The Mexican Mortgage Market: Has the Ship Come In?

by David Dale-Johnson and Gene Towle

ABSTRACT

Since the peso devaluation in 1994 and the exit of the commercial banks from the housing finance sector, numerous initiatives and the growth and strength of the mortgage banking sector has resulted in much optimism regarding the future of the housing market and mortgage finance in Mexico. Beginning operations in April, the newly created Federal Mortgage Bank, or Sociedad Hipotecaria Federal (SHF), is positioned to create Mexico's secondary mortgage market. This article describes the current environment in the housing and residential mortgage sector in Mexico and provides some perspective on the future as President Vicente Fox targets a doubling of housing production by 2006.

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INTRODUCTION

To build 750,000 new homes to accommodate 700,000 new households per year—that is the story of the Mexican housing market today. President Vicente Fox has five years left to create a legacy; and one of the legacies he wants to leave behind is a housing sector that is building enough new houses to meet the needs of the new households being created each year.

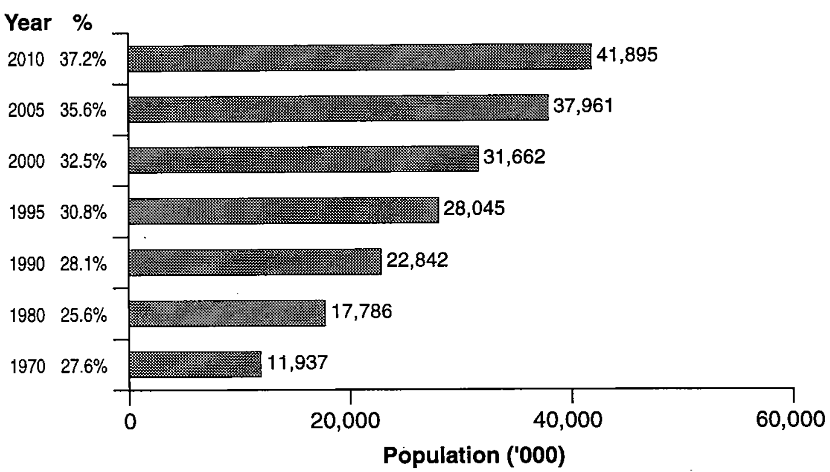
Today the Mexican housing market is driven by the availability of mortgage credit and the programs that provide that credit. In large part, these are programs that finance houses that range in price from US$12,000 to US$30,000 for households earning roughly two to five times the minimum wage which, as of February 2002 was 39.74 pesos per day.[1] There is limited new housing production in the market sector. However, housing finance in Mexico is on the verge of dramatic change. How rapidly this change occurs is the key to the success of Fox's plan.

NAFTA has dramatically increased the interdependence of economies of the United States and Mexico. While this has been good news for growth since the peso devaluation in 1994, the Mexican economy is more that ever dependent on the resilience of the U.S. economy in this uncertain time. Thus, potential advances in the housing and mortgage finance sector may be frustrated while we wait for a healthier economic climate here in the U.S.

This paper will provide an overview of the mortgage market in Mexico today. With Fox's election in July 2000, there has been a revised commitment to housing. Fox's goal is to produce 750,000 units per year by the time his term is over in 2006. This will involve more than doubling today's production of housing. While Fox's goal is ambitious, as is much of the rest of his agenda, with 700,000 marriages per year in Mexico, vast change in the housing sector is critical.

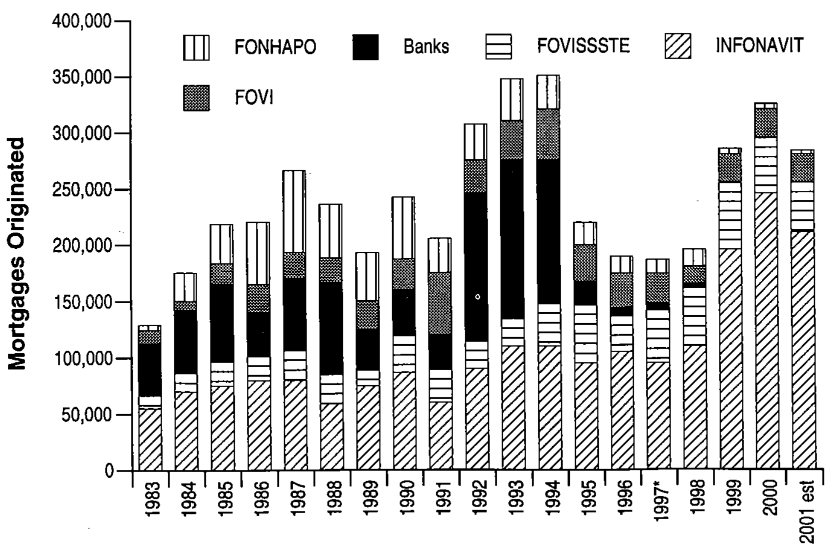
In the year 2000, over 50% of the Mexican population was under the age of 24. As a consequence of the Mexican baby boom of the 1960s and 1970s, as is shown in Figure 1, from now until 2010, about 10 million people will be added to the 25-50 age cohort through aging of the population currently under 24 years of age. These are prime household formation years with obvious impacts on the demand for housing.

