Haiti Home Ownership and Mortgage Expansion (HOME) Program

USING PAY-FOR-RESULTS TO CATALYZE AFFORDABLE HOUSING DEVELOPMENT:

A CASE STUDY OF THE HAITI HOME PROGRAM

January 2021

This document was produced for review by the United States Agency for International Development (USAID), and specifically for the Economic Growth and Agricultural Development Office of USAID/Haiti. It was prepared by the World Council of Credit Unions (WOCCU) USAID/Haiti Homeownership and Mortgage Expansion program (HOME) program (Award No: AID-521-A-15-00011). The principal leader and writer of this case study is Denise Mainville. The views expressed in this document are the sole responsibility of World Council of Credit Unions and do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

TABLE OF CONTENTS

PREFACE ..... **ii**
List of Acronyms ..... **iii**
EXECUTIVE SUMMARY **1**
INTRODUCTION **2**
Haiti's housing crisis: A problem with no easy solution 2
Pay-for-Results: A new way of "doing development" 3
Proof of Concept: The remarkable achievements of Haiti HOME 4
THE HOME PROGRAM'S PFR APPROACH **6**
Overview: Moving from concept to creation 6
HOME's approach: Give me a lever, and I can move the private sector 7
Supply-side: Catalyzing a supply of affordable housing 9
Identification and recruitment of property development partners 9
Incentive development 11
Property development 16
Demand-side: Creating effective demand for housing 20
Motivating commercial banks to lend down market 20
Motivating credit unions to develop a housing portfolio 22
KEY TAKEAWAYS ON PfR **24**
HOME's transformational achievements 24
PfR success factors 26
Lessons for donors and program implementers 26
CONCLUSION **27**
REFERENCES ..... Error! Bookmark not defined.

PREFACE

The Haiti Homeownership and Mortgage Expansion program (HOME) program was a five-year, USD 10-million USAID-funded initiative, implemented by World Council of Credit Unions (WOCCU), that sought to use a Pay-for-Performance, or Pay-for-Results, model, developed in collaboration with the Affordable Housing Institute (AHI), to catalyze the development of an affordable housing market. This case study is intended to leverage the experience of Haiti HOME to showcase both the potential of Pay-for-Results to achieve meaningful development outcomes and the challenges inherent in designing and implementing a Pay-for-Results initiative. This case study analyzes the program's methodology for designing its Pay-for-Results incentive structure, its results, and lessons learned. The case study draws upon internal project documents, information obtained through interviews with project stakeholders, and additional resources that are detailed in the References section.

LIST OF ACRONYMS

AHI	Affordable Housing Institute
APHI	Association des Promoteurs Immobiliers d'Haiti
EDGE	Excellence in Design for Greater Efficiencies
HFHI	Habitat for Humanity International
HOME	Home Ownership and Mortgage Expansion
P4P	Pay for Performance
PfR	Pay for Results
USAID	United States Agency for International Development
WOCCU	World Council on Credit Unions

EXECUTIVE SUMMARY

World Council of Credit Unions' (WOCCU) Haiti Homeownership and Mortgage Expansion (HOME) program created a new market for affordable housing by deploying an innovative Pay-for-Results Results (PfR)[1] scheme catalyzing the supply and demand sides of the housing value chain. Implemented from 2015-2020, HOME was a USD 10-million USAID-funded initiative. This case study showcases how Haiti HOME successfully deployed PfR to achieve meaningful development outcomes and illustrates the challenges in designing and implementing a PfR initiative.

Beyond providing proof of concept that PfR works, HOME transformed Haiti's affordable housing sector. On the demand side, the program developed Haiti's first credit union-issued mortgage product, offering a new solution to lower-income households typically not served by commercial banks when it comes to long-term financing. On the supply side, it stimulated the development of an affordable housing industry by incentivizing private sector investment in affordable housing supply and supporting affordable housing property developers to develop capacity to implement international building best practices. Overall, the program leveraged more than USD 25.9 million in private sector funds utilizing less than USD 3 million in publicly funded incentives—a ratio of 9:1.

HOME was initiated with the objective of catalyzing the supply and demand sides of the housing value chain to create a sustainable market for affordable housing. It was an effort to jumpstart a developmental process that would, over time, contribute to reduce Haiti's housing deficit of nearly 500,000 houses, as over 180,000 were lost in the 2010 earthquake. In addition to those losses, WOCCU, in collaboration with Affordable Housing Institute (AHI) and Habitat for Humanity International (HFHI),[2] identified many fundamental constraints in Haiti's home delivery system that cannot be resolved in the short or medium timeframe. Primary among these constraints are unclear property rights and the general population's limited income level that distort Haiti's housing market. These constraints paired with the lingering effects of the earthquake resulted in a significant number of people, especially the urban poor, living in unsafe, unhealthy conditions. The HOME program was not designed to finance construction; instead, it sought to leverage a new concept—PfR—that had shown promising results in sectors such as health and agriculture but had not yet been utilized in the housing sector.

PfR is a development approach that rewards private sector partners for achieving pre-specified outcomes, rather than funding their efforts to achieve outcomes. When successfully deployed, PfR incentives offset investment risk, mobilizing private sector investment into potentially profitable but under-developed markets while leveraging the private sector's entrepreneurial initiative, know-how, creativity, and financial resources to achieve mutually agreed-upon objectives.

Following a comprehensive market analysis, the HOME program designed a two-pronged approach to incentivize commercial firms to invest in the development of a market for affordable housing. On the supply side, the program provided incentives to bring property developers into the affordable housing space, with the intent of increasing the stock of affordable housing available to low- and middle-income buyers. On the demand side, HOME

[1] Pay for Results (PfR) is also referred to as Pay for Performance (P4P) in HOME program reports and materials. "Pay for Results (or performance/success/outcomes) is an umbrella term for initiatives that pay upon accomplishment of results rather than efforts to accomplish those results." (Camp, Lawrence, et. Al, *Pay for Results in Development – A Primer for Practitioners*. Palladium and USAID. January 2018)
[2] HFHI was a HOME partner through May 2018

worked to increase the availability of mortgage financing from financial institutions for low- and middle-income buyers. While the PfR initiative was primarily intended to "pull" the private sector into the affordable housing market through the provision of attractive incentives, the HOME program also used "push" activities such as grants and technical assistance to help the private sector partners build capacity where needed. The approach, results, and lessons learned from these supply- and demand-side activities are detailed in this case study. The case study concludes with observations on these transformational achievements, identification of factors underpinning the success of the initiative, and lessons for donors and implementers interested in using a PfR approach.

INTRODUCTION

Haiti's housing crisis: A problem with no easy solution

"There was no way the government could spend its way out of this crisis."

-Claude Clodomir, Haiti HOME Chief of Party

October 2015, Port-au-Prince, Haiti. Claude Clodomir was in a difficult situation. As Chief of Party for the HOME program, he was responsible for an innovative U.S. government-supported activity that aimed to reduce Haiti's massive housing crisis by piloting a private sector-led model to jumpstart a housing market for low to mid-income households. This crisis had grown to extreme proportions since the 2010 earthquake that destroyed approximately 180,000 houses in the country's capital and largest city, Port-au-Prince, adding to a pre-existing backlog of approximately 300,000 houses (WOCCU 2016). Yet, Clodomir had limited options by which to achieve the program's objectives of catalyzing development of a sustainable market for affordable housing by engaging investment on both the supply and demand sides of the housing value chain. The Haiti HOME program agreement stipulated that construction expenditures would not be reimbursed, eliminating traditional means of supporting the creation of new housing capacity, such as directly hiring U.S.- or Haiti-based construction firms or providing "bridge loans," loan guarantees, or grants to companies or non-profits to build the needed homes.[3] Indeed, this provision was included in large part because initiatives such as these had not led to scalable models that would impact the provision of housing to the average Haitian. Furthermore, while less intrusive, even indirect supports for housing development have potential to distort the construction and housing market and crowd out private sector builders. The highly subsidized nature of public housing initiatives was also problematic, as neither the pace of building nor long-term maintenance of the facilities could be sustained without continual government support (WOCCU 2016).

The overriding problem with such initiatives, however, was that they lack potential to make a meaningful dent in Haiti's vast housing deficit (WOCCU 2018). As Clodomir himself was aware, "[t]here was no way the government could spend itself out of this crisis," he said. The nearly USD 7 million[4] that USAID had committed to WOCCU indicated USAID's confidence that the program could come up with a workable solution to the problem and make a meaningful impact. Clodomir knew he had to find a better way to tackle this immense

[3] This is a standard provision (M.22) in USAID contracting.
[4] Initial funding was nearly $7 million for three years. A 2018 extension extended the project to five years and increased its overall budget to more than $10 million.

challenge—one that could meet USAID's high expectations while overcoming the shortcomings of traditional funding approaches.

Pay-for-Results: A new way of "doing development"

"If you can't build, incentivize."

-Lawrence Camp, Senior USAID Advisor

Searching for ideas, Clodomir reached out to Lawrence Camp, a senior USAID advisor who initially helped to conceptualize the HOME program. Camp made a seemingly simple recommendation, which opened a new world of possibilities to Clodomir. "If you can't build," Camp told him, "Incentivize."

