ME-0137

HOUSING FINANCE PROGRAM

EXECUTIVE SUMMARY

Borrower:	*Banco de Servicios y Obras Públicas* (BANOBRAS)
Guarantor:	United States of Mexico
Executing agency:	*Fondo de Operación y Financiamiento Bancario a la Vivienda* (FOVI)

Amount and Source:

IDB (OC):	US$ million	505
Local:	US$ million	665
Total:	US$ million	1,170

Financial terms and conditions:

Amortization Period:	25 years
Disbursement Period:	3 years
Interest Rate:	Variable
Supervision and Inspection:	1.00%
Credit Fee:	0.75%
Currency:	Single Currency Facility US$

Objectives:

The overall objective of the Program is to improve the efficiency of Mexico's formal housing finance system and facilitate its expansion to lower income segments of the population. Specifically, the proposed Program aims to consolidate the reform of a successful second-tier mortgage finance institution, FOVI, and to finance eligible housing subsidies and mortgages under the Program's operating regulations for the next two years – the period of time needed for the new government to articulate and implement an overall housing sector strategy, including a sustainable funding strategy for FOVI.

FOVI's reform rests on two pillars: on one hand, an overhaul of FOVI's products aimed at: (a) turning the existing interest rate subsidy into an upfront subsidy to be complemented with market rate mortgage credit; (b) making the upfront subsidy portable for the borrower, i.e. independent from the house to be acquired; and (c) separating mortgage financing from construction financing, and scaling down the latter. The new upfront subsidy will: (a) improve efficiency and reduce cost to the Government; (b) improve targeting by restricting eligibility to below-median urban

income households; and (c) encourage own-resource mobilization. (See paragraphs 1.13 and 1.14.)

The second pillar of the reform will be the design and implementation of a sustainable funding strategy for FOVI programs. Eventually, the subsidy program will have to be funded with fiscal resources while the credit program will have to rely on private funding sources. (See paragraph 1.22 and following).

Description: To reach its objectives, the Program will finance two components:

A. ***Investment component (US$495 million)***. This component will provide resources to co-finance both the credit and subsidy programs of FOVI for the 2001-2002 period. IDB resources will be passed to FOVI in Mexican currency through BANOBRAS in the form of a loan. The rate applicable on the loan to FOVI will be set, for every disbursement, so as to pass to FOVI the spread between the IDB lending rate and the Government of Mexico foreign bond issues (currently at 150 basis points). Proceeds from the loan will be used by FOVI to generate a combination of market rate mortgages and up-front subsidies, without decapitalizing FOVI. The IDB-funded mortgages will be completed by funds raised on the capital market; while the IDB-financed up-front subsidies will be complemented through budgetary appropriations and other similar resources. Over the life of the Program, the IDB contribution will go down as the market contribution (for credit) and the Government contribution (for subsidies) ramp up.

B. ***Technical assistance (US$10 million)***. This component aims at preparing FOVI for the challenges ahead (managing the up-front subsidy program and accessing the financial markets). To this end, it will finance technical assistance to: (1) finalize the design and monitor the implementation of the reform of FOVI's products; (2) design and implement a sustainable funding strategy for FOVI's programs; (3) help improve the housing policy framework affecting FOVI's operations; (4) strengthen the primary market infrastructure; (5) facilitate the development of the secondary market; (6) improve FOVI's operating environment; and (7) assess the impact of FOVI's programs on market development.

Relationship of Project in Bank's country and sector strategy:

The next five years will be critical for Mexico's housing finance system. The prospect for increased private funding is still uncertain as commercial banks prepare to return to the market. Public funding will remain scarce since budgetary restrictions will persist in the foreseeable future. Given the social implications of FOVI's activities, the Government of Mexico has requested the support of the Bank to help fund FOVI's subsidy program during the transition to market rates. At the same time, the operation is consistent with the Bank strategic line of action to promote private sector development in Mexico, since Program resources will leverage private resources and facilitate the connection between the housing finance system and the capital markets.

The proposed Project has been prepared primarily with the outgoing administration. However, the incoming administration has been involved at the pre-negotiation stage and its participation in loan contract negotiations will be sought. The incoming administration recognizes the key role played by FOVI in the housing finance system and agrees that the reforms proposed under the Program are necessary. Additionally, the Program has been designed to allow for flexibility in the execution phase so as to take into account the specifics of the incoming administration's housing policy once they are finalized.

Environmental and social review:

The Program's Environmental and Social Brief was sent to the PIC on September 23, 1999. No environmental impact assessment was required by the Committee on the Environment and Social Impacts (CESI). The Program will have limited but positive impacts on the environment, since it will help FOVI enhance its environmental review procedures (see paragraph 4.12). The main social issue involved has to do with the distributive impact of the new subsidy policy. Improved targeting is a central objective of the new policy (see paragraph 4.7). Another important social issue has to do with the gender implications of housing lending. The Program will develop a set of activities aimed at ensuring that FOVI's programs provide equal opportunity to women and men (see paragraph 4.14 and following).

Benefits:

The ***investment component*** will finance the up-front subsidy needed to bring about 60,000 households earning less than the median urban income to the formal mortgage market. Beyond this specific contribution, the introduction of the new subsidy scheme will have a variety of positive impacts: it will increase the efficiency of Government spending and household spending; it will improve the targeting and transparency of the allocation process; and it will help leverage savings and lower credit risk for lower income beneficiaries. (See paragraph 4.2 and following.)

Technical assistance and reform of FOVI. The separation of the responsibility for financing subsidies (eventually from budget allocations) from the responsibility for financing credit (eventually with market resources) will have important benefits in terms of transparency, efficiency and sustainability. (See paragraph 4.9.)

Another positive impact expected from FOVI's reform will be the decrease in the all-in cost of credit for FOVI borrowers (measured against the Government's cost of funding), through enhanced creditworthiness for FOVI, increased competition between intermediaries, better origination and servicing standards, and a more efficient management of risks, eventually through private insurance schemes. A significant reduction in the all-in cost of credit may be expected. (See paragraph 4.10.)

Risks:

The main risk involved with the proposed Program has to do with the ***sustainability of the financing for the upfront subsidy***, notably given the current budgetary restrictions facing the Mexican Government. The sustainability risk is unavoidable in a system where subsidy financing is part of the budgetary process and therefore subject to congressional approval. In the medium term, the policy of the next government will be critical to ensure that the subsidy program lasts and expands. In the longer run, the relatively low annual level of subsidy agreed upon in designing the proposed Program (US$140 million, i.e. less than 0.2% of total government budget) should make it relatively easy for FOVI to secure funding. In any case, because it fosters the replacement of the rate subsidy with an upfront subsidy, the Program has the benefit of making the sustainability risk more explicit. (See paragraph 4.18 and following.)

Another risk has to do with the ***financial position of FOVI*** itself, which is weakened by the rate mismatch between assets and liabilities in its existing portfolio. In the future, the subsidies embedded in old mortgages could become an unfunded liability for FOVI. An important step to isolate this risk and eventually

mitigate it will be to clearly separate the old portfolio from the new one. The Program takes a two-step approach to implementing the separation. The first step, a mere separation of accounts, will only yield transparency. It is a condition prior to first disbursement for the subsidy component. The second step, a more radical transformation of the new FOVI, will be defined during Program execution. (See paragraph 4.20 and following.)

Special contractual clauses:

Prior to first disbursement, FOVI will have to formalize the agreements reached with the Bank during project preparation concerning policy reforms and improvements in operations. Specifically, FOVI must present evidence that:

- The appropriate fund transfer agreements between the Borrower and FOVI have entered into effect. (See paragraph 3.1.)

- FOVI's Board (*Comité Técnico*) has approved FOVI's revised credit regulations to include: (1) the new subsidy program and its detailed administration mechanism; the new subsidy policy will be (a) targeted to below-median urban income households in a transparent way; (b) progressive, up-front and portable; (c) limited to six years of minimum wage per borrower, for the lowest-income eligible beneficiaries; and (d) structured in such a way that it encourages the mobilization of household savings (see paragraphs 1.14 and 1.15); (2) the mechanism to link on-lending rates to a well-defined market-based benchmark, so that on-lending rates cover FOVI's real costs and do not distort the credit market; (3) strict criteria to select and monitor intermediaries, including minimum capitalization level and maximum delinquency rate; and (4) provisions as to the diversification of counterparty risk of FOVI with its intermediaries. FOVI agrees that any substantial change to:
    - item (1) or (2) above, or any reduction of the minimum capitalization level of SOFOLES without access to the capital markets below 5.8%, or any substantial change in the methodology used to compute the capitalization level, shall require the Bank's prior consent; and
    - items (3) or (4) above shall require prior consultation with the Bank. (See paragraph 3.4.)

- The Program's operating regulations have entered into effect in a form substantially equivalent to the outline agreed upon during loan negotiations. (See paragraph 3.3.)

- SHCP has approved the transfer of FIDEC resources to FOVI, for both FOVI's capitalization and the financing of its lending program. (See paragraph 3.5.) This obligation of SHCP will also be included in the guarantee contract.

- FOVI's board has determined that, in addition to its mandatory accounting records, FOVI will maintain separate records for the following accounts: (1) old portfolio; (2) new portfolio; (3) primary mortgage insurance; and (4) systemic risk insurance; as set out in paragraph 3.5.

- The Housing Research Unit (HRU) has been established and given responsibility to evaluate Program execution; and a detailed execution plan for the technical assistance component has been agreed upon with the Bank. (See paragraph 3.10.)

A mid-term evaluation will be carried out by the Bank when US$250 million of loan resources have been committed to verify that: (1) the policy changes agreed upon during project preparation are progressing satisfactorily; and (2) solutions have been designed and are being implemented to ensure that both FOVI's up-front subsidy program and mortgage credit program have sustainable sources of funding. (See paragraph 3.6.) Specifically, before additional commitments can take place FOVI must provide evidence that:

- FOVI's Board has approved and incorporated within FOVI's revised credit regulations: (1) enhanced origination and servicing standards; (2) procedures for the environmental review of projects; and (3) gender equity policies.

- An agreed system has been implemented to monitor the impact of the new subsidy policy in the following areas: housing price and size; income distribution of beneficiaries; and level of down payment. A preliminary evaluation of the new subsidy policy has been carried out, and the subsidy policy has been adjusted to take into account the lessons learned from the evaluation.

- For the period of origination corresponding to the disbursement of the first US$250 million of IDB resources, FOVI's credit program has been adequately financed, with FOVI mobilizing at least one peso at market rate for every IDB peso equivalent. For the future, FOVI's Board has approved a sustainable funding strategy for its credit program, and there

are tangible signs that strategy implementation has started. More specifically, at least two pesos must be mobilized from market rate sources for every peso from the second half of the IDB loan.

