	40,000	156,000
30	Chihuahua	CTU	170	10,850	42,315
31	Jalisco	Gobierno Municipal	15 predios	2,000	7,800
32	Chiapas	Gobierno Estatal	400	20,000	78,000
TOTAL			46,928	1,869,487	7,486,837



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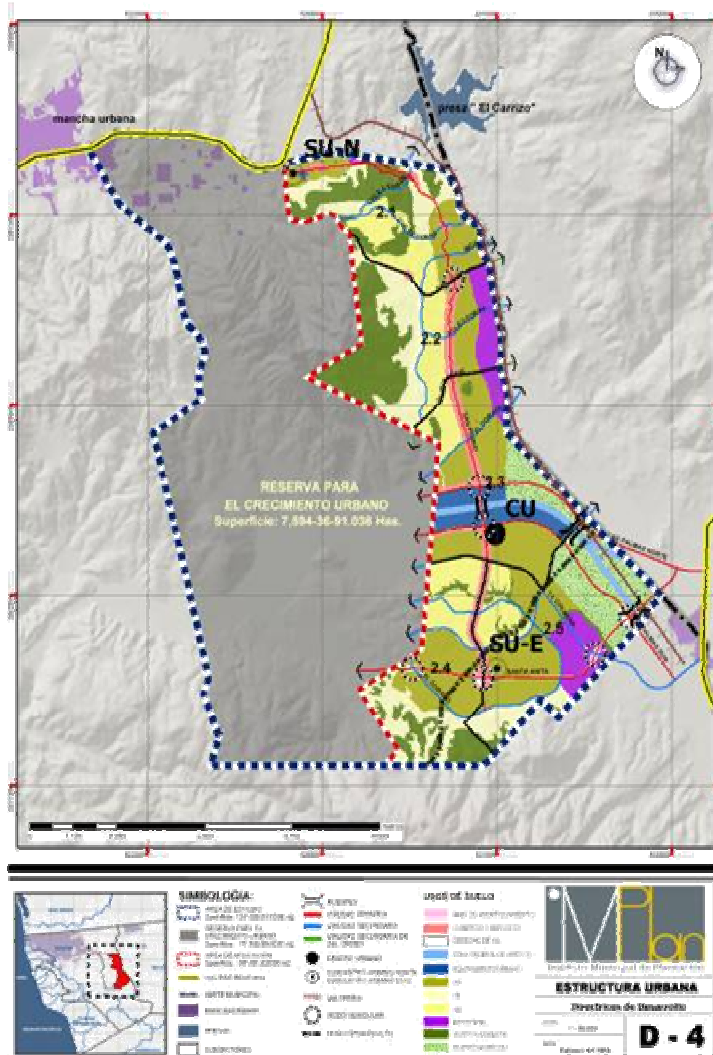
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III. SHF's Role in the housing market

Development of Projects



- To this date, the DUIS Group had sessions during 69 weeks, reaching a definition for the selecting and evaluating projects denominated as DUIS.
- There is a DUIS project that has already been launched called Valle de San Pedro, located on the southwest of Tijuana, Baja California, on a surface 5,859 acres, for 180,000 houses for 765,000 habitants.
- Counting with authorization for its Partial Plan of Development, this DUIS will help impel the growth of this region over the next 20 years.



