



CHAPTER 11

Housing Provident Funds

Loïc Chiquier

A common problem in emerging markets is high levels of inflation, which discourages savings combined with undeveloped capital markets. These problems conspire to limit any activities that would rely on the availability of long-term funds. A solution to this problem seen in a number of emerging markets is the creation of housing provident funds (HPFs). They are essentially long-term saving schemes that operate through mandatory contributions. While this can be an efficient and rapid way of raising long-term funds in environments where this would not otherwise be possible, it can also engender a number of costs. One of the main difficulties is in ensuring that the HPF does not distort market pricing through unrealistic and regressive subsidies. This chapter reviews some of the different models and structures of HPFs, as well as some issues that have arisen with their creation.

Description of HPF

Please provide some text to follow this heading. Headings should not be followed by headings. I let it go in other chapters, but there will be way too much space if I move this heading to the next page. A few lines of text will be very helpful here.



Structure

HPFs are specialized financial institutions that collect mandatory savings from employees—from the public or private sector—expressed as a defined percentage of their salary. Sometimes the employers are also required to make additional proportional contributions (for example, one-to-one match in China). The HPF then manages these accrued long-term savings, which are often remunerated at a below-market yield. This permits the contributing members of the HPF to

- withdraw their accrued savings as a down payment for a housing investment (but they cannot otherwise withdraw their savings before retirement);
- receive long-term housing mortgage loans, usually at a preferential rate (either directly lent by the HPF or through another lending institution);
- benefit from retirement savings as additional income to the retirement system; and
- receive unemployment severance payment (in some cases).

The organization, products, and governance of HPFs are shaped to reflect their multiple functions. Although they act as deposit takers and lenders, they are not banks and are often not regulated as such (in terms of capital adequacy, provisioning, financial oversight, etc). Although they provide retirement benefits, they are neither regulated as a pension fund or subject to investment limits and performance benchmarks. They are typically created through a specific law, or in some cases their existence is laid out in the constitution. Their activities and products are determined by law.

Subsidies

HPFs were often created when and where private lenders were not active in long-term housing lending, as a self-funded housing finance system capable of producing a sizeable amount of new housing loans. HPFs have been created

in many emerging economies, including Mexico, Nigeria, Brazil, Jamaica, the Philippines, and China.

Although often plagued by financial inefficiencies and regressive cross-subsidies, their market shares in housing finance can be quite significant. They may even dominate residential markets (70 percent market share together for the HPFs in Mexico at the end of 2005), mainly as the result of the recurrent and quasi-tax nature of their collected mandatory savings. After reaching a cruising regime, the reflows from the portfolio can also be recycled into even more new loans.

In other cases (for example, the National Housing Trust in Nigeria), they fail to provide any sizeable funding to develop a critical mass in the housing finance system. This occurs because employees try to avoid paying their contributions when the saving rates are negative in real terms, and the proportion of savers to borrowers is exceptionally low.

HPFs often finance favored population groups in preferential credit conditions, but not necessarily among the lower- or informal-income segments. HPFs are then exposed to considerable political pressure and interference from changing governments. Most of the time, this is to the detriment of their financial sustainability as lending institutions and pension funds, as seen, for example, in the Philippines (Filipino Development Housing Fund; PAG-IBIG) or Mexico (Fondo de Vivienda para los Trabajadores al Servicio del Estado; FOVISSTE)]. In Mexico, the other large HPF (INFONAVIT) has been restructuring to improve its efficiency and governance.

Their implied level of *cross-subsidization* can be larger than any other state program of housing subsidies. It mainly depends on three core factors: (i) the proportion of contributing savers who will never receive a long-term housing loan (but have their savings under-remunerated to the detriment of their future pensions), (ii) the interest rate gap below market levels for the savings and credits, and (iii) the mortgage portfolio performance (the less performing, the more inefficient subsidies).

This *system of cross-subsidies is often socially regressive*. The proportion of borrowers to savers is low by arithmetic necessity, given the relatively large amount and long-term nature of housing loans (less for eligible home improvement purposes). This reality is not necessarily an issue, except if the loan interest rates are subsidized by the under-remunerated savings of the contributing members. Informal-income households also do not access

these preferential credits as they are not formally employed. The problem of cross-subsidization is compounded when most of the credit subsidies benefit higher-income households that could have afforded private-market loans, and are actually funded by lower-income employees to the detriment of their retirement.