Figure 1. Population Aged 25–50 Cohort (1970–2010)



Source: Softec, S.C.

Figure 2. Sources of Mortgage Loans (1983–2001)



Note: INFONAVIT new home loans are traditionally between one- half and one-third of total. FOVISSSTE is mostly cofinancing. FOVI new home loans are approximately 90% or more of total. Bank loans had about 30-40% existing home loans in 1991–1994.

* 1997 figures estimated from program projections.

Source: Softec, S.C.

BACKGROUND

The Mexican housing market depends on the supply of mortgage credit, most of which comes from three entities: INFONAVIT, FOVISSSTE and FOVI.

President Fox appointed new chief executives of each of these entities. Victor Manuel Borras, previously an executive with Bancomer, is in charge of INFONAVIT (Instituto del Fondo Nacional de al Vivienda para los Trabajadores) which is a mandated pension fund program for private, lower-income employees funded through a 5% tax on their wages paid by the employer. Manuel Zepeda is in charge of FOVI (Fondo de Habitaciones Populares), a trust fund created in 1963 by the federal government to provide affordable mortgage financing for low- to moderate-income buyers. The World Bank and the Mexican government have provided the funding for FOVI. Luis De-Pablo, a supporter of Labastida, who privatized the train network under former President Zedillo, is in charge of FOVISSSTE (Fondo de la Vivienda del Sistema de Seguridad Social de los Trabajadores del Estado), a mandated pension fund mortgage finance program for lower-income public sector employees. It is funded by a 6% tax on employee wages.

Figure 2 shows the number of units financed by each of these entities over the last several years. INFONAVIT is clearly the largest player.

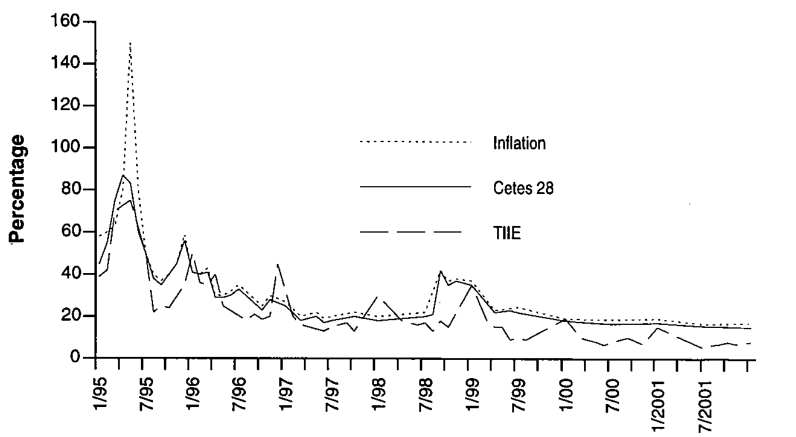
FOVI has emerged as a key player in the future of the primary and secondary mortgage markets in Mexico. With loan programs funded by the World Bank and the Mexican government, FOVI has also received grant funds that have allowed it to develop a strategy to create a new secondary market entity providing guarantees and liquidity to facilitate the growth of the primary and secondary mortgage market in Mexico. The new entity, which begins operations this month, is called the Sociedad Hipotecaria Federal (SHF) or the Federal Mortgage Bank.

The objectives for the Federal Mortgage Bank are to facilitate the expansion of housing production focused primarily on low- but also moderate-income households and to develop a strong private housing finance system through the provision of certain guarantees to issuers and investors and better mortgage market operations. The mandate for SHF is to be the catalyst for the development of both the primary and secondary mortgage markets.

