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FINANCIAL SECTOR ASSESSMENT PROGRAM UPDATE

MEXICO

TECHNICAL NOTE ON HOUSING FINANCE

NOVEMBER 2006

THE WORLD BANK
FINANCIAL AND PRIVATE SECTOR DEVELOPMENT
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MONETARY AND CAPITAL MARKETS
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Contents

I. Technical Note Housing Finance 3
A. Overview 3

Tables
1. Number of Credits Authorized by Source 2005 6
2. INFONAVIT Lending Spreads...12

Figures
1. Mortgage Lending by INFONAVIT Continues to Dominate the Market 5
2. SHF Total Portfolio Income Distribution 8
3. Amounts Loaned by SHF/Sofoles (2002-2005) 10

Boxes
1. The IMF TA Report on Regulation of SOFOLs and the SOFOME Law...............18

Appendices
I. Side-by-Side Comparison of 2001 FSAP Findings and Recommendations 21

I. Technical Note Housing Finance

A. Overview

1. **Since 2000, the government has adopted a range of policy measures, legal reforms, and institutional reforms that have increased residential mortgage lending by half, and established a sound footing for the further growth of stable private investment in housing finance.** The government carried out many of the reforms connected with housing finance recommended in the 2001 FSAP. Notable successes were registered in connection to the role played by SHF in the building of the housing finance market and to major improvements in the policy environment for private sector lending, as discussed in the rest of this report and described in more detail Appendix I, which offers a side-by-side comparison of the recommendations and analysis of the 2001 FSAP and the actions of the government.

2. **The SHF has successfully led a range of direct policy measures that have stimulated the development of the housing finance market.** These included: funding the growth of mortgage SOFOLs, introducing new mortgage default insurance (MI) products, encouraging private sector investment in MI, supporting the securitization of mortgages with its financial guarantees, creating new property appraisal standards, and cooperating in other government-wide initiatives. The government improved the legal environment for mortgage finance by passing reforms that reduced the average time to foreclosure from five years to two, by facilitating the reform of several state property registries, and by facilitating mortgage securitization. At the same time, the government created CONAFOVI to coordinate policy, and redesigned many of its on-budget mortgage subsidies, making them more transparent and efficient. While to date, these measures have not produced as much lending as the housing provident funds—with INFONAVIT continuing to dominate the primary mortgage market—the measures have laid the groundwork for a sustainable and widespread expansion in lending by the private sector.

3. **The development of MI, financial guarantees for securitization, and securitization itself are improving risk management and allocation within the financial sector.** At the end of 2005, SHF provided default insurance for 23 percent of bank and SOFOL mortgages outstanding. Almost all SOFOL loans benefit from MI, and an increasing number of banks are purchasing it. Mortgages securitized by SOFOLs carry MI. Neither INFONAVIT nor FOVISSSTE buy MI for their loans. Securitization of mortgages has begun. Since 2003, 15 issues for a total of MXP 11.5 billion have come to market. Securitization has moved credit risk from the balance sheets of SOFOLs to those of insurance companies and AFOREs. Thanks to MI and securitization, in the case of another crisis, SOFOLs and MBS investors will be insulated in large part from credit losses, increasing the likelihood that they will more quickly contribute to the subsequent recovery, distinct from the experience of banks in the last crisis.

4. **Loan terms have improved, and banks have shown a greater appetite for mortgage risk.** Increased macroeconomic stability has led to lower interest rates and so improved mortgage affordability. The intermediation spread has fallen in mortgage lending, leading to a drop in nominal rates on mortgages of 4 and 5 percent, and maturities for fixed

rate loans have lengthened from 15 to 20 years. Banks have returned to the mortgage lending after abandoning it in the wake of the peso crisis of 1995, now offering long maturity, fixed rate, low down-payment loans.

5. **In spite of significant gains, housing production continues to fall short of the household formation rate.** Public and private lenders achieved three-quarters of the government's goal of 750,000 units per year, set by the administration to match the anticipated household formation rate. Since the goal was not fully achieved, the housing deficit of 4.2 million units will continue to grow, albeit more slowly than in the past. One ongoing effect of this shortfall will be continued demand for mortgages and for renovation credits for informally-built, substandard houses.

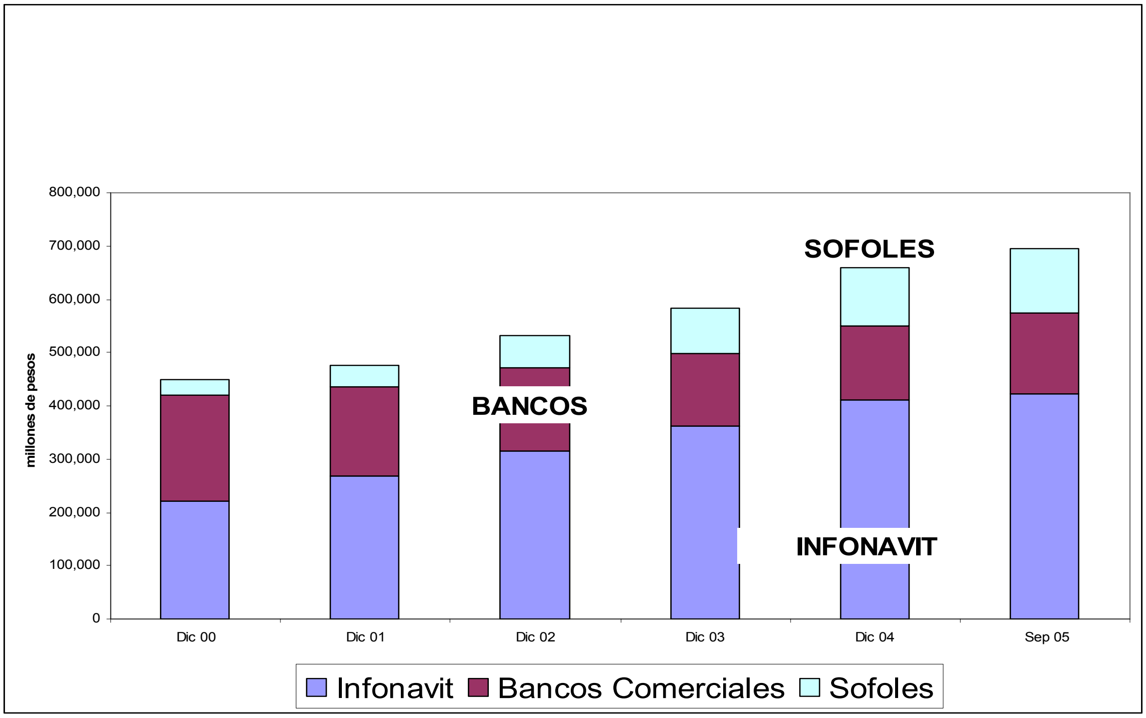
6. **In spite of the recent surge in lending to moderate and upper-income households, a number of issues remain, particularly in terms of access by lower income and informal households.** Lending reaches only a very few households that earn less than the median income. Although INFONAVIT and FOVISSSTE have carried out important reforms, each continues to provide interest rate subsidies, distorting primary markets. CONAFOVI has had very limited effects on property registration, further subsidy reforms, or the activities of institutions such as FONHAPO. The MBS market is small, and as a result of abundant bank liquidity, does not yet benefit from a steady stream of issues that would lead to liquid secondary trading or to further advances in efficiency and standardization. Large SOFOLs appear willing to wait until the 2009 deadline for the end of SHF funding to issue securities with any regularity or volume. Unless they act soon to tap alternative funding sources, the future of small independent mortgage SOFOLs is in question.

The market for housing finance

7. **The system-wide mortgage portfolio grew 55 percent between 2000 and 2005, rising to 8.7 percent of GDP.** In spite of the growth of mortgage SOFOLs and of greater bank lending, government lenders dominate the system, as was the case at the time of the 2001 FSAP. SOFOL participation in outstanding loans grew from 6.2 percent in 2000 to 17.3 percent in 2005. SOFOL lending carries no subsidy element, so the combined contribution of SOFOLs and banks can be considered market lending. Distinct from 2001, banks, which had withdrawn from the mortgage market in the wake of the crisis, have started lending again to middle and upper income segments. New bank lending made up 7.2 percent of houses financed in 2005 versus 0.2 percent in 2000. Thanks to its operational reforms and legal advantages, INFONAVIT increased its dominance of the primary mortgage market, growing from 48.8 percent of outstanding balances in 2000 to 59.9 percent at the end of 2005 (Figure 1).[1]

[1] At the time of writing, data was not available for FOVISSSTE balances prior to 2005, so they are not presented in this graph. The total portfolio for the end of 2005 was MXP 777.4 billio, of which approximately MXP 55 billion was held by FOVISSSTE, MXP 428.5 billion by INFONAVIT, MXP 116.7 billion for the SOFOLs, and MXP 173.2 billion for the banks. While the total stock of bank loans is larger than that of SOFOLs, much of these balances come from loans originated before 1995. The SOFOLs have lent more on the margin in recent years than have banks.

