Promoting Access to Affordable Housing Finance: Morocco’s Fogarim Guarantee Fund and U.S. Housing Finance

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Abstract

Affordable housing is a pervasive challenge throughout the world. In response, governments have formulated housing policies and executed strategies and programs to promote inclusive access to affordable housing for all, including the poor and most vulnerable. The Kingdom of Morocco began adapting its housing finance market in 2004 with the creation of the Fogarim Guarantee Fund program. The Fogarim program facilitates access to housing credit for Moroccans with modest and irregular incomes. Although the circumstances related to accessing affordable housing are different in Morocco, the Fogarim guarantee is not all too dissimilar from guarantees in the United States. Through innovative guarantee mechanisms, Fogarim has accomplished measured success in expanding lending to borrowers with low and intermittent incomes. More than a decade later, the Moroccan experience presents an important opportunity to exchange...
Abstract (continued)

practices on sovereign guarantee mechanisms and to evaluate their role in promoting access to affordable housing, especially as the United States continues to assess reforms to its own housing finance system.

Introduction

Housing is a capital-intensive necessity. Compared with food and clothing, the higher cost of shelter is a central constraint to socioeconomic development, threatening the sustainability of communities worldwide. The Kingdom of Morocco and the United States of America are no exception. In both countries, access to affordable housing is segmented, often out of reach to households with low and irregular incomes. Although Morocco, a lower-middle-income country, has experienced increased income and falling unemployment over the past 15 years, the persistence of informal settlements and a housing deficit have greatly hindered the livelihoods of low-income Moroccan households (al-Aissami, 2012). By comparison, U.S. households on the whole have had income gains and reduced mortgage costs since the 2008-to-2009 financial crisis (JCHS, 2015). Such progress has been blunted, however, because many low-income households derive their incomes irregularly and pay more than 30 percent of their total budget to housing costs (Federal Reserve, 2014; U.S. Census Bureau, 2015).

For the governments of Morocco and the United States, housing finance has been central to promoting access to affordable housing for all. For single-family and multifamily housing, sovereign guarantee mechanisms have been central to both countries’ housing policies. The following discussion examines three sovereign guarantee programs—Morocco’s Fogarim Guarantee Fund, and the Mortgage Insurance for One to Four Family Homes program and the Single Family Housing Guaranteed Loan Program in the United States. Each program shares the common objective of expanding financial access to affordable housing for lower-income households, but they have key differences.

Specifically, the Fogarim model has distinguishing features such as lending to borrowers with intermittent sources of income, methodologies in appraising borrower credit, and the use of life insurance in support of collateral. From implementation to evaluation, the Moroccan experience with Fogarim underscores innovations and a common purpose in promoting access to affordable housing finance.

Challenges to Financing Affordable Housing in Morocco

Since Morocco gained independence in 1956, its housing sector has changed considerably. The country—uniquely situated at the intersection of European, Arab, and African states—rapidly urbanized at a greater rate than its regional counterparts. Whereas 3 million Moroccan citizens lived
in cities in 1956, an estimated 20.4 million Moroccans were urban dwellers in 2015 (UN DESA, 2014). In becoming a majority-urbanized country, from 50.6 percent in 1993 to 60.2 percent in 2015, Morocco has experienced increased pressures providing affordable housing. Population growth has intensified, and more people have migrated to cities in search of greater economic opportunities.

Such rapid growth and urbanization has led to increased demand for affordable housing. Land has become scarcer and building materials costlier. Meanwhile, across Moroccan cities, the dominant housing tenure shifted from rental, at 53.1 percent of all urban housing units in 1971, to homeownership, at 65.5 percent in 2011 (HCP, 2011). Such factors ultimately contributed to the formal housing supply's being unable to meet the burgeoning urban demand. The supply deficit and the resulting affordability gap forced low-income households to meet their housing needs informally (MGI, 2014).