Another set of key intermediaries in the current market are the mortgage banks or SOFOLs. SOFOLs (Sociedad Financiera de Objeto Limitado) were created in 1994 to serve as intermediaries in the residential mortgage market. There are 17 active SOFOLs, and FOVI has authorized most of them to originate and administer mortgages within the FOVI program. They originated more than 95% of the FOVI loans during 2000 and 2001. With the exit of the banks from the mortgage sector due to the challenges they have faced recovering from the losses experienced in 1994, the SOFOLs have entered regional markets, grown their existing business lines, built volume by originating loans on existing houses and market rate houses, and provided banking services to residents in communities where they have located storefronts. The banks are expected to reenter the mortgage market as their health continues to improve, although their primary focus since 1994 has been corporate banking activities for medium- and large-sized corporations. As the residential sector (and thus the market for non-subsidized mortgages) develops, there should be greater interest from the banks. In fact, Fox's plan depends in part on renewed interest in this sector by the banks.

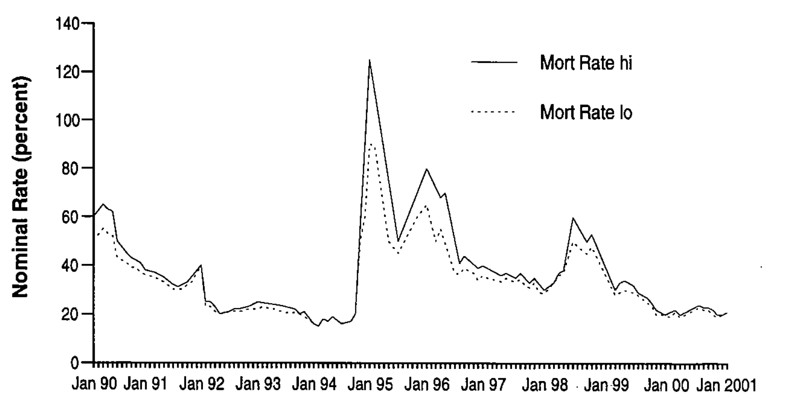
The Mexican economy has performed extremely well during the last few years, reflecting the benefits of NAFTA and the strong North American and world economies. Inflation has continued downward along with mortgage rates as is indicated in Figures 3 and 4. Growth of gross domestic product has recently suffered as a consequence of the U.S. economic downturn. However, since the mid-1990s there has been solid growth as reflected in Figure 5. Despite this, mortgage origination activity has still not recovered to pre-1994 levels. This is evidenced by the aggregate numbers in Figure 2. Most of the lending activity has been in the affordable housing segments

Figure 3. Inflation (1995–2001)



Source: Banco de Mexico and Softec, S.C.

Figure 4. Nominal Mortgage Rates (1990–2001)



Source: Softec, S.C.

where home purchase has been facilitated through the programs described briefly above.

While the economy has strengthened dramatically since 1994, there has been limited activity in the residential or market housing sector as a consequence of the lack of supply of "market" mortgages. The commercial banking sector has stayed away from this product type as a consequence of the poor performance of these loans after 1994. There has been some activity in this sector recently, but the lack of activity for several years suggests significant pent-up demand for housing for the higher-income groups and market rate mortgages.

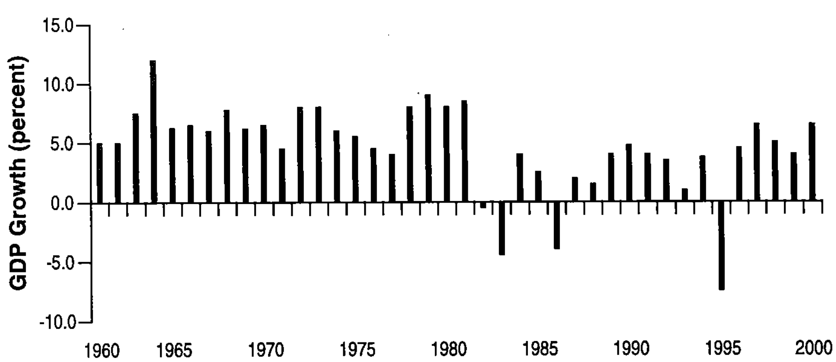
The housing and mortgage industry in Mexico have developed a useful matrix shown in Figure 6 that describes the range of housing products from the perspective of price, size and attributes. The existing programs provided by FOVI, INFONAVIT and FOVISSSTE target primarily the social housing segment.

