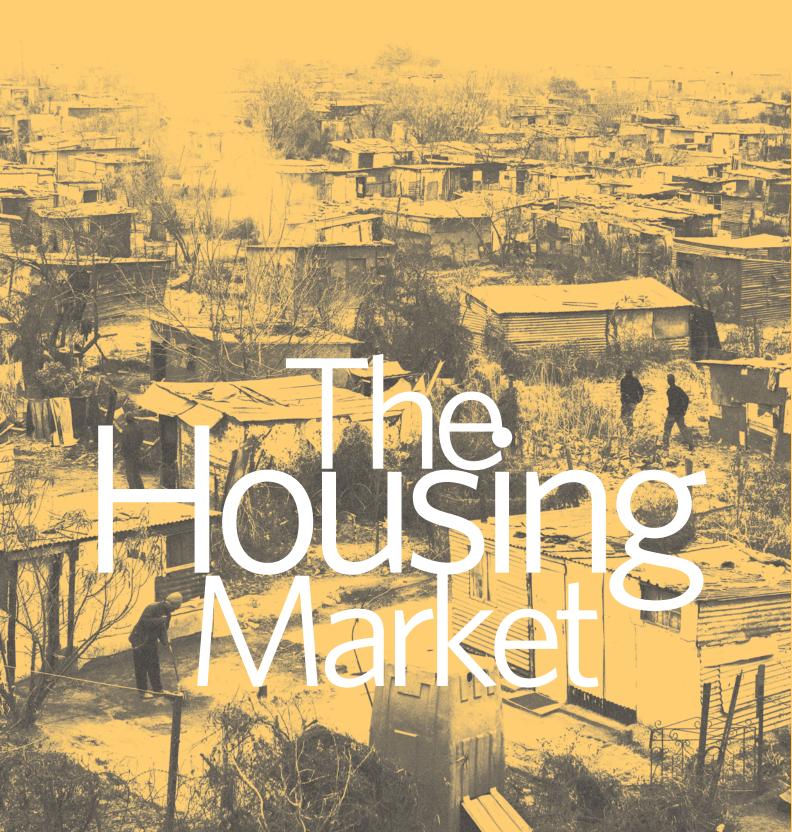
# CHAPTER SIX



Housing is one of the larger BOP markets—larger than transportation, smaller than energy. The market encompasses major spending items—rent, mortgage payments (or imputed rents), and repairs and other services. But the BOP housing market is perhaps uniquely handicapped by informality. Both lack of legal title to housing in squatter settlements—Hernando De Soto's "dead capital"—and lack of access to mortgage financing for the BOP limit its potential size.

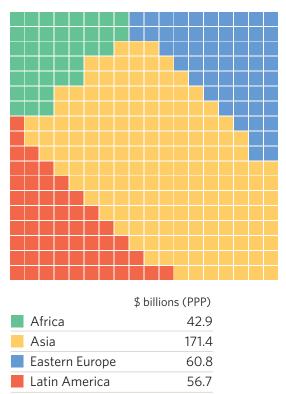
Despite these barriers, both private sector approaches and policy reforms—sometimes catalyzed by NGOs—are showing how to tap this market in ways that provide significant benefits for BOP households. In Asia especially, where mortgage markets are undeveloped and land prices high relative to income, the market potential—and the need—is huge (Bestani and Klein 2006).

## How large is the market?

The measured BOP market for housing in Africa (12 countries), Asia (9), Eastern Europe (6), and Latin America and the Caribbean (9) is \$187.5 billion. This represents recorded annual household spending on housing in the 36 low- and middle-income countries for which standardized data exist, covering 2.1 billion of the world's BOP population. The total BOP housing market in these four regions, including 3.96 billion people in all surveyed countries, is estimated to be \$331.8 billion (see box 1.5 in chapter 1 for the estimation method). Because imputed rent is a major part of household spending on housing and cannot be determined precisely, these numbers should be regarded as setting a lower bound for such spending.