Despite urban household incomes' being on average higher than their rural equivalents, the most modest of formal, urban housing units were out of reach for low-income Moroccans. Consequently, most of these households pursued self-built housing as the only viable option. Not only was such housing often deemed illegal by government authorities, but the lack of affordable housing also led to the proliferation of substandard dwellings typical of slums. In 2001, more than 4 million Moroccans resided in informal settlements, with substandard housing concentrated in more than two-thirds of Morocco’s cities (Mohammed VI, 2001). By 2004, slumdwellers represented nearly 1 in 10 of the urban households in Morocco (Lahlou, 2014). Problems only deepened, as nearly 1 in 4 housing construction projects was informal (Oxford, 2014). Even as housing delivery improved, 40 percent of completed housing stock added to the growth of slums each year. With access to affordable housing constrained and low-income households relegated to informal housing, the government became the nation's intervener of last resort.

Access to affordable housing finance is fundamentally feasible for Moroccans with low and irregular incomes. In 2015, for example, the cheapest new house built in Morocco by a formal developer was surveyed at $14,478 U.S. dollars (CAHF, 2015). With the gross national income per capita at $3,020 U.S., the debt-to-income (DTI) ratio can be calculated at 4.79 to 1. Such figures demonstrate the potential for Morocco to achieve financing for the cheapest new house built by a formal developer relative to the average urban household's income (CAHF, 2015). A housing loan with a 15- to 30-year term at the 2015 market interest rate of 5.5 to 6.5 percent could enfranchise lower-income households with financial access to affordable housing (DTFE, 2015a). The extension of such credit was not available, however, for slumdwellers and others with modest and intermittent incomes. To provide such access to affordable housing finance, the government needed to pursue reforms that prioritized housing and adapted its housing finance system.

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1 For reference, between 2007 and 2011, the homeownership rate in Morocco as a whole was 74.5 percent, with the rental rate at 15.5 percent and other at 10.0 percent (HCP, 2011).

2 DTI is a common metric mortgage lenders use to assess borrowers' means of repaying a housing loan's principal and interest.
Adapting Morocco’s Housing Finance System

Morocco’s housing sector required reforms to address the growing challenges. The accession of King Mohammed VI in 1999 compelled housing finance reforms. Such reforms precipitated what would become an augmented constitutional mandate for the government in “facilitating access to decent housing for all Moroccans” (Kingdom of Morocco, 2011: Article 31).³

As he began the second year of his rule, King Mohammed VI spoke of the “complex and multidimensional nature” of housing (Mohammed VI, 2001: 1). In his annual speech to commemorate the anniversary of the restoration of the Moroccan monarchy, the King conceded the “failures of responsible authorities” in the “fight” for adequate housing for all Moroccans (Mohammed VI, 2001: 2). Such failures, he posited, had hindered the sustainable development of the country in socioeconomic and environmental terms. To rectify these issues, the King outlined several promising projects to expand social housing delivery, eradicate slums, and promote increased access to housing finance. Together, these projects would help reverse the “hideous aspects of slums” (Mohammed VI, 2001: 1).

Housing finance reforms required, in the words of King Mohammed VI, “resourcefulness to find new funding sources that are stable and reliable” (Mohammed VI, 2001: 3). The housing finance system had been anything but financially sustainable for the government. From 1968 to 2004, Morocco’s financial sector was the principal actor and arbiter for housing finance activities. With few exceptions, the government had two main features in housing finance: (1) the provision of subsidies on housing loans in the form of interest rate rebates and (2) advances to public servants with salaries below a certain threshold. Despite the popularity of the former, concerns persisted about the effectiveness of interest rate rebates that served 120,000 households at the cost of $1 to 1.5 billion U.S. for the 36-year period (Talby, 2014). Critics argued government housing programs insufficiently targeted the most disadvantaged households. They also charged that the complicated administration of the process limited both accountability of the progress made and government leverage in expanding access to housing finance for low-income households.

