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Mohini Malhotra
Series Editor

2002
# Acronyms/Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACP</td>
<td>Association for Popular Colonias</td>
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<tr>
<td>AMSOFOL</td>
<td>Asociación Mexicana de Sociedades Financieras de Objeto Limitado, A.C.</td>
</tr>
<tr>
<td>CDP</td>
<td>Committee for Popular Defense</td>
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<tr>
<td>CENVI</td>
<td>Center for Housing and Urban Studies</td>
</tr>
<tr>
<td>CGAP</td>
<td>Consultative Group to Assist the Poorest</td>
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<tr>
<td>CHF</td>
<td>CHF International</td>
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<tr>
<td>COMO</td>
<td>Center for the Orientation of Women Workers</td>
</tr>
<tr>
<td>FEMAP</td>
<td>Federation of Private Health and Community Development Associations</td>
</tr>
<tr>
<td>FONHAPO</td>
<td>Fideicomiso del Fondo Nacional de Habitaciones Populares</td>
</tr>
<tr>
<td>FOVI</td>
<td>Fondo de Operación y Financiamiento Bancario a la Vivienda</td>
</tr>
<tr>
<td>FOVISSTE</td>
<td>Fondo de Vivienda para los Trabajadores al Servicio del Estado</td>
</tr>
<tr>
<td>FUNHAVI</td>
<td>Fundación Habitat y Vivienda, A.C.</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>HILP</td>
<td>Home Improvement Loan Program</td>
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<tr>
<td>IAF</td>
<td>Inter-American Foundation</td>
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<tr>
<td>IDB</td>
<td>Inter-American Development Bank</td>
</tr>
<tr>
<td>IMIP</td>
<td>Instituto Municipal de Investigación y Planeación</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>INEGI</td>
<td>El Instituto Nacional de Estadística, Geografía e Informática</td>
</tr>
<tr>
<td>INFONAVIT</td>
<td>Instituto Nacional de Fomento a la Vivienda</td>
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<tr>
<td>IVIECH</td>
<td>Chihuahua State Housing Institute</td>
</tr>
<tr>
<td>MFI</td>
<td>Microfinance Institution</td>
</tr>
<tr>
<td>NGO</td>
<td>Nongovernmental organization</td>
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<tr>
<td>PDA</td>
<td>Personal digital assistant</td>
</tr>
<tr>
<td>SADEC</td>
<td>Salud y Desarrollo Comunitario de Ciudad Juárez, a.c</td>
</tr>
<tr>
<td>SEDESOL</td>
<td>Secretaría de Desarrollo Social</td>
</tr>
<tr>
<td>SOFOL</td>
<td>Sociedades Financieras de Objeto Limitado</td>
</tr>
<tr>
<td>UDI</td>
<td>Unidades de Inversion (Investments Units)</td>
</tr>
<tr>
<td>USAID</td>
<td>U.S. Agency for International Cooperation and Development</td>
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INTRODUCTION: SHELTER FINANCE FOR THE POOR

From shacks in the shantytowns of Lima, Peru, to tin-roofed mud huts in the slums of Gujarat, India, insecurity of tenure and uneven income streams force the poor to build their homes tentatively, one wall at a time.

Yet the poor lack access to financial institutions and financial products tailored to the way they build. This, despite the fact that in so many developing cities around the world a majority of the population lives in slums—60 percent of Nairobi’s population, 82 percent of Lima’s population—and that most housing is built informally and progressively.

The Cities Alliance launched the Shelter Finance for the Poor Initiative to focus on the still nascent practice of financial institutions providing housing loans to poor clients on commercially viable terms. These loans are distinct from mortgages in that they are typically not for the purchase or construction of new units, but rather for home improvement and progressive building. They are being offered as a new product line by a generation of financial institutions that built their success on providing working capital loans to the urban poor, and are now looking to expand and diversify their products. To date, few of these experiences had been viewed through the prism of scale, outreach and sustainability. This is the framework applied to the five case studies examined under this initiative. The cases include Mibanco in Peru, SEWA in India, FUNHAVI in Mexico; a wholesale fund facility in Ecuador, and the policy, legal, and regulatory environments in Kenya. A synthesis paper identifies emerging policy recommendations on taking housing finance for the poor to scale. All are accessible on www.citiesalliance.org.

This research initiative is a lateral learning partnership with five networks of finance and housing institutions: ACCION International, Cooperative Housing Foundation (CHF), Frontier Finance, Plan International, and the Mennonite Economic Development Agency. Additionally, the initiative has six development agency partners: Inter-American Development Bank, U.S. Agency for International Development (USAID), The World Bank, the International Finance Corporation (IFC), the Urban Management Programme (UMP), and the Consultative Group to Assist the Poorest (CGAP). The Shelter Finance for the Poor Initiative is funded by Cities Alliance, CGAP, IFC, and USAID.

The intention is that these findings will advance best practices, inspire replication and adaptation, and increase the availability and affordability of shelter finance for poor households.

The following case study examines FUNHAVI, a nonprofit lender located in the city of Juárez, Mexico. With startup funding from the Ford Foundation, FUNHAVI lends exclusively for purposes of housing improvement.
EXECUTIVE SUMMARY

Introduction

In 1996, the Fundación Habitat y Vivienda, A.C. (Funhavi), a Mexican nongovernmental organization, emerged as a home improvement financing facility in the city of Juárez, Mexico. FUNHAVI targets the working poor who earn between two and eight times the monthly minimum wage ($125, in 2002). Three-quarters of Funhavi clients work in maquiladoras (foreign-owned manufacturing plants that produce for export), and 38 percent are women. As of October 31, 2001, Funhavi had 1,300 active clients, and an outstanding portfolio of just over $1 million. Funhavi has not as yet been able to achieve profitability (its financial self-sufficiency is 75 percent), but expects to reach financial self-sufficiency by the end of 2003.

Funhavi is a relatively young institution still refining its methodology of service delivery. It provides a combined package of financial and construction assistance to poor clients. It has forged an arrangement with construction materials suppliers, buying materials at wholesale prices, while requiring its clients to buy these materials at retail prices. Funhavi earns 11 percent of its operating revenues from this arrangement, and also views this as a way to ensure that clients use quality construction materials. Funhavi has also tapped an existing network of local S-MART grocery stores, which collect clients’ payments; this is convenient for clients and cost-effective for Funhavi.

Background

With 80 percent of Mexico’s exports going to the United States, the city of Juárez, Mexico, located just across the border from El Paso, Texas, is home to a plethora of maquiladoras—foreign-owned manufacturing plants whose product is intended for export to the United States. Although the average wage for Juárez’ maquiladora workers is above the national average, most of these workers are nevertheless poor, and as a result, many of their needs tend to be underserved, specifically in housing.

Many governmental and some nongovernmental housing programs have targeted economically active poor families in Juárez and in the State of Chihuahua (of which Juárez is the capital). Few, however, have managed to do so in a manner that is economically viable for the provider, or affordable for poor working families. Social housing programs have not typically provided housing solutions that are suited to the incremental way in which poor households tend to finance their housing needs. This gap in the supply of economically viable and affordable incremental housing financing to poor people helps explain why Funhavi has been able to develop a strong presence in such a short period of time.

Founded in 1996, Funhavi is the brainchild of CHF International, itself a nonprofit organization that pioneered home improvement lending in the early 1980s. With startup funding from the Ford Foundation, CHF used its technical expertise to establish FUNHAVI with a mission to “contribute to improving quality of life, especially for low-income households, by providing access to housing that is
dignified, healthy, and environmentally sound.” Funhavi’s relationship with CHF and the Ford Foundation is continuing, and the organization also receives lesser funding from local businesses and maquiladoras, and from the Inter-American Foundation.

Despite the fact that Funhavi’s financing is exclusively intended for housing improvements, a surprising 30 percent of clients are actually able to use the home improvement loans to build a new home—constructing a single, basic room with Funhavi financing, and making additions thereafter.

How Funhavi Works

Target Market
The target market for Funhavi is primarily maquiladora workers, who make up about three-quarters of its clientele. Funhavi’s clients earn between two and eight times the minimum wage of $125, a range in which 62 percent of Juárez’ population falls. The average monthly salary of Funhavi clients is $504, or about four times the minimum wage.

Despite earning a wage that is above the national average, most Funhavi clients have not had access to commercial banks and credit unions, and before receiving Funhavi credit, have generally financed home improvements out of savings. Only 7 percent of clients have used any other sort of financing, and of those surveyed, none had previous access to credit from materials providers, other nongovernmental organizations (NGOs), or maquiladora savings funds.

All of Funhavi’s clients have the legal right to their property, although they do not necessarily possess the title to their property. More than half of Funhavi clients have a complete home they intend to improve, and approximately 38 percent are in the process of building a new home. Three-fifths of Funhavi loans go toward room additions, while 30 percent are intended for the rebuilding of homes originally constructed from cardboard, wooden pallets, and other scrap material.

The Product

Guarantees: Funhavi relies on co-signers—as opposed to tangible collateral—to secure its loans. The co-signer must meet most of the same repayment-capacity standards and eligibility requirements as the borrower. And although co-signers may be related to the borrowers, they may not be part of the borrowers’ immediate household.

Terms and Conditions: Funhavi loan amounts are based on the estimated cost of improvements and the borrower’s repayment capacity. They range between $500 and $2,500, and average $1,623. Applicants’ monthly loan payments may not exceed one-third of their net monthly household income, and average about one-quarter of net monthly income. Interest rates for borrowers with net monthly household incomes between two and five times the minimum wage are 2.5 percent per month, while those between six and eight times pay 3 percent. Funhavi also charges a 2 percent commission on the total amount of the loan, and a $20 fee for a mandatory assessment of the upgrade by a contracted architect. The result is an average annual interest rate of 54 percent—in line with (but slightly lower than) what most microfinance institutions charge in Mexico. Loan terms average 20 months, although they vary from 6 to 36 months. Because loans are paid monthly at local S-MART
grocery stores (see below) it is administratively burdensome to control for specific loan repayment
dates, and clients are therefore allowed to pay between the 1\textsuperscript{st} and the 15\textsuperscript{th} of the month without
penalty.