- For the period of origination corresponding to the disbursement of the first half of IDB resources, FOVI's up-front subsidy program has been adequately financed and subsidies for at least US$60 million will have been generated aimed at below-median urban income households. For the future, the Government has clarified the long-term strategy for the funding of the up-front subsidy program. For the second half of IDB resources, FOVI will generate at least US$60 million in subsidies aimed at below-medium urban income households.

Other contract conditions will include the establishment of a 10% revolving fund (see paragraph 3.13) and required biannual progress meetings between the Bank, SHCP and FOVI (see paragraph 3.20).

Poverty-targeting and social sector classification: The proposed Program does not meet the eight replenishment's poverty reduction mandate.

Exceptions to Bank policy: None.

Procurement: Standard Bank procurement policies, to be set out in Annex B of the loan contract, will apply for all procurement. The Program does not call for direct financing of construction works. International public bidding will be required for the acquisition of goods and related services in excess of US$250,000. Consultant services will be procured according to the procedures to be set out in Annex C of the loan contract. International publication of announcements will be required for selection and hiring of consultants in excess of US$200,000. (See paragraph 3.19.)

I. BACKGROUND

1.1 The proposed Program will support the consolidation of a successful Government-sponsored housing initiative aimed at bringing low to moderate income households to the formal mortgage market, and will contribute to the funding of its programs during the 2001-2002 period – which will give enough time for the incoming administration to develop a comprehensive housing strategy. The Program will finance an investment component, designed to introduce an upfront subsidy mechanism to replace the present interest rate subsidy; and a technical assistance component to strengthen the institution in charge of the Program, develop a sustainable funding strategy, foster the development of an adequate housing policy framework, and support the development of the secondary mortgage market.

A. Mexico's housing sector and housing finance system

1.2 It is estimated that Mexico currently requires some 700,000 additional houses each year simply to accommodate additional household formation. An estimated 50% of this demand is met through the informal markets. These markets exhibit the same inefficiencies as in most LAC countries: they produce very low standard housing, often in environmentally fragile zones; for lack of access to regular financing schemes, house improvement takes years, postponing the benefits of a decent place to live for slum dwellers; the improvement process is slowed down by the titling issue: most informal housing units do not have formal title and, although expulsions have not been prevalent in Mexico, occupants are reluctant to invest their savings in what they consider an insecure investment; similarly, municipal utilities resist as long as they politically can before ceding to pressures by slum dwellers to install basic services – all the more so that a house without a title does not bring in revenues from local real estate taxes.

1.3 The formal housing sector (in which housing produced by commercial developers is purchased with mortgage-backed lending) is characterized by high housing prices and an extreme concentration of beneficiaries within the population's highest income brackets. The 1990 UNHCS global housing survey found housing prices in Mexico to be more than twice as high as in Venezuela and Brazil, controlling for other factors.[1] An indication of how confined to higher income groups the formal market is, the down-market penetration index, which measures the ratio between the price of the cheapest non-subsidized housing units produced (in a significant quantity) in the market and the median annual household income for the country. In most Mexican cities, this ratio exceeds 4. By contrast, it is 2.2 in Venezuela and 2.1 in Chile. The factors that explain this situation are all too common: scarcity of urban land; exaggeratedly tight land development

[1] Although some Mexican research centers are of the opinion that the methodology used may not be completely accurate.

regulations; limited competition between suppliers; implicit collusion between builders, developers and financiers; and limited access to the formal housing finance system. The last factor has taken on extreme proportions in the aftermath of the 1994 financial crisis: formal mortgage finance institutions do not finance, on their own (i.e. without a public credit risk guarantee), households earning less than US$1000 to 1200 a month, a figure about twice higher than commercial lending floors observed in most other LAC countries. Formal, private housing finance is therefore limited to the top 5 to 10% of the population. A series of structural problems combine to create this state of affairs: the endemic scarcity of long-term funds is exacerbated by a disorganized primary mortgage market and an expensive system of inefficiently delivered, poorly targeted subsidies.

1.4 ***Long-term funding*** has never been forthcoming in the Mexican capital markets. The recent spin-off of the pension reform and the establishment of private pension funds (known as AFORES) provide an historic opportunity to develop the mortgage market by integrating it with the capital markets. During FY1999, the AFORES gathered close to US$6.8 billion in savings, an amount equivalent to over 140% of all new mortgage originations. However, the housing finance system will not be able to tap this new source of funds unless a major reorganization of the primary market takes place.

1.5 ***The primary market*** suffers several major shortcomings. First, it is overly segmented: commercial banks concentrate on the higher-end of the market, returning shyly after the crisis; the rest of the market is dominated by uncoordinated public and quasi-public programs catering to specific socio-economic categories. This includes the two mandated pension funds, INFONAVIT (for private sector employees) and FOVISSSTE (for public sector employees), who hold about 44% and 4% of the post-1994 new originations market; two separate federal government programs, FOVI and FONHAPO, financing low-to-moderate and very low-to-low income housing respectively, who hold 13% and 1% of the market; as well as state housing institutes, who concentrate on the lower end of the market and now represent about 38% of originations. This segmentation leads to sub optimal resource allocation within the sector. Second, the primary market infrastructure remains weak; in particular there are no underwriting and servicing standards. Combined with the fact that subsidies are embedded in credit, this makes existing mortgage portfolios difficult to securitize. As a result, mortgage originators must act as portfolio lenders, which severely limits their capacity to do more new originations. Third, private originators are under-capitalized, an endemic problem of the Mexican financial system.

1.6 ***Flawed subsidy system***. The housing finance system is distorted by the presence of public lenders whose subsidies are embedded in the credit terms, including below-market interest rates and end-of-term forgiveness of outstanding balance - a phenomenon occurring due to the type of mortgage instrument used in Mexico (see paragraph 1.10). This results in highly concentrated and poorly targeted

subsidies. It contributes to keep potential private suppliers of mortgage finance out of the primary market, and hinders the development of a secondary market. Also, it imposes a high burden on the federal budget.

B. The *Fondo de Operación y Financiamiento Bancario a la Vivienda*

1.7 Within this fragile environment, one public institution has been faring much better than all others on most accounts: the *Fondo de Operación y Financiamiento Bancario a la Vivienda* (FOVI). FOVI is a trust fund of the *Secretaría de Hacienda y Crédito Público* (SHCP) managed by the Central Bank of Mexico whose mission is to provide funding for social interest housing. It acts primarily as a second-tier financing institution: it on-lends public funds to commercial banks and specialized mortgage institutions via a funds auction system. Its current outstanding portfolio amounted to US$5.29 billion by end of July 2000, while total originations reached US$620 million in 1999 (13% of all new originations the same year).

1.8 By several criteria, FOVI is the most successful of Mexico's housing finance programs. It uses private financial institutions for originations, which gives it wider, more efficient access to its client base. Because originators share the risk, FOVI's default rate has remained relatively low (under 2.5% of delinquency rate for the primary portfolio of mortgage banks channeling FOVI funds), even in the aftermath of the crisis. Also, FOVI's structure is efficient and its administrative costs are low (less than 1% of new originations for 1999). Notwithstanding these achievements, FOVI remains handicapped by three factors, which mirror the sector issues listed in the previous section: it delivers rate subsidies with no sustainable source of financing; it lacks a funding strategy that would make it sustainable in the markets; and its distribution channels have a limited origination capacity.

1.9 Since the 1994 reform of the Central Bank of Mexico, BANXICO has been prevented from funding government programs, resulting in a shortage of long-term funds for FOVI. During the period 1994/1999, FOVI has continued to provide long-term financing for housing thanks to the five-year grace period of BANXICO loans to FOVI. Aware of the unsustainable nature of such arrangements, SHCP and BANXICO have recently initiated a dialogue aimed at redefining the mission of FOVI and establishing a policy environment conducive to the fulfillment of this mission. As a result of this dialogue, it has been agreed that FOVI's mission should be to develop the formal mortgage market, allowing its coverage to expand downwards (i.e. to lower income groups). This will require three elements: an up-front subsidy program to be channeled through FOVI must be set up; FOVI must gain sustainable access to long term funds to finance its lending program; and FOVI's distribution channels must be improved to reach more lower income beneficiaries. This process will be supported by a recently approved World Bank loan (see paragraph 1.42) as well as the proposed IDB operation.

1. Existing programs and new subsidy policy

1.10 ***FOVI's basic lending instrument*** is a Double Index Mortgage (DIM), in which the borrower payment is indexed to the minimum wage (payment rate) and the mortgage balance amortizes at a fixed real rate (accrual rate). The DIM was conceived to make payments affordable for borrowers in periods of high inflation while maintaining a decent return on the mortgage for the lender. In periods when the payment rate is lower than the accrual rate (i.e. when real wages fall), the outstanding balance increases, a phenomenon referred to as negative amortization. The DIM mechanism does therefore not ensure the full amortization of the mortgage during the initial loan term. Until recently, FOVI has dealt with this issue by extending the initial term from 20 to 30 years, and by canceling outstanding balances after 30 years, therefore providing a subsidy to borrowers. This poses problems of unfunded potential liabilities, which FOVI has set to resolve through a minimum wage/inflation swap mechanism. (See paragraph 1.13 item d.)

1.11 ***Current programs***. Up to now, FOVI has been funding three programs directed to three different income groups. The characteristics of these programs are summarized in the table below. In addition, FOVI provides two-year, market rate construction loans to developers which have won long-term credit rights at FOVI auctions.

	PROSAVI	A Program	B Program
Maximum home value	US$10,000	US$13,750	US$22,000
Income Level of Beneficiaries	2 to 5 Minimum Wages (MW)	4 to 8 MW	7 to 15 MW
Income Distribution	15 - 67%	57% - 80%	80% - 90%
Loan to value ratio	73%	90%	90%
Up-front subsidy	20%	0%	0%
Basic interest rate	4% in UDI's	4% in UDI's	7% in UDI's
Term	30 years (with swap insurance for new product)		
Primary Mortgage Insurance	100% by FOVI	50% by FOVI, on *pari-passu* with originator	
1999 Originations (executed)	15,000	15,000	30,000

1.12 ***Existing subsidies***. Although FOVI is in transition to a more market-based program, there are (or, until recently, there were) several sources of subsidies embedded in existing FOVI mortgages including: (1) the rate subsidy, due to the difference between the cost of FOVI's funding and FOVI's actual on-lending rate; (2) the end-of-term balance forgiveness, due to the current DIM structure; (3) the primary mortgage insurance provided by FOVI to its intermediaries; and (4) servicing fees on the A program, which are currently paid for by FOVI, not homeowners. The net present value of the rate subsidy alone represents 30%, 35% and 20% of house value for the PROSAVI, the A and the B programs respectively.[2] These subsidies are poorly targeted: their vast majority benefits

[2] This estimate considers a (real) market cost of funding of 8.5% for FOVI, which translates into a mortgage rate in excess of 15% in real terms (including credit risk, insurance and servicing).

people richer than the average. They are also quite generous for those who get them: they represent up to 20 months of household income; consequently they are quite expensive for taxpayers (US$325 million in 1999 NPV), relative to the number of people they reach (60,000 in 1999). The introduction of up-front subsidies in the PROSAVI program in 1996 marked an important policy change towards a more transparent system. Access to PROSAVI is regulated through an innovative bidding mechanism, which rewards eligible beneficiaries with the highest level of savings.