Camp was referring to an approach—Pay for Results—that had been making inroads in the development community but had not yet been tried in the housing sector. The approach seemed risky—it was new and unrefined, and it relied entirely on the private sector for its success. That said, it was also intriguing; if successful, PfR could offer a replicable model for continued investment in the housing sector with the potential to sustain and grow well beyond the HOME program's implementation period. Implementing such an approach in Haiti would truly be putting it to the test, as the country's housing sector is challenged by numerous constraints that conspire against efforts to make progress towards many of the country's housing goals.

Pay-for-Results[5]

Pay for Results (PfR) is a development approach that rewards private sector partners for their success in achieving pre-specified outcomes, rather than funding their efforts to achieve outcomes (Camp et al). When successfully deployed, PfR incentives temporarily offset investment risk, catalyzing private sector investment into potentially profitable but un-developed or under-developed markets, while leveraging the private sector's entrepreneurial initiative, know-how, creativity, and financial resources to achieve mutually agreeable objectives.

PfR is radically different from traditional development approaches in that it pays only for the achievement of pre-defined results rather than funding inputs or efforts made toward reaching results (Camp et al). Traditional development approaches seek to address development problems by motivating government, non-governmental, and private entities to undertake activities on the donor's behalf, providing financial assistance (such as grants and cost-reimbursement) and in-kind support such as training and technical assistance to support the activities. Under traditional development approaches, the entities receiving the support are responsible for carrying out the strategies and solutions that have been designed by the donor or its implementer, working under their guidance and support.

PfR, in contrast, turns responsibility for designing and implementing solutions over to participating entities (partners) who are paid on the basis of their success at achieving pre-defined outcomes. A "pure" PfR approach provides an incentive to its participants—often private sector firms—to achieve the pre-defined goals. However, it does not prescribe the pathway by which those goals must be achieved, nor does it make up-front payments to support the activities. The commitment to pay only for its participants' results puts the risk-taking and responsibility squarely in the participants' hands, but also gives them control over

[5] For background on the Pay for Results approach, see Camp, Lawrence, et. al. Pay for Results in Development – A Primer for Practitioners. Palladium and USAID, January 2018. (https://www.usaid.gov/sites/default/files/documents/1865/Pay_for_Performance_Primer_Final.pdf)

the strategies to achieve those results. In a hybrid approach, which the HOME program ultimately used, the "pull" of results-based incentives is balanced by "push" activities that provides support (such as technical assistance and limited grant funding) in combination with financial incentives. These "pull" and "push" elements work together to motivate private sector actors to leave their comfort zone while building their capacity to succeed in unfamiliar markets.

The PfR approach seeks to harness private sector entrepreneurial dynamism to solve longstanding development challenges and has the potential to be more effective, sustainable, and cost-efficient than traditional development approaches. Broadly put, PfR initiatives de-risk investment into potentially profitable markets whose development is inhibited by supply, demand, or enabling environment constraints that make such investments risky enough to curtail them in the absence of the PfR initiative. Ideally, private sector investment that is motivated by PfR initiatives will strengthen the market and create conditions for sustained market activity by the time the PfR incentive is phased out. PfR initiatives have the best potential for success in circumstances where the private sector sees, or can be convinced of, an underlying business interest for long-term involvement in the market, and where they have the capacity and motivation, if properly incentivized, to realize and sustain profitable engagement in the market over time (Mainville and Narayan 2017).

PfR: The Players

The donor: The entity that funds a PfR initiative. In the case of Haiti HOME, the donor was USAID.

The program implementer: The entity contracted by the donor to design and manage the PfR initiative. In the case of Haiti HOME, the primary implementer was WOCCU, with the Affordable Housing Initiative and Habitat for Humanity International serving as partners.

Private sector partners (or partners): The entities that participate in a PfR initiative in pursuit of the PfR incentive. For Haiti HOME, partners included property developers, commercial banks, and credit unions.

Following his conversations with Camp, Clodomir recognized the potential of the PfR approach. Yet, as a new strategy for "doing development," there was little guidance available about how to develop a PfR initiative, and there was certainly nothing tailored to a context like Haiti's affordable housing sector. Indeed, Clodomir was aware of no other examples in which a PfR approach had been undertaken either in Haiti or in the housing sector in another country. If he were to lead the HOME program team into this arena, they would be breaking new ground. Who knew what sorts of challenges they would come across?

Proof of Concept: The remarkable achievements of Haiti HOME

"I think our project has inspired many who now realize it is possible to…offer adequate solutions to the housing problem in Haiti."

-Patrick Brun, Owner of Chabuma

Five years later, the HOME program was coming to an end. As Clodomir looked back on the experience of leading the program, he was struck not only by *what* the HOME program had achieved, but also *how* it had been achieved, as well as the significance of what was being left behind as the project approached its conclusion.

By the time HOME's technical activities concluded in late 2020, the program had leveraged its innovative PfR approach to provide a "proof of concept" that incentives work effectively to achieve development goals, even in a challenging environment like Haiti. HOME's initiative had catalyzed the construction and sale of Haiti's first commercially driven affordable housing. HOME also led to the establishment of Haiti's first mortgage instrument tailored to low- and middle-income buyers. More importantly, the HOME program mobilized the process of entrepreneurial innovation that led to these gains, with incentives supported by light-touch technical assistance that motivated HOME's private sector partners to leverage their own resources in the pursuit of these results.

Overall, the HOME program leveraged USD 25.9 million in private sector investment using less than USD 3 million in financial incentives, a ratio of USD 9 in private sector funds leveraged for every USD 1 in funding provided. Significantly, the investment process that HOME stimulated showed no signs of ending as the program wrapped up—private sector partners were taking concrete steps to maintain their affordable housing development activities, implying potential for sustainability that is largely unseen with traditional development initiatives. HOME's major achievements are summarized in Exhibit 1.

Exhibit 1: Haiti HOME achievements

HOME program "firsts:"

- First deployment of PfR approach to housing sector development in a low-income country
- First private sector-driven affordable housing developments
- First non-bank mortgage product developed and issued
- First "green" certification under the International Finance Corporation's EDGE program
- First private sector housing association established
- First vertical housing development involving application of Haiti's recent Condominium Law
- One of the first housing developments with a fully integrated co-ownership structure, with formal bylaws, table of recurring charges, elected board, and professional management.

Private capital leveraged by PfR incentives

Type of Incentive	PfR Incentives Disbursed	Private Capital Leveraged	Leverage Output Ratio (1:X)
Pay for Results Incentives to Housing Developers	USD 2,195,522	USD 10,480,291	5
Pay for Results Incentives to Credit Unions	USD 240,304	USD 10,926,079	45
Client-centered Credit Enhancements provided for mortgages	USD 117,166	USD 932,632	2
Risk Capital Incentives to Credit Union	USD 300,000	USD 2,602,680	9
Leverage from non-incentivized financial institutions	USD 0.00	USD 977,344	N/A
Total	USD 2,852,992	USD 25,919,026	9

Homes planned, built, sold, and mortgaged*

	Built	Sold	Pending	Mortgaged
Housing units	57	35	3	29

*Source: HOME project reporting, data current as of December 2020

THE HOME PROGRAM'S PFR APPROACH

The HOME program's staff had the overarching challenge of designing a program that would leverage the innovative potential of PfR, but remain grounded in the realities of Haiti's challenging implementation context and the unique dynamics of the country's housing market. Initiating this task required that they obtain a thorough understanding of Haiti's housing market and its constraints, and identify the key leverage points by which they could hope to motivate productive and profitable private sector investment in the market.

Overview: Moving from concept to creation

We were not just building houses. We were catalyzing a process."

-Claude Clodomir, Haiti HOME Chief of Party

HOME's first major step toward designing the PfR incentive was to commission a comprehensive analysis of Haiti's housing market,[6] which documented the state of demand, supply, and the enabling environment for the market (WOCCU 2016). The resulting document showed the immensity and interconnectedness of the challenges, and at first blush seemed to be defining an impossible task.

As outlined in the market analysis report, virtually all aspects of Haiti's housing market presented significant constraints to private sector investment in an affordable housing market aimed at low- and middle-income families. Indeed, when HOME kicked off, there existed no commercial property development activities or entities tailored to low or middle-income households in Haiti. The market was simply perceived as too costly and risky, with limited commercial potential.

On the supply side, there was an extremely limited stock of housing available. Building of any type is expensive in Haiti—land and materials are costly, with most building materials being imported and little suitable land due to Port-au-Prince's mountainous terrain and soil conditions. There is also little infrastructure—such as water lines and electric supply—available to housing sites, which meant that developers themselves had to bear the costs of its development.

On the demand side, it is extremely difficult for potential buyers to qualify for mortgages. While Haiti has a significant base of residents with stable incomes who would like to buy their own homes, many have difficulty satisfying commercial banks' underwriting requirements, which typically require three years of stable documented employment in the formal sector. Additionally, collateral requirements are extremely difficult to meet. For example, Haiti's weak land titling system makes it difficult for potential buyers to use the land where homes will be built as collateral to guarantee their loans. Because of these constraints, most formal housing

[6] Unless otherwise cited, details presented on Haiti's housing sector and the project's implementation context throughout the remainder of this document are drawn from the housing market analysis (WOCCU 2016), from internal project documents, or interviews with project stakeholders.

developers focus on the luxury market, consisting of a small but wealthy community of high-income Haitians and expatriates who finance construction themselves. As the HOME program launched, there were fewer than 1,000 mortgages in the country issued by Haitian banks; these mortgages averaged USD 300,000 and carried interest rates between 18-30%.