**Delivery Methodology**

On average, 10 days separates a client's initial visit to Funhavi and the actual dispersal of the loan. During this time, clients meet with a credit advisor at Funhavi's office where, assuming the applicant is eligible and all documentation is in order, she deposits the $20 architect fee. Working on a contractual basis with Funhavi, it is the architect who, in due course, pays a visit to the applicant and assesses architectural needs, designs the improvements, and uses a software program to determine the necessary budget. It is also the architect, not a loan officer, who assesses the ability of the applicant to pay and the consequent loan terms.

Once a loan appropriate to the client's needs and ability to pay is worked out, Funhavi provides the new client with vouchers to be used to purchase construction materials from specific suppliers. (As a loan-promotion incentive, suppliers who had originally referred the client to Funhavi are awarded by being the exclusive seller of materials to that client). Funhavi has an arrangement with suppliers whereby it purchases in bulk at low wholesale prices, but these materials are sold to its clients at retail market prices. By requiring that clients purchase from specific suppliers, Funhavi generates additional, non-interest income that accounts for 11 percent of its total revenue, and feels that it has some assurance that clients are using quality building materials.

Clients must make payments on their loans every month. For this purpose, Funhavi has established a special relationship with S-MART, a retail chain, wherein S-MART accepts payments from Funhavi clients. S-MART is already set up to receive payments for utilities, so the addition of Funhavi was simple. On the one hand, this relieves the clients from the need to travel all the way to Funhavi's offices to make payments, and it also releases Funhavi from the responsibility of securing large amounts of cash at its offices. For its part, S-MART provides the service free-of-charge since it benefits from increased store traffic.

**Follow-up Methodology**

If the client is late in paying, Funhavi notifies the client by certified mail that he must go to its offices to pay, rather than the S-MART stores. After the account is 90 days in arrears and the client has proven unresponsive, an official letter is delivered by a lawyer to the client. However, if after 120 days the client is still in arrears, Funhavi takes legal action.

**Sustainability and Outlook**

Funhavi’s prospects for long-term growth and continued financial viability appear strong. Whereas it experienced a slow start during its first three years, it grew by more than 70 percent in 1999. Its growth stabilized over the past two years, however, because of capital constraints. With projected additional capital resources, the organization expects to double its outstanding portfolio size by mid-2003, and achieve financial sustainability.
However, this assessment of Funhavi suggests that several aspects of Funhavi’s implementation strategy deserve to be revisited. Although its overall repayment rate is high (over 97 percent historically), the institution’s on-time repayment rate has decreased in recent years, and the overall arrears are quite high at 17 percent. While Funhavi’s management blames worsening economic conditions in Juárez as a partial cause for the increase in delinquency, the organization’s staffing structure, loan follow-up methodology and loan disbursement and collection incentive structure should be reexamined. Another reason for Funhavi’s high arrearage is that it has not written off loans regularly. The only loans that have been written off are cases in which the client has died. Once loans over 180 days are written off, Funhavi expects that approximately 7 percent of its portfolio will be more than 30 days in arrears.

Outstanding Issues and Conclusion
This assessment does bring to light several lessons that may be useful to the emerging field of housing microfinance:

- Once an institution has fine-tuned its lending methodology, single-product housing microfinance institutions can potentially find a viable niche in the market;
- Linkages with bulk suppliers of construction materials can provide some quality assurance to the lender on housing materials used by clients, in addition to providing it an additional source of revenue. Ideally, an institution can negotiate favourable wholesale prices that it can pass on to its poor clients.

*****
1 THE HOUSING CONTEXT IN MEXICO

1.1 Ciudad Juárez: Demographic and Economic Context

Ciudad Juárez sits on the northern border of Mexico on the Rio Grande, directly across from its U.S. sister city, El Paso, Texas, and about halfway between Mexico's two coasts. As Mexico's fourth-largest city, its population is estimated to be between 1.3 and 1.7 million, but an exact count is difficult with the tens of thousands who pass through the city either to or from the United States. Juárez and El Paso have a combined population of approximately 2 million—the largest among the sister cities on the U.S.-Mexico border. And Juárez has a young population, 45 percent of its residents being 19 years or younger, though only four of every 10 of these attend school.

Juárez contributes to a bustling U.S.-Mexico border economy that runs a 3,300-km span from the twin cities of Tijuana-San Diego on the west, to Matamoros-Reynosa on the east. The land within 100 km on either side of the U.S.-Mexico border is home to approximately 16 million people. This border area is perhaps best known for its maquiladora\(^1\) export industry, and with good reason: Mexico's border-area maquiladoras (or maquilas) number 3,500 and employ 1.3 million people, representing nearly one-third of the country's manufacturing workers. Juárez alone has 314 of these plants, which employ over 257,000 workers. FUNHAVI estimates that maquiladora workers earn an average daily wage of about $8.73, approximately twice the nationally mandated minimum wage.\(^2\)

Mexico's economy is inextricably linked with that of its northern neighbor, and it is no surprise that it is feeling the effects of the U.S. recession that began in 2001. In 2000, Mexico's gross domestic product (GDP) was $574.4 billion or approximately $5,860 per capita, and grew at 7 percent. In 2001 by contrast, GDP dropped 1.6 percent. However, having been able to hold inflation in check at 4 percent in 2001, the economy is expected to return to moderate growth of 1.1 percent in 2002. While nominal commercial bank interest rates average 12 percent, and are expected to slightly decline, the inter-bank lending rate is 10.20 percent.

The recession has particularly affected the maquiladoras, for which output dropped 18.1 percent in 2001.\(^3\) Since maquiladoras make up a significant portion of Juárez' employment base, the industry-wide slowdown is having a negative impact on the city's economy, resulting in rising unemployment. Hopeful signs do exist, however, that the maquiladoras will respond positively once U.S. markets return to growth.

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\(^1\) Maquiladora is the Spanish term for assembly-export plant.
\(^2\) Based on a $1= N9.24 exchange rate as of November 2001.
\(^3\) Actividad Industrial (Noviembre), Banamex, January 11, 2002.
1.2 Overview of Affordable Housing Finance Sector in Mexico

Despite the dominance of the federal government in the housing finance market, low-income households in Mexico remain essentially without access to housing finance. An International Monetary Fund (IMF) report notes that the government programs are almost exclusively focused on new home construction and mortgage financing requiring land title and sufficient steady incomes. According to the Inter-American Development Bank (IDB), relative to wage levels and relative to other Latin American countries, the principal sources of formal housing in Mexico—including government programs—are expensive. A report prepared for the Fannie Mae Foundation estimates that 80 percent of those in need of housing are unable or ineligible to participate in publicly funded and subsidized housing programs due to a variety of reasons including lack of title and insufficient incomes.

The private sector plays a limited role in housing finance. According to SEDESOL (Secretariat of Social Development), the ministry responsible for social policy, the private sector’s participation in the housing finance market was only 0.2 percent in 2000, down from 8.2 percent in 1987. Commercial banks’ limited participation in the housing finance market is due, in part, to a long-held government policy of subsidized interest rates, and to the general collapse of the banking system in the mid-1990s. The primary housing product offered by commercial banks is mortgage loans for complete home purchases. Borrowers are required to pay up to 30 percent of the home value as a down payment and must have minimum monthly incomes of at least $1,950. By comparison, the average maquiladora worker earns approximately $325 per month. Consequently, only the wealthiest 10 percent of households have access to commercial bank housing finance.

As a result, CENVI (Center for Housing and Urban Studies), a Mexican nonprofit research institute, estimates that 50 to 60 percent of the housing stock in Mexico is informal, usually self-constructed and financed with whatever cash happens to be on hand at a given time on land that is not suitable for home construction because of the lack of legal title, safety, and basic infrastructure and services. In Juárez the statistic is better. Approximately 31 percent of homes in the city are considered informal.

The following section outlines the primary housing finance options available to low-income residents in Ciudad Juárez.

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1.2.1 Public-Sector Low-Income Housing Programs

The main federal government low-income housing finance programs operative in Cuidad Juárez are INFONAVIT (the National Workers Housing Fund Institute) and FOVISSTE (Civil Servant’s Housing Fund). These two federal agencies finance large home construction projects and provide mortgage financing for those homes. INFONAVIT targets private-sector employees (including those employed by maquiladoras), while FOVISSTE focuses on public-sector employees. Funding for these agencies comes from a mandatory 5 percent payroll tax. Eligibility for mortgages is based on a scoring system that takes into consideration an applicant’s age, marital status, family size, income, and contributions to the fund. Individuals who score high enough are entered into a lottery system. Those who are finally selected are required to pay a 20 percent down payment, and are then are allotted a home and a mortgage, but have little choice as to the location and style of home. While the INFONAVIT program is in high demand, lower wage earners are often unable to meet the down payment. In addition, the homes are poorly constructed. Attention from the press has brought to light serious problems with cracked walls and homes not built to the correct size specifications, which has deterred households from participating in the program.

The IVIECH (Housing Institute for the State of Chihuahua) offers no-interest starter home loans and home improvement loans through INFONAVIT. Starter home loans extend up to six years for land already serviced with water and electricity, while home improvement loans extend up to two years. The total cost of the starter home is $4,004 with a minimum down payment of $1,190. Because there is no interest charged clients typically select the maximum loan term.