As noted above, the Mexican population is young and the income distribution is skewed, with slightly more than 60% of the households earning five times the minimum wage or less. Figure 7 depicts the number of families in each housing segment. Over 75% of the households are in the in the minimum, social and economic segments. With the aging of the population there will continue to be pressure on these segments. However, with continued economic growth there is also expected to be increasing demand for middle housing as economic gains benefit those earning annual incomes of less than US$17,000. In the past (since 1994), there have been few mortgages available for buyers in the middle segment and the expected absolute growth in the middle segment between 2001 and 2006 is greater than the expected absolute growth in either the social or the economic segments.[2] Clearly, lenders will be expected to develop products for this market.

National Mortgage Bank (Sociedad Hipotecaria Federal)

As noted above, FOVI has created a national mortgage bank referred to today as the Sociedad Hipotecaria Federal (SHF). The strategizing for this change has occurred over the last few years with significant seed funding from the World Bank. The

Figure 5. Annual GDP Growth (1960–2000)



Source: Banco de Mexico and Softec, S.C.

Figure 6. Housing Type Matrix

Type	*Price*	*Size (Square Meters)*	*Attributes*
Minimum	<$10,000	30	1–2 Rooms, self-built
Social	$10,000–$20,000	45	Kitchen, LR, 1–2 BRs, 1 BA, 1 parking space
Economic	$20,000–$40,000	50	Kitchen, LR, 2–3 BRs, 1 BA, 1 parking space
Middle	$40,000–$100,000	100	Kitchen, LR, DR, 2–3 BRs, 2–3 BA, 1–2 cars, service qtrs
Residential	$100,000–$220,000	200	Kitchen, LR, FR, 3–4 BRs,DR, 3–5 BA, 2–4 cars, service qtrs
Residential Plus	>$220,000	350	Kitchen, LR, FR, DR, 3–4 BRs, 3–5 BA, 4–6 parking spaces, service qtrs

Source: Softec, S.C.

Figure 7. Estimated Number of Families by Housing Segment (2001)

House	*Price Range US$*	*Annual Income US$*	*National*	*# Families (000s)*	*Metro Areas**	*# Families (000s)*
Minimum	<$10,000	<$4,000	16.47%	3,616	11.46%	724
Social	$10,000–22,000	$2,500–8,000	40.46%	8,882	31.10%	1,964
Economic	$22,000–40,000	$8,000–17,000	20.83%	4,573	27.22%	1,719
Middle	$40,000–100,000	$17,000–40,000	13.55%	2,976	17.35%	1,095
Residential	$100,000–220,000	$40,000–80,000	6.00%	1,317	6.58%	416
Residential Plus	>$220,000	>$80,000	2.69%	590	6.29%	397
			100.00%	21,955	100.00%	6,315

* Mexico City, Monterrey, Guadalajara, and Puebla

Source: Softec, S.C.

goal is for FOVI to be the catalyst in the evolution of a strong housing finance system that ultimately will look to the secondary market and long-term bond investors for capital. There is no plan to depend on deposit taking institutions for capital. As in the U.S., the SHF will serve to facilitate standardization of mortgage products and procedures, to improve foreclosure, appraisal and registry systems and institutions, and to encourage the evolution of private mortgage insurance. SHF will fund commercial bank and SOFOL construction and individual loans. Today, SHF will provide a guarantee with respect to default on loans. This may change if private mortgage insurance systems are put in place. Most importantly, SHF will take the lead in introducing and issuing mortgage-backed securities (MBS) and attracting investors. A critical piece of this will be their guarantee to MBS investors of the timely payment of principal and interest. The intent is for SHF to be an independent institution capable of obtaining a triple-A rating by 2014, after which time the back-stop guarantee by the federal government will cease.

SHF is envisaged to provide additional credit or liquidity to the market for no more than eight years. The Mexican government has budgeted US$5 billion initially. These funds will be directed in new ways relative to FOVI's past activities. Remember that SHF is a new institution with a much broader mandate. The financing of existing homes and residential or market housing units will be a significant part of SHF activities, along with the financing of rental units and serviced land for housing construction. Loans to developers will not be guaranteed against default. Twenty percent of the US$5 billion could go to the financing of existing housing; 40% for the financing of housing units up to values of US$80,000, and 20% for the financing of housing units above values of US$80,000.

Management of Liquidity and Risk

Part of the role of SHF will be to undertake a number of activities that will make it much easier for institutions to manage the liquidity and risk associated with the current mortgage market in Mexico. There will be effectively three guarantees: one provided by FOVI (the UDI minimum wage swap which is already in place) and two provided by SHF. There will also be funding or liquidity operations provided by SHF.