Even in the favorable case of an HFP refocusing its preferential housing lending to the underserved populations to minimize the regressive nature of cross-subsidies, it sacrifices its provident fund function to become an indirect *taxation and redistribution vehicle*, although (i) this role is often not integrated within the national housing policy of the government (given the HFP legal and corporate governance structure) and (ii) these *subsidies do not appear as on-budget fiscal expenditures* (inefficient but sometimes perceived as convenient by some governments exposed to tight fiscal constraints).

Governance

The multiple mandates and legal foundations of HPFs are often reflected through an inefficient corporate governance structure. The main body is a special council or board, composed of an excessive number of persons representing different stakeholders (several ministries, including labor, finances and housing, private construction and financial sectors, trade unions representing the employees, and so forth). This often results in a combination of a quasi-independence, poor accountability, and high degree of inertia in opposing strategic reforms. Once in operation they serve strong vested interests—developers, unions, public sector workers—which makes it difficult to change (for example, moving away from subsidization, even if detrimental to the lower-income savers).

Abuses and corruption are also encouraged by a lack of transparency; for example, part of the credit subsidies may be wrongly captured by developers when setting their sale prices, if households cannot freely choose their housing investment. The lending also suffers from administrative rigidities that conflict with industry standards and the nature of the market demand. A lack of transparency may affect the process of credit and home allocation. For example, many HPFs accept as housing investment only a home purchase (sometimes only a finished home built by a developer) versus a

demand from poorer members for lower credit for renovation and repairs on their existing homes.

These funds can deter the rise of private mortgage markets, if new private lenders cannot compete against the HPF's preferential conditions. An uneven playing field may be created by undue legal and regulatory privileges, but also from the following strategic difference: no private lender can survive substantial defaults by relying on contributions from member wages or by paying a negative real return on savings (as the Mexican HPFs did during the 1990s). Sometimes, HPFs also enjoy the exclusive privilege to deduct loan payments directly from salaries (which is cheaper and safer), nor do they pay income taxes or have to reserve capital against unexpected losses.

Development of an HPF

Many variants exist, notably whether the HPF is a direct lender (as in Mexico and China) or not (as in Brazil or Singapore). But many HPF share some common features at a certain stage of their development:

- low-income savers cross-subsidize a smaller number of better-off borrowers;
- the accrued savings are not sufficiently remunerated for retirement needs;
- administration costs of HPF are high and the lending performance is poor;
- their presence may hinder the expansion of other private lenders.

A challenge in countries where private lenders enter the mortgage industry consists for the HPF in encouraging private lending for middle-income households rather than competing against them. This implies a need to revisit their own credit products (develop co-financing, let other lenders use the savings as down payment or guarantees), better target their borrowers, improve lending efficiency, narrow the interest rate gap with market rate conditions, and target the subsidy element only for the underserved groups. Such reforms have been initiated in Brazil by the FGTS and in Mexico by INFONAVIT.

At a certain stage of their development, HPFs are confronted with a strategic choice between their functions as a pension fund, housing lender, and subsidy distributor:

If the priority consists in improving the retirement of members while private mortgage markets may expand, HPFs should optimize and diversify their investments rather than increase their market shares as a primary mortgage lender. The housing lending should be then separated from the provident fund operations, and the main activities focused on efficiently investing in a diversified way the savings through financial markets (including market-based refinancing of other mortgage lenders). This evolution of a separation between the savings and then lending—see Singapore—often represents the best scenario, when technically and politically feasible.

If the assigned priority mandate rather consists in facilitating housing finance for the underserved population, the HPF should revisit its credit policy to better target its loans (Should it lend to informal-sector workers who did not contribute through savings?), strengthen all aspects of its lending operations, leverage other private lenders to serve members,¹ price its housing loans according to market realities, target subsidies in a transparent and effective way (ideally through lump-sum grants), or provide a complementary second-lien housing loan to the main mortgage credit, which is provided by another private lender (as developed in France).