1.13 ***Policy shift***. As a result of the dialogue initiated by BANXICO and SHCP on FOVI's reform, the two institutions have agreed on a new subsidy policy aimed at improving the targeting and transparency of the subsidy system, while reducing its cost to the Government. It will also help ensure that future mortgages can be resold in the secondary market. Under the new subsidy policy,

a. All subsidies are to be separated from credit and will be delivered upfront in the form of a participation in the down payment. The structure of the upfront subsidy is discussed in the next paragraph.

b. In the medium term, all subsidies would have to be funded with explicit budget allocations. In the short term, as is explained in Chapter 2, FOVI will receive fresh resources to boost its capital base and will use part of its capital base to finance subsidies while a sustainable subsidy financing mechanism is worked out. (See paragraph 1.23).

c. Interest rates on FOVI mortgages will be set to reflect FOVI's real cost of funding.[3]

d. End-of-term balance forgiveness will disappear through the introduction of a swap mechanism to convert wage-indexed mortgage payments into inflation-indexed units (*Unidades de Inversión* or UDI's). This will be achieved through a FOVI-managed swap fund financed by an 11% premium on mortgage payments. The fund will receive minimum wage-indexed mortgage payments from the homeowners and make UDI's-indexed payments to originators. In its early years of operation, the fund will rely on a US$600 million contingent line of credit at BANOBRAS to handle any violent and temporary mismatch between the minimum salary and inflation. Calculations have shown the fund to remain solvent even in the face of severely adverse economic conditions. (See risks section, paragraph 4.23.)

e. Finally, the partial credit risk guarantee now provided by FOVI to originators will be turned into a commercially viable venture through a premium charged

[3] In the medium term, setting FOVI's on-lending rate will be an essential part of FOVI's to-be-established asset/liability management function; in the short term, rates will be set to cover FOVI's real cost of funding (not subsidized) and avoid creating distortions in the credit market. Ideally, they should be based on a market-observed benchmark such as the 10-year UDI bond (which the Government issued for the first time in October 99).

on primary mortgages. This will occur in two steps: in the short term, FOVI will establish a credit insurance premium and manage premium proceeds out of a separate reserve account; in the longer term, the insurance function could be privatized. (See paragraph 1.35.)

1.14 The 18-month Program preparation process led to the definition of the structure of the new subsidy policy, which are as follows.

a. Eligibility will be restricted to below-median urban income households (five minimum wages).

b. The amount of the subsidy will be a decreasing function of income.

c. The maximum subsidy amount will be no higher than six years of minimum wage (representing three years of salary for the expected lowest income beneficiaries).

d. The allocation of the subsidy will be related to the down payment, to encourage own-resource mobilization.

e. Houses priced above 55,000 UDI's (about US$16,000) may not be purchased with the help of the subsidy.

f. The subsidy will be portable, i.e. eligible households can use the subsidy, along with the loan, for the house of their choice.

1.15 The mechanism to select beneficiaries among eligible households has not been finalized, primarily because the politically sensitive nature of this mechanism commands that the incoming administration take responsibility for finalizing its details. However, the main principles have been agreed upon and the mechanism to be presented by FOVI to the Bank as a condition prior to first disbursement will be need to abide by these principles. They include: (1) ensuring transparency through clear, widely publicized selection rules, and the publication of beneficiary selection results; (2) delineating clearly the respective functions of FOVI and its intermediaries in administering the subsidy system; (3) encouraging the mobilization of own resources on the part of beneficiaries; and (4) ensuring the transparent management of subsidy funds.

1.16 The preliminary target level at which the annual budget contribution would expect to be set is US$135 million. This would be enough for FOVI to originate about 15,000 former PROSAVI-equivalent mortgages and 15,000 former A-equivalent mortgages. This figure represents less than 0.2% of the national budget and it could be expanded to the entire target population (households earning between 2.5 and 5 minimum wages) at a cost that would remain low compared with other LAC countries (where housing subsidies average between 2.5 and 5% of government

budget).[4] However, the budget restriction that Mexico is likely to be facing in the near future may come to bear on the sustainability of this expected funding level. (See risks section, paragraph 4.18.)

1.17 The following table summarizes the main differences between the old and the new subsidy policies and points to the benefits of the new policy. (The figures quoted illustrate the principles laid out in paragraph 1.14 and are only tentative.)

Parameter measured	*Mortgage Category*	*Old policy*	*New policy*	*Observations*
Maximum income of beneficiaries (MW = Minimum Wage)	PROSAVI	5 MW	Access to subsidy: 5 MW Access to credit: no limit	The new policy targets subsidies to lower income households.
	A	8 MW		
	B	15 MW		
Income distribution (urban population)	PROSAVI	Under 50%	Under 50%	
	A	Under 75%		
	B	Under 90%		
Subsidy per house (net present value for old program)	PROSAVI	US$8,000	Decreasing from US$7,500 (for households earning 2 MW) to US$0 for 5 MW	NPV of subsidy decreases by an average 7% to 100% respectively depending on income level.
	A	US$6,500		
	B	Presently: US$0 (Until last December: US$4,520)		
House prices	PROSAVI	US$10,000 average	Maximum: US$ equivalent of 55,000 UDIs max (US$12,600)	
	A	US$15,300 average		
	B	US$24,000 average	No limit	
Number of yearly Beneficiaries (1999 figures)	PROSAVI	15,000	15,000 estimated	The new subsidy improves the efficiency of public spending.
	A	15,000	15,000 estimated	
	B	30,000	No limit	
Overall cost		US$300 million	US$135 million	

1.18 **Transitional arrangements for financing the new subsidy**. The US$135 million referred to in paragraph 1.16 represents the amount of resources needed to sustain a reasonable level of activity with the new subsidy structure. In the medium to long term, the Government of Mexico will have to find steady sources of financing for this subsidy. This will be one of the key components of the housing policy to be elaborated by the incoming administration. In the meantime, the up-front subsidy will be financed by three sources: (1) through the IDB loan, using the differential between the IDB lending rate and the rate at which the Mexican Government places its long-term debt in the international markets;[5] (2)

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[4] Stepen Mayo (1999) reports that the second highest GNP/capita quartile of countries who participated in the 1990 UNHCS survey on housing had an average housing subsidy to government budget ratio of 5.6% (with an average GNP/capita of US$4040).

[5] Through a system of swaps established in 1996 by SHCP to hedge the currency risk on all its foreign currency loans.

through resources transferred from another government trust fund known as FIDEC (see paragraph 1.19); and (3) through budgetary appropriations.

2. FOVI's financial structure, funding strategy and financing plan

(a) FOVI's financial structure

1.19 ***Current financial position***. FOVI's existing balance sheet is structured as follows (data as of end of year 1999):

a. On the asset side, FOVI has about US$5.29 billion in existing mortgages (thereafter referred to as FOVI's old portfolio), which carry a subsidized rate (a 4% to 7% UDI rate – as opposed to about 8% for the ten-year, UDI-denominated, Government bonds) and, for some part, a DIM structure with potential end-of-term outstanding balance. In addition, FOVI has about US$110 million in cash and securities.

b. On the liability side, FOVI has three major creditors. BANXICO with a US$3.1 billion loan (at subsidized rate); BANXICO (at market rate funds from FIDEC[6]) with a US$1,800 million loan; and the World Bank with a $20 million loan. The Central Bank loan is a refinancing, which amortizes and matures on 2014. Since this amortizes at a faster rate than the portfolio, FOVI may be exposed to higher interest rates if it needs market financing to retire this debt. The FIDEC loan was contracted recently to finance FOVI's 1999 originations. It has a 15-year term and carries a variable market rate, which is likely to create a minor rate mismatch with the asset side.

c. In 2000, FOVI expects to complete a transfer of FIDEC's assets and liabilities, including cash and portfolio, and debts to BANXICO. These resources will be used to (1) make some payments on the BANXICO debt; (2) fund the year 2000 program; (3) capitalize the old FOVI to reserve against its contingent liabilities; and (4) provide a sound starting base of capital for the new FOVI.

d. At the end of year 1999, FOVI's capital base was about US$876 million, i.e. 16.5% of risk assets. At the end of 2000, assuming all the FIDEC assets are transferred, the capital base will grow to $1.46 billion, or about 20% of its risk assets. However, FOVI has several sources of contingent liabilities, which its staff reasonably estimates to be about $1.18 billion over the next twenty years. In relative importance these are: (1) $503 million in servicing fees on the low income "A" program commission; (2) $214 million in estimated mortgage default claims; (3) $168 million in guarantee payments for unpaid balances at maturity of the DIM mortgages; and (4) about $300 million increase in interest payments due to higher refinancing rate. The 100% guarantee for PROSAVI mortgages does not bear on FOVI's balance sheet because corresponding losses are absorbed by SHCP.

[6] FIDEC is another SHCP trust fund managed by the Central Bank

e. By far the biggest risk to FOVI is access to continued funding in the future. Its expected borrowing needs are on the order of $1billion a year, excluding up-front subsidy funding.

f. Another important feature of FOVI's operations is that it currently mixes construction financing with mortgage financing. An intermediary who wins mortgage credit rights in a FOVI auction is automatically eligible to receive a construction loan at an advantageous interest rate. In the recent past, this has often resulted in intermediaries financing the construction of housing developments with a FOVI loan and then selling these developments in their entirety to INFONAVIT borrowers, who receive individual mortgage loans at much cheaper terms. This has diverted FOVI away from its original mission.

(b) FOVI's funding strategy

1.20 ***The general evolution of FOVI's funding*** is driven by the need to secure long term funds from private markets. This important shift makes the separation of the old portfolio and the new portfolio necessary. The new portfolio will be made of market rate mortgages complemented by an upfront subsidy. Looking forward, FOVI's strategy should focus on preparing for being able to fund its programs in the markets, through debt issuance and/or securitization. The old portfolio, by contrast, carries subsidized rates and conditions. The strategy must ensure that the embedded subsidies do not cause FOVI to decapitalize thereby contaminating the new portfolio. During project preparation, financial proformats were prepared for the old FOVI and the new FOVI as if they were separate business concerns in order to force clarity and transparency on the restructuring process.[7] Several options were evaluated to ensure that FOVI's capital level remains adequate and that FOVI has access to enough resources to finance its lending program. The option presented below is the most plausible, and the finalization of the legal arrangements underlying it will be a condition prior to the eligibility of the subsidy component.

1.21 Under this option, ***the old FOVI*** will receive US$257 million of additional market-rate funding from FIDEC to finance part of the year 2000 credit program and US$309 million in capital to establish reserves to cover old FOVI's contingent liabilities. With this scenario and under reasonable macro-economic assumptions, projections show that the old portfolio would generate enough cash to retire its existing liabilities and die slowly by year 2030. The outright sale of the old portfolio or the securitization of part of it would generate additional liquidity to jump-start the new portfolio.