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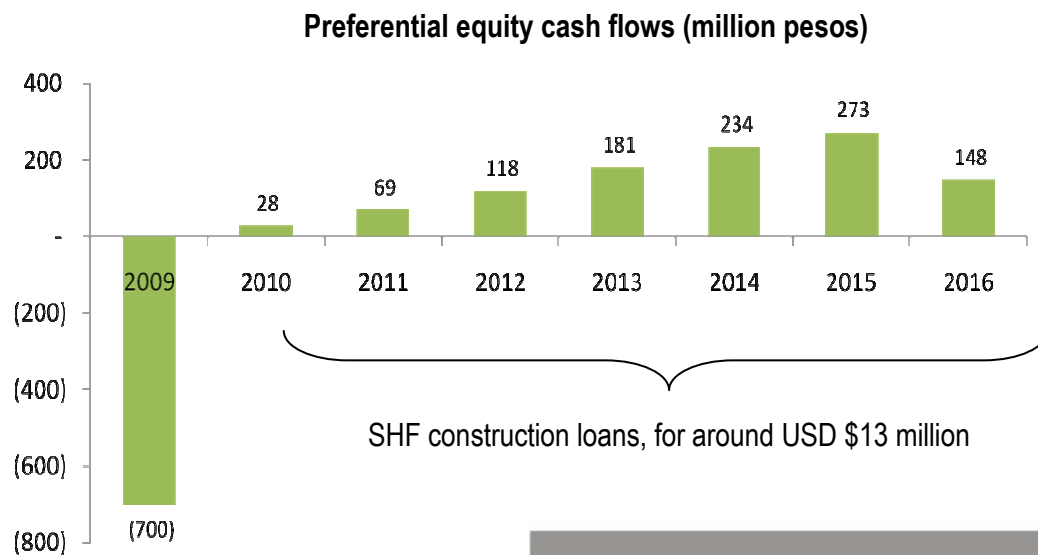
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Desarrollo Sustentable - Crecimiento Equilibrado



III. SHF's Role in the housing market

Development of Projects

- On its first stage this project requires an estimated investment of de USD \$107 million for primary infrastructure, participating FONADIN with preferential capital for around USD \$54 million. The maximum financial requirements of the project ascend to USD \$12.4 on its construction of housing stage, which can be provided by SHF.
- The business plan considers selling 335 acre of land with infrastructure which will serve to provide:
 - Industry
 - Commerce
 - Urban Buildings and Facilities, and
 - Housing, including the mid and residential sectors