Figure 1. Mortgage Lending by INFONAVIT Continues to Dominate the Market



Source: Banxico

8. **Public and private lenders together financed 561,550 new housing units in 2005, coming closer to the 750,000 unit target than had been expected by many observers at the time of the 2001 FSAP (Table 1)**. While this represents a 42 percent growth over the number of units delivered in 2000, most of these public housing programs have suffered from severe financial difficulties in the past or are continuing to suffer losses (all but SHF). Others provide inefficient or inequitable subsidies (INFONAVIT, FOVISSSTE, FONHAPO lending programs, the OREVIs), and some have faced severe shortcomings in their capacity to deliver on their commitments (particularly FONHAPO in the delivery of PROSAVI subsidies, and the OREVIs in their overall organizational capacity). The sustainability of FONHAPO and OREVI programs is weak, relying on annual budget allocations. In the past, poor collection practices have compromised the sustainability of INFONAVIT, FOVISSSTE, FONHAPO, and the OREVIs.

Table 1. Number of Credits Authorized by Source 2005

Institution	Acquisition	Renovation and other	Total	Total (million pesos)
INFONAVIT[1]	371,706	4,738	376,444	73,390.7
SHF[2]	54,449		54,449	16,891.5
FOVISSSTE	42,317		42,317	12,905.7
FONHAPO	33,034	61,466	94,500	1,543.0
BANKS	55,537		55,537	38,029.0
SOFOLES[3]	44,449		44,449	17,059.3
OREVIS	10,892	11,452	22,344	2,563.0
Others[4]	8,660	39,137	47,787	5,117.0
Adjustment	-59,484		-59,484	-1,816.3
TOTAL	561,550	116,793	678,343	165,682.9

Source: CONAFOVI

1/ Includes 17,904 credits from the program Apoyo INFONAVIT y 38,090 from the Cofinanciamiento program, each of which involves public-private partnerships between INFONAVIT, banks, and SOFOLs.
2/ Of the credits originated, 4,356 were from PROSAVI and 50,093 from PROFIVI.
3/ Not funded by SHF
4/ Includes: ISSFAM (2,806 loans), PEMEX (4,728 loans), CFE (1,081 loans), PEFVM (3,587 loans), LFC (3,201 loans), PET (31,513 loans), HABITAT, A.C. (776 loans) y PROVIVAH (95 loans).
5/ Refers to loans and subsidies that come from one or more institutions.

9. **Loan terms have improved, and lenders are showing a greater appetite for risk, leading to improved housing affordability.** In 2002, UDI loans were priced at inflation plus 11.73 percent, or an all-in nominal rate of about 17 percent for a 25 year term.[2] In 2002, banks had just started offering peso loans at a fixed rate of between 15.5 and 17 percent for maturities between 10 and 15 years. By 2006, spreads and rates had fallen. The spread on UDI loans had dropped to 4 percent, for an all-in nominal yield of around 13.5 percent and banks were offering 20 year fixed rate loans at 13.5 percent and 15 year fixed rate loans at 11.1 percent. Banks and SOFOLs are now offering 90 percent and 95 percent loan to value (LTV) loans, increasingly with mortgage insurance from SHF. Higher LTV loans make housing more affordable by reducing down payment requirements. However, they cost more in interest over the life of the loan.

10. **Loan quality has remained strong at SOFOLs and at banks, and has improved at the provident funds.** NPLs at SOFOLs have risen to 4.5 percent, versus levels around 2 to 3 percent for SOFOLs in past years, and for banks now. This is not a disturbing level so long as they don't rise further, and so long as demographic growth maintains pressure on housing demand and prices. SOFOLs lend to higher risk clients than do banks, and as their market position has matured and lending has grown, it is not surprising that defaults have risen somewhat. Also, SOFOLs charge more for their loans than do banks, reflecting the higher risk of their clientele. On a related note, NPLs at INFONAVIT have fallen to 8 percent from more than 30 percent in the late 1990s. FOVISSSTE also reports an 8 percent

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[2] The UDI (*Unidad de Inversion)* is a monthly moving average of the consumer inflation rate.

NPL rate, but its problems with information systems and financial reporting have led observers to question this improved number.

11. **Via the SOFOLs, SHF maintained lending to moderate and upper income households in the wake of the peso crisis of 1995.** The growth of funding to these sectors is critical for the development of financial intermediation, and for economic growth. About 20 percent of SOFOL lending is to informal income earners. Banks stopped lending for mortgages after the crisis, and returned to upper income, formal earner segments in 2002. In the absence of SOFOL lending, the only lenders to middle income families would have been INFONAVIT or FOVISSSTE, which lack the resources to completely satisfy market demand, and which by the terms of their charters may not reach informal households.

12. **Low income households living in substandard housing are still not well served by formal sector institutions.** An estimated 4.2 million households, or 16 percent of the population live in substandard conditions. Of these households, most earn less than four monthly minimum wages (MMW)[3], and eighty percent work in the informal sector, not paying income taxes or participating in any formal pension system. That leaves 20 percent of low income, poorly housed families with a member that is affiliated with either INFONAVIT or FOVISSSTE.[4] Since many affiliates earning less than 4 MMW cannot afford a mortgage on the newly built low-cost units that are available, relatively few are served. In 2005, INFONAVIT lent to 3.4 percent of its affiliates earning less than 4 MMW, providing them with 145,133 mortgages. Beyond INFONAVIT, banks lend to households earning above 10 MMW, and SOFOLs lend above 5 MMW. Informal sector households earning less than the median of 5 MMW generally have no contact with the formal financial sector.

13. **Given the reentry of the banks, SHF has recently begun to move its funding targets further down market.** The median household income funded in 2005 was 12.3 monthly minimum wages, versus 14.1 in 2004 (Figure 2). SHF also started a pilot program in 2005 of lending to microfinance institutions that lend for housing renovations. The households served by these institutions are typically in the informal sector, earning less than 4 MMW. They often occupy self-built houses of substandard quality, frequently with limited or absent formal property rights. The micro renovation loans allow the owners to upgrade the structures over time, improving their living conditions in stages.

14. **The government should continue its promising efforts to expand the availability of savings products and microfinance loans to finance the renovation of self-built, substandard housing.** About 15 percent of Mexican households have a savings account.[5]

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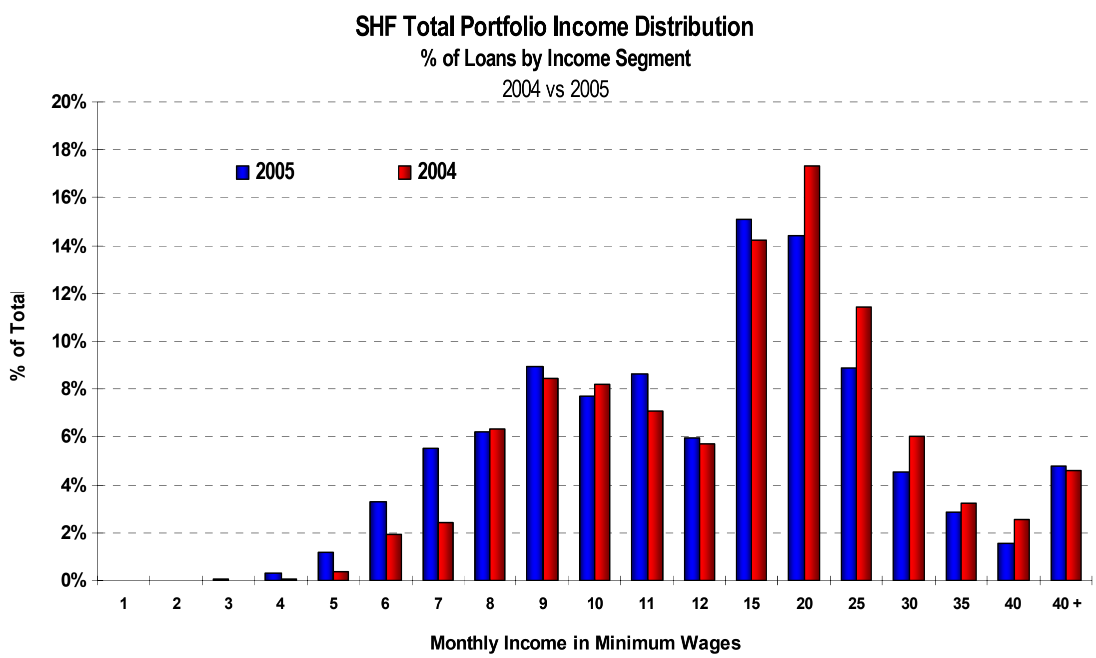
[3] Mortgage lenders segment the market in terms of multiples of the monthly minimum wage. The National Commission on Minimum Wages each year sets several minimum wages by geographical area. For 2006, the monthly median wages for large urban areas was MXP 1,460, or USD 133 at 11 MXP/USD. According to INEGI's 2004 National Survey of Incomes and Expenses, the median household income was just under 5 MMW.

[4] Source: ENEGHI statistics, analysis by McKenzie Consultants.

[5] Caskey, John P., Clemente Ruiz Duran, Tova Maria Solo, "The Urban Unbanked in Mexico and the United States."

The government has sought to increase participation in savings programs with its reforms to Bansefi. SHF, INFONAVIT, and Bansefi have cooperated on savings products that would help informal households to qualify for credit. While these efforts have produced very limited results to date, they are working with populations that show low levels of trust for institutions and that have low levels of education. These programs should be continued and expanded. As the SOFOLs with SHF support have demonstrated the capacity of households earning more than seven minimum wages to repay mortgage loans, and so attracted private banks to lend to these segments, government programs could demonstrate the viability of segments earning less than five minimum wages, which make up half of the population. Micro loans for housing renovation are growing rapidly in Peru, Bolivia, and Guatemala, and SHF has begun to provide lines of credit to micro finance institutions. Financial cooperatives have proved to be an important source of credit to low income households in Guatemala and Paraguay. SHF or other agencies could foster the growth of cooperatives, with reasonable standards for financial strength and stability.