1.22 ***The new FOVI*** will be capitalized by the difference between the FIDEC grant (US$584 million) plus old FOVI's current capital (US$876 million) and old

[7] For this purpose, the old portfolio is defined as comprising all the mortgages originated on or before December 31st, 2000, plus those mortgages originated after that date at below market rates.

FOVI's estimated contingent liabilities (US$1,185 million). This difference is estimated at about US$275 million. It will require about US$960 million a year to finance new originations starting in 2001. FOVI's capital base, together with the proposed IDB loan and a recently approved World Bank loan, will provide about US$750 million for new originations, representing slightly less than a year. Before this transition period is over, FOVI will need to be in a position to implement a sustainable funding strategy. Such a strategy must be consistent with the Government's overall funding program and notably the refinancing of IPAB liabilities, which recently added substantially to the internal debt market. The instruments to be used by FOVI to get access to long term funding and the timing for such access will therefore need to be considered very carefully.

1.23 In the medium term, FOVI's capacity to lend will be a direct function of its ability to raise financing in the markets. The perceived strength of the new FOVI's balance sheet will depend crucially on the level of separation of the two portfolios, old and new. Several options for separation were reviewed during project preparation. In the short term, the only viable option -- short of a full-fledged Government guarantee -- will be an administrative separation of accounts, allocating FOVI's capital base between the two entities from a purely accounting standpoint. While this arrangement will force transparency on the resolution of the problems embedded in the existing portfolio, it does not guarantee that the two portfolios and their respective capital base become independent. Namely, if the subsidies embedded in the old portfolio turn out to be larger than original projections indicate (for instance because of a macroeconomic shock), and if the Government decided not to finance these increased subsidies, FOVI's capital base would erode quickly. This would weaken the chance of FOVI to gain autonomous access to the financial markets.

1.24 The securitization of FOVI's old portfolio would not only bring liquidity to the primary market, it would also restore headroom in the balance sheet of FOVI's intermediaries, which would enable them to do more originations given their capital constraints. However, because the old portfolio is heavily subsidized, its outright securitization would result in a reduced amount of resources available for new loans and, more importantly, the ensuing loss would cause a significant reduction in FOVI's capital base and/or in that of its intermediaries. This, in turn, would dramatically reduce the ability of the system to finance new mortgages, thereby defeating the purpose of securitization. Also, given the complex structure of the old portfolio and the nature of the risks embedded in it, initiating FOVI's securitization program with the old portfolio may scare investors away and prove counterproductive in the medium term. It was therefore considered that securitization would be easier with the new portfolio, once a significant volume of seasoned new mortgages is available.

1.25 Finally, FOVI's construction financing activity will be separated from its mortgage finance activity, and progressively phased out. This will be done in two steps. First, construction finance auctions will be separated from mortgage finance

auctions. Second, the reserve price for the construction finance auctions (the interest rate under which construction finance rights will not be awarded) will be increased progressively over time until the amounts of construction financing awarded are reduced to zero.

1.26 Detailed financial projections for both the old FOVI and the new FOVI are available in the Program's technical files.

(c) FOVI's financing requirements for the period 2001-2002

1.27 It is estimated that, to maintain FOVI's operations at the a level comparable to that of 1999 (30,000 mortgages with subsidies and 30,000 without), but with the new mortgage structures, FOVI will need about US$135 million for subsidies and about US$960 million for credit per year.

1.28 The up-front subsidy can be financed from the following sources:

i. Government of Mexico budgetary appropriations: an amount of US$30 million has been approved for 2000. As a minimum, the same amount can be expected for the coming years.

ii. Proceeds from the spread between: (i) the rate of the IDB and World Bank loans to FOVI and (ii) the rate of FOVI loans to FOVI intermediaries (see paragraph 2.4 for details on the financial arrangements for the IDB loan).

iii. About US$70 million of FOVI's uncommitted capital would also be used for subsidies in the two-year period.

1.29 Credit financing will come from the following sources:

i. Proceeds from new portfolio recovery: these will be very limited in the first years of the new FOVI.

ii. Proceeds from the IDB and World Bank loans.

iii. Other sources at market rates (such as bond issues and/or securitization of existing and/or new portfolio, BANOBRAS or SHCP).

1.30 The following financing plan has therefore been agreed upon in principle.

Sources of funds	2001 Credit	2001 Subsidy	2002 Credit	2002 Subsidy	Total
Government	$ -	$ 35,000,000	$ -	$ 35,000,000	$ 70,000,000
FOVI Capital	$ 180,000,000	$ -	$ -	$ 70,000,000	$ 250,000,000
IDB	$ 200,000,000	$ 30,000,000	$ 200,000,000	$ 30,000,000	$ 460,000,000
IBRD	$ 146,200,000	$ 70,000,000	$ -	$ -	$ 216,200,000
Market rate sources	$ 433,800,000	$ -	$ 760,000,000	$ -	$ 1,193,800,000
Total	**$ 960,000,000**	**$ 135,000,000**	**$ 960,000,000**	**$ 135,000,000**	**$ 2,190,000,000**

Target financing plan, in US$

1.31 Since the extent of FOVI's operations will depend critically on (i) the capacity of the Government to provide financing for the up-front subsidy, and (ii) the capacity of FOVI to get long term financing at market rate for mortgage credit, it has been agreed that these two sources of funding will have to be maintained at or above the following minimum levels. (1) One peso of Government-funded subsidy must be mobilized for each peso of Bank-funded subsidy; and (2) one to two pesos of market rate financing will have to be mobilized for each peso of Bank-funded credit (see paragraph 3.6). This leads to the following minimum financing plan.

Sources of funds	2001 Credit	2001 Subsidy	2002 Credit	2002 Subsidy	Total
Government	$ -	$ 30,000,000	$ -	$ 30,000,000	$ 60,000,000
IDB	$ 200,000,000	$ 30,000,000	$ 200,000,000	$ 30,000,000	$ 460,000,000
Market rate sources	$ 200,000,000	$ -	$ 400,000,000	$ -	$ 600,000,000
Total	**$ 400,000,000**	**$ 60,000,000**	**$ 600,000,000**	**$ 60,000,000**	**$ 1,120,000,000**

Minimum financing plan, in US$

3. Primary market and distribution channels

1.32 ***FOVI distribution channels***. Before the financial crisis, commercial banks held 100% of FOVI's portfolio. After December 1994, commercial banks virtually stopped originating both privately funded and government-funded mortgages. The introduction of specialized mortgage institutions (known as *Sociedades Financieras a Objeto Limitado, SOFOLES hipotecarias*) in 1995 filled part of the gap left by banks in FOVI distribution channels. In 1999, SOFOLES won more than 90% of FOVI auctions. Because they specialize in housing, mortgage SOFOLES have rapidly developed better origination and servicing practices than commercial banks. They have also brought major innovations to the market, such as standardized application forms and on-site payment collection.

1.33 However, there remain serious impediments to the development of SOFOLES as efficient vectors to distribute FOVI funding. First, SOFOLES too suffer from the endemic lack of capital in the Mexican markets and have had difficulties to attract new capital. Second, most SOFOLES are too small to operate efficiently. Third, SOFOLES have limited sources of funding. Since they are prohibited from raising money from deposits, most SOFOLES rely on FOVI funding for survival. One of

the biggest SOFOLES recently issued debt in the local markets; others have turned to commercial banks and foreign partners such as the IFC to increase their capital. Eventually, the securitization of mortgage assets in the secondary market would allow SOFOLES to increase their origination capacity.

1.34 The strengthening of the ***primary market infrastructure*** will also be instrumental in the development of the secondary market. The mortgage origination and servicing functions are presently not standardized across the industry, neither are they efficiently carried out.[8] The introduction by FOVI of a standardized platform for these functions will be disseminated within the entire commercial mortgage industry through FOVI's intermediaries. Also, origination procedures are presently not adapted to the informal economy. For instance, loan documentation often requires the provision by the prospective homebuyer of a formal salary sheet. In an effort to expand its activities to the informal market, FOVI wants to encourage its intermediaries to better understand this segment and develop better suited underwriting tools for it.

1.35 Similarly, the development of a commercially viable Primary Mortgage Insurance (PMI) function will facilitate the securitization of future FOVI mortgages. In addition, it will create a strong incentive to standardize the primary market. FOVI's medium term plan is to contract a major international expert to develop the structure and policies of the FOVI PMI. It is expected that the PMI function will evolve from FOVI's current mortgage risk guarantee. As more reliable data is gathered on the actuarial risk of the portfolio, this function could expand to the entire primary market and be privatized.

1.36 Another important issue affecting the development of the primary mortgage market to lower income households is the legal framework for foreclosure and guarantees. In the last three years, FOVI has been instrumental in pushing for state-level reforms of the legal framework. States which want to gain access to FOVI's PROSAVI program must modify their legal framework to streamline their foreclosure procedures and make them enforceable. To date, 23 of the 32 states have complied. Statistics gathered in five states indicate that the average duration of court procedures for foreclosure has been reduced from 18 months to 6 months.

4. Non-financial housing policies affecting FOVI

1.37 FOVI's operations also suffer from a number of rigidities in non-financial housing policies, most of which have been inherited from a strong tradition of close involvement of construction companies in the housing finance system. FOVI is committed to work on these aspects, although some of them are related to national

[8] The origination function includes mortgage documentation and reviewing, collateral review and valuation, settlement processes and property registration, and credit underwriting. The servicing function includes loan monitoring, collateral control, credit risk monitoring, problem loan monitoring, loan restructuring, foreclosure processes and implementation of legal remedies.

housing policies and should be dealt with by SEDESOL, whose weaknesses are legendary. These rigidities include:

a. Housing production and housing finance bundling. FOVI's financing is brought to the potential homebuyer by the developer. It would be more efficient to have FOVI's financing channel to the homebuyer independently from the house production process. FOVI has developed an instrument which permits such portability (a credit line granted to intermediaries independent from developers), but so far it is under-used – because the economies of scale involved in originating and servicing large numbers of mortgages in bulk encourage intermediaries to work primarily with large developers reaching a big client base.

b. Product diversification. FOVI's main product is a new-house financing loan. In the recent past, FOVI introduced new instruments such as house improvement and extension loans, serviced land purchase loans and used-house financing loans. For various reasons (some not unrelated to the weaknesses of the primary market infrastructure), these instruments are not being used. FOVI is committed to explore new ways to widen its range of products and adjust them to the needs of its target population.

c. Lack of supply side competition. Similarly, competition for FOVI customers on the part of promoters and builders is often limited. With the exception of the five largest metropolitan cities, there are usually no more than three providers of FOVI-type housing in a given city. This has contributed to maintain high housing prices. FOVI has launched policies to reserve credit rights to smaller developers, but with little success so far.

d. Land and housing development regulations are another source of extra costs. In a newly built PROSAVI project which the team visited during project preparation, the developer reported that house construction costs represented less than 45% of overall house price; while the cost of complying with municipal and state-level infrastructure and public facilities development regulations accounted for almost 25% of house price.

e. Lack of price information. Finally, the lack of reliable information on the structure and evolution of housing prices makes policy debates unfocused and policy changes difficult to argue for. FOVI is aware of the need for better data and will work with the appropriate authorities on a data collection program to inform policy making.