At the other end of the market, there was an active, but informal and unregulated housing sector dominated by small-scale masons and builders, who also largely built owner-financed homes on a contractual basis. The only formal financing available to lower-income Haitians were microfinance-funded consumers loans, with high interest rates and short repayment periods. Under such conditions, low-income buyers often built on a piecemeal basis, contracting successive construction activities as they saved or borrowed adequate funds.

Finally, enabling environment constraints—such as the complex land titling system and a nascent credit bureau—underpin many of these supply and demand-side challenges. These constraints increase the costs of doing business, and the complexities of these challenges mean that they would likely not be resolved during the few years that the HOME program was slated to run. Indeed, numerous policy and governance-oriented projects had already taken place in Haiti without making significant inroads on the problem. Indeed, in 2015 when the HOME program began, Haiti was rated #180 out of 189 countries in the World Bank's "Doing Business" ranking (World Bank 2014), demonstrating a significant lack of efficient procedures and effective policies that are necessary to private sector investment and growth.

HOME's approach: Give me a lever, and I can move the private sector

PfR is not just a tool, it's a mindset."

-Claude Clodomir

While WOCCU's 2016 Housing Market Analysis conveyed the immensity and complexity of the challenge that the HOME program faced, the HOME program team still saw some cause for optimism. Despite the many problems affecting the country's economy and real estate market, the presence of both higher-end and lower-end builders and a large number of potential buyers indicated that a functioning housing market existed, albeit heavily constrained, and that there was potential for a commercially driven affordable-housing market to emerge with HOME's support.

There was certainly plenty of unmet demand—approximately 20% of the urban population earned between USD 250 and USD 500 a month, while another 30% of the market earned between USD 150 and USD 250 per month. Many of these residents had stable incomes—they were often government workers, teachers, or formally employed in the private sector—and could be eligible for a mortgage to help them buy a modest house or condominium. The problem was that no one was either building or financing such houses because of the perception that the sector was risky and costly to serve. The HOME team suspected that these perceptions over-generalized the entire sector, and based on their analysis, they posited that low- and middle-income markets offered a significant potential—and profitable—market.

The HOME program designed a two-pronged approach to incentivize commercial firms to invest in the development of a market for affordable housing. On the supply side, the program would provide incentives to bring property developers into the affordable housing sector, with the intent of increasing the stock of affordable housing available to low- and middle-income buyers. On the demand side, HOME would work to increase the availability of mortgage financing to low- and middle-income buyers from financial institutions. In both cases, HOME would also provide, or use grants to facilitate access to, technical assistance that would help ensure that the private sector firms had the capacity and resources needed to provide high-quality housing and financial products.

By design, the program did not include any activities to explicitly address the enabling environment. The rationale was that the enabling environment problems were too large and complex to be addressed in the course of a three-year project. Instead, HOME would encourage its private sector partners to tackle the many challenges they faced in the enabling environment as they would in the absence of a program like HOME, with HOME providing necessary technical support to upgrade their capacity to work through challenges related to the weak enabling environment. This approach helped the firms develop their capacity and gain experience addressing these issues, as they would need to in the future after HOME's support was no longer available.

HOME's PfR approach could be understood as a series of progressive experiments, designed to test and refine hypotheses about the potential of the affordable housing market in Haiti and the best strategies to develop it. The PfR incentives served as "levers" by which HOME could catalyze behavior change on the part of the private sector partners, while offsetting the underlying risk of investment that was inhibiting their entry to the market. Simultaneous engagement with multiple firms allowed HOME to test hypotheses to determine the merits of different private sector-driven investment strategies simultaneously, while limiting program expenditures. Adaptive management was a central pillar to this approach, as it allowed HOME to continuously adjust its implementation to reflect learning and promote the most efficient and effective paths available to meet program goals. In short, as articulated in the Housing Market Analysis (WOCCU 2016) that informed many of the project's activities, "Haiti HOME is intended to surface where these risks—real, perceived, or non-commercial—act to disrupt value chain links, and to create promising experiments to see how the risks can be reduced and the housing value chain strengthened."

Envisioning the HOME program approach as a series of experiments

Objective: Catalyze private sector investment in a market for affordable housing.

Hypotheses:

- There is a plausible business case for investing in the low- and middle-income (affordable) housing market.
- The main reason that this market has not been developed is because potential investors excessively generalize their perception that the market is unprofitable and risky.
- PfR incentives will serve as "levers" that will incentivize behavior change—motivating private sector-investment in the affordable housing market.
- Once the private sector is incentivized to invest in the market, they will see first-hand evidence of its profitability, compelling them to sustain their investments once the PfR incentives are withdrawn.

Behavior change objective: Motivate sustained private sector investment in the affordable housing market by creating incentives for the private sector to enter, and facilitating their success in, the market.

Interventions:

- Supply side: Increase affordable housing stock
    - "Pull:" Incentivize commercial investment by offering cash rewards for building affordable houses, for investing in green housing and best

practices in housing development, and for selling houses to low- and middle-income buyers.
    - "Push:" Support through grants and technical assistance development of capacity to implement best practices that are otherwise unknown or unused.
- Demand side: Increase finance available for affordable housing construction and purchase
    - "Pull:" Incentivize financial institutions to increase lending for affordable housing by offering cash rewards to financial institutions for issuing housing loans to low- and middle-income buyers.
    - "Push:" Support capacity development for implementation of best practices in housing lending through grants and technical assistance.

Supply-side: Catalyzing a supply of affordable housing

With an overall approach broadly writ, Clodomir and his team turned to the details. Critical questions still needed to be answered, such as: which developers should we target? How should we structure the incentives? How will the private sector respond? The HOME team would quickly learn that, when it comes to PfR, the details matter a great deal.

Identification and recruitment of property development partners

"The biggest challenge was that USAID was seen as an entity that gives grants, and a lot of possible competitors walked away."

-Claude Clodomir, Haiti HOME Chief of Party

Approach

The first step was to identify and onboard property developers to become HOME program partners. To begin, HOME sought to recruit firms that demonstrated an interest in the affordable housing market. These developers needed to have sufficient investment resources—both land and financial—and needed to show evidence of their integrity and commitment to what was to become a shared cause of serving Haiti's affordable housing market.

HOME ran ads in the national newspapers, soliciting submissions from firms that had land and a summary of the affordable housing development concepts. Within a month, WOCCU received more than 50 expressions of interest—a promising start. Upon reviewing the applications, however, members of the HOME team were mildly dismayed. Despite the clear requirements for the expressions of interest, many of the applicants were non-profit organizations with no land holdings that proposed to develop houses on land that they would acquire with grant funding from HOME.

The project held an information session to clarify the intent of the PfR approach and what it implied for prospective private sector partners. Looking back at the recruitment process, Clodomir mused, "[t]he biggest challenge was that USAID was seen as an entity that gives grants, and a lot of possible competitors walked away." Indeed, the next stage of submitting detailed proposals saw just twelve applicants. Of these, only four firms' proposals were immediately accepted. The firms were then subjected to an extensive vetting and due diligence process in which the HOME team verified the applicants' qualifications and confirmed that they were established entities with demonstrated, proven experience in delivering high-quality building services.

Results

Ultimately, three firms, all Haitian, partnered with HOME for Haiti's first ever commercially driven affordable housing initiatives—Chabuma, Tecina, and Panamera.

Chabuma was a hardware and building materials retailer prior to becoming a property developer through the course of its work with HOME. The company was embarking on its first building project when they learned about Haiti HOME, and it quickly became evident that the program could provide Chabuma with invaluable support. Patrick Brun, Chabuma's President, said: "We have been in building materials for 40 years. We have seen engineers and customers coming in and out complaining about how hard it is to find affordable housing, so we knew of the opportunity. We transformed ourselves to become a consortium…but we could not do it without HOME."

Tecina and its consortium partners had been involved in housing development in Haiti since 1974 and had completed a number of publicly and internationally funded social housing projects, as well as private luxury housing projects prior to its involvement with HOME. Reflecting on the initiation of the process with HOME, Gerald Emile Brun[7], Tecina's Vice President, observed: "Once you start getting into affordable housing, it is a very delicate process, particularly given the cost of production…It was clear that any support we could obtain from HOME that would reduce the stress of the (affordable housing) project would be good."

Panamera, an experienced luxury housing developer, became interested in HOME after sensing, and confirming with its own research, the affordable housing market's potential. Panamera's owner, Stephane Lerouge, describes his affordable housing projects as "luxury and modern, but at a good price—something attractive to banking and government employees and expats; and ideal for people renting or living with relatives who one day want to be home-owners."

Lessons

The partner recruitment process led to several lessons for the team:

- **The PfR approach can deter some potential partners:** As a new and different approach to "doing development business," most entities found PfR difficult to grasp, and several lost interest once they understood the concept. "PfR is not just a tool, it's a mindset," Clodomir points out. For many businesses and organizations, the idea of investing their own money to develop a market—in other words fronting their own resources in a relatively risky investment—was contrary to the way they wanted to operate.
- **Fewer well-motivated partners bring better results than many reluctant partners:** While it was initially disappointing to the HOME team to see interest dissipate so quickly for many applicants, this winnowing had the benefit of eliminating potential partners who were fundamentally ill-suited to the PfR approach. In fact, the HOME team came to appreciate that the program was better off starting with relatively few partners, with the most potential for success, rather than engaging a plethora of partners who were neither firmly committed nor prepared for the effort.
- **Partners should have adequate resources to bear risk and invest:** The requirement for partners to have land available for building and adequate resources to front the investment was also limiting. In fact, the HOME program was criticized by some stakeholders for the fact that relatively few partnerships were established. In

[7] Despite sharing a last name, Patrick Brun of Chabuma and Gerald Emile Brun of Tecina are unrelated.

retrospect, however, this resource-dependent narrowing of the field was fortuitous. At the end of the program's five years, after weathering the economic crisis that began in 2018 and was exacerbated by the COVID-19 pandemic in 2020, these partners had experienced setbacks and delays that had real financial impacts. Their capacity to manage and absorb shocks and setbacks was one of the important factors that led them to consider their involvement in HOME a success, despite these challenges.