The first guarantee, already in place, is the UDI minimum wage swap, introduced by FOVI in 2000. One of the historic problems for Mexican borrowers and lenders has been interest rate risk. The dual-index mortgage (DIM) solved many of these problems and has been discussed in detail elsewhere. (See Lea and Bernstein, 1996). The DIM solved the problem of payment shock for the borrower but in extreme cases left the lender with a loan that could never be fully amortized. This problem has been solved now with the introduction of a program in which the borrower buys insurance against relative declines in the borrower's income (a multiple of the minimum wage).

The new FOVI mortgage, introduced in 2000, is fundamentally a fixed real rate DIM but adds a significant new feature. An insurance fund is created that will guarantee that the borrower's monthly payment is sufficient to fully amortize the mortgage. The premium for the insurance (originally 11% of the payment, but now only 5%) is bundled into the borrower's monthly payment. In times in which the borrower's payment is insufficient to amortize the mortgage, the fund will pay the shortfall. From the investor's point of view, the resulting mortgage looks very much like a PLAM (price-level adjusted mortgage). From the borrower's point of view, the instrument continues to have affordable payments linked to wages. From FOVI's point of view, the instrument behaves like a PLAM but with reduced credit risk due to a lower probability of payment shock than is typically associated with PLAMs in Mexico.

For originated loans, there is a servicing fee and an origination fee. For the insurance, FOVI charges a commission of 5% of the sum of the mortgage payments. This is the premium required to protect the mortgage from a fall in the real minimum wage during the 30-year life of the mortgage. Reductions in real wages have occurred in the past, so this insurance is perceived as necessary to reduce default risk to manageable proportions. The advantage of the new FOVI mortgage is that it is securitizable and the commissions of banks and FOVI move with inflation and are not affected by the evolution of minimum wages.

The new Federal Mortgage Bank will also provide two types of guarantees, one in the primary market and the other in the secondary market. The first is a loan loss or default guarantee provided to commercial banks or SOFOLs that originate and securitize mortgages. SHF will guarantee the first 25% of the loan principal, costs of repossession and judicial costs. This guarantee replaces one previously provided by FOVI and the lender on a pari passu basis. There will be a maximium loan amount and the premium when the loan-to-value ratio (LTV) is 90% is 70 basis points for adjustable-rate loans and 83 basis points for fixed-rate loans (although fixed-rate loans will not be offered initially). If the LTV is lower, the rate is lower. These guarantees are not available for loans to developers for subdivision or infrastructure.

The second is a guarantee of timely payment of principal and interest to investors in the securities. The guarantee is still in the design process but the goal is credit enhancement in order to increase the rating of the security by covering any possible gap between the income resulting from the mortgage terms on the underlying UDI collateral and the required debt service on the MBS. The securities will be tranched, with mortgage originators holding the junior pieces, so investors are further protected from shortfalls in expected cashflows. With mortgage originators holding the junior tranches and providing the servicing of the originated loans, the incentives are in the right direction for good underwriting and servicing practices. Obviously, the US$5 billion is viewed as seed capital only, presumably with the assumption that loans originated will be securitized, thereby recycling the initial seed capital.

The Federal Mortgage Bank will also provide liquidity to commercial banks and SOFOLs to facilitate the origination of mortgages with terms of five, 10, 15, 20 and 25 years for individuals and investors. These would be UDI loans.[3] Where SOFOLs have historically acted as intermediaries for FOVI or tried to access capital markets independently (see the next section for some evidence), they will now have access to capital directly from the SHF.

SOFOLs

The mortgage banks, or SOFOLs, have been key players in the mortgage market since 1994. Through FOVI, as is evidenced in Figure 2, mortgage banks have originated 20% or 25% of the mortgages every year since 1994, with INFONAVIT and FOVISSSTE providing the funding for the rest. The SOFOLs fully expect to continue to play this role but also to be path-breakers in developing the higher-end mortgage market. As noted above, this segment is currently poorly served due, in part, to their inability to tap capital to direct to this market.[4] SHF, clearly is gearing itself to help the SOFOLs and the banks in this area.

There is evidence of success already in this segment. Since they are unable to take deposits, many of the SOFOLs have sought other sources of capital to allow them to go beyond the volume made possible by funding from FOVI. This has been a natural evolution. Once origination and servicing platforms have been created (including storefronts at homebuilding sites), there are significant benefits from increased volume. So there has been consolidation in the industry, as well as a search for other capital sources to permit expansion into non-subsidized market segments. Figure 8 indicates that as of 2001 there have been about US$350 million of securities issued by either homebuilders or SOFOLs for the purpose of providing financing for housing production.