The IVIECH home improvement program is limited to people whose household income is between $12 and $314 per month and who have legal title to their land. As in the starter home program, the applicant must be married or have children. The maximum loan amount is $509, and a 15 percent down payment is required. The clients use their loan to purchase construction materials from IVIECH at prices higher than market value. For example, IVIECH’s cement blocks are 8 pesos, versus 5.90 in the market. Nevertheless, borrowers purchase their supplies through IVIECH because they can pay for the materials over time without paying interest.

IVIECH also offers a financing package for land acquisitions. The program sells 126 square meter, water- and electricity-ready lots for $1,190. To qualify for this program, an applicant must obtain a letter from the public land registry to prove that she and her family do not have any property registered under their name. The client receives the property four to five months after paying for the land. Approximately 2,700 lots have been purchased through this program.

Based on information from several sources, IVIECH has approximately 16,200 active loans in Ciudad Juárez. IVIECH’s three-year plan calls for the construction of 5,000 homes in the state of Chihuahua by 2004, of which 3,000 are to be built in Juárez. As of the writing of this report, approximately 1,000 homes have been built and another 600 are in process. IVIECH starter home loans while striving to reach down market still require a significant down payment and its home improvement loans are sufficient to cover most construction costs particularly given the high construction material costs.
1.2.4 Private-Sector Low-Income Housing Finance

While commercial banks involvement in the housing finance market is limited there are a number of other private-sector institutions that provide low-income housing finance. Like the public sector, these institutions do not reach the lower income households or do not have products that are appropriate for the way low-income households build. This section provides an overview of these institutions and their products.

SOFOLs (Limited Scope Financial Institutions) are privately owned, single-purpose financial institutions that emerged in 1993 as part of a generalized effort by the Mexican government and the World Bank to revitalize the financial sector. Many SOFOLs work with federal government housing programs including FOVI a second-tier mortgage finance institution for private-sector lenders that target borrowers earning two to five times the minimum wage (about $252 to $630 per month).\(^9\) Approximately 70 percent of FOVI funding is channeled through SOFOLs. The SOFOLs also recently signed an agreement with FOVI and INFONAVIT to allow workers to apply their INFONAVIT balances towards reducing the balance on housing loans made through SOFOLs.\(^10\)

The largest of Juárez’ five SOFOLs is Hipotecaria Nacional. Since it started lending in 1998, Hipotecaria Nacional has financed 2,300 mortgages, targeting clients with incomes between 8 and 16 times the minimum wage (approximately $1,008 to $2,016), and offers different products for new home values ranging between $24,600 and $51,000. Hipotecaria Nacional will finance up to 90 percent of the home, but clients have to pay the remaining portion in a down payment. Repayment periods vary from 20 to 30 years and interest rates range between 10 and 13 percent. Hipotecaria Nacional underwrites about 50 new loans per month and has repayment rates of 98 percent. However given its loan product and down payment requirements it does not serve low-income households.

A handful of community-based organizations advocate for housing issues and provide community-banking services; however, none provide housing finance services of any significance. SADEC (Community Health and Development of Ciudad Juárez) and El Empresariado Chihuahuense operate small community banking programs that provide microfinance loans and savings services in the low-income areas of Juárez. The combined number of community banks is currently only about 30 and the total number of active clients is less than 1,100. While both NGOs plan to grow their community banking programs, each faces distinct challenges, including funding constraints, high delinquency rates, and loan amounts and terms generally inappropriate to home improvement financing. SADEC, with support from CHF International, ventured into housing finance in the mid-1990s but has nearly phased out its home improvement lending in order to focus on its core programs of social development, health and reproductive rights.

Loan sharks are commonplace in Juárez, but their clientele is primarily small business owners who cannot access credit through commercial banks. While informal moneylenders offer a wider range of loan amounts—loan sizes typically range from a few hundred to a few thousand U.S. dollars—the

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\(^9\) One monthly minimum wage equals approximately $126.

\(^10\) This agreement was made through AMSOFOL (Mexican Association of Limited Scale Financial Institutions), a specialized trade association for SOFOLs.
interest rates are much higher than FUNHAVI’s, typically ranging from 10 to 20 percent per month, and are not commonly used for home improvements because the cost of capital is so high.

Commercial banks that manage an employer’s payroll will often offer payroll advances to its employees. Banco Internacional, for instance, offers a credit-card-like product, with a maximum credit line of three times the employee’s monthly salary. The minimum monthly salary required to be eligible for the loan is $270, just over two times the minimum wage, and repayment periods can range between six months and three years with an interest rate of 7.5 percent per month.

Personal savings are an important source of financing for home improvements. A report prepared by Capital Advisor, Ltd shows that in Juárez, 38 percent of survey respondents reported saving regularly a median of $36 per month. A recent survey of FUNHAVI clients suggests that nearly half of clients used personal savings to finance home improvements prior to obtaining a loan.

Hardware stores and building material providers do not provide credit to individuals. If they do offer credit, it is typically 7-14 day financing and is only available to formal construction firms and other building professionals.

### 1.2.6 Public-Private Partnerships for Employer-Sponsored Housing

A growing number of innovative public-private partnerships in Juárez have attempted to address the need for housing. However, these efforts fall short of meeting the potential demand for housing finance for low-income households. One example is the program between Delphi Automotive Systems and INFONAVIT called Binomio Ahorro-Hogar. The program targets employees who have been with Delphi for at least one year and earn 1.7 to 8 times the minimum wage ($214 to $1,008). The program requires that participating Delphi employees save 15 percent of the home’s value. Delphi then provides a loan for the remaining 5 percent of the required 20 percent down payment, and INFONAVIT finances the remaining 80 percent. Delphi will forgive its loan for employees who stay with the company over five years.

Employees can select from five different home types ranging from 40 to 60 square meters in size and located within 15 minutes of the plant facility. From 1997 to 1999, 4,579 homes were built. The goal for the period between 2000 and 2002 is to build another 2,250 homes bringing the total project to 6,829 homes. In addition to providing housing for its employees, the program has helped reduce monthly employee turnover, which for Delphi program participants is less than 1 percent, compared with the 10 percent industry-wide norm.

### 1.4 Conclusion

Many governmental and some nongovernmental housing programs target economically active poor families in Juárez and in the State of Chihuahua. Few, however, have managed to do so in a manner that is economically viable for the provider, or affordable to poor working families. Moreover, social

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housing programs have not typically provided housing solutions that are suited to the incremental way in which poor households tend to finance their housing needs. This gap in the supply of economically viable and affordable incremental housing financing to poor people helps explain why FUNHAVI has been able to develop a relatively strong presence in a short period of time.

Table 1 provides a summary of the housing finance options described above.

### TABLE 1. HOUSING FINANCE OPTIONS

<table>
<thead>
<tr>
<th>Lender</th>
<th>Products</th>
<th>Target Client Monthly Income</th>
<th>Loan Size</th>
<th>Down Payment/ Collateral</th>
<th>Loan Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFONAVIT</td>
<td>New home loan (5 types - 40 m² to 60 m²)</td>
<td>U.S. $108 - $541</td>
<td>$19,480 - $25,974</td>
<td>5% Income tax contributions</td>
<td>20-30 years*</td>
</tr>
<tr>
<td>IVIEH</td>
<td>1. Starter home (land &amp; services) 2. Home improvement</td>
<td>1. &lt;$270 2. $112 - $314</td>
<td>1. $3,030 2. $509 (maximum)</td>
<td>1. $1,190 2. 15%</td>
<td>1. 6 years 2. 2 years</td>
</tr>
<tr>
<td>FUNHAVI</td>
<td>Home improvement loan</td>
<td>$216 - $866</td>
<td>$541 - $2,705</td>
<td>Co-signer</td>
<td>6-36 months</td>
</tr>
<tr>
<td>Banco Internacional</td>
<td>Home loan</td>
<td>$1,948 (minimum)</td>
<td>$32,468 (minimum)</td>
<td>30%</td>
<td>20-30 years</td>
</tr>
<tr>
<td>Banco Internacional</td>
<td>Credit Card</td>
<td>$271 (minimum)</td>
<td>3 times monthly income (maximum)</td>
<td>Account with bank</td>
<td>Variable</td>
</tr>
<tr>
<td>Informal Moneylenders</td>
<td>Personal loan</td>
<td>$541-$1,623</td>
<td>$541-$10,823</td>
<td>Title to car, home</td>
<td>Variable</td>
</tr>
</tbody>
</table>

*According to these agencies, 90 percent of borrowers take on a mortgage of 30 years.  
**The home’s value is based on size, location, materials used, and construction quality. Home size generally ranges from 50 m² to 110 m².  
***The prices of materials for the home improvement program are above market cost. For example, the cost of a sack of cement is 10.3 percent higher and block is 35.6 percent higher than market costs.

1.5 The Market for Housing Microfinance

As a provider of housing microfinance loans, FUNHAVI’s market comprises low-income households that are a good credit risk and require small, incremental housing loans. While the Mexican government has developed several affordable housing finance options, these programs only reach a small section of the potential market. Commercial banks serve upper and middle-income clients. Microfinance institutions while numerous in other parts of Mexico, are underrepresented in the border region. Thus, in Juárez where the economic conditions are favorable and the demand for housing is
strong, there is an opportunity for incremental housing finance programs. FUNHAVI has identified a clearly defined and underserved segment of the market in Juárez.