- **Entrepreneurialism is a critical trait:** Beyond the need for property development partners with financial resources and expertise in housing development, another set of traits emerged as important over the course of the project. These traits were not actively sought; however, they proved to be just as important as the other criteria used to qualify partners. Specifically, those partners that pursued the opportunity to develop affordable housing with the HOME program were differentiated by a unique entrepreneurial bent. They were open to new approaches, creative, flexible, innovative, ambitious, and commercially oriented. These traits helped the private sector partners throughout the property development process. With the HOME program's support, they adapted their approaches when faced with roadblocks, learned, and grew, ultimately strengthening themselves and the affordable housing industry for which they formed the backbone.

Incentive development

We needed to convince the companies to move outside of their comfort zone."

-Olivia Nielsen, HOME program advisor, Affordable Housing Institute

Approach

The HOME team turned to their next challenge—defining the incentives that would motivate their new partners to invest in developing affordable housing properties. The HOME team designed incentives to meet two main goals: first, from the private sector partners' perspectives, the incentives had to offset the risk of being a first mover in the largely unexplored affordable housing market; second, from HOME's standpoint, the incentives had to motivate behavior change by stimulating sustained investment in the affordable housing market. While a few examples of incentives for the PfR approach existed, they had been designed for other sectors, such as agriculture and health. It was incumbent on the HOME team to develop a PfR approach to apply in a new sector where it had not been previously introduced. Reflecting on this challenge, Olivia Nielsen, a HOME program advisor working with the Affordable Housing Institute summarized the challenge in fairly simple terms: "We needed to convince the companies to move outside of their comfort zone."

Exhibit 2 summarizes the incentive development process. The first step was to create an estimate of the production cost for the intended affordable housing product, as well as an estimate of the price the affordable housing market would bear for such a product. For the HOME program, the cost estimate needed to include not only the cost of building a house but also the cost of implementing a number of "best practices" that housing developers in Haiti did not commonly follow. These included, for example, "green" certification under the IFC's Excellence in Design for Greater Efficiencies (EDGE) initiative for the housing units as well as obtaining titles for individual housing plots prior to building on them.

The second step was to determine the "profitability gap" of building for the low- and middle-income market, which was the differential between the production and market values. This estimate formed the basis on which the incentive was calculated, with subsequent adjustments to account for factors such as the risk the activity posed to each partner, and the innovative value of the developer's activities. Gerald Emile Brun, Tecina's Vice President, explained:

"HOME analyzed the gap between what we could supply and what the buyers could pay, while maintaining a minimum profit margin. Then, HOME proposed an incentive based on our performance of doing the project."

The third step was to structure the actual incentive payments. The HOME team used milestone-based payments rather than a single lump-sum payment upon project completion. This approach had several benefits. First, milestone-based payments would help the partners see returns on their investments throughout the process, keeping them motivated. Second, partners could reinvest their incentive earnings in their projects, further facilitating their progress. Finally, an important pragmatic consideration was that payment milestones could be disbursed as fixed amount subawards under USAID's Simplified Acquisition Framework.

The final step in developing the incentives was an ongoing process of adaptive management that would help account for two realities—first that the definition of incentives was an experimental process rather than a fixed one, requiring adaptations and adjustments as HOME and the private sector partners learned; and second, that the context in which the projects were being implemented would itself evolve, changing the risk/reward ratio on which the incentives were based. This adaptive management process, discussed further below, required that the HOME team closely monitor program implementation, partners' efforts, and the overall operating environment; then adjust incentives as necessary to remain aligned with evolving conditions.

Exhibit 2: Incentive development process with illustrative HOME program application

Summary: Incentive Development Process

1. Estimate "pure market price" for target product based on production costs and industry standard profit margins; and market cost that could be borne by target beneficiary group.
2. Estimate total incentive amount based on the "profitability gap", i.e., the differential between production and market values determined in the prior step. Adjust based on risk and other intangible factors that influence private sector partners' incentive and capacity to realize the project.
3. Define milestone payments, tagged to meaningful behavior change objectives.
4. Adaptive management to keep incentives aligned with changes in the implementation environment and program and private sector partners' learning.

An important feature of the incentive development process was that it was conducted in collaboration with each development partner. Consequently, it was an iterative process with discussions to refine each entities' understanding of the product, target market, and inherent risk of the activity, among other factors. An important intangible outcome of this collaborative process was that it helped to establish the foundation for a collegial, constructive, and transparent relationship between the project and the private sector partner and to demonstrate the HOME program's role as a facilitator of the private sector partners' success. While building trust, this process also helped to increase the development of partners' commitment to the HOME program's outcomes and goals.

A second important aspect of the incentive development approach was that it made clear to all parties involved that incentive amounts were completely independent of costs incurred. Instead, incentive amounts were based on the "profitability gap." This was a crucial distinction and a significant divergence from how traditional aid funding works, in that it eliminated motivation for the partner to "game the system" by increasing or falsifying costs. Instead, once the incentive amounts and product were agreed upon, it was incumbent on the partner to produce the agreed-upon product as efficiently as possible, as they would directly benefit from any cost savings. Furthermore, the private sector's largest payoff would come when the product sold on the market, undermining any incentive to increase their revenue by compromising on quality because this would reduce the marketability of their product. This also helped to keep the partners' incentives aligned with the program objective of having them produce for the market, absent any support from the project.

Results

While the overall process of determining incentives was standardized, the specific incentive amounts and structure varied depending on the partner and the project being developed. Chabuma, for example, began with a piece of land in an area they called *Santos* on which they planned to build 31 houses. These houses would range from two-bedroom starter-units that could be sold for as little as USD 50,000, to fully developed 3 bedroom, 2-bath houses that would be sold for as much as USD 80,000. Following Chabuma's original proposal, Chabuma and HOME negotiated and eventually agreed to the specifics of the property development.

They then took updated cost estimates for the planned housing project, in combination with the market price points, and used them to calculate the "profitability gap" that formed the basis of the incentive. This was then adjusted based on the risk inherent in the project, Chabuma's capacity to absorb that risk, and the innovative value of the project's activities. In general, housing is a high-risk endeavor in Haiti, and in this case, the risk was heightened by newness of the firm to the affordable housing market and HOME's requirement that certain specific and novel building practices, such as "green certification" be adhered to.

Following calculation, the full incentive was broken down into phases, each of which linked payments with the firm achieving major milestones in the property development process. These milestones were defined against major achievements and behavior change objectives being targeted by the project, for example titling of individual land plots, EDGE pre-certification, and the sale of completed units to income-qualifying buyers.

While the calculation of the incentive followed a relatively straightforward process, the HOME team recognized that they were treading on new ground, and from the start integrated adaptive management into the process. As expected, they adjusted incentives to account for changes in the implementation environment and other challenges partners faced. Throughout, the HOME team stayed focused on the ultimate objective of facilitating the partners' successful completion of houses built to their standard and sold to qualifying low- and middle-income buyers and adapted incentives with the objective of keeping this objective at the forefront. Panamera, for example, encountered major delays in achieving one of its earliest milestones- the "best practice" of registering the individual land titles of the sub-divided lot. Doris Michel, a project manager at Panamera, described how HOME adjusted the milestone requirement to account for the delay. "Registering the individual land titles took 20 months due to the land registration system's complexity coupled with the political instability that the country was facing. As we got bogged down, HOME allowed us to move to the next phase of building while we continued to pursue the land titling in parallel."[8] Indeed, the team found that adaptability to be a central to the PfR approach, especially as both the HOME team and private sector partners ventured onto new ground programmatically while being faced with an unstable and constantly evolving operating environment.

Other adjustments were made to account for changing conditions. For example, when the COVID-19 pandemic struck, it shut down much of the country's economy, making it

[8] This and other incentive adjustments were made with USAID's approval.

appropriate to adjust the expectations of the partners and the incentives they were working towards. In all cases, the adjustments were intended to align the incentives with milestones that were feasible in the current environment, but that still required a "stretch" on the partner's part.

Reflecting on these adjustments as the project came to its close, one HOME project stakeholder who was involved with the program's management observed: "I think that when you do PfR you have to be a little more flexible. You want to pay on milestones, but sometimes you have to adjust the milestones. You have to be careful with the money, but the intent is to leverage the private sector's investment, and so you have to be able to adapt requirements in a changing environment. If it works, then you get a lot."

Exhibit 3 details development and structuring of an illustrative incentive schedule for a 23-unit development.

Exhibit 3: Illustrative HOME program property developer incentive

This illustrative example details the determination of incentive payments for a property developer committing to a 23-unit development. Exhibit 3.1 shows that the pure market price for a 102 m^2 house on a 250 m^2 lot is estimated at USD 93,121, while the target affordable housing price point is approximately USD 75,000. This equates to a "profitability gap" of USD 18,121 (19% of pure market cost). Of this, HOME agreed to provide an incentive equivalent to the value of land acquisition (USD 10,375/unit for 23 units = USD 238,625), while the development partner agreed to a 20% profit margin; these adjustments allowed for a project-supported sales price of USD 75,539.