It would be useful to describe in more detail one SOFOL's efforts to be at the forefront in the creation of a secondary market in Mexico. While the creation of the Federal Mortgage Bank is critical, given the anticipated needs in the marketplace, some significant strides have already been made to pave the way.

In 2001, Hipotecaria Su Casita undertook its first public MBS issue and in the spring of 2002 followed with an asset-backed security issue to fund construction loans. A second MBS issue to fund market rate mortgages is anticipated. For the first issue in 2001, Moody's Investors Service assigned a rating of Aa2.mx and a local currency rating of Baa2 to the bonds issued by Hipotecaria Su Casita, S.A. de C.V., which were to be backed by a pool of residential mortgage loans extended to middle-income borrowers located in Mexico. Interest and principal on the bonds were to be payable from the assets of a guarantee trust whose sole objective was to isolate the underlying assets from the risks of, and associated with, the issuer.

Figure 8. Volume of Paper by Issuer (SOFOL or Developer) and Type (2001) (US$ millions)

	Issuer (US$)	*Type (US$)*
Geo	$104	
Demet	$100	
Hogar	$32	
Fin. Azteca	$6	
Comercial America	$5	
Hipot. Mexicana	$8	
Hipot. Nacional	$48	
Hipot. Su Casita	$43	
Metro. Financiera	$3	
Short-Term Bonds (28 days)		$112
Medium-Term Bonds (+1 yr)		$203
UDI (7–10yr) Bonds		$35
	$350	$350

Source: Softec, S.C.

Moody's assigned the rating based on the factors below:

- Isolation of the assets in the trust through established Mexican laws and regulations for securitization.
- The presence of a prepayment premium reserve, tax reserve, one-year expense reserve, and capitalized interest account (all together, the contingency reserve accounts), which represented 10.98% of the total issuance at closing.
- Two months of interest, principal, and expense reserves maintained in the trust.
- Over-collateralization at 1.40 times, such that at the outset there were $140 of mortgage loans outstanding for every $100 in bonds. The over-collateralization was set up so that it could be reduced based on delinquency and default experience. In addition, the International Finance Corporation (IFC) funds 25% of the difference between the $100 in bonds and the $140 of mortgages, that is, it funds $10 while the remaining $30 are funded by Su Casita's own funds.
- The importance of Su Casita as a SOFOL, or a non-bank financial institution.
- The strong mortgage origination standards of Su Casita.
- Sound capability of the originator in its role as a servicer (Posch et al., pp 1–2).

This was not a senior-subordinated structure. Rather, the credit enhancement was provided through over-collateralization (provided in part by IFC) and the maintenance of various reserve accounts described above.

The investors in the MBS were primary institutional investors including insurance companies, AFORES (pension funds), private pension funds and mutual funds. The bonds were used to fund middle-income residential 10-year term mortgages. The maximum LTV was 65%, the average LTV was 49%, and the average loan had a principal amount of US$60,000. The average real rate at the time of issues was 11.9%. All the issue was placed in just under 200 loans. So far, the delinquency rate has been 0% and there have been no defaults.

In the late spring of 2002, Su Casita undertook a 460 million peso asset-backed issue (Posch et al, 2002). The issue was a senior-subordinated structure with Class A bonds in the amount of 400 million; Class B, 40 million; and the Residual Class, 20 million. Moody's rated the Class A securities Aa2.mx and the Class B securities Baa2.mx. The bonds are variable rate with proceeds to provide advances to housing developers based on construction in progress. The aggregated amount of the advances for a specific project will not exceed 65% of the sales price of low-income houses and 50% for middle-income houses. The funds will be held in a guarantee trust until advanced. They will, in turn, be secured by completed houses and houses in progress. Moreover, take-out providers will pay proceeds of take-out loans directly to the guarantee trust, assuring investors in the bonds that first proceeds go to them. Revenue from the take-out providers and interest paid by the housing developers provides the revenue stream to service the bonds. This issue provides housing developers an interim financing vehicle for both social and market (economic and residential) housing segments.

Su Casita is also in the process of undertaking an MBS issue similar to the 2001 issue described above. So, while the new Federal Mortgage Bank has a mammoth task ahead, some significant strides have been made to create a viable but small secondary mortgage market.

There is some possibility that the larger SOFOLs will eventually be allowed to convert to banks, meaning, presumably, that they will be able to take deposits and thus act as a more direct intermediary between savers and borrowers. This will also permit them to provide a broader base of services for their retail clientele.