Two World Bank studies estimate demand for housing microfinance in Juárez at between $35 million and $60 million. Likewise, in 1998, Capital Advisors, Ltd. measured demand for three-year loans ranging from $500 to $3,500 with a 45 percent interest rate secured by a co-signer. Based on these three criteria and the parameters, the study estimated the demand for progressive housing loans in Juárez at over $35 million.¹²

The most recent census data reveals that in Ciudad Juárez, 25 percent of the housing stock is deficient because of low-quality building materials like wooden pallets, cardboard, and dirt floors; lack of access to water, electricity, or drainage; or because of inadequate size given the number of residents. Indeed, in the Capital Advisors’ survey of households earning between two and eight times the monthly minimum wage in the border region, slightly more than 40 percent of respondents needed an additional room, and another 34 percent had needs for other improvements.

FUNHAVI calculates the cost of a new room addition at about $2,700 while other, smaller improvements average about $1,500. Applying these estimates to Ciudad Juárez and assuming that only half of all households living in substandard housing would actually take a loan, an initial loan portfolio could potentially reach $26.8 million, not including any subsequent loans. An upper range to this estimate might suggest demand as high as $60 million. This calculation is based on a recent World Bank report suggesting that 28,000 homes in Juárez would qualify for a loan.¹³ Multiplying this number by FUNHAVI’s current average loan ($1,623) and assuming that only 20 percent of borrowers would take on a second loan at the same amount, then demand could potentially be $60 million. These estimates suggests that FUNHAVI, whose loan portfolio is currently slightly more than $1 million, has considerable room for growth in the long term.

¹² Ibid.
2 HOUING FINANCE AT FUNHAVI

2.1 Overview

The Fundación Habitat y Vivienda A.C (FUNHAVI) or Foundation for Habitat and Housing is a legally registered, Mexican, nongovernmental organization, founded in 1996 that provides housing microfinance to low-income populations in Ciudad Juárez, Mexico. Its mission is to “contribute to improving quality of life, especially for low-income households, by providing access to housing that is dignified, healthy, and environmentally sound.” As of October 31, 2001, FUNHAVI had disbursed 2,291 loans representing $3,500,939 in loan capital and has an outstanding portfolio of $1,077,421. At present, FUNHAVI operates in Ciudad Juárez only, but it plans to expand along the U.S.-Mexico border.

FUNHAVI was created with help from the Cooperative Housing Foundation (CHF) in 1996. CHF is a nonprofit international development organization for community, habitat, and finance, which pioneered home improvement lending in the early 1980s and has designed and implemented home improvement loan programs across the globe. CHF's model is designed to address the housing needs of the economically active poor in a manner that is incremental, demand-driven, financially viable in the long run, and does not rely on collateral.

In September 1994, CHF initiated a one-year pilot project in Ciudad Juárez, targeting low-income urban families without access to formal financial institutions. Initially, CHF used SADEC as an intermediary financing institution, disbursing 50 home improvement loans. The Ford Foundation provided seed funding and CHF provided technical assistance, enabling SADEC to subsume the home improvement loan program in its overall economic development program.

Upon successful completion of the pilot project, CHF and a local NGO advisory committee established FUNHAVI, which began loan operations in early 1997. CHF borrowed $1 million from the Ford Foundation for loan capital and, in turn, lent to FUNHAVI at near market rates. In addition to providing loan capital, CHF covered FUNHAVI’s operating shortfalls in the organization’s early years and provided technical assistance for program and board development. CHF also played a key role in marketing the program to maquiladoras in Ciudad Juárez.

2.2 Funding Sources

FUNHAVI receives funding for loan capital and operations from three primary sources: (1) the Ford Foundation via CHF International, (2) private-sector businesses and maquiladoras, and (3) the Inter-American Foundation (IAF).

The primary funding source for FUNHAVI is CHF’s loan from the Ford Foundation, which CHF provides to FUNHAVI as a “line of credit.” In addition, the Ford Foundation and CHF are providing
FUNHAVI with a mix of grants and debt capital of up to $1 million to develop FUNHAVI’s institutional capacity and for program expansion on the U.S.-Mexico border.

FUNHAVI also draws on a maquiladora revolving-loan fund. The impetus for this fund was a request by a maquiladora to CHF to conduct a housing needs assessment for its employees in Juárez and to make recommendations for a housing finance program. The study found limited housing financing alternatives for maquiladora employees and concluded that demand exists for home improvement loans throughout the city. In January 1996, CHF received $50,000 from that maquiladora, the first capital investment in what would become the maquiladora revolving-loan fund. As of December 2001, the fund had grown to $342,000. CHF has lent $242,000 of this to FUNHAVI and the remainder to SADEC. Additional funding for FUNHAVI comes from the interest earned on its financial services and from revenue derived from its non-financial services (see Section 2.8.2).

Beginning in 2002, CHF will extend an additional four-year line of credit of up to $2.5 million to FUNHAVI. CHF also expects FUNHAVI to raise funds commercially in order to sustain and expand its services.

2.3 Clientele

FUNHAVI’s mission is to provide affordable home improvement finance to low-income, urban families lacking access to formal finance institutions. In Juárez, three-quarters of these potential and actual clients work in maquiladoras. Many women are economically active in the city, and make up 38 percent of FUNHAVI’s borrowers—whether they work in maquiladoras or elsewhere.

Employment and Wages

For FUNHAVI, maquiladoras provide a ready source of clients with the capacity to take on and pay monthly loan payments. The state of Chihuahua and the other five Mexican states bordering the United States show lower rates of poverty than the national average. They also tend to have a more uniform income distribution than Mexico as a whole.\(^\text{14}\) The primary reason for this is the high number of maquiladoras along the U.S.-Mexico border. Unlike the rest of Mexico where official unemployment rates fluctuated between 2.93 percent and 4.30 percent in late 2001, the border cities have an extremely low—at times even zero—employment rate.\(^\text{15}\) The maquiladoras provide not only a steady source of income, but also employee services, such as free transportation, health care, day care, recreation space and activities, and meals during the workday.

FUNHAVI targets individuals and families with incomes between two and eight times the minimum wage. Nearly 62 percent of the working population of Ciudad Juárez falls within this range. The average monthly salary for FUNHAVI clients is $504 or about four times the minimum wage. The following figures and table provide an overview of salary and household income distribution for FUNHAVI clients (see Figures 1 and 2).

\(^{14}\) [www.epa.gov/usmexicoborder/indica97/chap1.htm](http://www.epa.gov/usmexicoborder/indica97/chap1.htm).

\(^{15}\) Although the unemployment rates are lower than the country as a whole, residents of Mexican border cities lack basic services at a higher rate than the national average. These services include potable water, wastewater treatment, drainage, electricity, and paved roads.
Access to Finance Institutions
Although typically earning above the national minimum wage, the majority of FUNHAVI clients have not had access to commercial banks and credit unions. Of the roughly half of FUNHAVI clients that have made improvements to their home previous to receipt of FUNHAVI funds, nearly all of them used their own savings to finance the improvements. Only 7 percent of FUNHAVI clients have used any other sort of financing be it from public or private sources. And perhaps most striking, of the clients surveyed, none had previous access to credit from material providers, SOFOLS, or maquiladora savings funds.

Acquisition of Land and Home
When FUNHAVI started lending, it expected that the majority of its clients would be recent arrivals to Juárez. Reality has shown the opposite to be true; the majority of FUNHAVI’s clients have lived in Juárez for more than eight years. All of FUNHAVI’s clients have the legal right to their property, although they do not necessarily have the title to their property.
More than half of FUNHAVI clients have a complete home that they want to improve and approximately 38 percent are in the process of building a home. Most of the clients (74 percent) hire contractors to perform the construction work, only 16 percent of clients actually do the work themselves, and the remaining 10 percent use a mixture of self-help and contracted work. Most choose contract work because adding a roof, wiring, or plumbing, for example, require technical skills that most borrowers do not have. Clients will often work overtime to make additional money rather than do the construction themselves.

**Number of People Living in the Home**

A typicalFUNHAVI’s client will have just over four people living in the home, though some households have as many as 20 people (who are, most often, family members who stay on a temporary basis until they earn enough money to rent or build their own home). Few FUNHAVI clients are the sole occupants of a home.

**Land Security**

In Mexico, real estate ownership is documented through notarized titles (*escritura pública*). Unfortunately, because of inefficient bureaucracy and its concomitant high costs, few people actually hold the legal title to their property. Mexican law presumes that a person in possession of a plot of land is entitled to hold that land and enjoys all related ownership rights and as a result, other documents serve as a proxy to demonstrate land ownership. However, only a legal title deed represents formal ownership. In the state of Chihuahua, the title deed has less importance as the state does not have foreclosure laws, giving creditors limited recourse when borrowers default.

### TABLE 3. METHOD BY WHICH CLIENTS ACQUIRED HOUSE AND LAND

<table>
<thead>
<tr>
<th>Method</th>
<th>Percent Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bought house &amp; land</td>
<td>52</td>
</tr>
<tr>
<td>Bought land &amp; construction in progress</td>
<td>36</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
<tr>
<td>Inherited</td>
<td>3</td>
</tr>
<tr>
<td>Invaded land &amp; construction in progress</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>Property of a family member</td>
<td>&lt; 2</td>
</tr>
</tbody>
</table>

FIGURE 3. AVERAGE NUMBER OF RESIDENTS PER HOUSE

- 1 - 2 people: 8%
- 3 - 4 people: 46%
- 5 - 6 people: 44%
- 7 or more: 2%
- 7 or more: 2%
- 7 or more: 2%
Despite the cost and difficulty in securing land titles, 43 percent of FUNHAVI’s clients have title, and 56 percent are currently pursuing a title (see Figure 4). Clients without title use utility bills or preliminary promissory agreements (contratos de promesas) to demonstrate ownership.