C. Bank and country sector strategy

1.38 The transition team established by the President-elect has indicated that the new Government would rapidly initiate work to elaborate a (much-needed) comprehensive housing sector policy. Last April, at the Government's request, the

Bank prepared a housing sector note, which outlines the main challenges facing the sector. One of them is the dire need in which the country finds itself to deal with the informal housing sector.

1.39 Fifty-eight percent of Mexican families continue to produce their own housing in the informal sector. These households have little or no access to institutional lenders, which only extend credit for new, commercially built units that are typically unaffordable to these households even with the available subsidies. Partly as a result, seventy percent of Mexican households do not use financial institutions at all. To deal with this challenge, the Bank is engaging in a dialogue with the new government to promote policies focusing on the types of solutions (titled lots, home improvement and extensions, and replacement of deteriorated units) and the mechanisms (such as micro-finance, tenured land, and home saving programs) best suited to the poor. State governments can better control and join together many of the elements necessary to reach low-income families including land, tenure, and regulation. They are also arguably more responsive to the needs of the low-income majority. Indeed, all of Mexico's states have established housing institutes that are now the principal agencies working with the lowest-income households. Decentralization to the states represents one of the main overall thrusts of the incoming administration. Hence, the Bank's housing policy will also emphasize the state level as a key protagonist in reaching low-income households.

1.40 As for the formal housing sector, the next few years will be critical for Mexico's housing finance system. The prospect for increased private funding is still uncertain as commercial banks prepare to return to the market. Public funding will remain scarce as the country is undergoing another period of budgetary restriction. Given the social implications of FOVI's activities, the Government of Mexico has requested the support of the Bank to help fund FOVI's subsidy program during the transition to market rates.

1.41 The Government and the Bank have agreed that the proposed Program would focus on FOVI, to take advantage of the relatively sounder policy environment within which it operates. Obviously, the fact that FOVI controls less than 20% of the market will limit the impact that this institution and the proposed operation can be expected to have on the other two major quasi-public lenders in the sector, INFONAVIT and FOVISSSTE. However, working with FOVI will help strengthen and expand the entire commercial mortgage market, and will foster the emergence of a sound alternative to INFONAVIT for housing finance in Mexico.

1.42 The proposed Program complements a World Bank operation approved in January 1999. The main component of the US$505.5 million World Bank loan is a credit component (US$477 million) aimed at cofinancing FOVI's lending program for the period 2000-2001. While the World Bank operation and the proposed IDB Program have been conceived within the same policy framework, the IDB Program, coming at a later stage and resting on the progresses achieved through

the World Bank operation (such as the establishment of the swap fund mentioned in paragraph 1.13), is supporting a deeper evolution of FOVI's mortgage products (such as the portability of the subsidy and the diversification of housing products eligible for FOVI financing) and will promote the implementation of a sustainable funding strategy for FOVI. The two operations will co-finance FOVI's year 2001 lending program (see table in paragraph 1.30). Also, both operations have a technical assistance component, to be executed by the same unit within FOVI to ensure strict coordination (see paragraph 3.9).

D. Lessons learned

1.43 Drawing from the World Bank and the IDB's experience in the housing finance sector, the Project Team compiled a short document (available in the Program's technical files at RE2/FI2) presenting the building blocks which must be in place to ensure that the housing finance system is efficient and correctly linked with the capital markets. The building blocks most relevant to the proposed operation involve: (1) separating subsidies from credit; (2) improving underwriting policies and loan servicing processes, as well as the legal framework for foreclosure; (3) developing commercially viable mortgage insurance programs; and (4) developing the secondary mortgage market. These are at the core of FOVI's strategic plan and of the proposed operation.

1.44 With regard to the development of the secondary mortgage market, the main lesson learned from the US experience is that the primary market must be well organized (i.e. producing a predictable flow of standardized, high-quality mortgages) before an efficient secondary market can develop.

1.45 The proposed Program is the Bank's first program directly concerned with housing in Mexico in the last 20 years. However, as part of a 1996 sectoral loan aimed at supporting the reform of the pension system (loan 963-OC/ME), the Bank and the Government agreed on a series of actions to initiate the modernization reform of INFONAVIT, among which the introduction of individualized saving accounts.

E. Program focus

1.46 In brief, the development of Mexico's formal housing sector is hindered by: (1) supply-side constraints which artificially increase the price of housing; (2) a set of distorted arrangements to deliver subsidies, which do not boost the demand of lower income households efficiently; and (3) severe shortfalls in the housing finance intermediation system. The proposed Program will support a well-performing institution, FOVI, in its attempt to overcome these weaknesses and expand access to housing finance to lower income households.

II. PROJECT OBJECTIVES AND DESCRIPTION

2.1 ***Objectives***. The overall objective of the Program is to improve the efficiency of Mexico's formal housing finance system and facilitate its expansion to lower income segments of the population. Specifically, the proposed Program aims to consolidate the reform of a successful second-tier mortgage finance institution, FOVI, and to finance eligible housing subsidies and mortgages under the Program's operating regulations for the next two years – the period of time needed for the new government to articulate and implement an overall housing sector strategy, including a sustainable funding strategy for FOVI.

2.2 FOVI's reform rests on two pillars: on one hand, an overhaul of FOVI's products aimed at: (a) turning the existing interest rate subsidy into an upfront subsidy to be complemented with market rate mortgage credit; (b) making the upfront subsidy portable for the borrower, i.e. independent from the house to be acquired; and (c) separating mortgage financing from construction financing, and scaling down the latter. The new upfront subsidy will: (a) improve efficiency and reduce cost to the Government; (b) improve targeting by restricting eligibility to below-median urban income households; and (c) encourage own-resource mobilization. The second pillar of the reform will be the design and implementation of a sustainable funding strategy for FOVI programs. Eventually, the subsidy program will have to be funded with fiscal resources while the credit program will have to rely on private funding sources.

2.3 ***Expected results***. By program completion, it is expected that: (1) a sustainable subsidy policy for FOVI is in place and it is efficiently targeted towards lower income groups; (2) a sustainable funding strategy is in place, enabling FOVI to access long term funding at market conditions; and (3) as a result of the first two elements and thanks to a strengthened primary market infrastructure, housing finance is now readily available to households earning more than 2 minimum wage. To reach its objectives, the Program will fund an investment component and a technical assistance component.

A. Investment component (US$460 million)

2.4 The investment component of the IDB loan will provide resources to co-finance FOVI's new originations program for the 2001-2002 period, in the form of both market-rate mortgages and upfront subsidies as specified in paragraph 3.4. IDB resources will be passed to FOVI in Mexican currency through BANOBRAS in the form of a loan with the same maturity as that of the IDB loan (25 years). The rate applicable on this loan will be set, for every disbursement, so as to pass to FOVI the spread between the IDB lending rate and the Government of Mexico foreign bond issues (currently at 150 basis points). The rate of the US$ long-term issues and the rate on the Mexican currency long-term issues (known as ten-year *UDI bonos*) of the Mexican Government adjust to make borrowing by the

Government in US$ or Mexican currency indifferent. The IDB resources will therefore be passed to FOVI at ten-year *UDI bonos* minus the observed spread. If a disbursement were to have occurred on July 21, 2000, the applicable rate would therefore be the ten-year *UDI bonos* rate minus 150 b.p. Because FOVI lends to its intermediaries at market rate, the IDB loan will create a positive mismatch on FOVI's balance sheet, which will be used to co-finance the subsidy program.

2.5 With the July 2000 figures, the Program's investment component will enable FOVI to originate up to US$400 million in market rate mortgage credits and up to US$60 million of up-front subsidies, in accordance with the Program's operating regulations (see paragraph 3.3.) A detailed discussion of FOVI's lending and subsidy programs is provided in paragraphs 1.27 to 1.31.

B. Technical assistance component (US$10 million)

2.6 This component has been designed in close coordination with the World Bank's technical assistance program. While the World Bank program concentrates on strengthening the financial management capability of FOVI, the IDB program will adopt two complementary focuses: (a) furthering the reform of FOVI's mortgage products to facilitate the implementation of the new subsidy policy; and (b) supporting FOVI's efforts to gain access to the financial markets. Consequently, this component will finance assistance to: (1) help improve the housing policy framework affecting FOVI's operations; (2) strengthen the primary market infrastructure; (3) facilitate the development of the secondary market; and (4) improve FOVI's operating environment.

1. Reform of FOVI's mortgage products and policies

2.7 The Program will finance the establishment of a Housing Research Unit (HRU) within FOVI.[9] The HRU will be a small, high-level unit (about three housing policy specialists/housing economists) charged with research and development functions. It will be given responsibility for evaluating Program execution.

2.8 The Program will also finance the HRU's plan of activities for the first two years. This plan of activities and all the proposals therein will be presented to FOVI's board for approval before their implementation. During this period, the HRU will suggest, design and monitor a set of pilot programs designed to (1) investigate the feasibility of expanding FOVI's activities down-market and define the instruments necessary to reach this goal; (2) understand and measure the impact of existing policies (both subsidy and non-subsidy) on the supply and demand of housing; (3) inform the policy adjustment process with regards to FOVI's own policies; and (4) work with public agencies responsible for housing policies to design and implement improved policies. The HRU will propose an incentive system to

[9] An existing unit, the Housing Markets Analysis Unit, may be expanded and charged with the HRU functions.

encourage states and municipalities to work with FOVI on improved local policies (as was done for state-level foreclosure laws).

2.9 Specific activities will include:

a. Portability of financing. The HRU will investigate ways to make the portable financing option recently established by FOVI more attractive to intermediaries and final beneficiaries. It will also look into ways to unbundle mortgage financing from housing construction and land development.

b. Saving plans. The HRU will seek to generalize the innovative initiative of some of its intermediaries to work with deposit institutions and set up contractual saving plans, which lead to the build-up of a future down payment. This will be especially useful for informal sector workers.

c. Diversification of FOVI products. The HRU will look into ways to make FOVI's recently launched products (used houses, home improvements and serviced land) more attractive to intermediaries and final beneficiaries. This will include the introduction of smaller-size mortgage loans.

d. Streamlining land regulations. The HRU will conduct pilot studies to better understand the impact of existing land and housing development regulations on housing price. Since such regulations are municipal and state-level regulations, the HRU will design guidelines for streamlined regulations for states and municipalities.

e. Housing price monitoring system. The HRU will establish a system to collect and analysis data on the structure and evolution of FOVI and non-FOVI housing produced in the formal market. This will serve to better identify existing supply-side bottlenecks and propose corresponding policy changes.

f. Monitoring of the new subsidy policy. The HRU will design and implement a system to measure the impacts of the new subsidy policy and the degree to which it fulfills its objectives. The on-going evaluation will inform policy adjustments.

g. Gender equity policies. The HRU will develop a framework to analyze the impact of FOVI's rules and regulations on women. It will develop programs to raise the awareness of women concerning their rights and opportunities in housing. (See paragraph 4.14).