III. SHF's Role in the housing market

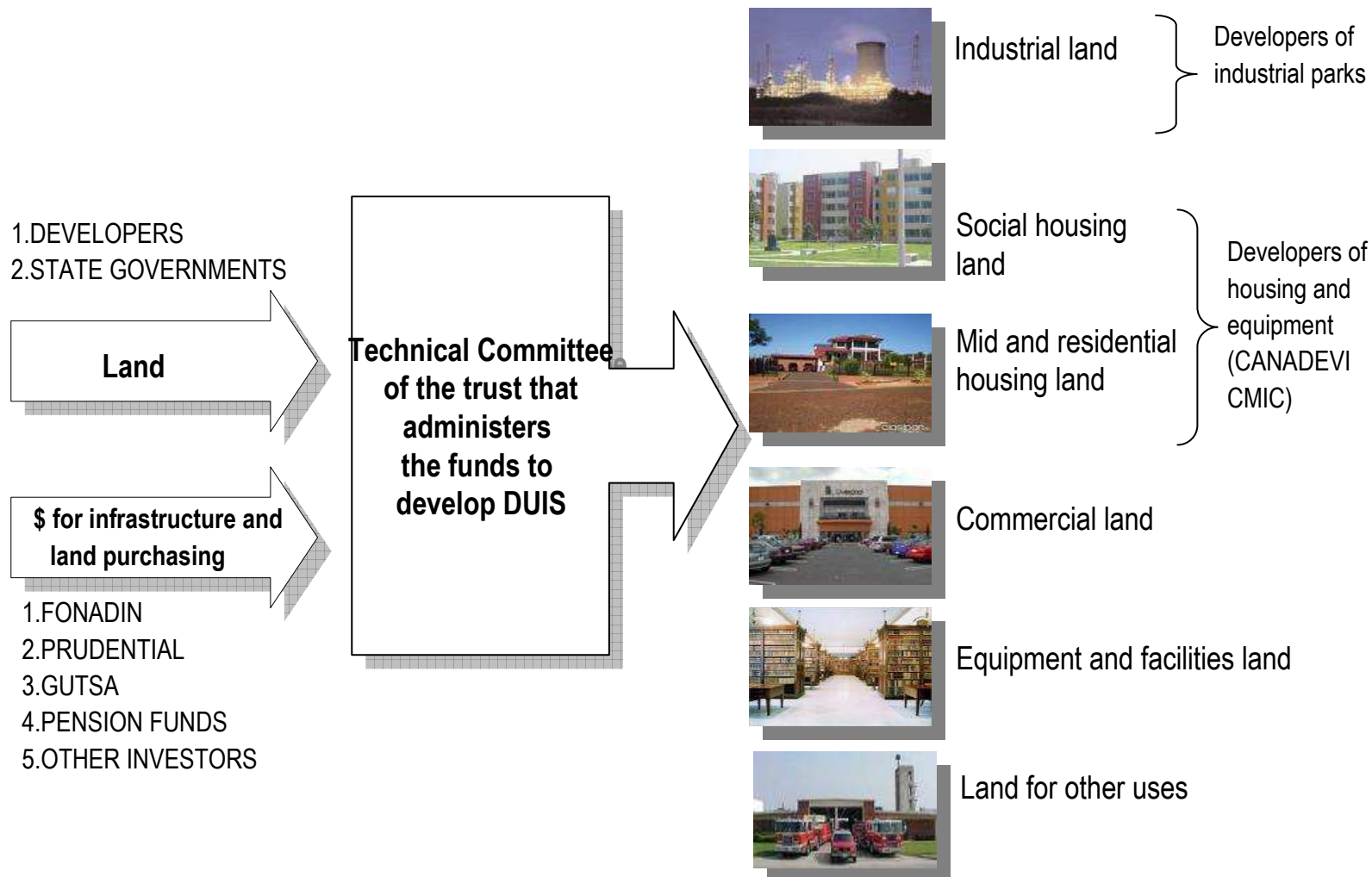
Development of Projects

- At the same time we have three projects in the stage of technical and financial analysis:
 - **Puerta de Anza**, in Nogales, Son., 22,337 houses for 87,113 habitants in 1,032 acres.
 - **El Cielo**, in Villahermosa, Tab., 30,000 houses for 102,300 habitants in 342 acres.
 - **Ciudad Natura**, in Apodaca, N.L., 9,000 houses for 37,440 in 183 acres.



III. SHF's Role in the housing market

Developers of land with services





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IV. SHF Financial Situation





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V. Final Remarks



V. Perspectives and challenges

- SHF will attend the demand for housing for the years to come on these complex market conditions through a mixture of **loans, guarantees and securitization**.
- These actions intend to provide **liquidity** to the sector and maintain the **production** of homes.
- It is also important to continue promoting the participation of the **private sector** to finance housing for the unattended segments of the population: low income, non affiliated and rural.
- To **reach** these segments of the population, SHF is widening its network of financial intermediaries and developing adequate products for these markets: saving programs and leasing with an option to buy.
- **Sustainable** and **green** housing will be favored.
- Our efforts will also be geared towards recovering the **demand** for **Mortgage Backed Financial Instruments** from investors as an adequate source of financing for this market. SHF has the goal of diminishing entry barriers and providing the necessary tools for wider investor participation.





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Appendices



Appendix

SHF House Price Index (SHF HPI)

- The **SHF House Price Index (SHF HPI)** was created using the best international methods to obtain the appreciation or depreciation rates of the price in the Mexican house market (houses, flats, apartments) through time and in the different geographical regions.
- Boost the efficiency in the housing and mortgages markets.
- Track down the expansion or contraction of the market and identify possible price bubbles.
- Establish the collateral value of the mortgage portfolio.
- Determine the quantitative relation between the house prices and non-payment.
- Update the Loan to Value.
- Help rating RMBS and pricing mortgage guarantees.