Exhibit 3.1 Calculation of "profitability gap" and full incentive amount

	"Pure market" financials	Financials with HOME support	Differential
Lot cost per m^2	USD 41.50	USD 0	USD 41.50
Construction cost per m^2	USD 400	USD 400	USD 0
Lot infrastructure development cost per m^2	USD 88.50	USD 88.50	USD 0
Unit size in m^2	102	102	USD 0
Lot size in m^2	250	250	USD 0
Unit construction cost	USD 40,824	USD 40,824	USD 0
Unit lot cost	USD 32,500	USD 22,125	USD 10,375
Unit total cost	USD 73,324	USD 62,949	USD 10,375
Profit margin	27%	20%	USD 0
Sales price (and profitability gap)	USD 93,121	USD 75,539	(USD 17,582)
HOME program incentive per unit			USD 10,375
HOME program incentive for 23-unit development			USD 238,625

Next, the property development process was broken into four phases, with incentive payments schedule based on key behavior change goals and property development milestones including: notarization of individual lots, preliminary EDGE certification of housing plans, construction of model homes, and sales to income-qualifying households.

Exhibit 3.2: Incentive amounts across all construction and sales phases

Phase	Share	Payment	Milestone
Phase 1	40%	USD 95,450	Evidence of notarization of individual lots
Phase 2	20%	USD 47,725	Preliminary EDGE ("green") certification of housing plans

Phase 3	20%	USD 47,725	Construction of model home
Phase 4	20%	USD 47,725	Confirmed sales of first 5 units to income qualifying households
Total	100%	USD 238,625	

Phase 1 was then broken down into three further steps, completion of which would qualify the company for receipt of a portion of the incentive, as detailed in Exhibit 3.3 below.

Exhibit 3.3: Phase 1 detailed incentive breakdown

Payment	Phase 1 share	Payment	Milestone
Payment 1	40%	USD 38,180	Evidence of notarized commitment to purchase land to be developed
Payment 2	30%	USD 28,635	Evidence that lots have been physically marked per original site layout
Payment 3	30%	USD 28,635	Evidence of notarization of residential lots per original site layout
Total	100%	USD 95,450	

Milestones were subsequently adjusted to reduce production and sales targets qualifying for incentive payments as Haiti's 2018 economic crisis unfolded.

Lessons

The HOME team brought forward many valuable lessons from its experience in designing the PfR incentives:

- **Use incentives to de-risk investment:** Incentives should be designed to de-risk partners' investment into a market that has potential for long-term profitability and should reward the private sector for realizing the behavior change objectives of the donor and implementer.
- **Subsidize profit, not cost:** The HOME program experience shows the merit of designing incentives to subsidize profit rather than costs. This approach orients private sector partners to the market and eliminates any potential incentive for the private sector partner to inflate their costs, which only undermines their profit.
- **Adaptive management is critical:** Adaptive management is necessary to adjust to contextual realities and should be integrated into the PfR design from the start. HOME program staff reflected that "it was very difficult to determine with complete accuracy the exact award amount and payment structure that would be sufficient to both incentivize a specific outcome and facilitate achievement of the outcome." As the implementation environment evolves, incentives should be appropriately adjusted so that they continue to motivate and enable achievement of the pre-established outcomes, rather than becoming so unachievable that they lose the power to motivate private sector partners to continue to strive to achieve difficult goals.
- **Incremental incentive payments reinforce behavior change:** Incremental incentives—awarded on the basis of milestone achievements—can be, in the right context and conditions, more effective at reducing risk and motivating partners than lump-sum end-of-project payments. Tagging incentive milestones to behavior change objectives also helps reinforce the value to the private sector partner of changing their behavior. Moreover, incremental incentives may enable the partner to reinvest its incentive receipts should they choose to do so. In other sectors such as agriculture, earlier and more frequent payout of incentives has also been shown to coincide better

with business cycles, facilitating planning and incorporation of a PfR activity in a business's strategic initiatives (Mainville and Narayan 2017).

- **Align program and market incentives:** Leverage the private sector to the extent possible to align incentives. The HOME program found that it did not have to invest heavily to verify outcomes claimed by its private sector partners because achieving those outcomes was well-aligned with their profit motivation. For example, HOME did not need to contract an engineer to independently verify the quality of completed homes because the financial institutions that were financing the purchase verified quality as part of their underwriting process. Given the large investments that the private sector partners made to build homes for the affordable housing market, and the relatively small value of the incentives, the sale of a house brought a far larger payoff than the incentive amounts they received while undergoing the process, again aligning their incentives to the market. This lesson also links back to the earlier discussed lesson on recruitment that market-oriented firms are best-suited for PfR approaches.

Property development

"We made mistakes, but because we were not alone, we were able to learn from those mistakes and continue without interruption."

-Patrick Brun, Chabuma President

Structuring and obtaining agreement on the incentives was a critical foundational element to the entire program. Once the agreements on the incentives were in place, the HOME program and its private sector partners were eager to break ground. As they embarked on their respective projects, the partners began the process of investment and risk-taking, which epitomizes the potential of the PfR approach. The private sector partners initiated construction using their own funds, meaning that they had "skin in the game," yet they did so with confidence that the HOME program was there to support them and with the excitement and motivation brought about by the financial incentives that awaited them as they achieved key milestones.

Approach

The discussions and negotiations that led to agreement on the incentives built a strong foundation on which the relationships between HOME and its partners would continue to grow as the construction process began. This relationship reflected shared trust and collegiality, enthusiasm over the potential of each partners' respective development projects, and shared commitment to the cause of developing a commercially driven affordable housing sector.

"We were not just building houses. We were catalyzing a process," Clodomir emphasized. With the ultimate goal of alleviating Haiti's massive housing deficit, the HOME program's leadership recognized that even more important than launching the immediate housing developments was putting in place the capacity for the industry to sustain its involvement in affordable housing once the program ended. As part of this, HOME required adherence to a number of "best building practices," such as conducting a formal market analysis prior to launching a development project, achieving "green" (EDGE) certification of the housing developments, and titling individual land parcels in advance of building (these are discussed further in the next section). These were, for the most part, new and unfamiliar practices to the developers, but once adopted they had the potential to set a competitive standard that would benefit both the developers and the industry. Given that these were new practices and developing the capacity to adopt them entailed a significant cost, HOME provided financial incentives and technical assistance to support partners as they implemented them.

These grant and technical assistance activities essentially formed a “push” that enabled the partners to achieve their goals, while the PfR incentive was a “pull” that motivated the partners to strive towards their goals. Grants reflected HOME’s sharing of the costs of implementing best practices that the partners otherwise did not have the practice of following; for example, the cost of conducting advance market analyses in areas where they would be building or paying for the training that would enable them to obtain EDGE certification for their projects. Technical assistance often came in the form of trainings and workshops that addressed issues common to the developers or the industry as a whole. For example, HOME organized an industry-inclusive workshop exploring challenges to the application of Haiti’s Condominium Law which, although had not yet been put into practice, was to be tested by one of the HOME partner property developers.

Results

When viewed in terms of concrete results, such as the number of homes built and sold during the project’s five-year course, HOME’s results may not appear impressive. By December 2020, HOME’s private sector partners had completed 57 of 236 total planned units, of which 35 had been sold (29 with mortgage financing) and an additional 3 sales pending. These low overall numbers were heavily influenced by the political unrest and economic instability that spread throughout the country in 2018, and further undermined by the COVID pandemic that followed and further stifled economic activity in 2020.

Exhibit 4: Homes planned, built, sold, and mortgaged under the HOME program

Homes planned, built, sold, and mortgaged under the HOME program				
Planned	**Built**	**Sold**	**Pending**	**Mortgaged**
236	57	35	3	29

*Source: HOME project reporting

From a higher-level viewpoint, the results of the property development process were transformational. In the space of only five years, and in the context of extreme economic uncertainty, the HOME program incentivized three firms to become the country’s first commercially driven affordable housing property developers. Each partner invested its own resources in multiple property developments and, in the course of doing so, undertook innovative activities that were new to the Haiti property development industry, representing best practices appropriate both for Haiti’s current context and its emerging needs (see box below). Throughout the course of the program, HOME’s property developers invested USD 10,480,291of their own funds at the cost of USD 2,195,522 in incentives to the HOME program, a ratio of approximately USD 5 leveraged for every USD 1 provided as an incentive.

In addition to undertaking best practices that were required by the project, HOME’s partners also undertook additional innovations on their own impetus. Major innovations included the initiation of developer-financed sub-division developments, vertically built condominiums, home-owner associations, self-contained shared infrastructure, and new housing concepts such as Chabuma’s experiment with an “un-finished” house that could be developed and sold at a little over one-third the cost of a fully finished house (USD 360/m^2 vs. USD 900/m^2).

Financing in Haiti is a major constraint to property development, and the partners pursued a number of innovative approaches to address this challenge. These included pre-sale financing, lease-to-own options, engagement of institutional markets (for example government or corporate entities that help finance housing on behalf of their employees), issuance of private sector bonds, and property development consortiums that provided in-kind finance.