International Experience

China

The HPF was initially introduced as a pilot program in Shanghai in 1991 and later extended nationwide in 1995, in order to kick-start a housing finance system that could carry on the housing policy reform (for example, transform housing from welfare to commodity). HPF operations are now conducted through 320 management centers. The interest rates are regulated by the People's Bank of China, while the Ministry of Construction and Ministry of Finance are responsible for overseeing the scheme at the national level. At

1. For example, by co-financing loans, as is now the case with INFONAVIT. But HPF savings can also be used as guarantees and down payments for other lenders.

the local level, housing committees determine policies with the management centers. Commercial banks are appointed to handle the deposits, lending, and financial management.²

These savings earn a low interest rate. The participant's employer provides a one-for-one match to the employee's deposits. The employee can only use the funds for the purchase or major repairs of housing or to supplement retirement income. When purchasing housing, the member can withdraw the savings and obtain a loan at a preferential rate. Upon retirement, the employee can withdraw the account for other purposes.

By the end of 2005, HPF savings represented RM 626 billion collected from 63.3 million employees. Despite an RM 283 billion mortgage portfolio, their housing lending remains limited (versus 1.6 trillion mortgage portfolio held by commercial banks). Only 45 percent of collected savings has been provided as housing loans and only 8 percent of savers are housing borrowers. Fund loans have performed well, with only a 0.12 percent delinquency rate as of the end of 2005. These credits are not used very much by lower-income groups, but HPF rather competes with banks for upper-income borrowers. Despite preferential credit rates, their accessibility and impact remained limited. Over time, HPF lending has mainly benefited upper-income households or privileged employees, but did not help the many households that are unemployed or marginally employed. A total of 80 percent of HPF lending in Beijing went to the purchase of high-cost housing, while in Shanghai 44 percent of lent funds went to 4 percent of contributors. HPF lending is a regressive policy in which the lower end of the income distribution receives a limited benefit in the form of reduced-yield savings, helping to cross-subsidize the loans to upper-income HPF participants.

In addition, some HPFs act as inefficient lenders, for example, in processing loan applications when compared to the commercial banks. They are administratively managed, resulting in cumbersome procedures and market-unfriendly limitations. The loan amount is capped while housing prices keep increasing. There are reported cases of corruption and misused funds for other priorities of a local government, notably when the local management center supersedes banks in controlling all financial transactions.

The performance of China's HPFs leads to several important policy lessons:

2. In some cases, management centers also collect funds and provide financial supervision.

- The HPFs were created as a means to create long-term mortgage markets at a time in which banks were absent from the market. Since then, most banks have been competing on mortgage lending, so the activities and market positioning of the HPF should be revisited accordingly (lower income, complementary funding, etc).
- HPF preferential lending fails to meet the affordability purpose, as its design favors higher-income workers. Most members will not receive a loan over their lifetime and are forced to save at below-market rates. The functions of subsidy and finance should be separated and subsidies better targeted.
- The HPFs are insufficiently diversified (most of their assets are in real estate loans from a particular area). The system should be more consolidated.
- HPFs are regulated by the Ministry of Construction, which has no expertise in financial regulation and which has a potential conflict of interest: the desire to develop housing as opposed to safe and sound lending. As a matter of safety and soundness, HPF activities should be regulated by a qualified financial regulator.

Singapore

Residents in Singapore are required to put a large proportion of disposable income into the Central Provident Fund (CPF). Virtually all employees pay as much as 35 percent of their gross income (for those 35 years of age or younger) into the CPF, which invests the savings in a diversified portfolio of domestic and international assets that earn a positive real return for participants. The CPF acts as a pension fund rather than as a housing lender.

A majority of housing finance is provided by the Housing Development Board (HDB), a government agency that develops, finances, and manages housing. HDB requires a 20 percent down payment for its loans, and households can borrow from the CPF for the down payment and amortization of their housing loan, but these funds must be repaid over time. The savings in the CPF are used for down payment and loan repayment but not for direct subsidized lending, which reduces the possible confusion of roles.