Mexican Pension Reform

Starting in January 1, 1997, employees began contributing to an individual pension account. These pension accounts are administered by Administradores de Fondos para el Retiro (AFORES). The law of the Mexican Institute of Social Security (IMSS) was changed to transfer to private pension fund administrators (AFORES) part of the payroll tax contributions provided by employers on behalf of their respective employees. This was once completely managed by IMSS. These funds accumulate 7% of the national payroll with 5% going to INFONAVIT and 2% going to an AFORES selected by the beneficiary.

When retired, workers may opt to keep their money with the AFORES or buy an annuity sold by insurance companies. Figure 9 shows that as of June 2001, the AFORES had accumulated almost US$25 billion in deposits. Estimates are that these holdings will increase by US$2 billion to US$5 billion per year for at least the next decade. AFORES, along with annuity funds managed by insurance companies, should increase investment demand for various types of medium- to long-term bonds, including MBS. AFORES are constrained to invest only 30% of their portfolio in one sector of the economy and no more than 10% of their portfolio in an individual issue.

The availability of long-term funds from the AFORES and insurance companies, together with the low delinquency shown by the SOFOLs and the new FOVI mortgage, offer the possibility of a secondary mortgage market. Indeed, as noted above, one of the buyers of Su Casita's first MBS issue in 2001 were the AFORES. From the point of view of banks and SOFOLs, their low capital availability makes this a critical part of the development of the market. From the point of view of investors it makes sense in principle, but it will require considerable policy changes and consistent effort to develop a smoothly working market.

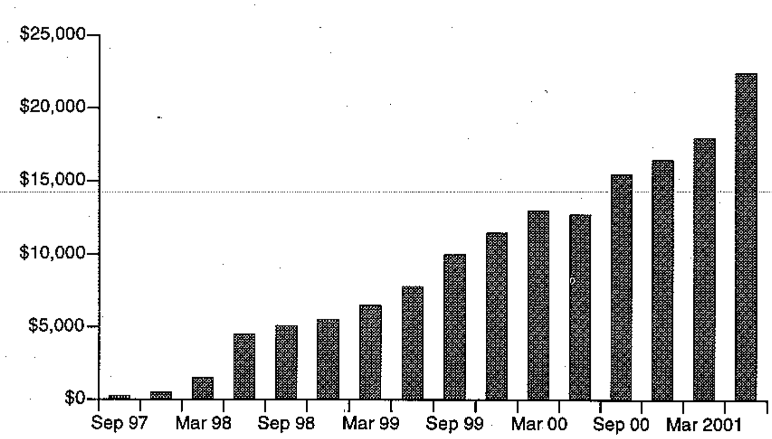
Details of Fox's Plan (Sources of Financing and Types of Units)

Figure 10 illustrates how President Fox plans to achieve his goal of 750,000 housing units per year by 2006. Most of the new loan production comes from FOVI and from the SOFOLs and banks. So, it is clear that the Fox program depends critically on the transformation of FOVI into national mortgage banks able to tap secondary markets for capital. The plan also depends on the ability of the SOFOLs to be able to do the same. Some 280,600 of the increase in loan volume is derived from FOVI and the SOFOLs. The half of the volume coming from the SOFOLs is a market that is in its infancy, the provision of financing for new market (residential) housing construction and the purchase of existing housing.

Figure 11 illustrates the allocation of the 750,000 units in 2006 among housing types. Note that the minimum segment is for the poor and is not the focus of FOVI, FOVISSSTE or INFONAVIT programs. These programs instead target the social and economic market segments. The middle, residential and residential plus segments are markets which existing programs do not target in large numbers. But the SOFOLs and banks are expected to expand their activities in this segment with the assistance of the Federal Mortgage Bank.

The projections are prepared by Softec, S.C. and presume growth of 143% in the number of social housing units built (102,848 to 250,000 units), modest growth (36%) in the number of economic housing units and more dramatic growth (635%) in the middle, residential and residential plus segments. Note that much of the growth in the social housing segment reflects the shift of demand from the minimum housing segment to the social housing segment. The absolute number changes are relatively high in the three middle- and upper-income segments, but as a result of the high hoped for growth rate. The projections depend on a ramping up of FOVI activity in the social housing segment combined with increased ability of the SOFOLs and banks to originate loans to facilitate activity in the middle- and upper-income markets. The latter, though showing life, have been virtually inactive since 1994. Not only do the SOFOLs and banks need to ramp up their activity in the middle- and upper-income markets, developers also need to begin to acquire parcels

Figure 9. Deposits in AFORES (US$ millions)



Source: Softec, S.C.