Discussions on prospective reforms to achieve effective government-provided housing finance focused on minimizing bottlenecks that restricted access to housing credit. Mechanisms were needed to provide innovative banking alternatives with flexible guarantees and collateral requirements for those living in poverty and those working in the informal sector (Martin and Mathema, 2008). The financial sector had excluded lending to households with low and irregular incomes because of perceived repayment risk. As a result, prospective borrowers had limited access to banking services. Such low bank penetration further marginalized borrowers and reinforced a culture of unfamiliarity and uneasiness with housing finance products. Because of this perceived risk and unease in lending to low-income slumdwellers, higher interest rates and loan servicing costs further excluded such borrowers with their smaller loan sizes. The government’s solution was to develop a sovereign guarantee fund with credit risk sharing to benefit these individuals with modest and irregular incomes.

³ After the promulgation of five previous iterations, the 2011 Constitution enumerated—for the first time—the duty of the government “to work for the mobilization of all means available to facilitate the equal access of citizens [to] the right to decent housing” (Kingdom of Morocco, 2011: Article 31).
Fogarim Guarantee Fund: Objectives, Design, and Performance

In October 2004, the government created the Fogarim Guarantee Fund program. Fogarim, an acronym for the French, “Fonds de Garantie en faveur des populations à Revenues Irréguliers et/ou Modestes,” is explicit in stating its purpose to facilitate access to housing credit for low-income and nonscheduled Moroccans (Talby, 2014). Fogarim guarantees loans granted by banks to finance housing, whether through purchase, acquisition of land, or construction. To achieve its goals, Fogarim’s guarantee encourages banks to extend financing for home loans at favorable terms to targeted populations. Such a commitment of government resources for the Fogarim guarantee required “resourcefulness in identifying new funding sources” (Mohammed VI, 2001: 3).

Since the mid-1990s, the Moroccan government had invested heavily in improving housing through national programs. These programs, however, operated largely through the provision of subsidies to mass housing developers and through housing credits. The Fogarim guarantee mechanism is unique. It guarantees lenders insurance on 70 to 80 percent of the principal and interest of housing loans in the event of borrower default (al-Aissami, 2012). Such a commitment of government resources requires not only political capital but also a pragmatic financing strategy.

Fogarim was endowed with a budget of $60 million U.S. from the Housing Solidarity Fund (FSH), renamed the Solidarity Fund for Housing and Urban Integration (FSHIU) in 2014. FSH was created in 2002 with the mandate of increasing financial resources allocated to housing. Its principal funding mechanism, through a cement tax, reduced financial strain on government financing to 40 percent from the general budget (Ali et al., 2012). Concurrent with the creation of Fogarim in 2004, the government doubled the cement tax to 10 percent per kilogram and then increased it to 15 percent in 2013 (Chihab, 2016; DHSAF, 2010). To further alleviate pressures on direct government financing, in 2009, risk premiums were instituted (CAHF, 2015). Moreover—as exhibit 1 illustrates—in 2013, the government introduced additional taxes on building materials, with a 10-percent tax on concrete iron and a 30-percent tax on sand to ensure “diversified” resources in “strengthen[ing] the sustainable mobilization of resources to finance housing” (Chihab, 2016: 16).

To participate in the Fogarim guarantee program, approved lenders must evaluate borrowers for Moroccan citizenship, engagement in income-generating activities (under the maximum amounts proscribed by the government), possession of no additional properties, and verification that the last loan payment is made no later than the borrower’s 60th birthday. Borrowers must also submit documentation of proper land title—sometimes a challenge, given the opaqueness of tenure security in informal settlements—and submit to a life insurance policy in which the lender is beneficiary. Finally, borrowers must also have the downpayment to qualify for what is typically 70 to 80 percent loan-to-value (LTV) financing provided by Fogarim guaranteed lenders. Acquiring the

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4 The government created two guarantee programs in the adaptation of Morocco’s housing finance system. The second program, Fogaloge, builds on the previous housing finance system’s provision of advances for civil servants seeking access to housing loans. Together, Fogarim and Fogaloge are the two guarantee funds constituting the umbrella fund Damane Assakane. In 2014, Fogarim represented 85.4 percent of Damane Assakane in terms of loans and 75 percent in terms of dollar amount. (DTFE, 2014).
money for a downpayment often entails accumulating savings, borrowing from family and friends, or seeking community-based financing from local organizations, such as microfinance institutions (MFIs).