Figure 2. SHF Total Portfolio Income Distribution
(Percentage of Loans by Income Segment, 2004 vs. 2005)



Source: SHF

15. **There are no programs to support the development of rental housing, which could be an important alternative for low-income households.** Government programs have focused almost exclusively on the acquisition of new owner-occupied housing. While there are some programs for renovation, 83 percent of credits financed the purchase of houses, most of which are single-family residences, as opposed to apartments. Existing financing programs, in combination with long-standing problems with access to developable land, have contributed to suburban sprawl and have had negative impacts on infrastructure and lifestyle, such as heavier traffic densities and long commute times.

Overall advances since the 2001 FSAP

16. **Government policies have sought to amplify the role of the private sector since the 2001 FSAP.** The national government has limited influence over the states in their processes and laws on the enforcement of contracts and in the registration and transfer of title. Through CONAFOVI, SHF, and INFONAVIT, the national government has sought to spur improvements in the practice of state and local governments, while at the same time pursuing legal changes that would extend nationwide.

- Improvements in the legal framework for mortgage lending were passed in the Miscelánea de Garantías package in 2003. These reduced the average expected time to foreclose to two years from five. While this represents an important improvement, expected foreclosure time should be further shortened to six months or less. Studies in Europe and the United States have shown that regions with shorter and less expensive foreclosure processes benefit from a greater supply of mortgages at lower rates of interest.

- The process to register or transfer real property ownership remains expensive in many states. This reduces liquidity and value in the housing market, and hinders the development of a market in existing housing. CONAFOVI and SHF have been working with the states to establish a framework to measure the efficiency of their property registries, and improve it.

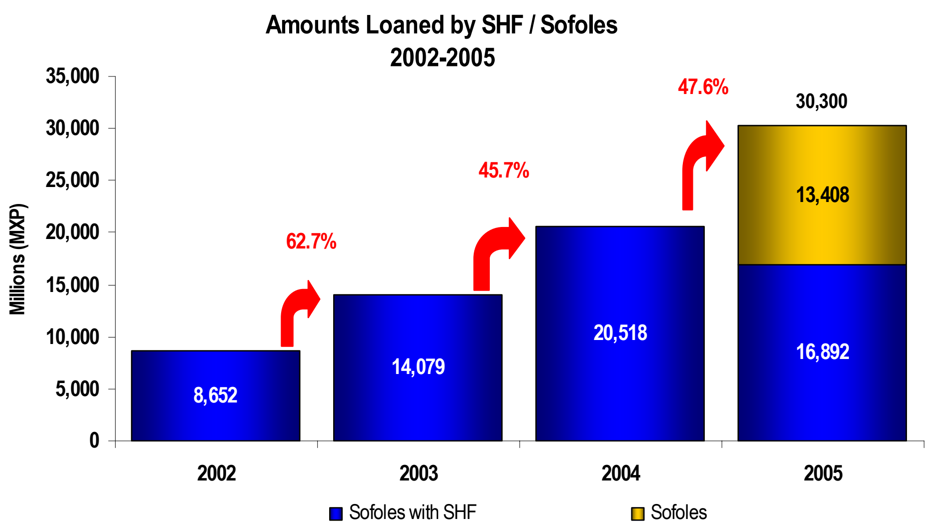
17. **Sociedad Hipotecaria Federal (SHF) has largely fulfilled the recommendations set forth in the 2001 FSAP.** See Annex 1 for a side-by-side comparison of the 2001 FSAP and the measures taken by the government, including SHF. These included the creation of a focused charter and operations that are more transparent than was the norm for development banks in 2001. FOVI's funding activities were translated to a newly founded development bank known as SHF, which was authorized to start operations in February, 2002. The previous FSAP recommended that SHF operate as a limited purpose finance company rather than as a development bank as was commonly understood. SHF is legally mandated to promote the development of the primary and secondary mortgage markets, with a special focus on the social sector. As such, SHF funds its operations via debt issuances through the money markets with associated derivatives.

18. **SHF's initial, transparent governance structure will soon be restructured as the company is split into three entities: (i) a financial guarantee firm, (ii) a mortgage insurance firm, and (iii) a development bank.** As recommended in the 2001 FSAP, SHF's Board of Directors has been composed of public sector representatives and independent members. SHF has professional management dedicated to banking areas, including finance, risk management, credit and product sales and promotion. Like other development banks, SHF is subject to CNBV supervision for financial statements, accountability, and prudential regulation under international accounting standards. The upcoming split into two entities will maintain independent board representation while allowing the firm to segregate capital for its distinct business lines.

19. **As recommended by the 2001 FSAP, SHF operates as a second tier institution and as a catalyst for private mortgage market development on commercial principles.** While SOFOL loan balances have been growing at more than 45 percent per year, their contribution looks small in comparison to the outstanding loan portfolios of state institutions. However, SHF has created avenues for private sector investment that are critical for the future growth of the mortgage finance system. SHF prices, reserves, and sets capital for all of products so as to cover losses and to provide a market-related return on equity. These programs represent a prudent and creative use of the government guarantee:

- Through its credit lines to SOFOLs, SHF has maintained lending to and competition for middle income clients, allowing the SOFOLs to grow at rates of between 45 and 63 percent per year. (Figure 3) Since two of the larger SOFOLs were acquired by banks, SHF's contribution to SOFOL financing has declined.

Figure 3. Amounts Loaned by SHF/Sofoles (2002-2005)



- SHF has developed a new mortgage default insurance (MI) product that enables lenders to mitigate the risk of higher loan-to-value ratio lending. MI promotes financial system stability by allowing for greater distribution of risk among system participants. The new product was designed to avoid the many problems that occurred with FOVI's pari passu product, including a more carefully monitored underwriting process, and providing a more clearly defined process for making claims. Between 2002 and 2005, MI risk in force grew from MXP 7 billion, for 58.6 thousand loans, to MXP 19 billion, covering 246.4 thousand loans, close to half the originations in 2005. More than three-quarters of the insurance in force is the new MI product, which covers 25 percent of the defaulted loan balance in the case of default. This reduced exposure (in comparison to 50 percent of losses under the pari passu product) allows SHF to extend coverage to a much greater number of loans while reducing moral hazard.

- SHF has pursued a conscious effort to attract private sector competition for its MI product. SHF sponsored legislation that passed the congress in early 2006 that permits private companies to offer MI. As its MI exposure has grown, SHF has purchased reinsurance from providers from the United States, providing these companies with exposure to and an increased understanding of local markets.

- SHF has sponsored amendments to the insurance and other laws that would permit private companies to offer MI. These amendments passed in April of 2006. With the passage of the law, the companies that are providing reinsurance to SHF are planning to enter the market and directly provide MI.

- SHF provides timely payment guarantees for securitizations, for a price, enhancing market access for issuers. To date, SHF has provided such guarantees on four issues.

The housing provident funds INFONAVIT and FOVISSSTE

20. **As combined savings, subsidy, and housing finance instruments, INFONAVIT and FOVISSSTE have important limits and internal contradictions.** Each institution has a long history of financial losses that resulted from politically-influenced lending and collection policies. These losses have been borne by account holders in the form of real returns that have turned positive only in the past five years. Neither fund has lived up to its potential to lend to a plurality of members. Each has had to struggle with means to ration credits to members as fairly as possible. In a country where the majority of households earn informal incomes, these institutions reach only the formally employed. Even as governance reforms have been achieved for one of the institutes, the risk remains that future governments will return to politically-influenced financial policies. *As private sector mortgage lending has developed, it is now feasible to consider removing the links between retirement savings and housing lending.*

21. **INFONAVIT is provided with advantages by law that restrict the capacity of the private sector to compete with it, even in low income segments.** Employee and employer contributions provide a safety net from credit losses. During the 1990s, INFONAVIT survived substantial defaults by relying on contributions from member wages and by paying a negative real return on savings. It is the only lender that is able to deduct loan payments directly from salaries. INFONAVIT does not pay income taxes.

22. **INFONAVIT has made major improvements in its operations, transparency, and corporate governance.** It has implemented new, more efficient automated systems and business processes for mortgage origination and servicing. By reducing its NPL ratio from over 30 percent in the late 1990s to 8 percent in 2005, and by originating according to industry standards, the operational reforms have enabled INFONAVIT to increase lending, dramatically improve its cash flows, and pay a return on savings that is comparable to the return paid by AFOREs. It has adopted international accounting standards and made itself subject to CNBV oversight. As a result of changes to its law passed in April, 2005, INFONAVIT has improved corporate governance, establishing committees for risk management, auditing, and for strategic policy that include senior external professionals.

23. **INFONAVIT has widened its cooperation with the private sector, providing its members with the ability to better leverage their INFONAVIT savings accounts.** Via the Cofinancing product, INFONAVIT members may simultaneously originate the purchase of a house with two credits, one from INFONAVIT and one from a private lender. With Apoyo INFONAVIT, households may use their INFONAVIT savings account as down payment for a loan originated by another lender.