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Autonomía - Independencia - Creación de Nuevas Oportunidades



Vivir Mejor

Appendix

SHF House Price Index (SHF HPI)

Selected countries: House Price Index

OCDE Country	Institution and method Institution	Method
México	Sociedad Hipotecaria Federal	Hedonic, mixt method in the meddium term
Germany	Federal Statistical Office of Germany	Hedonic
Canada	Statistics Canada	Repeated sales
Spain	Instituto Nacional de Estadística	Hedonic
USA	Federal Housing Finance Agency	Mixt
France	National Institute of Statistics and Economic Studies of France	Hedonic
Japan	Japan Real Estate Institute	Indexation
United Kingdom	Land Registry in the United Kingdom	Repeated sales



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Resistencia Independencia - Continuidad Tradición

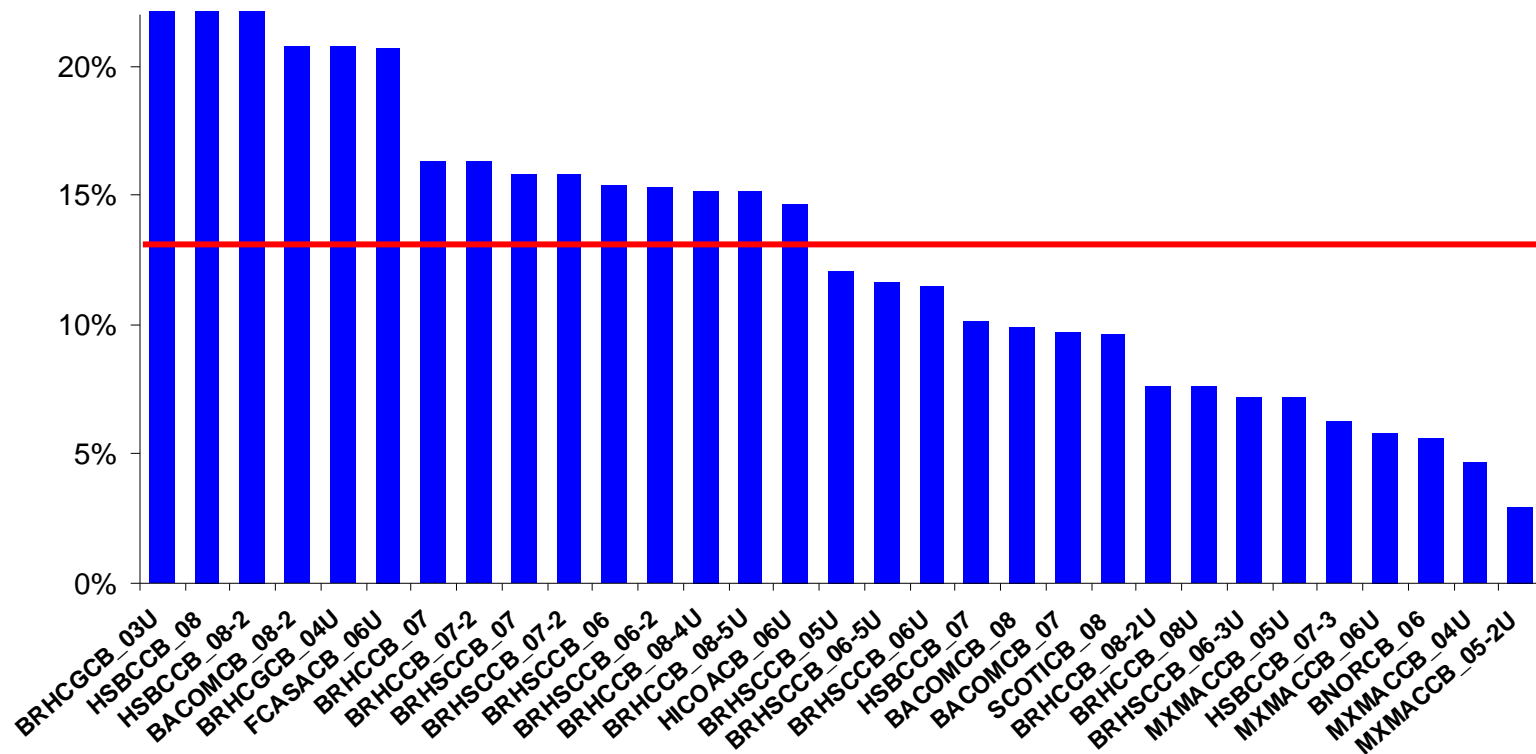


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Appendix

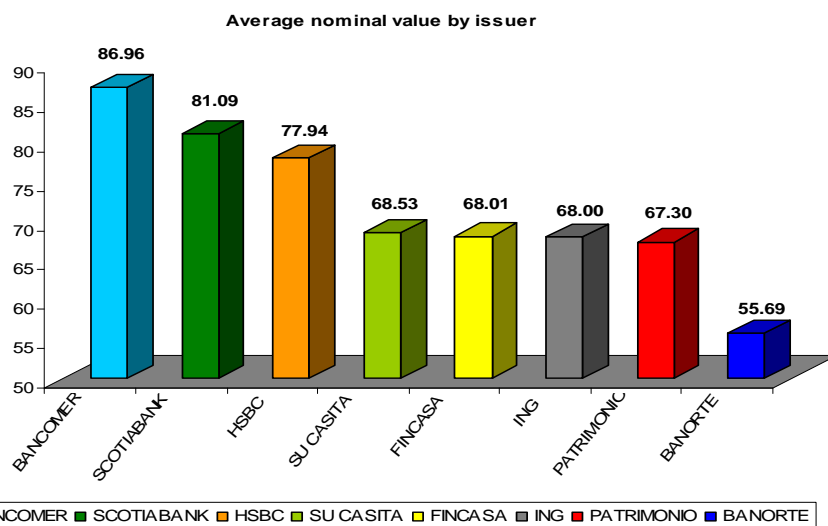
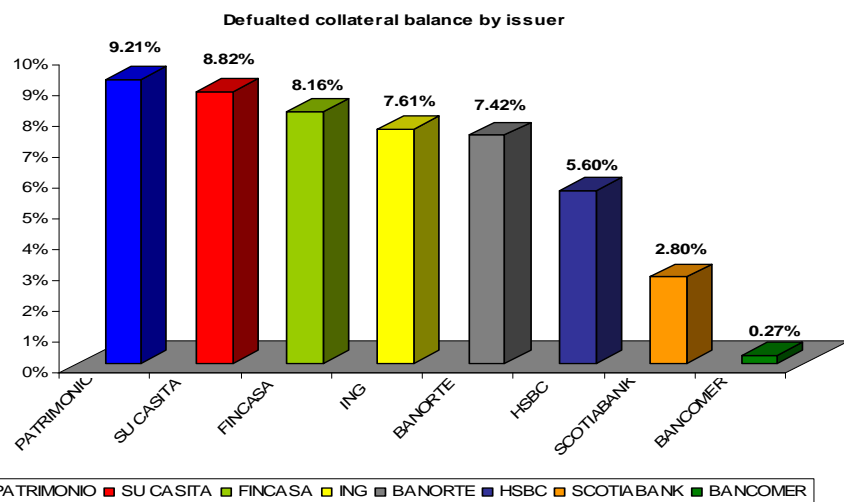
BORHI's market performance

- The total coverage backing up the Borhis is calculated considering the actual overcollateralization, the partial guarantee and the mezzanine percentages.
- The average coverage is 13.7% and accounts only for credit risk, i.e. there is no currency mismatch



Appendix

BORHI's market performance



Cumulative defaults by issuer are higher in issuers with older issuances, like Su Casita, which had its first issuance in 2003.