In the past, HDB provided both market rate and subsidized loans. The Ministry of Finance lends to HDB at the government borrowing rate and the HDB provides interest rate subsidies to households according to need. As of 2003, HDB no longer provides market rate loans—households are expected to obtain credit from banks. HDB continues to provide concessionary interest-rate mortgage loans for first-time flat buyers and current HDB borrowers who are upgrading from smaller flats (first-time buyers and married households with children receive priority). The subsidized and market-rate lending sectors are quite separate segments of the business. Borrowers obtaining market-rate credit from a bank can also use their CPF savings for their required down payment.

In addition, housing loans account for only a small fraction of CPF uses of funds, so the CPF can operate in an actuarially sound manner to provide the highest return for its participants, in keeping with international standards for pension fund management.

Mexico

There are two large HPFs, one for the employees of the private sector (INFONAVIT) and the other for public-sector employees (FOVISSTE). Both have been operating for more than 30 years. Both collect 5 percent of the salaries of employees through individual savings accounts (withheld at source by the employer). Both make direct mortgage residential loans to their members. The credits are quite subsidized in the case of FOVISSTE. Members may withdraw their savings to use as a down payment to purchase a house, together with a loan from either their HPF or from a private lender. Any savings remaining at retirement are available to supplement retirement income. INFONAVIT loans are linked to an index of wage inflation, to which a spread is added that varies by income category, cross-subsidizing borrowers in lower-income segments.

The two funds represent 70 percent of the Mexican mortgage market by the end of 2005 (INFONAVIT 60 percent, FOVISSTE 10 percent) despite a rapid growth of private-market lending by SOFOLs and banks. In partic-

Box 11.1. The Reforms of INFONAVIT in Mexico

INFONAVIT management implemented operational reforms during the last six years that have significantly improved the performance of INFONAVIT. The main blocks were to modernizing information and accounting systems, improving the procedures in mortgage origination and servicing, appointing external debt collectors, better tracking the evolution of employees who left their jobs (operational risk as one of the main reason of defaults), and creating new committees for risk management, auditing, and strategic policy.

By lending according to mortgage industry standards, these reforms enabled INFONAVIT to increase its lending, improve the cash flows, and pay a return on savings comparable to private pension funds (Afores). INFONAVIT has adopted international accounting standards and made itself subject to the financial regulator oversight—Comisión Nacional Bancaria y de Valores—and is now subject to all reporting and control rules of commercial banks. The default rate has been reduced to 8 percent. Its savings pay a positive net real yield (3.5 percent in 2005), close to the net yields of private pension funds in the last years. But on average since 1997, its yearly performance has been lower by 0.4 percent than the private Afores.

INFONAVIT has widened its cooperation with the private sector, providing its members with the ability to leverage their savings. Members may simultaneously originate the purchase of a house with one credit from INFONAVIT and another from a private lender. They may also use their INFONAVIT savings as a down payment for a loan originated by another lender.

In order to grow, INFONAVIT has also initiated a securitization program. This move requires credit policy reforms in favor of more transparency, advanced systems, rigorous improved standards, and market-based pricing. So far, securitization has been expensive through high over-collateralization ratios (between 18 and 23 percent). Any sizeable expansion would require more market-friendly and better-priced underlying loans.

INFONAVIT has been targeting its subsidized lending only to the underserved households. Between 2002 and 2005, 76 percent of its originated loans went to individuals earning 7 times the minimum wage or less, a segment that is lightly served by SOFOLs, and not at all by banks. This means less regressive cross-subsidization. Despite this, INFONAVIT only lends to about 20 percent of qualified participants, and the ratio of borrowers to savers remains low.

ular, INFONAVIT went through several operational reforms that helped to increase its share of primary mortgage markets.³

Both HPFs suffered from political influences and weak financial management for many years, which resulted in a poor performance both as lenders and as retirement plans. They were under pressure to provide subsidized housing loans to favored groups, and extensive forbearance to borrowers, with the same moral hazard issue as faced by any other public lender. Prior to 2000, both recorded default rates on mortgage loans in the excessive range of 30 to 40 percent. INFONAVIT paid negative real rates of return on savings during much of the 1980s and 1990s, while FOVISSTE built up a funding shortfall. Most members failed to receive a loan, and had not much left to collect at retirement.