24. **In recent years, INFONAVIT has targeted its lending down market.** Of the 13 million members of INFONAVIT, 10.5 million have never received a credit. Of these nonrecipients, 91 percent earn less than 7 MMW. Between 2002 and 2005, 76 percent of the 1.3 million loans that INFONAVIT originated went to individuals earning 7 MMW or less, a segment that is lightly served by SOFOLs, and that is not served by banks. This is positive in that the cross subsidy between lower income savers that lack the resources to borrow and upper income borrowers has been reduced. Also, given that banks and SOFOLs serve upper-income INFONAVIT members, it makes sense to use more of INFONAVIT's resources to address underserved markets.

25. **Due to legal constraints, INFONAVIT has not been able to change its product characteristics.** By law, its loans remain linked to an index of wage inflation. By the choice of its board, INFONAVIT prices by spreads over the wage inflation index that vary by income category, cross-subsidizing borrowers in lower income segments. (Table 2) Given that wage inflation ran about 3 percent last year, INFONAVIT loans to individuals earning more than 5 MMW cost a nominal 12 percent. This is somewhat lower than the most comparable product, an UDI loan offered by a SOFOL, which is linked to consumer inflation plus a spread, currently resulting in about a 13.5 percent annual nominal rate. INFONAVIT's nominal 12 percent somewhat higher than the fixed rate on 20 year bank loans to higher income borrowers (about 11 percent). But INFONAVIT and commercial banks do not compete. Borrowers with the income to qualify for a commercial bank loan are able to either borrow on their own or use INFONAVIT's cofinancing products and rely primarily on a private sector credit. As long as INFONAVIT de-emphasizes the upper income market, then the more important competition is with SOFOLs, with a more comparable product (UDI loans) and common income segments, between 5 and 7 MMW.

Table 2. INFONAVIT Lending Spreads

Salary (multiples of MMW)	**Spread over Minimum Wage Index**
1.5	4 percent
2.0	5
3.0	6
4.0	8
5.0	9

Source: INFONAVIT

26. **INFONAVIT's cross-subsidies represent an allocation of wealth from net savers to borrowers.** Most net savers are low income. Subsidies to low-income borrowers reduce the ability of INFONAVIT to pay interest on the savings accounts of its members. Since

many low-income members lack the income to support a mortgage loan, they effectively cross-subsidize higher earning members that are able to borrow.

27. **INFONAVIT's securitization program requires transparency, advanced systems, and to be sustainable will require market-based prices.** Since March, 2004, the institute has brought five issues to market, for a total of MXP 5.2 billion, representing 1.3 percent of outstanding mortgage credits. For any institution to carry out a successful securitization program over time, it needs automated systems and business processes that permit it to quickly and accurately extend and service a large number of individual credits, and administer the bonds resulting from the securitization. On the one hand, INFONAVIT's securitization program acts as an impetus for the modernization of its systems and processes. On the other hand, the securitizations have been expensive, requiring over-collateralizations of 18 and 23 percent, which is high by international standards, and represents a cost of financing for the institute. The over-collateralization required for each transaction should be reduced as INFONAVIT improves its track record for credit risk management. In addition, the over collateralization and cost of each transaction would be reduced if the underlying loans were denominated in pesos instead of being indexed to the minimum wage, and were priced at a spread that reflected INFOVAVIT's risks. The minimum wage index is not commonly used in the financial system, and so the translation to a peso-denominated bond is expensive for INFONAVIT, and adds to the required over collateralization.

28. **Operational reforms at INFONAVIT are positive and important, but they do not resolve the internal conflicts between its roles as lender, pension fund, and subsidy provider.** There is an inherent conflict between maximizing returns for savers and providing low-cost mortgage finance through cross-subsidies. By law, INFONAVIT is not permitted to diversify investments to maximize returns for members subject to an agreed upon risk tolerance, as any other pension fund would do. Its subsidy programs eliminate income that would be available to nonborrowing members as returns on deposits.

29. **INFONAVIT pricing is closer to market than it used to be, but even in lower income segments it should establish a market-based lending rate.** Since other lenders do not operate actively in segments below 7 MMW, INFONAVIT correctly claims that there is no market lending rate in these segments. However, the lending spreads that INFONAVIT collects on these loans obviously have little to do with credit risk or other calculations. (See Table 2.). Rather than using an arbitrary spread, a market rate could be estimated by adding to the risk free rate a spread that compensates on a net present value basis for expected and unexpected credit risk and other costs. As INFONAVIT successfully lends in this sector at rates that better reflect the costs of private sector lenders, it could lead those private sector lenders down market.

30. **If INFONAVIT is to subsidize lower income households, it should provide the present value of those subsidies in a lump sum at the time a mortgage is originated rather than providing a reduced interest rate.** A lump sum subsidy would be more transparent, as INFONAVIT would be required to show the subsidy as an expense on its income statement. Under current practice, interest rate subsidies are less obvious, because they show up as lower net income rather than being stated explicitly in the financial statements. In economic terms, each type of subsidy reduces the amount of income available

to pay on deposits. Providing the subsidy as a lump sum would also facilitate coordination of these subsidies with other, on-budget subsidies currently administered by FONHAPO. Finally, providing the subsidy as a lump sum and pricing loans at market would create loans that can serve as collateral for securities at a lower discount than subsidized loans.

31. **Given INFONAVIT's reduced reliance on the salary contributions of its members, these contributions should be redirected to the Afore system.** In the past, weak collections made INFONAVIT dependent on its salary contributions in order to survive. As a result of reforms, this has changed, and with improved collections, INFONAVIT predicts that between 2006 and 2010, salary contributions will fall from 39.9 percent to 27.1 percent of cash inflows. At the same time, portfolio collections will rise from 52.4 percent to 61.8 percent of inflows.[6] Eventually, portfolio collections will overwhelm salary contributions. Given this structural change, the salary contributions should be phased out altogether so as to provide an incentive for INFONAVIT to continue managing its portfolio well. These forced savings could be redirected to AFOREs or made voluntary.

32. **INFONAVIT's authority to collect loans via payroll debits should be given to all other mortgage lenders.** INFONAVIT is the only lender that is able to deduct loan payments directly from member salaries. This capacity could be extended to other lenders, putting them on a similar footing to INFONAVIT and reducing their credit risk.

33. **FOVISSSTE has made much less progress than INFONAVIT, but it is developing new automated systems and streamlining its business processes.** In positive terms, FOVISSSTE now uses the operations network of SOFOLs to originate mortgages. It is investing in systems and reforms. It allocates mortgages using a lottery rather than internal political processes. Until recently, FOVISSSTE was required to set the size of its lending program as part of the annual federal government budget. In 2005, the law was changed to free FOVISSSTE from the federal budgeting process so that it may lend directly from its own resources.

34. **The results of FOVISSSTE's reform efforts to date are very limited.** FOVISSSTE's corporate governance has not advanced. Unlike INFONAVIT, it has not developed the management or external audit committees, and unlike INFONAVIT, it has not been made subject to CNBV oversight or international accounting standards. FOVISSSTE's financial statements are audited with qualifications, some of which stem from the inability to reconcile figures between its disparate automated systems. Management has difficulty providing basic data on the business and the performance of the mortgage portfolio.

35. **FOVISSSTE provides much deeper interest rate subsidies than does INFONAVIT, but its effect on the market is limited due to its more restricted membership base.** Like INFONAVIT, FOVISSSTE mortgages are linked to wage inflation. FOVISSSTE spreads range between 4 and 6 percent over the index, substantially lower than INFONAVIT's topmost rate of 9 percent. FOVISSSTE reported 2.1 million members at the end of 2005, of which 1.3 million had not received a loan. FOVISSSTE membership will

[6] INFONAVIT Financial Plan 2006-2010, page 115.

grow only to the extent that federal government employment grows. Since FOVISSSTE members are all federal government employees, the income distribution is much more restricted than that of INFONAVIT or the population as a whole, with relatively few affiliates earning less than 7 MMW.

36. **FOVISSSTE should be made subject to regulation and governance as a financial institution.** FOVISSSTE should be subject to supervision by the CNBV, and be subject to banking standards for financial reporting, governance, internal controls, and financial risk management. FOVISSSTE's subsidies should be made on an up-front basis so as to be more transparent, and to facilitate coordination with the government's on-budget subsidy policies.

Mortgage securitization has begun with some growing pains

37. **The start of a mortgage-backed securities (MBS) market is an important and fundamental achievement.** Securitization of mortgages enables a virtuous circle of savings and investment that includes individuals, banks, SOFOLs, and institutional investors such as Afores, and insurance companies. Securitization enables the transfer of long term mortgage credit and market risk to investors best able to bear it, and has led to lower mortgage interest rates in many countries. Lenders brought MXP 6.125 billion to market in 2005 in eight transactions, 25 percent more in peso volume than in 2004. Since 2003, 15 issues for a total of MXP 11.5 billion have come to market. While an important start, this represents only 0.71 percent of the balance of credits outstanding in the system at the end of 2005. Banks have not yet issued MBS, as they still have sufficient liquidity from deposits, and their mortgage portfolios are small in relation to their balance sheets, even with 30 percent annual growth in lending. Many of the smaller SOFOLs have not yet securitized, lacking the required volumes to do so on their own, and so far showing no willingness to develop a joint approach. Larger SOFOLs, such as Su Casita and Metrofinanciera have each brought several deals to market, but still are reliant on SHF for the bulk of their funding.