**FIGURE 4. LEGAL STATUS OF LAND FOR FUNHAVI CLIENTS**

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have Title</td>
<td>43%</td>
</tr>
<tr>
<td>Titling in Process</td>
<td>56%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
</tbody>
</table>

2.4 **Product Description**

The types of home improvements FUNHAVI finances range from major improvements such as room additions, to minor improvements such as plastering and tiling. In practice, most loans (59 percent) go toward room additions.

While loans are primarily intended for home improvements, a surprisingly high percentage of FUNHAVI’s clients use their loans to build a new home. These clients use the loan to build a basic room and continue to expand and improve that structure over time. An estimated 30 percent of clients use their loans to rebuild homes originally constructed from cardboard, wooden pallets and other scrap materials into more formal structures. Another 8 percent of clients use their loans to finance new core construction on a recently acquired lot where no structure previously existed.

2.4.1 **Loan Terms**

FUNHAVI’s loan terms differ slightly from what other microfinance lenders offer their clients in Mexico. Most of the known microfinance institutions in Mexico provide microenterprise loans and use group (solidarity) or village banking methodologies. Of the MFIs that provide individual loans, the average loan size is $1,000, repayment periods tend to be 4 to 12 months (although some MFIs go up to 24 months), and the estimated average interest rate is approximately 60 percent per annum. By comparison, FUNHAVI’s loans are for relatively larger amounts, with longer terms and lower interest rates. The lower interest rate and longer term reflects, in part, the need to assist lower income individuals in accessing larger loan amounts needed to complete improvements.
TABLE 4. COMPARISON OF FUNHAVI’S LOANS WITH OTHER MICROFINANCE LENDERS IN MEXICO

<table>
<thead>
<tr>
<th>Organization</th>
<th>Annual Interest Rate on a declining balance (without fees)</th>
<th>Repayment Period</th>
<th>Payment Frequency</th>
<th>Loan Max-Min Average Loan Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUNHAVI</td>
<td>50 percent</td>
<td>6-36 months</td>
<td>Monthly</td>
<td>$500-$2,500</td>
</tr>
<tr>
<td>ADEM</td>
<td>114 percent</td>
<td>1-12 months</td>
<td>Monthly</td>
<td>$108-$1,623</td>
</tr>
<tr>
<td>Compartamos</td>
<td>70 percent - 94 percent</td>
<td>4-6 months</td>
<td>Weekly</td>
<td>$1,082-$2,165</td>
</tr>
<tr>
<td>Crédito Familiar (SOFOL)</td>
<td>60 percent - 36 percent for subsequent loans</td>
<td>6-24 months</td>
<td>Weekly</td>
<td>NA</td>
</tr>
<tr>
<td>FinComun</td>
<td>60 percent - 72 percent</td>
<td>4-8 months</td>
<td>Weekly</td>
<td>NA</td>
</tr>
<tr>
<td>Financiera Independencia (SOFOL)</td>
<td>47 percent - 38 percent for subsequent loans</td>
<td>6-24 months</td>
<td>Twice monthly</td>
<td>$162-$812</td>
</tr>
</tbody>
</table>

2.4.2 Loan Amount

FUNHAVI offers loans ranging from $500 to $2,500, with an average loan of $1,623. The loan amount is based on the estimated cost of the improvement and the borrower’s repayment capacity, which is itself based on the applicant’s current net monthly household income, defined as gross income less utilities, phone, house payments, outstanding debt, and other recurring costs. Given this, applicants’ monthly loan payment cannot exceed one-third of their net monthly household income. For most of the loans disbursed, the average monthly repayment amount is 25 percent of the net monthly household income.

The loan amount must cover the cost of a completed improvement. If the cost of the proposed improvement is greater than the applicant’s capacity to pay, FUNHAVI will work with the applicant to expand the repayment period or divide the improvement into smaller, more affordable projects. As a result, approximately 18 percent of FUNHAVI’s clients have taken more than one loan.

2.4.3 Interest Rates and Fees

Borrowers with net monthly household incomes between two and five times the minimum wage must pay 2.5 percent monthly interest, while those between six and eight pay 3 percent. In addition, FUNHAVI charges a 2 percent commission on the total loan amount paid up front, and a $20 fee for the architect’s visit. The result is an average annual interest rate of 54 percent.

The rationale for the multi-tiered interest rate is due to funding requirements. The Ford Foundation requires that FUNHAVI charge 2.5 percent monthly interest rate to its borrowers and only lend funds to individuals whose net family income is two to five times the monthly minimum wages. FUNHAVI’s other funding sources do not have lending requirements. FUNHAVI staff believe that having multiple rates has not been a problem and that the lower interest rate allows FUNHAVI to reach lower income individuals. The organization does not advertise its interest rates, but does classify clients based on...
their income. According to the Executive Director, borrowers understand the rationale for such differentiation.

FUNHAVI also has an agreement with a Juárez maquiladora offering its employees home improvement loans at a monthly rate of 1.5 percent. The maquiladora reimburses FUNHAVI for the single percentage difference between this 1.5 percent interest rate and the usual 2.5 percent rate. These loans make up about 7 percent of FUNHAVI's total portfolio.

### 2.4.4 Repayment Period

All loans are repaid monthly and repayment periods vary from 6 to 36 months, with an average period of 20 months. An informal study conducted by FUNHAVI found that clients with shorter repayment periods had higher repayment rates despite the higher monthly payment. As a result, FUNHAVI encourages borrowers to take loans with shorter repayment periods and does not grant clients grace periods. The borrower must start repaying his/her loan the month following the loan’s disbursal.

Since the payment takes place at the local S-MART grocery stores, controlling for specific dates of repayment is administratively burdensome, and clients are therefore allowed to make each monthly payment between the 1st and 15th of each month. This arrangement conforms to regular procedures S-MART already implements when receiving payments for gas, electricity, and other utilities.

### 2.4.5 Security

FUNHAVI relies on co-signers—as opposed to tangible collateral—to secure its loans. The co-signer must meet most of the same repayment capacity standards and eligibility requirements as the borrower. And although co-signers may be related to the borrowers, they may not be part of the borrowers’ immediate household.

### 2.4.6 Late Fees

Loans that are past due are charged a penalty equivalent to 3.5 percent of the outstanding balance for each month the loan is in arrears, and the borrower must pay a 150 peso fee for the late notice. FUNHAVI uses a certified delivery service to distribute its late notices. FUNHAVI pays the delivery service more for notices given directly to the borrower than it pays for receipts signed by other members of the household or a neighbor.

### 2.5 Product Pricing

The interest rates for FUNHAVI's housing microfinance loans are based on the organization's operating costs, estimated loan losses, inflation, cost of funds, capitalization goals, and currency devaluation. The cost of the technical assistance is passed along to the borrower through a combination of the architectural site visit fee and the assessed interest rate. The architectural fee does not cover the entire cost of this service. Rather, the fee is used to discourage people who might use the MFI’s architectural service with no intention of taking a loan. Even with the additional cost of
providing technical assistance, the interest rate is in line with (and slightly lower than) what other MFIs charge in Mexico.

FUNHAVI actively works to keep the technical assistance costs to a minimum. The organization has revisited its technical assistance procedures periodically to ensure a proper balance between the quality of construction and the need to minimize operating costs. The architects are contracted out, which reduces overhead costs, and are paid a flat fee for each approved loan application on which they have worked. FUNHAVI also provides clients with disposable cameras to document progress made on the improvements as a substitute for FUNHAVI staff having to make a site visit to verify construction progress.

FUNHAVI has also developed relationships with local construction-material suppliers that generate income for FUNHAVI. Section 2.6.2 addresses these relationships in greater detail.

2.6 Management and Staffing

FUNHAVI has a relatively small operation, employing 16 staff members. To minimize administrative costs, FUNHAVI contracts architects and legal representation on an “as needed” basis. However, as a result of this assessment, FUNHAVI is considering adjusting its staffing structure and hiring permanent technical officers/architects, in large part to address concerns regarding the declining portfolio quality.

The staff are divided into three departments: Credit, Finance and Administration, and, as of November 2001, a Promotions Department. The credit department oversees the scheduling of the architects and verifies information on the loan applications, and also manages the loan documentation and disbursement process. The finance department monitors loan repayments and conducts other financial administrative operations, contracting out lawyers to collect loans in arrears. Finally, the promotions department functions to generate new clientele.

The structure of the organization reflects FUNHAVI’s goal of keeping operating costs to a minimum. FUNHAVI does not have loan officers per se. Contracted architects largely assume the role of the loan officers, conducting client visits, verifying home ownership, reviewing the proposed improvement plan, and determining the loan size. FUNHAVI’s support staff conducts credit assessments and documentation verification—similar to other microenterprise finance providers. The loan promoters are responsible for client outreach and initial client screening.
Given the focus on cost minimization, this system worked relatively well during the early years of the program. However, recent decreases in on-time repayment have led CHF and FUNHAVI’s management to consider the long-term wisdom of outsourcing technical services and loan promotion. The current system emphasizes and rewards loan origination and loan volume, but FUNHAVI has unfortunately not developed the one-to-one relationships between loan promoters and clients that constitute the core of many MFIs’ arrears-management strategy. This assessment suggests that a more orthodox approach, providing for in-house technical expertise and loan follow-up, will have a net beneficial effect on delinquency management.