These HPFs found it hard to reconcile their functions as housing lenders, subsidy distributors, and pension funds. They had to ration credits (by 2000 only one loan for seven savers at INFONAVIT), which remain accessible only by the formally employed minority. Despite governance reforms, the risk remains that future governments may return to politically influenced financial policies. They cannot represent the sole and maybe even the main solution to resolve urban housing shortages, or to extensively lend for affordable housing (they will soon reach a plateau level).

All these reforms correspond to major improvements, but have not resolved the internal conflicts between its roles as lender, pension fund, and subsidy provider. There is an inherent conflict between maximizing returns for savers and providing low-cost mortgage finance through cross-subsidies. Will the core functions as a housing lender and as pension fund require further separation?

FOVISSTE has made less progress than INFONAVIT, in terms of operational reforms and corporate governance. It is now developing new automated systems and streamlining its business processes, but more remains to be done: management reforms, external audit committees, basic data on the portfolio and its performance, oversight by Comisión Nacional Bancaria y de Valores, and international accounting standards. FOVISSTE also provides

3. From 49 percent in 2000 to 60 percent in 2005 in terms of outstanding balance. As a share of the new 2005 production of mortgage loans, INFONAVIT weighted 67 percent and 44 percent respectively in number of loans and in loan amounts.

deeper rate subsidies than INFONAVIT, but its effect on the market is limited because of its restricted membership base.

Brazil

Most of the housing finance system remains funded by the FGTS, which operates as an HPF. In 2005, the FGTS provided R\$5.5 billion of on-lent housing credits, plus R\$1.2 billion of complementary up-front housing subsidies (448,000 loans, including 150,000 micro-consumer loans). In 2006, the FGTS should reach R\$10 billion for housing credits and R\$1 billion in subsidies.

The FGTS collects a levy of 8 percent of all formal private-sector salaries (including the employees from government-held companies). This total represents an impressive amount each year (4 percent of GDP). These contributions are credited to “accounts” of individual workers. Savings are remunerated at *tasa referencial* (reference rate) plus 3 percent, which is the minimum imposed by FGTS law but stands below inflation. By comparison, voluntary housing savings—SBPE system managed though most banks—are much better remunerated (yield higher by 3 percentage points), and short-term rates from Sistema Especial de Liquidação e Custodia are even higher.

Its performance as a pension fund has been poor, and its own administrative costs high. The savings become available to the worker in case of lay-off, retirement, or for application to housing expenditures. Although severance and retirement may be provided to only the contributing members working in the formal sector, housing loans may be granted to any eligible borrower, even if not contributing to the FGTS.

Part of the accrued savings are invested into treasury securities, while another part is invested into infrastructure loans and housing loans at a rate of return of *tasa referencial* + 6.2 percent (considerably below free-market mortgage rates). Every year, the council decides how much funding will go to housing loans (recently expanding but historically quite fluctuating and unstable contributions), as the fund is also subject to political pressure.

The FGTS does not directly extend mortgage loans but finances the Caixa Econômica Federal (Federal Housing Bank; CEF), a state-owned bank that is both the sole operator of the FGTS for originating and servicing housing

loans, and the appointed management agent of the FGTS (part of this role consists of guaranteeing a return to the FGTS even if other lenders fail to perform). The spread charged by the CEF is 2.16 percent. The system is designed to pay back to the FGTS a fixed remuneration of *tasa referencia* + 6.16 percent, and discriminate credit rates across different borrowers (subsidized rates only for low-income ones).

This system has financed a rationed number of loans. A large part of the portfolio was non-performing when CEF needed to be recapitalized in 2000.⁴

The FGTS program has been gradually but steadily re-focused on the lower income groups with 77 percent of the number of loans going to households with incomes less than 5 times the minimum wage. In 2005, this movement was pursued with the FGTS stopping new lending to higher income groups (10 times the minimum income) and introducing upfront subsidies for lower income households (less than 5 times the minimum income).

The next challenge consists in broadening the distribution of these housing finance resources through to other competing lenders, which could distribute this attractive program (reduced credit risk by the upfront subsidy and the cheaper credit rate).