Nonetheless, those with more seasoned issues also have a lower outstanding balance, as seen in their Nominal Adjusted Value, which shows the percentage of balance outstanding (e.g. Banorte has 55.7% of its original balance outstanding)



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Reformando la estructura - Creando el futuro

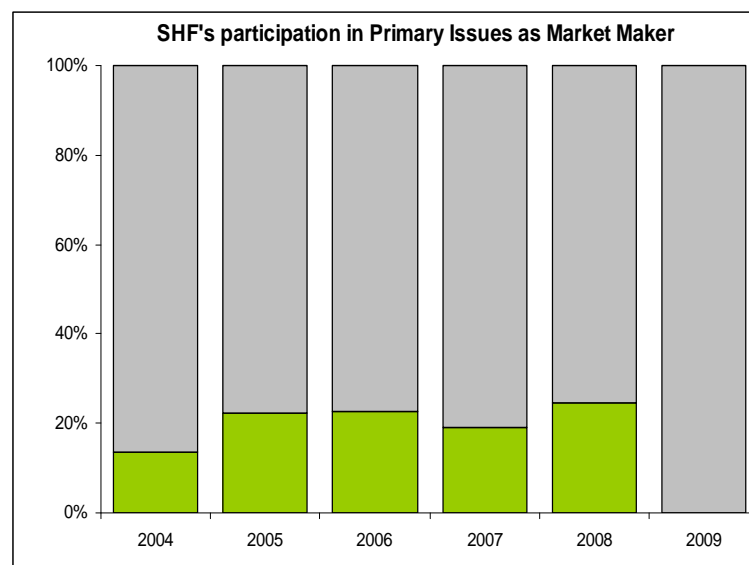
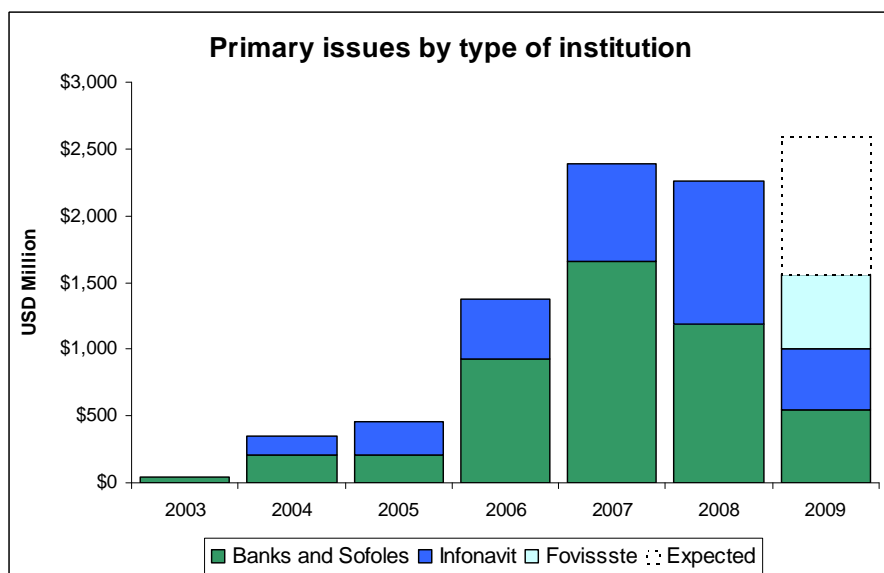


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Appendix

Mexican RMBS Market

- Primary issues in the RMBS market grew at a CAGR of nearly 90% in the period 2004-2007. However, this extremely high growth rate was affected by the financial crisis in 2008, mainly in the post-Lehman months.
- In 2009, with Fovissste now becoming an active issuer in the market, it is expected that the amount issued will surpass the amount seen in 2008.
- SHF's participation in the primary market, as part of its market making functions, has averaged 20% from 2004 to 2008. In 2009, the biggest issue was done by BBVA with an amount of USD\$450 million, did not require SHF's participation.



Source: SHF



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Mortgage Market in Mexico: Projects, Strategies and Challenges Ahead