Figure 10. Current and Projected Mortgage Production by Originator (2001–2006)

	2001	2006	% Growth
Others	45,000	145,000	222%
SOFOLs/Banks	2,000	144,350	7,117%
FOVISSSTE	15,000	24,150	61%
FOVI	50,000	188,250	276%
INFONAVIT	205,000	248,250	21%
	317,000	750,000	142%

Source: Softec, S.C.

Figure 11. Current and Projected Housing Production by Housing Segment (2001–2006)

	Average Size 2001 Square Meters	*Average Price 2001 (US$)*	*2001*	*2006*	*% Growth*
Minimum			358,100	212,000	
Social	59.1	17,900	102,848	250,000	143%
Economic	64.0	25,600	154,076	210,000	36%
Middle	108.9	56,700	11,435	90,000	687%
Residential	162.0	157,500	3,005	20,000	566%
Residential Plus	327.6	417,300	1,871	10,000	434%
Total			631,335	792,000	

Source: Softec, S.C.

suitable for the development of housing for these market segments as well as to reassert their capability in entitling, planning, developing and building these product types.

CONCLUSIONS

The Mexican housing and mortgage market seems to be poised for a dramatic change. There are, and will remain, significant challenges that will probably frustrate achieving President Fox's goal of constructing 750,000 units per year by 2006. Nonetheless, the start-up of the Sociedad Hipotecaria Federal (SHF) is a critical step if there is to be any hope of reaching this goal even in this decade. The provision of liquidity to SOFOLs and banks, the broadening of the spectrum of loans that can be funded (for middle and residential borrowers, as well as investors and developers) and the provision of guarantees are all important steps. The growth of the AFORES provides necessary long-term investment capital while the SOFOLs have evolved into relatively strong well-managed intermediaries that can originate and effectively service residential mortgages using transparent and rigorous underwriting practices. The banking sector has stabilized and will likely begin to play a role in the non-social housing segment. The economic climate, though significantly influenced by the recent U.S. downturn, seems to have stabilized. Inflation is low and interest rates, though high relative to the U.S., are at manageable levels for many borrowers.

What must happen is a rapid expansion of the capacity of SOFOLs and banks, as well as homebuilders and developers. The SOFOLs need to broaden their product lines and develop the capability of underwriting, originating and servicing "market" loans. Since most of their activity since 1994 has been to originate FOVI loans, this will involve building capacity in underwriting, originating and servicing in new market segments. While the SOFOLs have never been in this business, the banks have been out of it since 1994.

Not only that, local governments must recognize that without entitled land and infrastructure, no houses will be built. The start-up of the SHF goes a long way toward resolving the capital markets bottleneck that has precluded expansion of the marketplace particularly for middle and residential borrowers. However, the start-up of the SHF does not make it any easier to identify, acquire, entitle and develop new projects. There needs to be a cooperative effort between local governments and the development community to facilitate land development in a way that encourages competition among landowners rather than allowing the monopolization and capture of rents by well positioned sellers. While prosperity and expansion of the housing market through access to capital will likely yield higher land values, regulatory (administrative or political) bottlenecks may exacerbate price effects, offsetting the benefit of greater liquidity among buyers.

The guarantees to be provided by the SHF are key at this point, but the hope is that the market will evolve such that the extent of that guarantee can be reduced through time. If this is to occur, the judicial system and the land title system must be tested and pass the tests. In other words, at some point investors have to be confident that the lender can gain control of the asset quickly and at minimal cost when a borrower defaults. SHF is to be a stand-alone, A-rated entity by

2014. This will require that investors have that degree of comfort with the system. Significant progress has been made; the process is well underway but tough challenges remain.

NOTES

[1] With an exchange rate of 9.1 pesos per U.S. dollar, that amounts to US$4.36 per day. Assuming 1.78 workers per household, a household or family earning the minimum wage would receive US$7.76 per day.

[2] These are based on forecasts by Softec, S. C. and depend on assumptions about economic growth, and increasing numbers of "middle class" buyers.

[3] UDI loans are price-level adjusted mortgages or PLAMs, where there is a CPI-based unit of account known as the "unit of investment" that is quoted daily by the Banco de México.

[4] Developers are not building product for this segment either. Obviously, with capital, product will be developed. A concern, however, is whether planners and local governments, along with the homebuilding sector, can effectively gear up to provide the needed product even with available capital.

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