Philippines

PAG-IBIG is an HPF, which operates as a public corporation with its own board of trustees. Its mandates are multiple, including investing the collected savings into assets for retirement purposes, and directly lending for housing both to developers and to the employees-members (a retail portfolio of about a half-million households). The portfolio is highly subsidized (the less the loan amount, the cheaper the interest rate, which ranges between 6 and 12 percent). Special devices have been introduced to improve debt recovery (penalties for late payments, rent-to-own leasing, loan restructuring). PAG-IBIG is a public housing lender that leads the market. It is funded by the savings contributions (mandatory since 1994; between 1 and 2 percent of

4. Until 2001, a large number of nonperforming loans characterized the balance sheets of CEF and Banco de Brasil. The federal government absorbed those loans at a net cost of approximately 6 percent of GDP, three-quarters of which was due to the restructuring of CEF.

the wages for the employees according to their wage, and 2 percent for the employers). It has been tapping bond markets since 1997 to increase its funding capacity.

Its weaknesses lie within substandard financial reporting, weak asset liability management (increasing pressure for additional liquidity), technological gaps, high proportion of NPLs, insufficient delinquency management, and inequitable cross-subsidization between savers and borrowers. The more its lending is underperforming and cross-subsidized, the lower its performance as a provident fund for the taxed employees. Its subsidized lending also hampers the growth of private mortgage lending. These features suggest the need for strategic choices, depending on whether other sources for low-income housing finance may emerge, according to the level of macroeconomic stability, and the health of the mortgage finance system (historically plagued by inefficiencies and high risks in the Philippines), as well as the capacity to find mechanisms to lend to low-income households. Even if the case for such a special lending circuit based on mandatory savings is confirmed, the issues of default leakage and cross-subsidization need to be addressed.

Nigeria National Housing Fund

The NHF was established in 1992 with the objective of facilitating the provision of houses for Nigerians at affordable prices, ensuring a constant supply of loans, and providing long-term loans to mortgage institutions for on-lending to contributors. Nigerians earning Naira (N)3,000 or more per year (about \$24 per year) are required to contribute 2.5 percent of their monthly income to the fund. This is a very low threshold—it has not been revised since the inception of the system—which should result in including the near totality of the salaried workers in Nigeria. The fund could also receive voluntary contributions, thus allowing non-salaried workers to participate in it. In addition, commercial banks are theoretically required to invest 10 percent of their loans and advances, and insurance companies are to contribute 10 percent of their non-life funds and 20 percent of their life funds, but these provisions have not been enforced. Contributions earn a rate of interest of 2 percent. Loans are channeled through a specialized circuit comprising the

Federal Mortgage Bank of Nigeria, which runs the fund, and a network of specialized institutions. Contributors, and only them, can request a loan after having contributed for at least six months. The amount of the loan is not related to the amount of contributions, but is subject to a ceiling of N5 million. Interest rate is set at 6 percent, well below market rates, which were 20 percent (all in cost) in early 2006.

The scheme has had little success. It disbursed a cumulative amount of N5 billion in 13 years in individual loans.⁵ The number of beneficiaries were 5,250 at the end of 2005, compared to 2.8 million contributors—or a ratio of 540:1. NHF funds are effectively accessible mostly by high-middle-income groups, which can afford the mortgage payments on the loan amounts not covered by the NHF funds and can access bridge financing before NHF funds are allocated—a process that can take more than two years. Partly because of the low probability of benefiting the system, the actual number of contributors is moreover far below the theoretical scope—in the range of 12 million employees. Furthermore, it is said that diversions of contributions from their legal use take place.⁶ Voluntary contributions are insignificant.

A new legislation has been drafted for NHF, which could partially remedy the flaws of the system in two key aspects. First, the fund would be given the structure of a trust, and administered by a board of trustees compelled to stronger accountability obligations than now. Second, the relationship between contributors and borrowers would be changed, possibly limiting the reverse subsidization mechanism: the wage level above which salaried workers would have to contribute would be raised to seven times the minimum wage, and NHF would be entitled to lend to noncontributing, low-income households. The law, however, would set interest rates at below the market level for both for savings and lending, thus giving a new legal comfort to a still potentially regressive subsidization scheme.

5. And N8 billion for developer finance.

6. Igbino 2005.