### 2.6.1 Salaries

FUNHAVI currently works with five architects on a contractual basis, paying them a fixed honorarium for each client they have visited. The purpose is to minimize staff fixed costs. The architects receive 565 pesos ($61) for each approved loan application on which they have worked and 175 pesos ($19) per applicant visited that does not receive a loan. FUNHAVI pays the architect more for loans approved to encourage better client services. In addition, FUNHAVI pays the architects a monthly bonus that increases with the number of clients they refer to FUNHAVI. For example, an architect receives 150 pesos ($16) for a single referral and 300 pesos ($32) per referral for five or more referrals. The chief architect, who also works under contract, is responsible for reviewing the architects’ budgets and improvement designs. He is paid a flat, per-month honorarium.
Management and staff salaries are on par with the market rates for similar positions in Mexico, and FUNHAVI has not had problems with staff turnover. The loan promoters, while full-time employees, are paid according to an incentive system. The promoters receive a base salary, which is the minimum wage for Ciudad Juárez, and a certain percentage above their base salary for every approved loan. As the promoters are not responsible for the client’s repayment rate, the incentive scheme does not include portfolio size, portfolio at risk, or repayment rate as with other MFI incentive schemes. Promoters, however, are expected to bring in 20 clients per month.

As stated above, FUNHAVI also contracts out its loan collection to a group of lawyers who work on commission, receiving a percentage of what they recover. Loans that are three payments in arrears are automatically sent to one of the contracted lawyers for collection. The lawyer is asked to recover at least 40 percent of the total outstanding balance for all cases and receives 20 percent of the loan amount in default as payment for services.

2.6.2 CHF’s Role in FUNHAVI’s Management

At the beginning of the program CHF’s Juárez Resident Advisor played a hands-on role in the administration of the program and in adapting the systems and parameters of the program to the local context. CHF also provided FUNHAVI with its loan capital and covered the costs associated with the start up and any shortfalls while FUNHAVI reached sustainability.

Over the years, CHF’s role has evolved from a heavy operations orientation to providing as-needed technical assistance and financial oversight. Recently, CHF has tried to strengthen the FUNHAVI board on which CHF holds 3 of the 11 voting positions, hoping to create stronger governance policies and increased fundraising efforts. CHF continues to assist with marketing, financing, and long-range strategic planning.

2.7 Service Delivery

An average of 10 days separates a typical client’s initial visit to FUNHAVI and the actual disbursal of the loan, a number that FUNHAVI hopes to cut in half by introducing personal digital assistants (such as the Palm Pilot). This will allow the loan promoters to conduct the initial client analysis off site, which will quicken the loan approval process and reduce the need for clients to travel to the FUNHAVI office. The process entails 11 main steps as described below.

Promotion

FUNHAVI’s main form of promotion is by word-of-mouth; approximately 75 percent of new clients are referrals. Using promotional banners and flyers, the organization also advertises at the S-MART grocery stores where clients make their loan payments and at construction-material suppliers (see Sections 2.7.2 and 2.7.3). The material suppliers also have loan applications on hand, which they distribute to potential FUNHAVI clients. FUNHAVI also relies on a system of incentives for its promotion and outreach:

- Clients receive 200 pesos (approximately $22) for each applicant they refer who actually receives a loan, up to a total of three referrals.
Architects are paid for each applicant they refer. The amount paid per referral increases with the number of referrals. Construction-material suppliers are also rewarded for referring clients. For every client that they refer, FUNHAVI will purchase the construction supplies from that provider.

FUNHAVI has used other forms of promotion with varied success, including running advertisements (ads) on the radio, in newspapers, and on billboards and buses. In the case of the radio promotion campaign, FUNHAVI ran ads for five months in 2000, which leads to a doubling of applications. FUNHAVI used these promotional approaches when it started lending, but due to the high cost of a frequently run ad, FUNHAVI no longer uses that promotional method. FUNHAVI estimates that approximately 25 percent of individuals who inquire about the program complete a loan application. Of these, approximately 75 percent qualify for and receive a loan.

In November 2001, FUNHAVI hired loan promoters to increase its outreach. The promoters work in the informal settlements where most FUNHAVI clients live, commercial centers, S-MARTs, and maquiladoras. They have portable kiosks that can be set up wherever they go, and in the future, promoters also will wear uniforms that identify them as FUNHAVI employees.

**Preliminary Meeting and Affordability Analysis**

Clients interested in a loan from FUNHAVI must go to the organization’s office for an initial consultation that typically last between 15 and 20 minutes. A credit advisor explains the program: the eligibility requirements, loan terms, and required documentation. Since FUNHAVI’s promotional materials list the required loan application documentation, many applicants arrive with the required information in hand.

The credit advisor also conducts an affordability analysis, taking into account the applicant’s household income and expenses. If applicants meet the eligibility requirements and are able to afford a loan, they are given a loan application and a payment voucher for the architect’s visit. The applicant must go to FUNHAVI’s bank and deposit the fee for the architect’s visit and provide FUNHAVI with a copy of the deposit slip. For security reasons, FUNHAVI does not accept any cash payments at its office.

**Architect Site Visit**

Once the applicant has paid the architect’s fee, FUNHAVI sends one of its architects to visit the applicant’s home to discuss immediate and long-term home improvement needs, take measurements, and informally assess the structural integrity and adaptability of the existing structure in relation to the proposed improvement. During this visit the architect also collects socioeconomic data from the applicant, which FUNHAVI uses to help determine the loan size and payment duration, and to better understand its clientele. Information gathered includes how the client learned about the program, the number of people living in the house, what materials were used in the construction of the house, and how the applicant financed acquisition of the home and any previous improvements. The site visit is also useful for verifying the applicant’s residency and home ownership, and takes about 15 to 45 minutes.

According to FUNHAVI’s management, clients whose improvements are completed and well constructed are more apt to repay their loan and to return for additional services. Thus, clients
generally find the design assistance provided by the architect to be of great use in helping them plan their improvements. Since the architect is familiar with the necessary steps, he/she can help the client focus on priorities and needs rather than on the cheapest, most available solutions.

**Improvement Analysis and Budget Design**

Based on the site visit, the architect develops a budget for the proposed improvement using a specialized software program that factors in current market prices for construction materials and labor. This budget serves as the basis for the loan amount. The architect also designs the proposed improvement as well as any improvements the applicant may wish to undertake in the future. It typically takes the architect less than an hour to develop the construction budget and design document.

**Client Review and Consultation**

Once the budget and improvement design are completed, the architect meets with the applicant at FUNHAVI’s office to review and finalize the home improvement design, construction budget, and materials list. If the cost of the proposed improvements is greater than what the client can afford or if the proposed improvement cannot be supported by the existing structure, the architect will work with the applicant to determine what can be accomplished in terms of the applicant’s needs and household income. FUNHAVI also takes advantage of this meeting to gather final documentation and complete the application. The meeting typically lasts between 15 and 20 minutes.

**Technical Review**

After the architect has worked out the proposed improvement with the applicant, the chief architect reviews the proposed construction budget and design for accuracy and soundness and forwards the application to the credit department.

**Credit Analysis**

The credit department verifies the loan application information. This process includes calling the applicant’s references and employers, reviewing the application for missing or inconsistent information, and verifying the client’s repayment capacity.

**Loan Decision**

Loan applications that have been signed off by the chief architect and the credit department are forwarded to the Executive Director for final review and approval.

**Loan Debriefing and Document Signing**

Upon the Executive Director’s approval, the credit department sets up a meeting with the applicant and the co-signer in which they sign the loan agreement and promissory note. The applicant also receives instructions on the loan disbursement process, the construction-materials vouchers, the repayment schedule and process, and a list of construction materials required for the project. The client receives an information booklet on managing construction projects and a disposable camera to document construction progress. During this meeting, the client pays the loan commission. The loan debriefing and document signing process typically takes 20 minutes.
Construction-material Purchases

FUNHAVI has developed relationships with large construction material suppliers that have resulted in tangible benefits to its clients including reduced effective interest rate and ensured supply of quality materials. These partners include Cementos de Chihuahua—one of the largest cement suppliers in Mexico, and local hardware stores. FUNHAVI purchases cement at wholesale prices from Cementos de Chihuahua and resells it to its clients through hardware stores at market rates, or at slightly more favorable rates than retail. FUNHAVI thereby is able to generate a net profit on the resale of cement, which in turn reduces the total financing costs to its clients. FUNHAVI's relationships ensure that clients are accessing quality construction materials. Net income from this non-loan service was $56,458 in 2001, 11 percent of FUNHAVI's operating income.

For the construction-material portion of the loan, FUNHAVI issues vouchers to its clients. FUNHAVI faxes the supply order (based on the construction budget) to either the provider that is closest to the client’s home or to the provider that recommended FUNHAVI to the client. The client is responsible for contacting the material supplier and setting up a date and time for the construction materials to be delivered. Clients are required to contact the material suppliers within 15 days of signing their loan documents. According to FUNHAVI’s agreements with materials suppliers, this is the time frame under which the budgeted prices are honored. Upon receipt of all of the budgeted materials, the clients sign the delivery voucher. The material suppliers use this signed document to invoice FUNHAVI for payment, and upon receipt of the invoice, FUNHAVI directly pays the vendor.

FUNHAVI currently works with five materials suppliers. It regularly reviews the existing suppliers to ensure that they are providing the required service to the client, and FUNHAVI is always open to new relationships with other suppliers in the city based on their location and capacity.

Construction Labor Payment

FUNHAVI signs checks once a week. Clients must return to the office on the Friday of the week they sign their loan documents to pick up their loan payment coupons and a check for 70 percent of the estimated construction labor costs. To receive the remaining 30 percent, clients must use the disposable camera to document progress on the construction, develop the film, and submit the pictures to FUNHAVI. FUNHAVI uses these pictures to verify that the client has used the loan for the intended purpose. Clients typically come for the second disbursement within two to three weeks after the first disbursement, and the improvement is typically completed within two months.