2. Strengthening of the primary market infrastructure

2.10 Under this subcomponent, the Program will finance technical assistance to:

a. Improve existing criteria for the initial selection and on-going monitoring of FOVI intermediaries; including capital requirements and maximum admissible delinquency rate.

b. Help intermediaries standardize their loan origination and servicing processes, define and set-up reporting standards (at both loan level and portfolio level), and install the corresponding information management and transmission systems. This may include the purchase of information technology equipment.

c. Help strengthen the links between credit bureaus and intermediaries, and develop standard scoring tools to assist in mortgage underwriting.

d. Develop origination and servicing standards for informally employed mortgagees. These may include a standard methodology to carry out a socio-economic survey of the potential borrower; the development of a data baseline for specific informal professions (e.g. street vendors) to serve as a benchmark to verify information provided by loan applicants; and the development of financial instruments to facilitate loan collection when direct deduction from the salary sheet is not an option.

e. Develop guidelines to assist state-level property registry agencies standardize the information they collect and improve their systems.

f. Revise existing guidelines to assist states perfecting their foreclosure legal and regulatory framework.

g. Investigate ways to increase the professionalism of house appraisal processes, and strengthen existing house price registries maintained by local real estate agency associations. This may be initiated through a pilot project.

h. Document the progress achieved in the categories listed above.

3. Development of the secondary market

2.11 Under this subcomponent, the Program will finance technical assistance to:

a. Assist FOVI and other interested parties (SHCP, National Securities and Banking Regulatory Commission, Mortgage Bankers Association, National Banking Association) elaborate a draft legal framework for the issuance, trading and supervision of Mortgage Backed Securities.

b. Investigate various credit enhancement options for MBS issuances and propose a structure for FOVI's pilot securitization program.

4. Improving FOVI's operating environment

2.12 Under this subcomponent, the Program will finance technical assistance to:

a. Help FOVI improve the management of credit and market risks, notably through the establishment of a full-fledged asset/liability management function.

b. Prepare and enforce revised guidelines for the environmental screening of housing developments financed by FOVI.

c. Promote the adoption of the best available institutional arrangements to minimize moral hazard associated with mortgage insurance.

d. Help determine the future institutional status of FOVI. To this end, a study will be carried out to look into the various options to transform FOVI into a sustainable corporation with administrative autonomy and direct access to the capital market while preserving its public mandate.

C. Program costs and financing

2.13 The overall cost of the Program is US$1,250 million, of which the Bank would finance up to US$500 million through its Ordinary Capital Fund, and the Government of Mexico and its agencies would finance the balance.

(in US$ million)	IDB financing	% financed by IDB	Local counterpart	Total	% of item in program cost
Investment component	460	41%	660	1120	96%
- *Credit*	*400*		*600*		
- *Subsidy*	*60*		*60*		
Tecnical assistance	10	100%	0	10	1%
Financing costs	35	0%	5	40	3%
- *Interests (first two years)*	*30*		*1.25*		
- *Credit fee*			*3.75*		
- *Inspection fee*	*5*				
Total	505	50%	665	1170	100%

Note 1: the technical assistance component may include the purchase of information technology equipment.
Note 2: the table reflects the minimum financing plan as described in paragraph 1.31.

2.14 Bank financing will carry the following conditions.

Term	25 years
Rate	Variable
Credit Fee	0.75% of undisbursed balance
Inspection Fee	1% of loan amount
Currency	Single Currency Facility US$

III. EXECUTION

A. Borrower, Guarantor and Executor

3.1 The borrower will be BANOBRAS (*Banco Nacional de Obras y Servicios Públicos*). The United States of Mexico will guarantee the loan. Each disbursement of IDB resources will be passed to FOVI in the form of a sub-loan from BANOBRAS in Mexican currency at a rate equal to the latest ten-year UDI bond rate minus the difference between the US$ Mexican Government bonds and the IDB lending rate. Prior to first disbursement, the appropriate fund transfer agreements between the Borrower and FOVI must have entered into effect.

3.2 FOVI will be the executing agency. The modernization process, which FOVI has initiated with support from the World Bank, makes FOVI well equipped to deal with the proposed Program. Throughout this process, FOVI will rely on first-class advisers, including housing policy consultants, specialized housing finance consulting firms and investment banks with experience in mortgage securitization.

B. Execution of the investment component

3.3 The execution of the investment component will be regulated by the Program's operating regulations, an outline of which has been agreed upon during the negotiations (available in Program's technical files). Prior to first disbursement, FOVI must present evidence to the Bank that the operating regulations have entered into effect in a form substantially equivalent to the agreed outline.

3.4 The operating regulations will be based on FOVI's credit regulations as well as the disbursement plan mentioned in paragraph 3.12 below.[10] The project team has reviewed FOVI's credit regulations, paying special attention to the selection of intermediaries, the establishment of the on-lending rate, and the mechanism to assign credit resources to intermediaries. As a condition prior to first disbursement, FOVI must present evidence that FOVI's Board (*Comité Técnico*) has approved FOVI's revised credit regulations to include: (1) the new subsidy policy consistent with the principles laid out in paragraphs 1.14 and 1.15; (2) the mechanism to link on-lending rates to a well-defined market-based benchmark, so that on-lending rates cover FOVI's real costs and do not distort the credit market; (3) strict criteria to select and monitor intermediaries, including minimum capitalization level and maximum delinquency rate; and (4) provisions as to the diversification of counterparty risk of FOVI with its intermediaries. FOVI agrees that any substantial change to:

[10] The rationale for having operating regulations for the Program based on but different from FOVI's own credit regulations is that FOVI's credit regulations also contemplate activities which the Bank does not wish to finance, e.g. construction financing.

- item (1) or (2) above, or any reduction of the minimum capitalization level required of SOFOLES without access to the capital markets below 5.8%, or any substantial change in the methodology used to compute the capitalization level, shall require the Bank's prior consent; and
- items (3) or (4) above shall require prior consultation with the Bank

3.5 Additionally, prior to first disbursement, FOVI must provide evidence that:

a. SHCP has approved the transfer of FIDEC resources to FOVI, for both FOVI's capitalization and the financing of its lending program.[11]

b. FOVI's board has determined that, in addition to its mandatory accounting records, FOVI will maintain separate records for the following accounts: (1) old portfolio; (2) new portfolio; (3) primary mortgage insurance; and (4) systemic risk insurance. This practice must: (1) split FOVI's existing capital base between the four accounts; (2) prohibit the transfer of funds from the last two accounts to any of the four; (3) separate the costs of operation related to each account; (4) define clearly the regime of SHCP guarantees applicable to each account separately and to FOVI's consolidated balance sheet; and (5) mandate the preparation of separate simplified financial statements for each of the four accounts, as well as a consolidation at FOVI's level.

3.6 A mid-term evaluation will be carried out by the Bank when US$250 million of loan resources have been committed to verify that: (1) the policy changes agreed upon during project preparation are progressing satisfactorily; and (2) solutions have been designed and are being implemented to ensure that both FOVI's up-front subsidy program and mortgage credit program have sustainable sources of funding. Specifically, before additional commitments can take place, FOVI must provide evidence that:

a. FOVI's Board has approved and incorporated within FOVI's revised credit regulations: (1) enhanced origination and servicing standards; (2) procedures for the environmental review of projects; and (3) gender equity policies.

b. An agreed system has been implemented to monitor the impact of the new subsidy policy in the following areas: housing price and size; income distribution of beneficiaries; and level of down payment. A preliminary evaluation of the new subsidy policy has been carried out, and the subsidy policy has been adjusted to take into account the lessons learned from the evaluation.

c. For the period of origination corresponding to the disbursement of the first US$250 million of IDB resources, FOVI's credit program has been adequately financed, with FOVI mobilizing at least one peso at market rate

[11] The obligation of SHCP mentioned in paragraph 3.5 item (a) will also be included in the guarantee contract.

for every IDB peso equivalent. For the future, FOVI's Board has approved a sustainable funding strategy for its credit program, and there are tangible signs that strategy implementation has started. More specifically, at least two pesos must be mobilized from market rate sources for every peso from the second half of the IDB loan.

d. For the period of origination corresponding to the disbursement of the first half of IDB resources, FOVI's up-front subsidy program has been adequately financed and subsidies for at least US$60 milllion will have been generated aimed at below-median urban income households to gain access to a housing solution. For the future, the Government has clarified the long-term strategy for the funding of the up-front subsidy program. For the second half of IDB resources, FOVI will generate at least US$60 million in subsidies aimed at below-medium urban income households.

3.7 Program preparation consisted in an eighteen month long process during which FOVI, BANXICO, SHCP and the Project Team considered and analyzed various policy options for FOVI's reform. This process led to a solid agreement on the core of the reform. Complying with the conditions prior to first disbursement will therefore consist mostly in formalizing the agreements reached through the appropriate instruments, which is well underway: FOVI's revised credit regulations and the Program's operating regulations are being finalized; the FIDEC transfer is to be approved by SHCP by year end; and board resolution prescribing the separation of accounts is being drafted. It is therefore expected that the conditions prior to first disbursement will be met by January 2001.

C. Execution of the technical assistance component

3.8 FOVI will recruit individual consultants and consulting firms to execute the technical assistance component. The work will be carried out in close coordination with the major players in the housing finance system, including the association of SOFOLES, associations of real estate agencies, the national association of notary public, state governments, housing institutes and property registry agencies, and credit bureaus.

3.9 The coordination of this component will rely on two distinct structures within FOVI. (1) Overall component execution will be orchestrated by a lean project management structure, which will be contracted out by FOVI as part of the World Bank loan. Using the same project management for both the IDB and the WB technical assistance will ensure coordination between the two programs. (2) The technical assistance related to mortgage products and policy matters (see paragraphs 2.7 to 2.9) will be dealt with directly by the Housing Research Unit.

3.10 Prior to first disbursement, FOVI must present evidence that:

a. The Housing Research Unit (HRU) has been established - possibly by modifying the mandate and composition of an existing unit - and has been assigned the functions listed in paragraph 2.8.

b. A detailed execution plan for the technical assistance has been agreed upon with the Bank. The plan must include: (1) an initial mapping of the respective areas of focus of the World Bank's and IDB's technical assistance programs, as well as a mechanism to ensure ongoing coordination between the two programs; (2) an effective mechanism to define, contract out, supervise and implement the various studies and consultancies commissioned under this component; and (3) the presentation to the Bank of biannual plans, detailing the proposed use of technical assistance resources from the Bank loan for the upcoming year.