38. **Mortgage securities should play an important role in risk management and stability for all lenders within the next two to three years, as portfolios grow and SHF's financing sunset nears.** Currently, bank mortgage portfolios are small in relation to their large and liquid balance sheets. SOFOLs find it preferable to fund with SHF credits. However, the financial structure of dual-index and fixed-rate loans and SHF's 2009 sunset for direct funding will eventually drive capital market funding for mortgages.[7] Large SOFOLs may be expected to wait until closer to 2009 to go to the trouble and expense of regular MBS issuance. Su Casita, the largest independent SOFOL, has already brought several issues to market, although it still funds the bulk of its balance sheet with SHF credits. Metrofinanciera has based its business model on securitization of bridge loans and of mortgages. At the extreme, larger SOFOLs could wait until just before SHF's sunset before

[7] By law, SHF's direct financing of lender portfolios ends in 2009. SHF's privilege to issue government-backed bonds ends in 2013. UDI loans are linked to two indexes: payments are linked to an index of wage inflation, while the principal is linked to the UDI. Lenders generally use a basis swap offered by SHF to convert the payment stream to UDIs, and eliminating basis risk within the loans. SOFOLs that fund with SHF eliminate term risk in funding because SHF lending is fully matched to loan terms. Banks holders of UDI mortgages accept basis and term risk, as their deposits are denominated in nominal pesos.

issuing in large volumes, as outstanding SHF credits will preserve their lower government-backed financing rate beyond the sunset date. Bank-owned SOFOLs will be able to fund UDI and fixed rate loans with bank deposits for some time (another two years in the judgment of one SOFOL manager) before creating basis and term mismatches large enough to require mitigation through securitization. The banks themselves predominately originate fixed rate nominal peso loans. These create a maturity mismatch for their deposit base, for which either securitization or mortgage bonds would serve as an ideal mitigant.

39. **As during any boom period, pressure to reduce costs and cut corners on credit origination persists.** The main distribution channel for residential mortgage credit is the property developer. The faster that the developer sells the houses in a given development, the sooner it can repay its bridge credit from the SOFOL and redeploy its capital in another project. As they complete a significant portion of a given development, developers set up sales and financing offices in the developments, and as they line up would-be home buyers, the developers take the mortgage applications. The developer has a strong incentive to minimize the costs and maximize the speed of the mortgage origination process, and it has no exposure to the quality of the resulting credit. Larger developers have market power relative to smaller SOFOLs. If small SOFOLs do not accept a given package of loans, even if documentation is deficient, the developer can take the package to another SOFOL that needs the business.

40. **Questions have been raised over the quality of the process and the nature of the involvement of auditors and credit rating agencies.** The role of accounting standard letters and rating agencies in a new securitization market can be distinct from that in an established market. In any securitization market, it is essential to establish investor confidence in the integrity of the process. With one pool for which SHF was asked to provide MI, it found that fully 30 percent of the loans suffered from deficiencies in documentation ranging from missing credit bureau reports to missing or deficient appraisals, and loan currency denominations distinct from that of the rest of the pool. On this transaction, the auditor had reviewed a small sample of loans that were not eventually included in the securitized pool. The rating agency did not review any loan files, and the institutions that were offering credit enhancement did not review any files. Issuers and regulators should consider standards for the inclusion of due diligence firms to review the files of the loans that make up collateral pools.

41. **Covered bonds could prove to be an attractive alternative to securitization for banks and larger SOFOLs, but specialized legislation would be required to establish ring-fencing of collateral.** Covered bonds would provide another means for lenders to match fund their mortgage portfolios and create attractive assets for institutional investors. Unlike securitization, covered bonds would permit lenders to keep their most attractive assets on their balance sheet. Covered bonds could also be a simpler alternative to securitization. Several of the foreign banks operating in Mexico have experience in issuing covered bonds in other markets, in particular Spain. Legislation would be required to establish the senior rights of bondholders in case of bankruptcy of the bank.

The future of SOFOLs

42. **With the end of the SHF credit line approaching in 2009, one would expect to see more tangible signs of strategies to fund themselves beyond that date.** Instead, large SOFOLs such as Su Casita have securitized a relatively small portion of their portfolios, and small SOFOLs have as yet failed to develop any means to gather portfolios large enough to merit the cost of securitization. Smaller institutions that lack adequate scale in their operations will have to either change their business model, be acquired by a bank, or go out of business. Large independent SOFOLs (Su Casita, Metrofinanciera) can continue to operate with securitizations after SHF ceases funding. Some SOFOLs will continue as units of banks (e.g., Hipotecaria National). While SOFOLs will be able to originate new credits from SHF right up to the deadline, one would expect more to be developing programs of similar, regularly timed issuances. Such programs serve to establish market confidence in the capacity of an institution to provide regular supply of issues. To establish an issuance program, SOFOLs might be expected to start now with periodic regular issues that make up an increasing portion of new originations so that when the SHF stops lending, the SOFOL is able to replace SHF funding for all of its marginal lending.

43. **It is important not to postpone the sunset of the SHF credit line.** The point of creating the mortgage SOFOLs with SHF support was to create an industry and then let it operate on its own, funded by securitization or direct investments from private shareholders. Long term funding by state banks does not constitute a sustainable market. A SOFOL business strategy that depends solely on the SHF mortgage credit line should not be considered viable for operating beyond 2009.

44. **As it did with construction lending, SHF should consider providing positive and negative incentives for SOFOLs to wean themselves from its mortgage funding lines in advance of the 2009 subset.** For its construction loan guarantees to larger SOFOLs, SHF reduced its guarantee coverage in stages, providing bank lenders with an incentive to develop expertise in construction lending, and providing SOFOLs with an incentive to develop their capacity to borrow from banks.[8] SHF is working with the industry on a facility to collect portfolios from smaller SOFOLs that would provide the scale economies required to make a securitization worthwhile. To complement this positive incentive, SHF could provide interim deadlines for reducing its funding lines as alternative sources present themselves.

The changing regulatory regime for SOFOLs

45. **The SOFOMES law will reduce prudential regulation costs for SOFOLs, reduce moral hazard of the government, and reduce the legal costs of market entry.** The new law, passed in February of 2006, creates a new legal entity, *Sociedad de Objecto Financiero Multiple* (SOFOME), that may lend for any purpose and that is not supervised by the CNBV, but that may not accept deposits. In essence, the new law liberalizes lending and factoring, and eliminates prudential regulatory requirements for all lenders that are funded by investors

[8] This has worked for larger SOFOLs, but the smaller ones that still benefit from 100 percent construction loan guarantees have predictably taken more risk, and in two cases, have suffered important losses.

and banks. It reduces supervisory costs and potential moral hazard for the government by eliminating CNBV oversight over SOFOMEs.

46. **It is important to further develop market regulatory institutions such as auditors, rating agencies, disclosure requirements and the risk management capacities of institutional investors.** The original set of recommendations offered by the IMF technical assistance report regarding the deregulation of SOFOLs envisioned the deregulation in the context of a number of improvements to issuer disclosures, bank regulation, and securities regulation, only some of which have come to fruition.[9] (Box 1.)

Box 1. The IMF TA Report on Regulation of SOFOLs and the SOFOME Law

The IMF report recommended relying primarily on market regulation for SOFOLs that are not funded by development banks (the SHF), and contractual regulation by public banks for SOFOLs that are publicly funded. The report couches its recommendations in terms the motivations for regulation. These would be to address a failure of the financial system in terms of: 1) anticompetitive behavior; 2) market misconduct; 3) information asymmetry; or 4) systemic instability. The first two give rise to a need for market regulation, the second two to prudential regulation. The report notes that non-publicly funded SOFOLs are financed by institutional investors that should be able to protect their interests, that they do not rely much on the historic "thin" official oversight, that their contagion risk seems limited, and so they should be deregulated to limit moral hazard and reduce supervisory costs. The report recommends that CNBV's prudential oversight role vis-à-vis publicly funded SOFOLs be delegated to the public banks. The report makes a series of recommendations regarding improved disclosures, improved effectiveness of corporate bankruptcy and resolution procedures, elimination of licensing and minimum paid-up capital requirements, and deregulation of publicly-funded SOFOLs as CNBV becomes satisfied with their contractual oversight by public banks.

The SOFOME law achieves the broad goals that the IMF recommended, albeit without the phased-in approval by CNBV that the report envisioned and without the distinction of public versus non-public funding. The law eliminates restrictions on leasing, factoring, or extension of credit by commercial companies while providing them with the same tax advantages and legal powers granted to institutions regulated by CNBV and the Treasury. These tax advantages include an exemption from the asset tax and the value-added tax on financial transactions. SOFOMEs will also retain the legal capacity to act as trustees.

[9] "Oversight Framework of the Mexican Nonbank Financial Institutions (SOFOLES)", Alain Ize, Eva Gutierrez, Ursula Ciaravolo, Anastasios Corolis, February, 2005.

47. The contractual prudential regulation of publicly-funded mortgage SOFOLs by SHF as a public bank exists, but in the context of persistent confusion on the part of SOFOLs regarding SHF's role. Given SHF's history in licensing, promoting, and regulating SOFOLs, and its involvement in the resolution of two failed mortgage SOFOLs, many market operators have long viewed SHF as their primary regulator. In the late 1990s, SHF played a direct and active role in selecting and licensing SOFOL operators and investors. In the absence of active regulation by the CNBV, SHF imposed risk-based capital rules for the SOFOLs that it funds. In two recent SOFOL failures, SHF stepped in to engineer purchases of the institutions as the primary creditor and effectively the sole source of the funding required to survive. It will be a challenge for SHF to establish more distinctly its role as financial counterpart rather than the implicit roles of promoter, licenser, and regulator that it has borne in the past. Important in this process will be SHF and the SOFOL industry's respective efforts to tap alternative funding for smaller SOFOLs, or SOFOMEs, as they will eventually be known.