Loan Payments

In July 1999, FUNHAVI began a relationship with the S-MART supermarket group to collect clients’ monthly payments. The S-MART supermarket chain, which is open 24 hours a day, has 20 store locations throughout Ciudad Juárez. This is an added convenience for maquiladora workers who may not work traditional business hours. S-MART also receives payments for utilities like gas, water, and electricity, making the addition of FUNHAVI uncomplicated—and allowing FUNHAVI’s clients to pay all their bills at one time.

FUNHAVI provides the clients with a book of payment coupons for each month, which they use at S-MART grocery stores. Clients make their loan payments between the 1st and the 15th of the month at
any S-MART store. FUNHAVI collects the payments from S-MART three times within that time period. S-MART will not accept loan payments after the 15th of the month, nor will it accept partial payments. If a client does not make her loan payment by the 15th, she must go to FUNHAVI’s office to get a deposit slip to make the loan payment and pay the late fee at FUNHAVI’s bank.

When a client makes a payment, the S-MART cashier stamps the coupon and gives the client a cash-register receipt. Clients are informed during the loan-signing process that they should retain these receipts, since the receipts are their proof of payment. On the 17th of the month, S-MART provides FUNHAVI with a list of clients who have paid by the 15th. It is S-MART’s policy that the cashiers are responsible for any payment errors. Cashiers who enter in an amount different than that on the payment coupon, must make up the difference between what was paid and what was on the repayment coupon.

If a client does not make a loan payment by the 15th of the month, FUNHAVI sends a certified letter to the client notifying that the loan payment is past due and that he must go to FUNHAVI’s offices to make the payment. If the client does not make a payment, FUNHAVI sends a second certified letter. After 60 days in arrears, FUNHAVI sends the client’s case to one of its collections officers who work with the client to make their loan current. If after 90 days the client still does not respond, the lawyer for FUNHAVI and the collections officer deliver an official letter to the client stating the legal process that will be initiated. This “pre-legal” step has proven very effective because of the formality of the letter and delivery by the lawyer. However, for those clients who still do not respond after 120 days, legal action is taken. Since FUNHAVI started, 30 cases have required legal action. In most cases, the co-signer and client are able to arrange for payment of the amount due.

For FUNHAVI, this arrangement streamlines the payment process and reduces operating costs and security risks, since no large amounts of cash are held in the office. S-MART provides the service for free on the basis that the arrangement will generate consistent store traffic and encourage customer loyalty. The grocery store chain knows that FUNHAVI’s clients will pass through the store every month and most likely buy something during their visit. Moreover, FUNHAVI does not collect the loan payments until the 17th of the month, allowing S-MART to earn interest on the payments received during the month.

### 2.9 Next Steps

Since 1996, FUNHAVI has lent successfully in the challenging environment of peso volatility, government reform, fiscal reform, and economic fluctuations. The maquiladora industry is greatly affected by economic cycles, which affect nearly all of its clients, though especially the 74 percent who work directly for the maquiladoras. As the program enters its fifth year, FUNHAVI’s greatest challenge will be to expand the program in Ciudad Juárez and along the border. To counter macroeconomic factors—primarily inflation and exchange rate risk—the program has returned 33 percent of all interest earnings to the capital fund, which has maintained its value in dollar terms. Fiscal reform is currently being assessed in Mexico and it is possible that new laws affecting financial service providers may be in place that will alter governmental oversight of organizations such as FUNHAVI.
Since FUNHAVI is operating below its lending capacity, it is exploring avenues to expand its loan program. The program currently disburses an average of 60 loans per month, but has a capacity to process 100 with its existing systems. According to FUNHAVI's executive director, the problem is not FUNHAVI's potential to attract clients, but rather insufficient capital, the necessity of having clients go to FUNHAVI's offices, and other inefficiencies. With the loan promoters and its new information systems, FUNHAVI expects to have the capacity to process 200 loans per month.

FUNHAVI will be able to access a $2.5 million line of credit from CHF to meet this expected increase in loans. Preliminary discussions have also taken place between CHF and FUNHAVI's management on the possibly of transforming FUNHAVI into a SOFOL or other type of financial institution, though this is only a long-term possibility. Currently as a foundation, FUNHAVI does not fall under the financial oversight of the country’s central bank.

With the assistance of CHF, FUNHAVI is currently planning expansion to sites along the border and within the state of Chihuahua and is developing an operational business plan for this expansion. FUNHAVI also has developed an ambitious three-year plan for board strengthening, which includes a review of by-laws, the addition of new members with appropriate skills, the creation of new committees, and proposal writing.
3 PERFORMANCE AND VIABILITY ANALYSES

3.1 Performance Analysis

3.1.1 Loan Portfolio and Portfolio Quality

As of October 31, 2001 (the date of the most recently consolidated financial statements) FUNHAVI’s outstanding portfolio was $1,077,421. The loan portfolio has had a moderate growth rate of 12 percent and 20 percent in 2000 and 2001 respectively after experiencing 72 percent growth in 1999. This slowdown was largely due to capital constraints the organization experienced during the last two years. The organization projects slightly higher growth in 2002 and 2003 with the employment of loan promoters and a $2.5 million line of credit from CHF.

In terms of portfolio quality, 17 percent of the portfolio is more than 30 days in arrears. This number is quite high and reflects the economic slowdown—particularly among the maquiladoras where nearly three-fourths of FUNHAVI’s clientele work. Another reason for FUNHAVI’s high delinquency rate is that it has not written off loans regularly. It has only written off the loans of client who have died. FUNHAVI is in the process of instituting a policy of writing off loans that are 180 days in arrears. Once loans over 180 days are written off, FUNHAVI expects that approximately 7 percent of its portfolio will be more than 30 days in arrears.

3.1.2 Profitability

Based on an application of the ratios recommended by the Consultative Group to Assist the Poorest (CGAP), FUNHAVI has had net operating losses for the past four years. As a result, return on assets is also negative, though the return has improved over time. As of October 2001 returns were -7 percent, down from a high of -19 percent in 1999. This improvement is attributed to net operating losses declining more than the increase in assets, suggesting that FUNHAVI is still young, and that its financial operations have not yet achieved maximum capacity.

However, FUNHAVI does break even even when one takes into consideration its income from agreements with construction-material suppliers. If one factors in the net profit from the resale of construction materials (listed as other non-operational income on Table 6) into FUNHAVI’s operating income, the institution shows net operating gains since 1998. This non-financial source of income contributes an additional 18 to 20 percent to FUNHAVI’s net profit.

FUNHAVI has been operationally sustainable since 2000 (if one excludes the cost of funds). As of October 2001, it earned more than enough to cover the operating costs associated with running a loan program. This “operational self-sufficiency” was 173 percent.16

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16 Operational self-sufficiency calculation excludes costs of funds. This calculation comes from the CGAP publication Format for Appraisal of Microfinance Institutions, July 1999, page 29. For FUNHAVI’s first four years of operation, CHF covered the organization’s operational deficit. For the purpose of this report, we have conservatively assumed that this amounted to 50 percent of technical assistance costs.
FUNHAVI has yet to reach financial self-sufficiency, however. As of October 2001, its financial self-sufficiency was 75 percent. This, in large part, is due to the cost of capital. Unlike many MFIs, interest and fees paid on loan capital constitute the largest share of FUNHAVI's total operating costs. Financial costs constitute 47 percent of FUNHAVI's total operating costs, reflecting the fact that FUNHAVI has been paying at or near market rates for loan capital since its inception. However, assuming FUNHAVI can meet its growth and performance targets, the organization is on course to reach full financial sufficiency towards the end of calendar year 2003. FUNHAVI also has reduced its reliance on donations since it is able to cover operating expenses through its income. As of October 2001, donations represented only 2 percent of total income, down from 212 percent in 1998.

FUNHAVI's loan portfolio yield is 55 percent, up significantly from 12 percent in 1998. This ratio describes the organization's annual financial income (interest payments from clients, commissions, arrears penalties) as a percentage of its annual average outstanding portfolio. The yield is therefore a function of the effective rate clients pay, adjusted upwards by penalties and downwards by annual losses. Because FUNHAVI lowered its interest rate in mid-2001, the portfolio yield data cannot be compared to the effective rate. Prior to mid-2001, FUNHAVI's average effective interest rate was 57 percent. Based on the current interest rate and fee structure, the average effective interest rate is 54 percent.

3.1.3 Efficiency

FUNHAVI’s efficiency trends are moving in the right direction. The administrative efficiency ratio—the sum of administrative costs as a percentage of the average adjusted loan portfolio—has decreased over the last two years from a high of 45 percent in 1999 to 33 percent in October 2001. Although the total administrative costs per active loan are high, there is a consistent downward trend in terms of the cost per loan. In October 2001 the cost per loan was $324 compared with $449 per loan in 1998.

The majority of FUNHAVI's staff serves back-office functions. Its front-line staff positions are mainly the architects who work under contract. FUNHAVI has been increasing the number of front-line staff particularly in light of its proposed expansion, including hiring loan promoters. As of October 2001, front-line staff comprised 44 percent of the organization’s total staff—this ratio has increased from past years when front-line staff made up approximately one-third of total staff. If the architects were to be included in the number of front-line staff per staff member, the ratio would be 59 percent.