3.11 The technical assistance execution plan will be updated on a yearly basis. The technical assistance component will be reviewed closely during the mid-term evaluation. If deemed appropriate, its amount will be reduced and corresponding resources will be transferred to the investment component.

D. Program disbursements, advance of funds, recognition of expenditures and retroactive financing of expenditures

3.12 The expected disbursement period is three years.

3.13 A revolving fund will be set up at BANOBRAS to manage disbursement, with an amount of up to 10% of total program amount. Given the expected rhythm of program disbursement, this is necessary to ensure that FOVI will only need to request revolving fund replenishments ten weeks (as opposed to every 40 days with a 5% revolving fund).

3.14 The Program's operating regulations will include a disbursement plan detailing the procedures for the replenishment of the revolving fund, with the following steps:

a. Once the conditions prior to first disbursement have been met (and as often as FOVI deems convenient), FOVI will present to the Bank a pool of originations (mortgage and upfront subsidy) financed with loan resources. FOVI will make a representation that the corresponding mortgages and subsidies were granted in compliance with the Program's operating regulations.

b. Based on the above, the Bank will proceed to disburse the amount equivalent to the total mortgage and subsidy pool. All controls will be ex-post.

c. Twice a year, the Bank will draw randomly about 1% of the mortgages in the corresponding pools so that they be audited by external auditors acceptable to

the Bank to be financed by the Program under terms of reference acceptable to the Bank. The auditors will request additional information, including the data submitted by the mortgagee in his/her subsidy application; the mortgage underwriting file; and the report on the subsidy competition in which the mortgagee was selected.

d. The auditors will review the mortgage-level information submitted. They will seek to verify that the Program's operating regulations have been abided by, and that the information contained in the underwriting file is consistent with that contained in the subsidy application.

3.15 To facilitate the tracking of the utilization of loan resources, FOVI will maintain a separate simplified accounting system for the proposed operation, under which it will record the expenditure breakdown by source of financing (IDB and local counterpart) with the adequate back-up documentation.

3.16 Disbursements for the technical assistance component will follow standard Bank procedures.

3.17 The following table summarizes the expected disbursement.

Component	***Year 1***	***Year 2***	***Year 3***	***Total***
Investment	230	230	0	460
Technical assistance	3	4	3	10
Financing costs	11.5	21.5	2	35
Total	**244.5**	**255.5**	**5**	**505**

3.18 It is not expected that retroactive financing or recognition of expenditures incurred before Program approval will be sought for by the Borrower. Retroactive financing of mortgage credits originated by FOVI starting from the date of Program approval will be allowed provided that: (1) the total amount of such retroactive financing does not exceed US$150 million (so that the Bank may still have significant leverage over the policy reforms to be undertaken by FOVI before the mid-term evaluation); and (2) the mortgage credits presented for retroactive financing have been originated with characteristics substantially equivalent to those prescribed by the Program's operating regulations.

E. Procurement

3.19 Standard Bank procurement policies, to be set out in Annex B of the loan contract, will apply for all procurement. The Program does not call for direct financing of construction works. International public bidding will be required for the acquisition of goods and related services in excess of US$250,000. Consultant services will be procured according to the procedures to be set out in Annex C of

the loan contract. International publication of announcements will be required for selection and hiring of consultants in excess of US$200,000.

F. Monitoring

3.20 The Bank will carry out ongoing monitoring of the Program through its representative office in Mexico. Additionally, every six months during program execution, the Bank, FOVI and SHCP will participate in progress meetings to review program performance on the basis of semi-annual execution reports prepared by FOVI. These reports will include: (1) a review of the state of compliance with the disbursement conditions; (2) a review of program benchmarks; (3) a summary of the results of the technical assistance activities; and (4) a description of the main issues affecting program performance and a description of the appropriate actions planned to resolve these issues.

3.21 The preliminary design of a comprehensive Program monitoring system has been prepared. It is available in the Program's technical files. It will be finalized and used to monitor program performance. Key benchmarks include the following: (see table next page)

Program Objective	***Benchmark***	***Base line, expected target and means of verification***
Subsidy policy (The monitoring system to be set up by the HRU will provide a comprehensive framework for measuring the impact of the new subsidy.)		
The new subsidy policy directs public funding to lower income households.	% of FOVI subsidies (in monetary terms) which reaches beneficiaries under (1) the 50th percentile and (2) under the 30th percentile in the urban income distribution curve	Presently - Under 50%: 20% - Under 30%: 5% Target (by year 2001) - Under 50%: 100% - Under 30%: 30%
The new subsidy policy is sustainable	Annual budgetary appropriation to FOVI or other sustainable source of subsidy funding	Target: - US$30 million in years 2001 & 2002 - US$140 million + by year 2003
Efficiency of the housing finance system and sustainability of FOVI's funding		
The efficiency of Mexico's housing finance system has improved.	All-in cost of credit for homebuyers, measured through the differential between the final rate to the borrower and the rate of the longest term UDI bond.	Presently: 600bp + Target: a steady reduction (to be quantified) throughout the life of the Program
FOVI has developed a sustainable funding strategy and has become a respected market-based institution.	% of FOVI's new resources coming from the market rate sources	Presently: 37% Target: 100% by end of year 2002
The secondary market is developing.	(1) Date of the first FOVI MBS issuance (2) % of FOVI's new resources coming from MBS (3) Date of the first non-FOVI MBS issuance	(1) Target: before end of year 2004 (2) Target: 30% by end of year 2005 (3) Target: before end of year 2005
The formal housing finance system reaches out to lower income segments.	Average income of the 20,000 poorer beneficiaries of FOVI's yearly originations	Presently: 5 minimum wage Target: 3.5 minimum wage by end of year 2002.
The formal housing finance system reaches out to greater segments of the informal economy.	% of FOVI's yearly originations whose beneficiaries are employed in the informal sector	Presently: less than 5% Target: more than 10% by end of year 2002.
Environmental and gender issues		
FOVI's intermediaries have developed and implemented high quality environmental due diligence standards	% of FOVI intermediaries with such standards, as evaluated by an independent environmental specialist	Present: Not known with precision, but certainly very low Target: 50% by end of year 2001, 90% by end of year 2002.
Women are aware of the implication of their filed marital status on their rights and obligations related to the purchase of a house	% of FOVI mortgagees whose partner is left exposed by their filing and mortgage status which have not signed the Statement of Understanding (see paragraph 4.16)	Present: 100% (no Statement of Understanding exists). Target: Less than 5% (of "at-risk population": partners with "Separate Income" filing and without their name on the mortgage) by end of 2002

IV. BENEFITS AND RISKS

A. Benefits

4.1 The proposed Program will have impacts on four distinct but related spheres: the households which will benefit from FOVI's financing; the housing industry, including builders, developers, and other private providers of housing-related services; FOVI's intermediaries and the housing finance system at large; and FOVI, as a financial institution. The actual benefits of the proposed operation are difficult to quantify because they will be realized under various forms. Also, a precise delineation between the specific benefits created by the IDB project and those created by the overall FOVI modernization process is not possible. Given these limitations, the following section attempts a description of the principal benefits expected from the Program.

1. The new subsidy policy

4.2 The Program's subsidy component will finance the up-front subsidy needed to bring about 60,000 households earning less than the median urban income to the formal mortgage market. Beyond this specific contribution, the introduction of the new subsidy will have a variety of positive impacts: it will increase the efficiency of Government spending and household spending; it will improve the targeting and the transparency of the allocation process; it will help leverage savings and lower credit risk for lower income beneficiaries.

4.3 <u>Greater efficiency in household spending</u>. Under the new policy, the subsidy structure will be a function of income and independent of home price. The marginal cost of housing to the homeowner should therefore reflect exactly the marginal utility, and consumption may be expected to be closer to optimal economic levels. A more rationale allocation of household resources will result.

4.4 <u>Greater efficiency in public spending</u>. For a given level of public expenditure, the new subsidy system will reach about 50% more people than the old one, granting them a smaller subsidy in average (about 70% of the existing one). Since the marginal utility created by an additional dollar of subsidy is a decreasing function of quantity, a shallower subsidy reaching more people creates more benefits than a deeper, more concentrated one.

4.5 <u>Savings mobilization</u>. The new policy will also encourage the mobilization of beneficiaries' own resources, since households will have an incentive to increase their down payment in order to access the subsidy.

4.6 <u>Lowering credit risk</u>. Another important benefit of the upfront subsidy is that by realizing the monetary value of the subsidy from the outset, the new system will decrease the loan to value ratio thereby reducing the exposure of intermediaries to

credit risk in the early years of the loan. This should encourage intermediaries to explore lower income segments of the market.

4.7 Improved targeting. Another major change introduced by the new policy will be the target population. Whereas the present policy benefits households located up to the 90th percentile of the urban distribution income, the new policy will be restricted to below median urban income families. This shift in target population is consistent with FOVI's redefined mission of developing the formal mortgage market, allowing it to expand down the distribution curve. Under an ideal scenario, this will be a dynamic process: the subsidy policy will be evaluated every two to three years and evidence that housing providers now supply cheaper products (as a combined result of the flat structure of the subsidy, leaner land regulation and greater supply-side competition) and that private lenders now lend to the current target group without reservation should prompt a revision of the policy and a lowering of the subsidy eligibility ceiling. The first step of this process - the policy change agreed upon as part of the proposed program - will lead to a 20 to 40% decrease in the median income of beneficiary households. The Program will finance the establishment of a monitoring system to measure the distributive impact of the subsidy and evaluate the extent to which it fulfills one of its main objectives: to expand the formal mortgage market downwards.

4.8 Political benefits. Finally, the new subsidy will force transparency and bring the housing subsidy debate into the public arena. Experience in other LAC countries has shown the introduction of up-front subsidies to prompt a variety of questions related to subsidy targeting, allocation and fiscal cost. The change decided by FOVI may therefore have positive repercussions on other housing finance institutions, most notably INFONAVIT.

2. Reform of FOVI as a sustainable, efficient housing finance mechanism

4.9 Clarification of mandates and FOVI's sustainability. The separation of the responsibility for financing subsidies (eventually with budget allocations) from the responsibility for financing credit (eventually with market resources) will have important benefits in terms of transparency, efficiency and sustainability. Under the new arrangements, one of the main risks behind the existing set-up - that the lack of financing for the rate subsidy would lead to a rapid depletion of FOVI's capital base - will be made more explicit and FOVI will be insulated from it: the lack of financing for the upfront subsidy program will translate into a decrease in FOVI's activities in the subsidized segments of its market, but will not affect FOVI's solvency.