MFIs are important actors in the Fogarim process. They can act as a key financing source for the prospective Fogarim borrower's downpayment, although their products are often subject to shorter terms and higher interest rates, such as a 3-year loan at an interest rate of 19 percent (Martin and Mathema, 2008). Also, they can be subcontracted by lenders to assist in the provision of credit through social collateral and income appraisals through borrower reputation assessments, which is especially helpful given the closeness of MFIs in their work at the community level.

Once the loan application is complete, the lender assesses the merits of the application and either approves or denies the loan. If approved, the loan is validated by the Central Guarantee Fund (CCG). The borrower then uses the financing to acquire housing, whether a social housing unit, condominium, or plot of land. Nearly all Fogarim guaranteed loans—99 to 100 percent of the total—are used for home purchase, rather than land acquisition or construction.\(^5\) Should the borrower miss nine monthly repayments, foreclosure processes can be legally initiated, and lenders can then file a claim for the defaulted loan. As a result, the lender can petition for court action to foreclose. Default and foreclosure do not occur often. The Fogarim default rate was 4.8 to 5.6 percent from 2012 to October 2014 (Bounakhla, 2014). In instances of default, collateral is liquidated. CCG uses funds from the FSHIU to compensate the lender for the 70-to-80 percent guarantee of the principal and interest of the loan.

\(^5\) Given the prevalence of incremental self-building for housing in Morocco, lenders are reluctant to approve these housing loans. In 2014, Fogarim assessed construction-housing loans to be 2.4 times riskier than the home-purchase and land-acquisition typologies (Bounakhla, 2014).
Fogarim has achieved measured success, especially compared with the former interest rate rebate system. From its inception in 2004 to 2014, Fogarim guaranteed 117,000 loans at an average loan size of $15,749 U.S. (DTFE, 2014). As a result, Fogarim has assisted an estimated 510,000 Moroccans with an overall market share of 20 percent within the housing loan market while keeping its nonperforming loans at a relatively low rate, given the risk of the targeted borrower segment (The World Bank, 2015). Its loan size exceeds the minimum cost of $14,478 U.S. for a formal housing unit in the country (CAHF, 2015). Of further note, the government has exerted significant regulatory leverage in requiring Fogarim loans have a fixed rate, with longer maturities capped at 25 years. Fogarim has not only furthered the inclusion of those with modest and irregular income, it has enabled more women to access affordable housing finance. At the end of 2013, the majority of Fogarim guaranteed borrowers were women (Bounakhla, 2014).

Fogarim has accomplished much in facilitating access to affordable housing finance for Moroccans, especially evident when comparing Fogarim with the former provision of interest-rate rebates. As one CCG official remarked, "Unlike subsidies, [the] Guarantee Fund provides significant leverage as it allows us to engage, in the case of Fogarim, up to 8 times the availability of funds, which multiplies the effect in terms of beneficiaries and credit volume" (Haimoud, 2008: 1).

As demonstrated in exhibit 2, Fogarim has nearly exceeded the number of beneficiaries served by interest-rate rebates and is allocating capital in a more effective and targeted manner.

Despite significant progress, Fogarim still has much to accomplish, particularly related to risk management and the prudent use of financial resources in expanding participation in the program. The government has established an actuarial premium system to promote financial sustainability and broaden access for more borrower and lender participation. Lending is concentrated. From 2013 to 2014, 95 percent of Fogarim loan guarantees derived from three banks (DTFE, 2014). In terms of geography, Fogarim benefited households in 150 towns and localities from different regions throughout the Kingdom in 2014. The largest cities do not have the most housing loans; Casablanca, Temara, Meknes, Fez, Tangier, and Fes comprised only 65 percent of total loans in 2014 (DTFE, 2014). Finally, the government is developing mechanisms to enable refinancing and to mobilize funding from capital markets for additional financial resources in support of promoting access to affordable housing finance in Morocco.