As the responsible entities in the process, the property developers also brought their own visions and creativity to the projects, evidencing the extent of their buy-in and commitment to the development concept. Gerald Emile Brun of Tecina, for example, described how, with the support of the HOME program, they developed five house models that covered three major price points (all within range of low- or middle-income buyers). He also detailed how Tecina's development plans include bringing an innovative array of amenities into the community, such as an independent power plant that will be available to run in parallel to the notoriously inconsistent public power system, which often only supplies three to four hours of power a day. The power sources will be metered separately, allowing homeowners to opt into the private system if they chose. The houses also have independent water storage systems fed by the distribution network on a deep well installation, and all units have the option to be powered by solar power. The public lighting network of Tecina's planned village is fully solar, enabling a highly secure environment for its resident families. Brun pointed out that these innovations would not only improve the marketability of the houses but would also avoid the noise, cost, and pollution of having "75 separate generators run simultaneously."

Panamera's vision for its first affordable housing development was shaped by the firm's owner, Stephane Lerouge, who grew up close to the development's location and recollected a happy childhood spent running through open land, climbing trees, and playing in creeks. He wanted the children and families who would live in that development to enjoy a similar sense of community and freedom. Building on that desire, he integrated protected green space within the bounds of the walled community, allowing the children and families who would one day live there a place to walk and play without worry.

As the private sector partners undertook their projects, the HOME team accompanied them providing support and incentives, but also observing the process of the "experiments" and learning along with them. Remarkably, although some of the private sector partners lost substantial money due to the unexpected economic collapse that hamstrung their initiatives, they consistently reflected that they were nonetheless grateful for the learning-by-doing experience that they had with HOME there to support them at each step of the process.

HOME helped to establish adherence to "best practices" in property development

Best practice: Pre-investment formal market analysis

Gerald Emile Brun, Tecina's Vice President, commented on the experience of undertaking a formal market analysis during the pre-investment stage: "That was the first time we did a market study to define a target market based on a formal analysis. HOME felt it was needed and we were more comfortable too. Usually, we act on the basis of experience.…The report showed the acceptability of the product we were proposing, the price points, and the financial resources of the potential buyers."

The process, Mr. Brun continued, "forced us to be very systematic, very professional in doing all the analysis, the what-if scenarios, the business plan, analyzing it, adjusting it, understanding the financial impact…We have benefitted a lot from going through all the steps of the different studies, building models, testing the banking system, etc. All those activities benefitted us."

Best practice: Pre-construction registration of unit-specific land titles

Another best practice that the HOME program required was the process of registering individual land titles for houses in a development prior to building. Until that point, the standard practice in Haiti was to wait until a house was ready to be sold before the individual land title was "extracted" from the larger land holding. In practice, however, this meant that the actual sale of a unit was often delayed because the "extraction process" or titling of individual units was easily complicated by the complex and bureaucratic land titling process.

Best practice: “Green" building certification

The HOME program also collaborated with the International Finance Corporation to introduce EDGE certification; a “green” building approach tailored to emerging markets. EDGE certification promotes both economic and environmental sustainability by incorporating resource-conserving principles and tools into project design (Caldwell 2019). “The project paid for an EDGE consultant to train us and shared the cost of pre-certification of our building plans,” Doris Michel, project manager for Panamera, reported. “It was really useful…some of the changes were very simple and cost effective, in fact some of them reduced costs and I actually replicate them in other projects that I’m managing.”

Patrick Brun of Chabuma detailed the competitive benefit he realized from undergoing the EDGE certification process. He remarked: “HOME encouraged us to do our units with a low-carbon footprint. The homes are very efficient from the way they are planned and built, with energy efficient windows, low-flow toilets and faucets, solar panels, etc. The units produce their own electricity, and all that is all due to HOME’s support.” The “green building” approach promoted by EDGE also leads to considerable efficiencies and savings that are particularly important to low- and middle-income homeowners. Brun described the EDGE certification as offering a clear advantage in the market, particularly given the unreliable power and water services, saying “[t]he people have their home with water and energy, and that takes out a big headache. They make their budget, and it includes everything, which makes a huge financial and psychological difference for the buyer.” Chabuma’s Villa La Fontaine development, for example, was marketed to low-income buyers. Adhering to the building practices—such as installing solar panels, reflective paint, and low-flow plumbing—that qualify the program for EDGE certification resulted in La Fontaine homes being built that are predicted to have 42% energy and 49% water savings compared to traditional building practices (Caldwell 2019).

Lessons

A number of lessons emerge from the HOME program’s experience of using PfR to stimulate the development of a commercially driven affordable-housing property-development industry:

- **Both “pull” and “push” strategies were critical to the private sector’s achievements:** Reflections by HOME’s staff and its private sector partners indicate that the “push” and the “pull” aspects of the program were critical to private sector partners’ achievements. The “pull,” or incentives, motivated partners to leave their comfort zone despite a relatively risky new market. The “push” aspects, grants and technical assistance, enabled partners to learn how to implement new practices and make investments that they otherwise did not have the knowledge or resources to pursue.
- **Private sector partners persevered against challenges in pursuit of the incentive:** There were numerous cases where HOME’s private sector partners overcame major impediments that would almost certainly have stopped them if they had been working under a traditional activity-oriented development approach. The pull element proved to be not only catalytic but also motivating when significant challenges arose. For example, as Doris Michel, Panamera’s project manager, described: “[t]he incentive encouraged us to not give up when we came across all the different impediments—the insecurity, (difficulties with) land surveying, etc.…If we just had the technical assistance, I could see some of the roadblocks we encountered as ending things, but with the award within reach, we were more motivated to keep pushing.”
- **Alignment of program and market incentives promotes a facilitative relationship:** Donor and implementer interactions with private sector partners are most productive when they recognize that the PfR approach aligns private sector partners’ incentives

with donors' objectives. Recognition of private sector partners' motivations, investments, and risk-taking, as well as their capacity limitations and learning processes, helps donors and implementers orient themselves to supporting and facilitating partners' success in the market without undermining their entrepreneurialism or autonomy. As a result, program stakeholders are able to respect and build trust with one another.

- **Incentives should be designed to avoid distorting the market:** A key PfR lesson is to seek to facilitate investment and private sector engagement without distorting the private sector's inherent incentives or the market, to the extent possible. If the incentives are well designed, the private sector will have an incentive to perform. Critical to this point is the fact that the private sector is bringing forth its own financial, institutional, and human resources in pursuit of the incentive and a place in the emerging market, so the incentive to perform is central in all of their activities. In effect, each PfR intervention should help private sector partners step further up a ladder of sustainability.
- **Partners will make, pay for, and learn from mistakes:** As they undergo their process partners will make (and pay for) mistakes; this is part of the creative process of learning and transformation that the program should prepare for and encourage, without compromising efficiency of resource use.
- **Alignment of program and market incentives allows for reduced reporting burden:** When reflecting on the successful relationship between the HOME program and its private sector partners, it is evident that these precepts were well embedded in their interactions. For example, several partners emphasized how the HOME program's staff worked to streamline and minimize reporting processes and made prompt payouts when milestones were achieved that qualified them for incentives. HOME staff, too, realized that the inherent alignment of incentives reduced their need to monitor their private sector partners' activities or enforce their agreements.

Demand-side: Creating effective demand for housing

"Half of the population could be eligible for housing finance."

-Housing Market Analysis (WOCCU 2016)

Simultaneous to HOME's supply-side activities, the team also sought to address major demand-side issues that limited the availability of housing finance to low- and middle-income buyers. When looking at the limited availability of housing finance, Clodomir and the HOME team hypothesized that the right incentives would serve as a "lever" that would increase the private sector's appetite for lending to low- and middle-income buyers. The HOME program's demand-side work targeted commercial banks and credit unions with the aim of motivating each to lend "down-market" and "up-market," respectively, to make housing finance available to the "middle" market.

Motivating commercial banks to lend down market

"HOME aimed to shrink the home financing gap facing low-to-medium-income Haitians by incentivizing banks to lower minimum mortgage values…"

- Social Impact Performance Evaluation, August 2020

Approach

The HOME program sought to motivate commercial banks to move their mortgage financing "down market," in order to increase the availability of finance to low- and middle-income consumers for affordable housing purchases. HOME worked under the hypothesis that as banks began to lend to lower-income clientele, they would come to appreciate the size and viability of the affordable housing market. The main financial incentive provided to commercial banks was an indirect one—the provision of funds through a down-payment assistance program that the banks could allocate at their discretion to subsidize the down payments of income-qualifying buyers for purchases in qualifying housing developments. HOME also engaged commercial banks in ongoing technical activities, such as sector-wide workshops to explore enabling environment constraints; facilitating the development of alliances between developers and banks; and providing grants to bank personnel for participation in international affordable housing conferences.

Results

Commercial banks' response to the program's initiatives was tepid. While the commercial banks willingly participated in the project's technical assistance and grant initiatives, they did little to leverage the down-payment assistance funds that were available from HOME to make mortgages available to low- and middle-income consumers.

On further consideration, several issues became apparent—the major one being that banks did not see it in their interest to pursue lending in the affordable housing sector because the stock of available housing for purchase was extremely low. They perceived that it did not make sense to actively pursue a market segment that, at that point, offered little volume. While the number of potential affordable housing borrowers was large, the number of available houses limited the potential market to a level that the banks found uninteresting.