48. **Despite progress made through CONAFOVI, the government still lacks a well-functioning, centralized, consistent policy for housing subsidies.** There is a persistent shortage of credit for segments earning less than four minimum salaries particularly for informal households. INFONAVIT and FOVISSSTE are the most important sources of subsidies for housing, but are the least fair, efficient, or transparent. Nor do they reach the informal sector. Without budgetary authority CONAFOVI cannot manage the national system of subsidies. FONHAPO continues to suffer from serious defects in the capacity to implement programs. Given the success in the median income segments, it is important for the government to use its institutions to reach the bulk of the population that earns less than four minimum wages.

Recommendations

49. INFONAVIT / FOVISSSTE—Remove the links between savings systems, housing finance, and housing subsidies.

- Phase out the 5 percent employee contribution or transfer it to the pension (Afore) system .

- Level the playing field—give payroll discount capacity to banks and SOFOLs, impose banking regulatory rules on each.

- The CNBV should examine the cost/benefit of INFONAVIT securitizations to date to be sure that they add value to the institution given their pricing and the required level of over collateralization.

- Set market and risk-based loan interest rates for loans to all income segments.

- If subsidies are to continue, provide them in the form of up front subsidies to households that require them, not to exceed the present value of existing interest rate subsidies.

- Eliminate the definition in law of the credit products that each institute may offer.

- Establish in law the supervision of the two institutions by the CNBV.

- Use the market position of the institutes to work with more states to promote reforms to property registries and title transfer and registration procedures.

- Establish in law that SHF and INFONAVIT should focus their lending on households with incomes lower than the median.

50. INFONAVIT and FOVISSSTE should consider purchasing MI for their loans, to benefit from increased risk sharing in the system, and to submit their origination standards to the scrutiny of a third party.

51. Securitization—the CNBV should review itself or have the standard setting agencies look at the methodology of rating agencies and auditors with respect to securitization. Consider norms that reflect the level of development of this market such as requirements to use diligence firms to review collateral documentation.

52. Develop a common policy on subsidies and access to credit for low income households that includes CONAFOVI, FONHAPO, INFONAVIT, and FOVISSSTE.

53. Use the power and market presence of CONAFOVI, SHF, INFONAVIT, and FOVISSSTE to pressure the states and localities to press ahead with reforms to the legal infrastructure for primary markets, including foreclosure processes, land and title registration and transfer, mortgage registration and transfer. Foreclosure time should be reduced to six months or less, in the presence of reasonable consumer protections.

54. SHF should continue its efforts to promote microfinance for housing to benefit households earning between 1 and 3 MMW.

55. The government should develop programs to encourage rental housing as a solution for very low income households. The same types of in-kind subsidies that have been provided to individual households in the form of serviced lots could be provided to developers of low-cost rental housing.

56. Through law and regulation, the government should enable the issue of covered bonds by banks and SOFOLs (SOFOMEs) as an alternative to securitization.

Appendix I. Side-by-Side Comparison of 2001 FSAP Findings and Recommendations

Topic	2001 FSAP Finding or Recommendation	Status April 2006
Structure of the housing finance system	The formal housing finance system is small, subsidized, fragmented, and dominated by three uncoordinated non-market public institutions (i.e., INFONAVIT, FOVISSSTE, and FOVI). Important inefficiencies linked to pensions that are lower than they should be and inequitable. Complex dual indexed loans, institutions not producing public financial statements. Only a minority of Mexicans has access to mortgage finance, the rest relies on informal housing finance system. Pricing not risk based, subsidies not coordinate or efficient.	The system has grown and the private sector element is more important, but the system remains dominated by the state. Some formal sector finance now reaches to the median household income, five monthly minimum wages (MMW), but most is above 7MMW. INFONAVIT has recently targeted more of its lending to the 2 to 4 MMW segment, and remains the only formal sector institution to reach this segment. Most Mexicans still rely on the informal sector for housing solutions. Securitization has begun. Sociedad Hipotecario Federal (SHF), has put in place a foundation for the growth of private sector finance as outlined below. As interest rates have fallen, banks and Sofols have started originating nominal peso loans, but dual index loans remain dominant. Banks have returned to lending to upper middle income households. The formal mortgage finance system has to date only grown to 8.8 percent of GDP, versus 5 percent at the end of 2000. Communication has improved between public institutions, and INFONAVIT and FOVISSSTE are more transparent, but they continue to provide implicit subsidies without coordinating with other agencies. Most of the growth in originations have come from INFONAVIT and FOVISSSTE at subsidized rates of interest, albeit with improved targeting by INFONAVIT. Together they held more than 60 percent of outstanding mortgages at the end of 2005. Each pays better pension returns than they have in the past. Per Development indicators, GDP 2004 USD 676.5 billion.
CONAFOVI to coordinate housing policy	CONAFOVI created in 2001 to reduce fragmentation, design a coherent housing finance strategy	CONAFOVI has had limited effectiveness coordinating policy. It did produce a national plan in 2001. As described below, CONAFOVI led the rationalization of the design of on-budget subsidies. However CONAFOVI has not been successful in improving the capacity of FONHAPO to disburse subsidies. It has created a subsidy working group that includes INFONAVIT and FOVISSSTE, and that has calculated the value of the subsidies offered by each institution. CONAFOVI has had limited success in reforming property registries.
Subsidy reform	Fiscal resources to fund efficient, transparent and well targeted subsidies should be separated from finance, in order to unlock the growth of the housing finance	The vast majority of subsidies (>75 percent) are provided in the form of below market interest rates by INFONAVIT and FOVISSSTE. There is no coordination of these policies with the on-budget subsidies, although INFONAVIT and FOVISSSTE are cooperating in a subsidy working group with CONAFOVI, FONHAPO, and SHF. On-budget federal subsidies targeted at the low income portion of the population were separated (2001) from the interest rate and are now granted as a lump sum that increases the down payment, except for subsidized loans from FONHAPO to OREVIs and private lenders. The total budget for subsidies is YY, which remains small in relation to the sector and the economy.

Topic	2001 FSAP Finding or Recommendation	Status April 2006
		Now centralized and administered by a separated entity known as FONAEVI, which is entrusted to conforming and managing a unified housing subsidy system and in charge of centralizing information regarding subsidies operation. FONAEVI has coordinated the expansion and improvement of "Prosavi" and "Tu Casa" which are federal subsidies. On an operational basis, the development bank FONHAPO is responsible for disbursing on-budget subsidies, but has had substantial difficulty doing so. Disbursements of Prosavi and Tu Casa dropped to YY in 2005, from YY in 2004. Separately, FONHAPO management has committed to ending its subsidized lending programs and turning existing credits over to SHF to collect.
The transition of FOVI from its status as a fund of ***Banco de Mexico*** to an independent financial institution	The new SHF should have a focused charter and operate under much more transparency than the existing development banks. The functions of a limited purpose finance company (rather than those of a development bank) should guide the financial authorities in focusing the activities of the SHF	FOVI's funding activities were translated to a newly founded development bank known as Sociedad Hipotecaria Federal (SHF), which received authorization from the Mexican authorities to start operations in February, 2002. As such, SHF has all the required prerogatives to fund its operations via debt issuances through the money markets with associated derivatives in most cases. SHF has a Board of Directors, some of which are independent members, and a professional management in central areas (finance, risk management, credit and product sales and promotion). SHF is legally mandated to promote the development of the primary and secondary mortgage markets, with a special focus in social sector. It has moved the market below the level of banks (10 monthly minimum wages or MMW), reaching a limited number of households earning between 5 and 10 MMW. (5 MMW being the median for the country). But most lending funded by SHF has been above 7 MMW.
	Improperly designed, the operation of the new SHF (mission, charter, governance, privileges and powers) could undercut market-based resource mobilization and lending by private lenders and adversely affect the sustained growth of the private mortgage markets for the foreseeable future.	SHF has been the sole source of funding for Sofols, supporting their financing of segments that banks were not serving (5 to 10 SMM), has priced at market, so by definition does not compete with private sources of funds. SHF has also promoted initiatives to encourage private sector entry into the markets that it serves, such as the new MI and financial guaranty law that permits the private sector to offer these products. SHF will have to achieve independence of government backing in 2013 when it loses the government guarantee, as established in law and so it seeks to achieve self sustainability through its pricing and financial policies. In 2001, Sofoles relied heavily on SHF funding. Now, in 2006, this landscape has changed considerably:

Topic	2001 FSAP Finding or Recommendation	Status April 2006
		- Hipotecaria Nacional, the biggest Sofol, was acquired by BBVA Bancomer, one of the two most important Mexican banks and so no longer uses SHF funding. - SHF has substituted direct funding to developers with partial credit guarantees for bank credits to them. - Increasing number of MBS issuances made by Sofoles. - SHF new products oriented to market funding facilitation (GPO, GPI, Swap SM – Udis, MBS market making) and private sector participation.
	The new SHF should be subject to regulation and supervision by the CNBV, with enforcement powers.	As other Development Banks, SHF has been under supervision of CNBV. The CNBV enforces disclosure of financial statements in a timely manner, as well as accountability and prudential regulation. CNBV has sought to put development banks in the same "level playing field" as that of private banks, by making them disclose information according to international accounting standards.
	The SHF should only operate as a second tier institution and function as a catalyst of private mortgage market development, mainly through guarantee products.	SHF has acted as a catalyst for development of the market via activities that include funding Sofols, offering MI and financial guaranties for MBS, establishing loan origination standards, promulgating appraisal standards, gathering and publishing market data, participating in subsidy policy formation, administering up-front subsidies for a period, sponsoring a law that makes private sector MI possible. Its products are: funding Sofoles, banks if they want (sunset date of 2009 persists in law) in which the individual mortgages serve as collateral in case of default; MI offered to Sofol or bank mortgages where the lender is the beneficiary of the MI; financial guaranties for MBS issued by banks or sofols, and Construction lines of credit offered by banks to sofols. SHF is prohibited by law from granting mortgage finance to individual borrowers
	SHF governance should achieve complete transparency and it should provide for full and timely public disclosure of Board decisions and financial results. Full transparency of all Board decisions as noted above should limit the perceived risk of conflict of interest	SHF law provides for representation of diverse nature within its Board of Directors. It has seven members, four of which are the Secretary and the Undersecretary of Finance, the Secretary of Social Development and the Governor of Banco de Mexico. Two more are to be appointed by the Secretary of Finance and one more is to be an independent councilor. No Board decisions are made public. Financial statements are made public, per CNBV rules on reporting standards.

Topic	2001 FSAP Finding or Recommendation	Status April 2006
	The SHF should be fully autonomous in its human resources management. A positive amendment introduced by the House proposes a Wage Committee reporting to the Board of the new SHF. Yet this improvement still leaves SHF personnel policies under the direct influence—if not control—of the SHCP.	This Wage Committee is fully operational and serves as and independent body, but it still functions under the main influence of SHCP officials and other Government offices through budgetary policies. The Wage Committee has sought to apply rules and procedures that conform to practices found in the labor market. In practice, SHF staff has been professional and high quality, drawing many from the financial sector.
	The authorities should explicitly contemplate the eventual privatization of the SHF in their reform agenda, for it would encourage SHF management to operate on commercial principles. The mission would recommend trying to float a minor part of the SHF shares, in order to strengthen its business plan and its market orientation, and provide incentives for business transparency	SHF law has foreseen the fact that the institution might be privatized in the future, by settling a specific date in which the federal government guarantee ceases to apply. SHF management believes that floating a minor part of SHF's shares seems implausible in the near future due to the political environment, although it could be the right market mechanism to orientate its business plan. No major work or attention has been paid by management or the government to privatization of SHF. The 2006 FSAP mission believes that it is premature to consider full privatization of SHF, as it has been such an effective housing policy tool for the government. Perhaps a partial floating as 2013 approaches would make sense.
	The use of government guarantees for SHF debt securities should be limited and their use over time controlled by explicit sunset rules which might be possible under the proposed law, but it is not specifically mentioned. Under the draft law, however, SHF liabilities would enjoy full government guarantee for an unduly long period of 12 years. The authorities should consider limiting the government guarantee to limit the growth of contingent liabilities, give incentive to SHF to manage risks properly, and avoid creating a public monopoly hostile to the growth of private sector finance.	The law has not been amended to move up the date at which the government backing of SHF debt would be terminated. The law contemplates the end of funding in 2009 and the complete removal of the government guarantee in 2013, but does not provide a specific program that gradually limits this guarantee. SHF has stated as a strategic mission to operate fully under market rules. Since rating agencies require history to assign high ratings and since SHF takes systemic risk (and concentration far superior to private sector standards) management it is not sure that 12 years is an adequate period of time to achieve triple-A status. Rating agencies are quite open about their methodologies. Several U.S. MI providers have triple-A ratings. It should be possible for SHF to develop a plan for the maintenance of its triple-A status after the termination of the government guarantee on its debt in 2013.
	SHF issuance of securities should not be backed indefinitely by a government guarantee.	Management has not aggressively pursued funding without government backing. Given the

Topic	2001 FSAP Finding or Recommendation	Status April 2006
	Management should explore funding alternatives such the issuance of SHF bonds without a federal guarantee.	time available until that date, management has not viewed it as a priority. SHF has explored funding alternatives related to the secondary market, however management believes that triple-A status in the MI and financial guaranty businesses is strongly required. Government backing is clearly the easiest way to maintain the triple-A rating. SHF should develop a plan for the intermediate term under which it would determine the level of capital, financial operations, etc. required to maintain its triple-A rating after the government guarantee terminates.
	Periodic external actuarial assessments of government contingencies attached to bond guarantees. SHF institutional rating on both a stand-alone basis and including explicit and implicit government guarantees.	STATUS?
	Government should consider charging a price for its guarantee of SHF debt.	Not ever considered?
	SHF should develop a business plan to include consideration of systemic and commercial risks it would assume, products to offer, pricing, required capital level and profitability targets. Consider how the business plan fits within the efforts by CONAFOVI to coordinate policy. How to separate old FOVI commitments from new products and their required capital.	SHF developed a business plan in 2002 that encompassed these points.
	Provide collateralized financing to qualified mortgage lenders	SHF provided financing to Sofols based on SHF ratings, capital and liquidity requirements, standards for mortgage loans. SHF funding has not proved attractive to banks, that are liquid and have lower cost deposits.
	Finance lending with either refinancing lines from the government or SHF bonds in UDIs.	SHF bonds chosen, backed by the government until 2013. Denominated in ???
	The SHF should also reconsider the mortgage pricing policies that FOVI presently imposes on its participating lenders and allow more pricing	This pricing process has completely changed and now SHF determines its prices reflecting current funding market conditions as well as the risks taken, by setting risk premiums according to Sofol's specific credit rating.

Topic	2001 FSAP Finding or Recommendation	Status April 2006
	flexibility by individual lenders.	Individual lender prices are not controlled by SHF and obey to market moves, rigidities and competition.
	The current pari passu FOVI default insurance still looks overpriced and is not backed with efficient risk management tools and information systems. This insurance product should be offered as a self-standing product sold separately from the refinancing products offered by the SHF, in contrast with the current tied-sales of FOVI products.	SHF terminated the pari-passu product in 2004. Further, it has developed a means to satisfy the controversy surrounding the claims process for the pari-passu product, eliminating an important source of conflict between the banking community and SHF. Since July 1st of 2004 SHF has offering a Mortgage Insurance (MI) product with the same characteristics as the MI offered by monoline insurers in the United States. SHF has invested heavily in risk management technology for pricing, reserves, databases and credit score mechanisms. Linking to other SHF products and to the issuance of MBS remains an issue. Even though the insurance is now an independent product it remains tied to other products for purposes of market development. SHF has stated that some review of collateral pools for each securitization is required at this early stage in the development of the market, and that MI is the easiest way to do that. It has accepted credit insurance from AMBAC, which reviews each loan, as a substitute. Market participants do not agree; believe that no such review is required. SHF offers as evidence a recent transaction offered without SHF MI, that had 30 percent of loans out of compliance with the terms of the transaction, including incorrect denomination of the loans (UDI loans in a peso nominal pool), missing documentation, etc. It is important to develop an approach to reconcile the need for review with costs and the participation of SHF in the market. The upcoming entry of alternative MI providers is one means to obtain a review aside from SHF. Another would be the use of “diligence” companies, as is done in the U.S.
	A new guarantee of 100 percent timely payments to eligible MBS, in order to upgrade the rating of MBS issued by private mortgage lenders. Provided that issuers offer sufficient first-loss enhancements to their standardized MBS, the SHF could cover any residual loss exposure and ensure timely payment.	Currently, there are four outstanding MBS structures supported by SHF’s GPO, three of them with loans originated by Metrofinanciera and one by Su Casita. The product provided by SHF is a partial financial guaranty that offers just the necessary enhancement for the structure to achieve a domestic triple-A rating. The required coverage has been decreasing as a result of the standardization of MBS structures and a deeper familiarity with the market.
	To encourage private mortgage market development when the level of risk is considered significant, the SHF should act as a catalyst by	The new MI product provides a partial guarantee, 20 percent of the loss suffered by the lender as a result of the default. SHF has been promoting its use in all of the securitizations it sponsors. The use of this product offers a wide variety of virtues, from its impact on the