4.10 Reduced all-in cost of credit. Another positive impact expected from FOVI's reform will be the decrease in the all-in cost of credit for FOVI borrowers (measured against the Government's cost of funding). Several factors will contribute to this decrease, which may be understood looking at the present

structure of the cost of credit to borrowers. Presently, the cost of credit is the sum of:

a. FOVI's funding cost. It has been agreed that the many overlapping guarantees would be clarified and that FOVI would obtain a US GAAP credit rating by July 2001. The progressive reform of FOVI, and in particular a clear separation of the old, subsidized portfolio from the new, market rate one, should tremendously enhance FOVI's creditworthiness and reduce FOVI's cost of funding.

b. Insurance premiums. FOVI's partial credit risk premium adds 70 to 100 bp to the interest rate. In the longer run, improved origination standards, enhanced foreclosure procedures and the privatization of the PMI function should lead to a reduction in cost.

c. Cost of intermediation. This includes the intermediary's credit risk premium, administration costs and return on equity. It is fixed in the market. Presently, it exceeds 200 bp. Over time, the first factor should decrease as origination standards and foreclosure procedures improve. The second factor will decrease as the volume of credit increases. Increased competition between intermediaries will also bring this factor down.

d. Servicing cost. This adds another 100 bp to the cost of credit. Again, this is very high compared with the price of this service in more developed housing finance systems (typically 25 bp). It should go down as a result of improved origination and servicing standards, increased lending volumes and stronger competition between servicing agents/intermediaries.

4.11 Overall, the cost of credit to FOVI's borrowers is now around 6 to 7% above the Government's cost of funds. As a result of the various reforms undertaken by FOVI and supported by the proposed Program, a significant drop may be expected. This decrease has the potential to trickle down to the entire commercial mortgage market, creating important benefits for all mortgage borrowers.

3. Environmental impacts and gender issues

4.12 Impacts on the environment. The proposed Program will have limited but positive impacts on the environment. During project preparation, an independent review of FOVI's environmental screening procedures was carried out. The study, which is available in the project's technical files, concluded that one of the main weaknesses of these procedures is that they assume that the municipal and state level environmental licensing processes are sound. Therefore in most cases, FOVI's environmental review is limited to ensuring that local regulations have been abided by. This is obviously not enough given the wide disparity of the environmental capacity of subnational governments in Mexico - as discovered in

the course of a Bank project aimed at strengthening Mexican states and municipalities (ME-208, approved November 1999).

4.13 While the improvement of the environmental management capacity of states and municipalities lies outside of the scope of the proposed project, recommendations have been formulated to improve FOVI's environmental procedures and ensure that potential environmental risks in FOVI-financed new housing developments are identified and mitigated appropriately. Under the improved procedures, FOVI's intermediaries will be required to undertake independent environmental due diligence of new housing developments, and request developers to investigate: (1) the existence of potential environmental risks such as soil contamination and natural hazards; (2) the adequacy of the proposed development with respect to the general development plan of the urban area concerned, and its implications in terms on land use and increased demand for transport; and (3) the adequacy, in terms of capacity and quality, of the existing or proposed rain water drainage and waste water disposal infrastructure. The Program will finance technical assistance to help FOVI develop these general recommendations and write them into its credit regulations for intermediaries.

4.14 Gender issues. The system by which houses are legally registered and used as loan collateral have important gender implications. During project preparation, a study was carried out to look into this issue in the context of FOVI's lending program and determine where the system leaves room for discrimination. The study, which is available in the Program's technical files, points to the following findings. (1) There is a lack of reliable data, notably with the property registries, as to the involvement of women in the home buying process. (2) Women are poorly educated as to their rights, their choices and the opportunities available to them in housing. In particular, few of them understand how their financial status is affected by their financial declarations at the time of marriage, as the result of five years of a common law relationship, or as the result of a shared child. This status can have a life-long effect on their rights to assets within the household. (3) Women and men in the informal economy are disadvantaged in mortgage borrowing because there is little credit data about them. Because more women work in the informal economy, they are even less likely to be considered for a mortgage.[12]

4.15 These findings lead to three recommendations. First, ensuring that proper data concerning the impact of housing policies on gender is gathered and analyzed will be essential to inform gender-equitable policy changes. The Program will support this objective: (a) at the level of property registration, through the technical assistance to help improve state registries; and (b) at the level of loan origination, by FOVI requesting systematic gender specific data from its intermediaries. The

[12] According to a paper prepared by the International Labor Office in 1998, Mexico's informal sector employment has risen by about 71% between 1989 to 1996. There is also evidence that women are over-represented in the informal sector.

HRU will expand the preliminary analysis carried out during the study and formulate appropriate policy recommendations.

4.16 A second step will be to raise the awareness of women as to their status, rights and opportunities in housing. While the Program cannot be expected to take up this daunting task alone, it will start modestly by ensuring that women understand the implication of their marital status on file at loan closing. FOVI will require its originators to put together briefing programs to ensure that couples (married and common law) who have chosen to file a "Separate Incomes" status understand that if one of them is not on the mortgage, they will not be on the property registry, unless a request is made by the borrower to include them. FOVI will also require a Statement of Understanding from the partner who is not included on the mortgage.

4.17 Third, the expansion of FOVI activities to the informal economy, notably through the development of specific origination standards and credit scoring tools, will have major benefits for women.

B. Risks

1. Sustainability of the subsidy program

4.18 The main risk involved with the proposed Program has to do with the sustainability of the financing for the upfront subsidy. Given the current budgetary restrictions facing the Mexican Government, providing funding for upfront subsidy has a high opportunity cost. Should this risk materialize, FOVI would have only two options. It could go back to lending at subsidized rate, hoping to postpone for some time the impact of the lack of subsidy financing. Eventually, it would resume decapitalizing. Over the medium run, this would be FOVI's sure death. Alternatively, FOVI could abandon the subsidized segment of its activity and change target population entirely. But the justification for the involvement of a quasi public institution in the non-subsidized market only would be very weak - and Bank involvement would certainly be unwarranted. The sustainability risk is unavoidable in a system where subsidy financing is part of the budgetary process and therefore subject to congressional approval, however with less than 0.25% of total Government expenditure, the US$140 million on which the Program is based is indeed much below generally observed housing subsidy levels. It will enable access to credit for about 30,000 households every year. This represents about one quarter of the annual new demand for housing in the target market - the households located between the 30th and the 50th of the urban income distribution curve. Additionally the proposed subsidy is inexpensive enough to be expanded to the entire target segment at a tolerable cost for public finance. Attending the whole target segment would therefore cost about US$560 million. This would represent less than 1% of Government expenditure and remain quite reasonable.

2. Financial risks

4.19 Mexican financial markets and banking sector. The overall health of the Mexican banking sector continues to be a source of concern. Should major shocks occur in the coming years, key aspects of the Program such as the potential for FOVI to fund itself in the market or the viability of the old portfolio could be severely affected. This risk is mitigated by the far-reaching reforms that the Government has introduced to banking and financial regulations. The Bank is supporting such reform through a US$ 250 million sector loan (Modernization of the Banking System Program)

4.20 Financial viability of FOVI. The financial position of FOVI itself is made fragile by a number of factors. First, there is a term mismatch between FOVI's assets and liabilities. Such a mismatch should be dealt with through a full-fledged asset/liability management function, which the Program will help establish. The successful implementation of this function will be a prerequisite for the presentation to the Board of the second phase.

4.21 More importantly, with respect to FOVI's old mortgage portfolio, there is a rate mismatch between assets and liabilities. In the future, the subsidies embedded in FOVI's old mortgages could become an unfunded liability for FOVI. An important step to isolate this risk and eventually mitigate it will be to clearly separate the old FOVI from the new one. This will achieve two complementary goals: it will protect FOVI's new portfolio while forcing transparency onto the resolution of the issues involved in the old one. The Program takes a two-step approach to implementing the separation. The first step, a mere separation of accounts, will only yield transparency. It is a condition prior to first disbursement for the investment component. The second step, a more radical transformation of the new FOVI, will be advanced through Program execution.

4.22 The financial viability of FOVI's intermediaries is another source of concern. In the aftermath of the 1994 crisis, some FOVI intermediaries have developed abnormally high rates of default, as a combined result of loose underwriting policies and the poor macro-economic situation. While the Government's financial assistance programs (known as ADES) went a long way to solve the old portfolio's most pressing problems, the quality of underlying mortgages remains difficult to assess. However, it is reasonable to think that most of the credit risk has already materialized. The systemic risk (end of term balance on DIM mortgages) is passed on to FOVI and does not affect originators.

4.23 The Systemic Risk Insurance (Swap Fund). As any insurance system, the mechanism established to cover the systemic risk is subject to default in the event of highly improbable events, in this case a series of major economic shocks. The proposed mechanism was designed by FOVI with assistance from the World Bank in the course of preparation of their project. The IDB project team reviewed the proposed arrangement and the modeling carried out to test its viability.

Montecarlo analyses were performed using inflation, real interest rates and real wages as random variables centered around six distinct macroeconomic scenarios. The swap fund remains solvent under all but the most catastrophic scenario. A description of the scenarios and the results of the analyses are available in the Program's technical files.

Annex III-1

Tentative Procurement Schedule for the Technical Assistance Component (first year)

Activity	*Bidding process*	*Estimated cost*	*Proposed time schedule*
1. Housing policy work			
Various studies (see paragraph 2.9)	Individual Consultants/ Short lists (several separate contracts)	US$250,000	All year
2. Strengthening of the primary market infrastructure			
Review and Improvement of selection and monitoring criteria for FOVI's intermediaries	NCB	US$150,000	First semester 2001
Standardization of origination and servicing procedures	NCB	US$150,000	First semester 2001
Development of origination and servicing procedures for the informal sector	NCB	US$75,000	Second semester 2001
Guidelines for the improvement of state-level registry systems	NCB	US$200,000	Second semester 2001
3. Development of secondary market			
Advisory services for the improvement of the regulatory framework for MBS	NCB	US$100,000	Second semester 2001
Study on credit enhancement options	NCB	US$200,000	Second semester 2001
4. Improvement of FOVI's operating environment			
Study of alternatives for the evolution of FOVI's status	ICB	US$400,000	First semester 2001
Deign of women's awareness programs and training	Individual Consultants/ Short lists	US$25,000	First semester 2001
Finalization of environmental procedures and training	NCB	US$50,000	First semester 2001

ICB: International Competitive Bidding
NCB: National Competitive Bidding

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MEXICO. LOAN _____/OC-ME TO "BANCO NACIONAL DE OBRAS Y SERVICIOS PUBLICOS, S.N.C."

Housing Finance Program

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the "Banco Nacional de Obras y Servicios Públicos, S.N.C.", as Borrower, and the "Estados Unidos Mexicanos", as Guarantor, for the purpose of granting the former a financing to cooperate in the execution of a housing finance program. Such financing will be for the amount of up to US$505,000,000, which are part of the resources of the Single Currency Facility of the Bank's Ordinary Capital, and will be subject to the "Special Contractual Conditions" and the "Financial Terms and Conditions" of the Executive Summary of the Loan Proposal.