Another issue that was brought to light through this process was that, even though it was difficult, it *was* possible for buyers to access mortgages for affordable housing through a commercial bank. In fact, most of the commercial bank loans that financed the purchase of affordable housing built through the HOME program were offered by banks that did not participate in any HOME activities. While HOME-participating banks invested USD 932,632 in the process of receiving USD 117,166 in incentives (a leverage ratio of USD 8 of private sector investment for every USD 1 in incentives provided by the project), non-participating commercial banks financed a total of USD 977,344 for affordable housing purchases without receiving any HOME incentive. This reinforces the observation that, while difficult to obtain, mortgages were available from commercial banks and could be obtained without HOME program involvement. It also confirms the HOME program's evolving understanding that banks' limited lending to buyers was more a product of the limited availability of housing to buy than their unwillingness to lend.

Lessons

While the HOME program's efforts to increase commercial bank's lending to low- and middle-income borrowers had limited traction, it did help shed light on the banks' limited mortgage portfolio:

The PfR approach promotes "productive failure:" Keeping in mind that a PfR initiative essentially consists of an array of "experiments" designed to test working hypotheses about issues constraining a market's development, the commercial bank "experiment" paid off quickly and well. Specifically, it tested and rejected the hypothesis that commercial banks represented a significant bottleneck to the development of the affordable housing market; instead, it revealed that the limited supply of housing was a more critical bottleneck to the expansion of the affordable housing market.

A thought experiment can help to better clarify the unique contribution that the PfR activity made. The thought experiment is to consider what would have happened if a purely traditional approach to engaging the private sector in the market for affordable housing loans had been used. In such an approach, the banks might have been invited to workshops that promoted the idea of affordable housing as a promising and under-valued market segment, and technical assistance might have been provided to help the banks revise their under-writing processes to be more receptive to lower-income but income-stable clients. A mid-course review would likely have identified a lack of any meaningful progress being made, which could have led either to the activity being terminated or a revamping of the project's grant and technical assistance activities to redouble the efforts, either of which would have depleted program resources. Over time, the failure of the project to significantly increase lending to affordable housing buyers might have suggested the need to provide subsidies to offset the higher cost and risk of lending to that sector. In the place of all this, however, HOME's PfR approach quickly identified a notable lack of response of the banks, promptly driving a reconsideration of the working hypotheses on which the initiative was based. Compared to never having engaged with the banks at all, the HOME program was able to learn from the bank's non-responsiveness to gain a better understanding of the affordable housing market and the key constraints limiting its development.

Motivating credit unions to develop a housing portfolio

"Today mortgages are available in Haiti for moderate, middle-income households—it is unheard of in Haiti. It is a great thing."

-Patrick Brun, Chabuma

Approach

Turning to the down-market side of the lending sector, the HOME program focused its microfinance activities on credit unions, the only microfinance institutions in Haiti that could legally accept deposits. Microfinance institutions are responsible for a large share of the lending in Haiti; however, they typically only lend small amounts and have short repayment periods. Such loans are usually used for consumption or investment purchases—the investments being income-generating activities that will generate increased earnings that can be used to repay the loan and reinvest. Housing purchases, in contrast, are not only for much larger amounts of money and require a much longer repayment period.

The HOME program's credit union's activities had three objectives. First, was to create new loan products that were suitable for housing microfinance and for home purchases. Second, was to make housing loan terms more attractive and accessible. Finally, the program also sought to facilitate credit unions' access to longer-term finance that would support housing lending more than just through relying on members' deposits.

HOME primarily used incentives and technical assistance to achieve these objectives. Incentives were directed to both credit unions and their clients. Credit union-focused incentives included "risk" and "performance" incentives paid as a percentage of housing loans made that met the HOME program's lending guidelines. These guidelines included larger housing loan amounts and repayment terms that were more favorable to borrowers. Client-focused incentives included down payment assistance to low-income households and financial rewards for good repayment behavior on housing loans. The technical assistance helped increase the credit unions' capacity to undertake specific housing finance activities such as underwriting, housing finance product development and sales, and loan monitoring.

Results

Contrary to the experience with the commercial banks, the HOME program's participating credit unions actively pursued the incentives by increasing their financing of housing improvements and mortgages. In total, for housing improvements, HOME provided USD 540,304 in incentives to credit unions, leveraging USD 13.5 million in finance as a result, the equivalent of approximately USD 25 of private sector investment for every USD 1 spent by HOME; a 25:1 leverage ratio. For mortgages, HOME provided USD 41,601 in incentives, spurring USD 380,000 in mortgages, resulting in USD 9 of private sector investment for every USD 1 spent by HOME; a 9:1 leverage ratio.

In the course of HOME's activity, numerous changes were seen, including reductions in interest rates for housing finance from as high as 30% to 18%, extension of repayment terms from three to seven years, and increases in maximum loan sizes as high as USD 55,000 for the mortgages.

There were also significant increases in the number of new housing loans issued, with loans for activities ranging from purchasing land for building; building and home improvements; and purchasing completed homes. Overall, the credit unions surpassed all of their incentive targets, increased the proportion of their loans going to female members, and improved their loan performance through a significant decrease in the percentage of their loans in arrears more than 30 days (Social Impact 2020).

A transformational achievement of HOME's demand-side PfR activity was the credit union Kotelam issuing Haiti's first non-bank mortgage product. Jean Roussel Petit-Homme of Kotelam observed: "Before the PfR model, there weren't any accessible financial instruments for low- or middle-income individuals. Obtaining funds for even making repairs, or obtaining land, was out of reach." The realization of Haiti's first credit union-issued mortgage product radically changed this.

By 2018, the three credit unions that the HOME program was working with had increased their housing lending to the point where housing approached 50% of their total lending portfolio, the maximum share for any individual sector permitted by the Haitian Central Bank, the financial regulatory body. As a result, the HOME program eased off its work with the credit unions. Following the conclusion of this work, the credit unions continued their lending for housing, while re-aligning their credit terms to reflect market conditions, particularly given the economic instability in Haiti, which significantly increased their lending risk. For example, credit unions increased interest rates and reduced loan repayment periods (Social Impact 2020).

Lessons

The HOME program's work with the credit unions succeeded in increasing their overall housing lending as well as in creating Haiti's first non-bank issued mortgage, offering helpful insights for future PfR programming in the finance sector:

- **Proof of concept:** The credit unions' responsiveness to the performance incentives, in combination with technical support, demonstrated the viability of using an incentive-based approach to increase lending to low- and middle-income home buyers. The project was also able to "nudge" credit unions toward even more robust achievement of their social objectives, such as increasing lending to women. The credit unions' re-adjustment of their housing loan terms in response to changing market conditions following the conclusion of HOME program support reflected the need for adjustments to make the market sustainable.
- **Both "pull" incentives and "push" assistance were critical:** As with the supply-side interventions, both the "push" (capacity building) and "pull" (incentives) were perceived to be instrumental to the credit unions' achievements. According to Mr. Petite-Homme from the credit union Kotelam, "[t]hey were both helpful. While we could receive the funds and accomplish the work without the technical assistance, it would

have been throwing the money out the window. The financial incentives allowed us to do the work, but the technical assistance allowed us to do it appropriately. If we were to do it again, we would be much more effective and efficient."

KEY TAKEAWAYS ON PFR

"The HOME program has been able to demonstrate that market failures can be successfully addressed through the use of incentives."

-Claude Clodomir, Haiti HOME Chief of Party

The HOME program's experience offers generalizable lessons to help inform questions of whether PfR could be used elsewhere in the housing sector, or in other sectors where they have not been used before. Here, we discuss some of the program's most transformational achievements, identify elements that were essential to the success of the PfR initiative, and offer high-level lessons learned for donors and implementers interested in exploring PfR approaches.

HOME's transformational achievements

"*Without financing activities directly, we have been able to demonstrate the power of incentives aimed at driving private capital into markets that have never existed in the past."*

-Claude Clodomir, Haiti HOME Chief of Party

One of the most important achievements of the HOME program is that it offers "proof of concept" of the PfR approach. As observed by Claude Clodomir, "the HOME program has been able to demonstrate that market failures can be successfully addressed through the use of incentives. Without financing activities directly, we have been able to demonstrate the power of incentives aimed at driving private capital into markets that have never existed in the past." Indeed, as of December 2020, HOME had paid USD 2.9 million in incentives to leverage $25.9 million in private capital from its Haitian private sector partners, achieving an overall resource leverage of 9 to 1. This demonstrates an effective use of PfR resources to incentivize private sector actors to expand into a previously unexplored market sector in a challenging context such as Haiti.

One of the HOME program's definitive achievements laying the foundation for the creation of a private sector-driven affordable housing industry, with ongoing investment by private sector partners likely to continue following the conclusion of the program's incentives. This affordable housing industry is serving a population that has never before been targeted. The industry has been developed on the foundation of best practices that strengthen private sector firms and elevate the industry's performance, such as through "green" building techniques.

The establishment of a dynamic affordable housing industry has also led to important stakeholder synergies, networking, and collaboration that would not have taken place without the HOME program. Some of these took root through the processes of training and facilitation that HOME undertook. For example, as a result of working together under HOME, the developer Chabuma and the credit union Kotelam developed a business relationship in which Kotelam purchased a number of units in one of Chabuma's affordable housing projects; both entities confirm that this relationship would never have been formed absent the HOME program. In addition, under the initiative of Gerald Emile Brun of Tecina and with support of the HOME program, the three property developers created the first-ever Real Estate Developers Association of Haiti (*Association des Promoteurs Immobiliers d'Haiti [APIH]*), bringing together both private and public stakeholders for structured collaboration in the sector. Association membership has already grown to seven and is already reviewing opportunities to develop joint housing initiatives using a number of concessional finance opportunities available from the Government of Haiti as well as international donors. Given the prevalence of finance as the most enduring constraint to the builders' activities, access to such financing has the potential to release much investment into the production of affordable housing stock.