Topic	2001 FSAP Finding or Recommendation	Status April 2006
	offering guarantee products to private lenders but it should require a sharing of market risks with them.	underwriting process and origination practices to the risk sharing with originators or servicers.
	According to the SHF law, "swap guarantee fund" will continue to be applied to the new loans funded through SHF, but its administration remains located in the old FOVI structure. The mission recommends to manage this guarantee as an autonomous insurance product, with a separated legal, operational, and financial structure.	SHF strongly promotes peso denominated loans, so that end-of-maturity risks are alleviated. The contingency reserve fund remains as a separated and specifically labeled portfolio that is under active, professional managing subject to benchmark return rates. It still resides in FOVI and is expected to remain there. In 2005, almost 10 percent of SHF's total assets are loans denominated in pesos.
	SHF should encourage and fund the development of new UDI mortgage loans. These UDI loans would be cheaper and more resistant to macroeconomic volatility than the DIM mortgages.	As said before peso denominated loans developed strongly in 2005 and were introduced in 2003. This product eliminates market uncertainty. Both portfolios are properly funded and hedged via bond issues or derivative operations.
INFONAVIT Reforms	Reforms to INFONAVIT rank highest in priorities for the system. INFONAVIT dominates the primary market; unwieldy corporate governance, conflicting mandates, and political influence have led to weak financial management, negative real returns on pension savings for members. Activities and products should be restructured to price loans in market terms, not link to wage inflation; make use of portability of benefits. Management targets an NPL ratio of 5 percent by 2006, versus 43 percent in 1998. To support the growth of the MBS market, INFONAVIT should invest in MBS from other issuers, for example the SOFOLs. End to the capture of FOVI-funded development projects through discounted construction finance. Reorganize internally along the lines of a modern	INFONAVIT remains the largest originator of mortgage loans, holding 60 percent of outstanding loans at the end of 2005. It has reorganized to include standard banking functions such as CFO and managers responsible for risk management. Transparency and corporate governance has improved by creating audit and risk committees, regular financial disclosures connected with securitizations. Under a voluntary agreement, INFONAVIT has made itself subject to supervision by CNBV, and to adherence with CNBV bank regulatory standards. No effort has been made to date to address the fundamental conflicts between INFONAVIT's role as pension fund, housing fund, and provider of subsidies. It should be noted that the pension obligation is legally limited to the contributions of the members plus the annual rate of return that it declares. As a result, prior to its recent operational reforms, the institute continued operating in spite of dismal financial performance by paying a negative real rate on pension savings of its members. Loans are still indexed to wage inflation and subsidized with below-market interest rates. Spreads over the wage inflation index are determined by income segment rather than risk, with lower income borrowers receiving a much deeper interest rate subsidy than upper income borrowers. No up front subsidies are provided. Portability is now available through Cofinavit and Apoyo Infonavit. Many members earning more than 10 monthly minimum wages (MMW) are taking advantage of these programs to use their INFONAVIT savings to qualify for a loan from a bank or Sofol. Starting in 2005, INFONAVIT has targeted more of its direct lending to households earning 4 MMW or less,

Topic	2001 FSAP Finding or Recommendation	Status April 2006
	financial institution. Maintain an appropriate level of reserves.	57 percent was targeted to this sector for 2005, a market that is not well addressed by the formal financial sector aside from INFONAVIT. INFONAVIT has made major improvements in areas such as quality of operations as well as mortgage origination and servicing. It has improved its organization and governance. It has reduced its NPL ratio from more than 43 percent in 1998 to 8.6 percent at the end of 2004 and 6.95 percent at the end of 2005. Loans are made only to borrowers that have the resources to make payments. Qualified applicants are ranked in a queue first by order of application. Low income members have priority within the queue for receiving loans. Higher income members who qualify for Cofinavit loans can jump the queue. Higher income members may exit the queue and use their accumulated savings as part of the down payment on a mortgage at a commercial institution. INFONAVIT has found alternative funding through securitization, which has in turn led to advances in standardization and documentation. Pricing issues with securitization are important – INFONAVIT has to realize the implied subsidy on sub-market loans and history of poor collections by selling portfolio at a substantial discount (15 percent - 20 percent). Up to the end of 2005, INFONAVIT has securitized about 5 percent of its total loan portfolio. INFONAVIT has not purchased MBS from other issuers. INFONAVIT has terminated its construction lending as a line of business. It has reserved fully against all delinquent loans and adequately against new loans. However, INFONAVIT has never written off a delinquent loan, and so reserves occupy an inordinately large part of the balance sheet.
FOVISSSTE	Like INFONAVIT, FOVISSSTE products and operations should be restructured to be on market terms, and to be transparent. High turnover rate of management, weak internal controls and processes, staff lacking in financial qualifications. FOVISSSTE suffers from the same fiduciary conflicts as INFONAVIT and generates a substantial unfunded liability for the government.	FOVISSSTE has lagged INFONAVIT in reforms, but has more stable management, is investing in systems, improving disclosures, and reforming its operations. There has been no attempt to reform FOVISSSTE's legal structure or role in the pension or mortgage finance systems. Distinct from INFONAVIT, FOVISSSTE has built up a sizeable unfunded pension liability for its members. Loan authorizations have been volatile since 2001, but have stayed at or above 50,000 credits authorized since 2003, versus 26,641 in 2001. Issues of staffing and inefficiency persist, resulting in somewhat volatile lending production from year to year. Financial statements provided with auditor qualification letter (i.e., with reservations expressed by auditor on the reliability of the numbers). Management claims to have brought NPL rate to 5 percent in 2005, but given the problems that FOVISSSTE has with systems and financial data disclosures, observers within the government have cast doubt on

Topic	2001 FSAP Finding or Recommendation	Status April 2006
		this figure. FOVISSSTE now uses the Sofoles' operations network to originate mortgages. In 2005, the FOVISSSTE law was changed to allow FOVISSSTE to lend independently of the federal budgeting process this will simplify the lending process and give management more control over its timing during the year. FOVISSSTE has made the credit allocation process more transparent and fair by holding periodic lotteries for members who wish to borrow from FOVISSSTE.
Mortgage securitization	Develop a secondary mortgage market and access for new institutional investors. Improve pricing of risks and allocation of risks across parties. Resolve price and financial disincentives, promulgate origination and documentation standards, reform the legal, regulatory, and tax framework for mortgage securitization.	A securitization market has started, with 15 issues worth 11.5 billion pesos since December, 2003. In addition, there have been construction securitizations with SHF's financial guaranty. Investors have included Mexican insurers, private pension funds, and foreign insurers and hedge funds. No lack of supply of credit enhancements for new transactions, (SHF, IFC, FMO have all provided). Level of credit enhancements has dropped in most recent deals as market, rating agencies have become more comfortable with the market. Longer, more liquid yield curve for government bonds has facilitated pricing of MBS bonds. (Longer yield curve makes it possible to swap Mexican peso to U.S. dollar with a tenor of up to ten years. World Bank has issued in pesos, and is able to swap back to USD.) Trust vehicle is believed by market participants to be adequately robust for securitization. States have taken actions to reduce cost of trust creation, transfer of portfolios to trusts. Bank regulations for investment in MBS do not reflect the priority of cash flow allocation. This is expected to be addressed in the context of the adoption of Basel 2 in 2007. Within the context of Basel 2 adoption, under Pillar 3 of the Accord, the CNBV should expand the disclosure requirements for bank mortgage portfolios, the portfolios that form collateral for securitizations, and the transactions themselves. MBS market is fragile, not yet a steady deal flow of MBS from any originator, limited secondary market liquidity for MBS bonds. Banks have not securitized, are able to fund current production from deposits. If primary market continues to grow, can expect some bank securitizations in the next two or three years as portfolios grow as a portion of the balance sheet, and as term mismatch grows. SHF has supported YY transactions requiring timely payment guaranty (GPO) and YY transactions with mortgage insurance (GPI) underwritten by SHF. SHF has actively promoted standardization of mortgage origination and documentation. SHF has promoted itself as a market maker to provide secondary trading, along with other financial intermediaries, all of which assures the ongoing mortgage funding via the secondary

Topic	2001 FSAP Finding or Recommendation	Status April 2006
		market, instead of direct lending. Enforcement of mortgage pledge has improved via the Miscellaea de Garantias passed in 2003. However, average expected time to foreclose remains long by international standards at two years. SHF should work with INFONAVIT to pursue reforms in each of the states to reduced this average time to six months or less.
SOFOLES Hipotecarias	Sofoles created in 1995, funded by SHF, have created best performing mortgage portfolio in the system. Portfolio of MXP 30 billion in 2001. Industry small and concentrated, future of smaller Sofols uncertain as 2009 approaches, regulation and supervision of Sofols unclear in terms of relevant roles of SHF and CNBV	The Sofoles' outstanding mortgage balance has grown at 15 and 20 percent a year since 2000, reaching YYY at the end of 2005. As the 2009 deadline for SHF funding approaches, YY Sofols have been purchased by banks, YY have merged to achieve greater scale. SOFOLs purchased by banks fall under CNBV banking regulations. Independent SOFOLs have been deregulated under the SOFOME law, passed in February, 2005, subject only to standard financial disclosures, and disclosure requirements associated with bond issuance if they securitize. Future of smaller Sofols remains uncertain. Two have failed since 2001 as a result of weak credit management, have been absorbed by larger Sofols. Several have lagged the industry in terms of investments in automated systems. SHF is promoting a facility that would facilitate the aggregation of loan portfolios from smaller Sofols to reach adequate scale for securitization.
Role of Commercial Banks	Important for commercial banks to return to the mortgage market and the need for a level regulatory playing field between the banks and other mortgage lenders. SHF MI product redesign important as an incentive for banks to lend further down market.	Banks have returned vigorously since 2003, marketing to households earning more than 10 monthly minimum ages. New set of innovative mortgage products, especially competitive in the fixed rate peso denominated mortgage loan. Regulatory norms between SOFOLs and banks described above. SHF has supported increased bank lending by resolving the historic claims issues with the pari passu MI product, and designing a new MI product that appeals more to banks. Bank deposits cheaper than SHF funding. Ample deposits forestall any need to securitize, and the banks have not done so, so have not used the SHF guaranty. Banks are using SHF's redesigned MI product.