FUNHAVI’s equity multiplier, which measures the extent to which an organization has leveraged its debt financing, is 3.66 (Table 5). FUNHAVI’s equity is expected to increase significantly in 2002 and 2003 through grants from CHF and the Ford Foundation. However this increase should be outpaced by FUNHAVI's ability to access a $2.5 million line of credit to help meet the projected increase in demand.
### Table 5. Financial Performance Ratios Overview

<table>
<thead>
<tr>
<th>Values in US$</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001 (October 31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Active Loans</td>
<td>501</td>
<td>892</td>
<td>1022</td>
<td>1008</td>
</tr>
<tr>
<td>Total Outstanding Balance</td>
<td>$465,340</td>
<td>$800,736</td>
<td>$896,838</td>
<td>$1,077,421</td>
</tr>
<tr>
<td>Average Loan Balance</td>
<td>$929</td>
<td>$898</td>
<td>$876</td>
<td>$1,069</td>
</tr>
<tr>
<td>Number of Voluntary Savings Clients</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Percentage of Female Clients</td>
<td>42%</td>
<td>41%</td>
<td>39%</td>
<td>39%</td>
</tr>
<tr>
<td>Loan Loss Rate (1)</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Loan Loss Rate (2)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1%</td>
</tr>
<tr>
<td>Portfolio at Risk Delinquency Rate (&gt;30 days)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>17%</td>
</tr>
<tr>
<td>Adjusted Outstanding Loan Balance (net of allowance for uncollectables)</td>
<td>$465,340</td>
<td>$766,669</td>
<td>$842,829</td>
<td>$1,005,091</td>
</tr>
</tbody>
</table>

#### Profitability

- Return on Assets: -12% -19% -11% -7%
- Operational Self Sufficiency: 99% 94% 161% 173%
- Financial Self Sufficiency: 63% 56% 72% 75%
- Portfolio Yield: 12% 40% 56% 55%

#### Efficiency

- Administrative Efficiency: 13% 45% 37% 33%
- Operational Efficiency: 20% 71% 75% 67%

#### Solvency

- Equity Multiplier: 3.07 4.34 3.69 3.66

### Table 6. Income Statement

<table>
<thead>
<tr>
<th>Values in US$</th>
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<tbody>
<tr>
<td>Operating Income</td>
<td>$105,325</td>
<td>$263,864</td>
<td>$472,246</td>
<td>$521,335</td>
</tr>
<tr>
<td>Interest and Fee Income from Loans</td>
<td>$96,757</td>
<td>$233,745</td>
<td>$431,315</td>
<td>$489,100</td>
</tr>
<tr>
<td>Income from Other Finance Related Services</td>
<td>$2,138</td>
<td>$12,342</td>
<td>$17,396</td>
<td>$16,322</td>
</tr>
<tr>
<td>Income from Investments</td>
<td>$6,430</td>
<td>$17,777</td>
<td>$23,536</td>
<td>$15,913</td>
</tr>
<tr>
<td>Total Operating Income</td>
<td>$105,325</td>
<td>$263,864</td>
<td>$472,246</td>
<td>$521,335</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>$166,882</td>
<td>$438,784</td>
<td>$604,217</td>
<td>$623,478</td>
</tr>
<tr>
<td>Interest and Fee Expense</td>
<td>$54,285</td>
<td>$141,372</td>
<td>$283,709</td>
<td>$294,116</td>
</tr>
<tr>
<td>Personnel</td>
<td>$40,295</td>
<td>$94,297</td>
<td>$110,470</td>
<td>$104,114</td>
</tr>
<tr>
<td>Technical Assistance Costs</td>
<td>$11,739</td>
<td>$35,829</td>
<td>$52,675</td>
<td>$54,873</td>
</tr>
<tr>
<td>Other Administrative Expense</td>
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<td>$170,376</td>
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<tr>
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</tr>
<tr>
<td>Net Operating Profit (Loss)</td>
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<td>-$174,920</td>
<td>-$131,971</td>
<td>-$102,142</td>
</tr>
<tr>
<td>Non-operational Income</td>
<td>$222,966</td>
<td>$141,497</td>
<td>$129,843</td>
<td>$19,801</td>
</tr>
<tr>
<td>Other Non-operational Income</td>
<td>$94,668</td>
<td>$392,868</td>
<td>$544,833</td>
<td>$483,891</td>
</tr>
<tr>
<td>Non-operational Expenses</td>
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<td>$458,451</td>
<td>$381,824</td>
</tr>
<tr>
<td>Total Consolidated Profit (Loss)</td>
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</tr>
</tbody>
</table>
## 3.2 Affordability

FUNHAVI evaluates loan affordability based on the client’s net monthly household income—assuming the client can set aside 25 to 33 percent of net household income. Net income is derived from gross income minus debt, utilities, and other recurring payments. FUNHAVI clusters client incomes based on federally mandated minimum wage levels for the area. In the case of Ciudad Juárez, the minimum daily wage is $4.37. Wages for maquiladora workers, on average, start at approximately twice this amount.

Table 8 illustrates how a FUNHAVI loan helps clients earning two to eight times the minimum wage afford a range of desired home improvements. The analysis looks at affordability for loans with a repayment period of 12 months, 20 months (the FUNHAVI average), and 36 months (the FUNHAVI maximum). The analysis reveals that most clients within the examined income ranges cannot afford to build a new room unless the loan period is more than the 20-month average. It also shows that at 20 months, a kitchen or a bathroom becomes affordable for all but the lowest income clients.

For the purpose of this analysis and for the sake of simplicity, the allowable monthly payment was set at 25 percent of gross income, which approximates the FUNHAVI average household payment.
### Table 8. Sample Affordability

#### 12-Month Repayment Period

<table>
<thead>
<tr>
<th>Proposed Improvement</th>
<th>Estimated Cost of Improvement</th>
<th>Monthly Payment at 2.50%</th>
<th>Affordability if payment is 25% of monthly income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2 Minimum Wage ($66.42)</td>
<td>3 Minimum Wage ($99.64)</td>
</tr>
<tr>
<td>Room (unfinished)</td>
<td>$2,609.00</td>
<td>$222.85</td>
<td>No</td>
</tr>
<tr>
<td>Interior finishings</td>
<td>$164.00</td>
<td>$14.01</td>
<td>Yes</td>
</tr>
<tr>
<td>Bathroom (finished)</td>
<td>$875.00</td>
<td>$74.74</td>
<td>No</td>
</tr>
<tr>
<td>Roof (concrete)</td>
<td>$1,188.00</td>
<td>$101.48</td>
<td>No</td>
</tr>
<tr>
<td>Kitchen</td>
<td>$900.00</td>
<td>$76.88</td>
<td>No</td>
</tr>
</tbody>
</table>

#### 20-Month Repayment Period

<table>
<thead>
<tr>
<th>Proposed Improvement</th>
<th>Estimated Cost of Improvement</th>
<th>Monthly Payment at 2.50%</th>
<th>Affordability if payment is 25% of monthly income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2 Minimum Wage ($66.42)</td>
<td>3 Minimum Wage ($99.64)</td>
</tr>
<tr>
<td>Room (unfinished)</td>
<td>$2,609.00</td>
<td>$133.71</td>
<td>No</td>
</tr>
<tr>
<td>Interior finishings</td>
<td>$164.00</td>
<td>$8.41</td>
<td>Yes</td>
</tr>
<tr>
<td>Bathroom (finished)</td>
<td>$875.00</td>
<td>$44.84</td>
<td>Yes</td>
</tr>
<tr>
<td>Roof (concrete)</td>
<td>$1,188.00</td>
<td>$60.89</td>
<td>Yes</td>
</tr>
<tr>
<td>Kitchen</td>
<td>$900.00</td>
<td>$46.13</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### 36-Month Repayment Period

<table>
<thead>
<tr>
<th>Proposed Improvement</th>
<th>Estimated Cost of Improvement</th>
<th>Monthly Payment at 2.50%</th>
<th>Affordability if payment is 25% of monthly income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2 Minimum Wage ($66.42)</td>
<td>3 Minimum Wage ($99.64)</td>
</tr>
<tr>
<td>Room (unfinished)</td>
<td>$2,609.00</td>
<td>$74.28</td>
<td>Yes</td>
</tr>
<tr>
<td>Interior finishings</td>
<td>$164.00</td>
<td>$4.67</td>
<td>Yes</td>
</tr>
<tr>
<td>Bathroom (finished)</td>
<td>$875.00</td>
<td>$24.91</td>
<td>Yes</td>
</tr>
<tr>
<td>Roof (concrete)</td>
<td>$1,188.00</td>
<td>$33.83</td>
<td>Yes</td>
</tr>
<tr>
<td>Kitchen</td>
<td>$900.00</td>
<td>$25.63</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The following assumptions were made for this analysis.

- One minimum daily wage: $4.37
- Average daily wage for maquiladora workers: $8.73
- Average monthly wage for maquiladora worker: $266

Monthly wage rates are calculated at 30.4 times the daily wage, taking into account that workers are paid an extra months wages at year-end.
This assessment reveals the story of a young and small institution that is still experimenting with its lending methodology, and with too short a period of steady performance to assess its future trajectory. As of this analysis, costs are high relative to other microfinance institutions and the scale is small, particularly given the estimated market demand and apparent lack of real competition. Nevertheless, this assessment brings to light several observations and lessons that could prove useful to the emerging practice of housing loans for the poor.

**Using leverage to negotiate bulk rates on construction materials to increase MFI’s income and reduce financing costs to clients.**
FUNHAVI has used its strong presence in the construction market to negotiate preferential purchases rates with large construction material suppliers. This has resulted in tangible benefits to FUNHAVI’s clients including lower effective interest rates and guaranteed supply of quality materials. Net income from this non-loan service was $56,458 in 2001, 11 percent of FUNHAVI’s operating income.

**Although FUNHAVI has yet to reach full financial self-sufficiency, housing-focused MFIs can potentially find a viable niche in the market.**
FUNHAVI’s sole line of business is the provision of housing financing to the working poor. As a result, its business model is demonstrably different from that of most other MFIs currently offering housing finance services as part of a wider set of financial services for the poor. FUNHAVI’s emerging track record suggests that, under certain conditions, housing microfinance may be able to sustain a small- to mid-sized MFI in a manner that is financially viable.

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