HOME Catalyzed Networking that Led to Novel and Sustained Business Relationships

HOME's transformational effects on industry behavior included the creation and sustenance of relationships between private sector actors that would not otherwise have been seen. One of the most salient among these is Real Estate Developer's Association of Haiti, *Association des Promoteurs Immobiliers d'Haiti* (APIH), a private sector driven initiative that will allow for the continued development of industry level best practices, professional relationships, property development investments between and among both supply-side and demand-side actors in the affordable housing industry.

Mr. Gerald Emile Brun, President of APIH, explained the provenance of the association "The idea to rally our forces came up in conversations. We were aware that all our projects faced the same types of problems—lack of financing, collapse of economy.…We figured that rather than continuing the fight individually and alone, we would put our forces together. I initiated the idea and HOME supported it from the outset."

PfR is also unique in its ability to achieve simultaneous real-world testing of diverse private sector investment models, particularly in an environment as highly complex and fluid as Haiti's. The testing is simultaneous because multiple private sector partners each undertook their own "experiments" in building under their own initiative and risk within Haiti's changing context. The real-world aspect is a central benefit, in that the alignment of private sector partner incentives with market incentives means that results are not distorted by attempts to "game the system," but rather the private sector partners' best efforts were in play as they assumed actual risks under real-world conditions, such as Haiti's economic instability and insecurity. Throughout a process of this kind, each private sector actor can witness and learn from not only their own activities, but those of the other private sector partners, allowing for rapid and dynamic improvement to investment models through learning-by-doing and observation.

The experience of HOME also demonstrated the potential cost-effectiveness of PfR approaches. Key to this is that HOME only paid for results that were achieved. Thus, the program did not pay when the private sector failed to take up an opportunity (as in the example of the commercial banks) or when activities did not bear results. From a longer-term perspective, the cost-effectiveness of PfR approaches is remarkably enhanced compared to traditional development approaches because PfRs catalyze processes which, if successful, will continue to grow and develop following the conclusion of the PfR incentives. Finally, PfR approaches enable private sector partners to succeed or fail on their own merit, while also benefitting from the learning process as they invest. In contrast, traditional initiatives run the risk of continuing to fund activities that lack potential for significant achievement, while also "protecting" the private sector from the realities of the market and thus inhibiting its learning, effectiveness, and growth.

PfR success factors

"Without HOME's support, we would never be able to embark on such a project targeting the middle class."

-HOME program partner, quoted in Social Impact Performance Evaluation, August 2020

PfR initiatives are most likely to succeed when they motivate private sector partners to invest in markets that have a viable underlying business case for private sector investment. The PfR incentive can help to offset the initial investment risk and learning curve as a firm first enters the market, encouraging it to make a concerted effort to reach a level of scale and efficiency that it will sustain once the PfR initiative concludes.

The success of PfR initiatives is also enhanced when donors, implementers, and private sector partners have organizational cultures that support flexibility, adaptability, respect and collegiality, openness to mutual trust, and a commitment to the PfR mindset and approach. Among private sector partners, the traits of entrepreneurialism, willingness to risk failure, and eagerness to learn also improve performance.

In addition, private sector partners should have both the capacity for meaningful and sustained investment in the market and the willingness and capacity to absorb risk. The latter trait is very important because the private sector partner is investing its own resources and exposing itself to substantial losses that can occur due to no fault of its own. For example, all of the HOME property development partners suffered significant delays and losses due to the 2018 political insecurity and economic downturn and the COVID-19 pandemic. Even as they regain their footing and proceed with their investments, many of the incentives that they would have earned through HOME's PfR initiative will no longer be available, given the program's conclusion. Fortunately, the HOME program's three property development partners had adequate resources to withstand the delays and losses outside of the program's control, enabling them to maintain financial stability.

Lessons for donors and program implementers

We made mistakes, and without financial support they could have stopped us; instead, we got through the whole process and learned from it, and today, with the experience we acquired in the field as developers, we're not making mistakes anymore."

-Patrick Brun, Chabuma

The Haiti HOME program provides a number of high-level lessons to donors and program implementers:

- **Potential contribution of the PfR approach:** PfR initiatives have the potential to catalyze investment in a market whose development is curtailed by one or more binding constraints that can be overcome through private sector partners' behavior change. It also demonstrates the value of PfR as a means of catalyzing a series of progressive experiments that test and refine activities to overcome critical constraints limiting development of a market such as the market for affordable housing. These experiments take place at both the project level, as it designs, implements, and adapts incentives; and at the firm level as partners make investments, learn from their results, and continually refine their own strategies with the support of the project.
- **Multiple simultaneous experiments foster objective assessment:** A unique benefit of this private sector-driven experimental nature of PfR initiatives is that, in contrast to a traditional approach where investments and activities are driven by the project

implementer, PfR approaches allow a project implementer to stay a step removed and be more reflective and honest about the pros and cons of different models rather than vested in claiming the success of a model that it created. Adaptive management, learning-while-doing, and adaptability are key to the PfR approach for both the project implementer and the project's private sector partners; and they are critical to realize the potential benefit of undertaking multiple simultaneous experiments, which is to adapt and grow as the outcomes of those experiments are realized.

- **Control—and risk—are in the hands of the private sector partners:** The higher-level role of the project implementer can, however, present some challenges along with benefits. The fact that PfR initiatives depend on private sector initiative implies a loss of direct control for the donor and implementer. This dynamic tension can be seen in two quotes from the HOME program leadership team, with one person remarking: "The hardest thing…is that we are not the drivers of the results. The private sector is." Another HOME leadership team member observed: "You are giving up control, but they are investing all the money." Another stakeholder involved in management of the HOME program affirmed the underlying value of this dynamic by observing: "the developers put out a large amount of money—10 million—and having put that out, they cannot let that money go to waste." In other words, while the control is in the hands of the private sector, they are so heavily invested that they will do everything in their power to achieve the outcomes they set for themselves.
- **Private sector and market realities drive results:** Designing incentives for a PfR program requires a clear and honest appraisal of the market and the interests and capacity of potential private sector partners. This is required to ascertain the costs of achieving specific outcomes or products, as well as what price points the market can bear for those products. By calibrating incentives to offset the "profitability deficit" and aligning incentives to market conditions to the extent possible, the incentive structure avoids creating a motivation to "game the system" by project partners.
- **Focus on alleviating critical constraints through behavior change:** Though HOME initially tried to simultaneously resolve constraints in both the supply and demand sides of the market, its experience shows that this bilateral action was not needed. Instead, by focusing on a *single* binding constraint—the private sector's willingness to invest in creating a stock of affordable housing—it addressed the fundamental limitation that kept the market from developing. As that constraint is gradually eased, other constraints are likely to come into play; however, the first step is to flex the lever that can catalyze development of the market.
- **Starting small leverages the learning curve:** Given the experimental nature of investments in markets targeted by PfRs, it is prudent to start small at both the project-level and in terms of individual partners' investments. PfRs and the new market both represent a new way of doing business, and there is often a steep learning curve. The underlying objective of the PfR is to create a replicable and transformational model, and larger initiatives increase risks and costs, while potentially limiting learning if partners are overwhelmed by their initiative's management challenges. Large early efforts can also be costly, reducing the availability of resources for investment once a model has been developed, proven, and is ready for scaling.

CONCLUSION

The HOME program's PfR initiative sought to tackle Haiti's massive affordable housing deficit using an innovative approach. Considering the extreme challenges presented by Haiti's operating environment and the newness of the PfR approach, HOME was successful in catalyzing the development of a commercially driven affordable housing sector in Haiti, with activities poised to continue past the program's conclusion. At a higher-level, the case of the HOME program provides an important and insightful "proof of concept" that PfR initiatives work, giving further evidence to warrant the adoption of new, more effective approaches to the realization of development objectives that have long stymied the development community.

REFERENCES

Caldwell, Olivia. *Breaking new grounds: EDGE certificated affordable housing in Haiti*. https://edge.gbci.org/breaking-new-grounds-edge-certified-affordable-housing-haiti. EDGE. April 16, 2019.

Camp, Lawrence, et. al. *Pay for Results in Development – A Primer for Practitioners.* Palladium and USAID. January 2018. https://www.usaid.gov/sites/default/files/documents/1865/Pay_for_Performance_Primer_Final.pdf

Mainville, Denise and Tulika Narayan, *Pull Mechanisms for Overcoming Market Failures in the Agriculture Sector*. Evaluator's Lessons Learned Series, Issue 2, Bethesda, MD: Abt Associates and Denise Mainville Consulting, November 2017. https://agresults.org/learning/26-evaluator-lessons-learned-2-pull-mechanisms-for-overcoming-market-failures-in-the-agriculture-sector/file

Social Impact, Home Ownership and Mortgage Expansion (HOME) Program. Haiti Evaluation and Survey Services*. Performance Evaluation, Final Report.* August 2020.

WOCCU, Home Ownership and Mortgage Expansion (HOME) Program. *Haiti Housing Market Analysis Report.* January 2016.

WOCCU. *Haiti Home Project Video*, USAID and WOCCU, July 23, 2018.

World Bank Group, *Doing Business Economy Profile 2015*: Haiti. Washington, DC. World Bank. 2014. https://openknowledge.worldbank.org/handle/10986/21241