### Exhibit 2

<table>
<thead>
<tr>
<th>Comparing Interest-Rate Rebates With the Fogarim Guarantee Fund Program</th>
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<tbody>
<tr>
<td><strong>Beneficiaries</strong></td>
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<tr>
<td>Interest-rate rebates (1968–2004)</td>
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<tr>
<td>Fogarim Guarantee Fund (2004–2014)</td>
</tr>
</tbody>
</table>

6 Such efforts to facilitate investment from capital markets into Fogarim guaranteed loans is similar to Ginnie Mae’s work in channeling global capital into securitized mortgages insured by the U.S. government.
Comparison With United States Insurance and Guarantee Housing Programs

The objective of the FogoRim Guarantee Fund to extend access to affordable housing finance to borrowers with low and irregular incomes is similar to two guarantee and mortgage insurance programs in the United States. Both the Mortgage Insurance for One to Four Family Homes program of the Federal Housing Administration (FHA) and the Single Family Housing Guaranteed Loan Program of the Rural Housing Service (RHS) seek to expand access to lower-income households that lack mortgage credit. Like FogoRim, these programs guarantee compensation to lenders in the event that target households default on their loans. Despite similarities among these three programs, differences exist among their operational and funding mechanisms.

With origins stemming from the Great Depression, the FHA program, authorized under Section 203(b) of the National Housing Act, insures approved lenders against losses on mortgage loans. In contrast to FogoRim, FHA insures fixed-rate as well as adjustable-rate mortgages (ARMs). FHA is bound to a ceiling, however, in which a maximum 30 percent of ARMs can be insured. In addition, borrowers must have a credit score greater than 500 and a maximum LTV of 96.5 percent (HUD, 2015b). This allows cash-poor borrowers to access housing finance with a downpayment of as little as 3.5 percent of the total loan.

In the event of default, FHA compensates lenders for the unpaid principal, missed and accrued interest payments, and taxes and fees incurred on the loan. This differs from FogoRim’s provision of 70 to 80 percent of unpaid principal and interest on the loan. In the event of default, recorded at 2.3 percent for FHA single-family loans in 2012 (the lowest since before 2000), lender compensation comes from FHA’s Mutual Mortgage Insurance Fund (MMIF; Goodman, Seidman, and Zhu, 2014).

Funding for the MMIF is another key difference between FogoRim and the FHA 203(b) program. Since its inception in 1934, FHA has been largely self-sustaining in financial terms. As indicated in exhibit 3, it operates with upfront and annual mortgage insurance premiums (MIPs), as of this writing, at 1.75 and 0.85 percent, respectively. Borrowers pay MIPs in addition to their monthly principal and interest (Jones, 2013). Such funding reduces as the borrower repays the loan and the outstanding LTV is minimized. These MIPs are essential to the financial sustainability of this FHA program and have mostly allowed for the program to pay for itself for more than 80 years.

Enumerated by Section 502 of the American Housing Act of 1949, the Single Family Housing Guaranteed Loan Program facilitates access to low-income households seeking to purchase and refinance housing in rural areas of the United States. Unlike FogoRim, this RHS program is open to moderate-income borrowers having at or below 115 percent of the Area Median Income. In addition, lenders must assess and determine that approved borrowers have “decent credit history” (Foote, 2010).

### Exhibit 3

Comparison of Fogarim, FHA, and RHS Single-Family Guarantee Programs

<table>
<thead>
<tr>
<th></th>
<th>Fogarim</th>
<th>FHA</th>
<th>RHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program inception</td>
<td>2004</td>
<td>1934</td>
<td>1949</td>
</tr>
<tr>
<td>Targeted borrowers</td>
<td>Low and intermittent incomes</td>
<td>Cash-poor and lower credit</td>
<td>Rural with low and moderate incomes at or below 115% of Area Median Income</td>
</tr>
<tr>
<td>Loan type and term</td>
<td>25-year maximum fixed rate</td>
<td>30-year maximum fixed or adjustable rate</td>
<td>30-year fixed rate</td>
</tr>
<tr>
<td>Maximum LTV</td>
<td>100%</td>
<td>96.5%</td>
<td>100%</td>
</tr>
<tr>
<td>Guarantee</td>
<td>70–80% of unpaid principal and interest&lt;sup&gt;a&lt;/sup&gt;</td>
<td>100% of unpaid principal, delinquent interest due, taxes, advances, and fees</td>
<td>Up to 90% of original principal, interest up to default, accrued interest 90 days after liquidation, advances, and fees</td>
</tr>
<tr>
<td>Funding</td>
<td>Annual risk premiums, 0.25–0.65%&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Upfront and annual mortgage insurance premiums, 1.75 and 0.85%, respectively&lt;sup&gt;c&lt;/sup&gt;</td>
<td>Upfront guarantee fee of 2.0 and 0.5% if refinanced</td>
</tr>
</tbody>
</table>

FHA = Federal Housing Administration. LTV = loan-to-value ratio. RHS = Rural Housing Service.
<sup>a</sup> Lenders are guaranteed an additional 10 percent if the borrower lives in an informal settlement through the “City without Slums” program.
<sup>b</sup> These premiums fluctuate, depending on the LTV.
<sup>c</sup> After such loans reach 78 percent LTV and premiums have been paid for at least 60 consecutive months, depending on loan type and term, future annual premiums are cancelled.

Similar to Fogarim guaranteed loans, RHS guarantees only 30-year fixed-rate mortgages in this program. The RHS 502 loans are funded in a different manner than Fogarim and FHA’s 203(b). RHS charges lenders an upfront guarantee fee of 2.0 percent of the loan amount and another 0.5 percent should the borrowers refinance their mortgage (Foote, 2010). At their discretion, banks can and often do transfer these guarantee fees to the borrower. In the event of default, RHS compensates lenders up to 90 percent of the original principal amount of the loan. Such compensation is tiered, depending on the amount paid down by the borrower.

Fogarim allows lenders to penalize prepayments by borrowers, whereas FHA and RHS programs prohibit such actions. Unlike Fogarim’s high lender concentration among banks, FHA-insured lenders are more diffused between banks and nonbank institutions (Goodman et al., 2014). This trend has become more accentuated since the 2008-to-2009 financial crisis. In terms of defaults, Fogarim is an outlier. To enfranchise those with irregular income, Fogarim requires nine missed loan repayments for courts to order foreclosure, whereas the lenders in the FHA and RHS programs can initiate foreclosure proceedings within 30 days of missed borrower payments. RHS does not have a limit for the loans it guarantees; Fogarim and FHA do. Fogarim permits collateralization with housing land title and life insurance—covering the loan period—whereas FHA and RHS require housing deeds.
Lessons Learned From the Fogarim Guarantee Fund

The case of Fogarim in Morocco underscores the significance of inclusive housing finance in bridging income inequality and promoting sustainable urban development. Access to affordable housing finance has strengthened Morocco’s overall housing sector and promoted long-term socioeconomic development (Talby, 2014). Persons with modest and intermittent incomes can go to banks across the country and not be turned away in meeting their housing needs. Because of Fogarim and related housing sector reforms 10 years ago, Morocco now has one of the most developed housing markets in the region (DTFE, 2015b).

Fogarim is unique with its focus on financing housing for Moroccans with irregular incomes. Households with fluctuating incomes exist in the United States. In a 2013 survey on U.S. economic well-being, the Federal Reserve found 10.1 percent of U.S. households reported that their incomes fluctuated “quite a bit” from month-to-month (Federal Reserve, 2014). Of those respondents, 41.6 percent said this was because of irregular work schedules, 12 percent said because of seasonal employment, and 14.7 percent said because of periods of unemployment (Federal Reserve, 2014). Furthermore, households with irregular incomes often overlap with the lowest-income earners in the U.S. workforce (Golden, 2015). In this respect, Fogarim’s promotion of access to these borrowers underscores a subset of households often overlooked in U.S. housing finance.

Although the contexts of accessing affordable housing are different in Morocco and the United States, it is evident that valuable lessons and reforms remain to be learned by both countries. Although the United States has no comparable housing deficit, constrained access to affordable housing persists (UN-Habitat, 2011). The Fogarim program demonstrates the need for continued monitoring and evaluation to better inform housing finance reform in the United States. The persistence of affordable housing issues in the United States requires innovative approaches to achieving a sustainable and inclusive housing finance system.

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