Asia has the largest measured regional BOP market for housing, \$86.6 billion, reflecting a significant BOP popula-

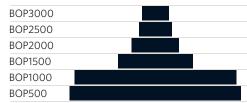
# **BOP spending on housing** \$331.8 billion



Each square represents approximately \$1 billion

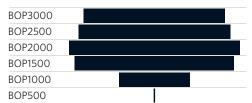
#### Rwanda

TOTAL HOUSING SPENDING BY INCOME SEGMENT



#### Thailand

TOTAL HOUSING SPENDING BY INCOME SEGMENT



tion of 1.49 billion. The total BOP housing market in Asia (including the Middle East) is estimated to be \$171.4 billion, representing the spending of 2.9 billion people. Latin America has the next largest measured market, \$47.4 billion (276 million people), and an estimated total market of \$56.7 billion (360 million people).

In Eastern Europe the measured BOP housing market is \$34.2 billion (148 million people), and the estimated total market \$60.8 billion (254 million people). In Africa the measured BOP market is \$19.3 billion (258 million people), and the estimated total BOP market is \$42.9 billion (486 million people).

The average BOP share of measured national housing markets varies across regions. In Asia and Africa that share is 63%. In other regions it is much smaller: 39% in Latin America, 35% in Eastern Europe. Latin America has the greatest disparity between the BOP share of the population (71%) and the average BOP share of housing spending (39%).

The BOP share of housing spending also varies across countries. These differences in part reflect the prevalence of a landed middle class in some developing countries, such as South Africa and throughout Latin America. Between mid-market landowners and disenfranchised BOP communities, the BOP share of a country's housing market is on average half that of its weight in population. Nonetheless, in countries such as Pakistan and Sierra Leone, the BOP accounts for more than 95% of the measured housing market.

In Asia one extreme is represented by Sri Lanka, Pakistan, and Bangladesh, where the BOP accounts for more than 90% of the spending on housing—the other by Thailand and India, where despite the substantial BOP population, the recorded BOP share is only 47% and 48%, respectively. In Africa the extremes are Nigeria (99% BOP) and South Africa (31%). In Eastern Europe the extremes are represented by Uzbekistan (92%) and FYR Macedonia (13%).

#### How is the market segmented?

Many African BOP markets for housing are relatively bottom heavy, with spending concentrated in the bottom three of the six BOP income segments. The remainder are flat, with spending distributed relatively evenly across all BOP income segments. In Asia too, most BOP housing markets are either bottom heavy or flat. BOP spending on housing reflects consistently strong demand: people are willing to spend a fairly consistent share of their income on their home.

In Eastern Europe, in contrast, almost all countries have a top-heavy BOP market, with the top three segments accounting for more than half of BOP housing spending. The lone exception is Uzbekistan, where the bottom three BOP income segments account for 77% of spending. In Latin America spending tends to flatten out at the BOP1500 segment. In Brazil, for example, the top four segments each account for 19–23% of BOP housing spending.

In Latin America and the Caribbean some large national housing markets are dominated by the wealthier mid-market segment; in Colombia the BOP accounts for only 27% of the total. In Peru, however, the BOP segment accounts for nearly three-quarters of the total market (73%). Jamaica represents the extreme, with 88% of the national housing market in the BOP.

In contrast, the BOP dominates Asian markets, with only Thailand and India having slightly more than half of total housing spending in the mid market. Africa too is predominantly a BOP market: in only one country, South Africa, does spending in the mid-market segment exceed that in the BOP.

#### What do households spend?

BOP spending on housing reflects consistently strong demand: people are willing to spend a fairly constant share of their income on their home.

India has the largest measured BOP housing market in Asia, \$62.1 billion; BOP spending accounts for 48% of the national housing market and averages \$164 per household a year. In other regions the BOP market leaders are Mexico (\$45.6 billion, 44% of the total market), with average annual spending of \$1,280 per BOP household; Russia (\$94.7 billion, 34% of the total market), with average spending of \$1,268; and South Africa (\$14.4 billion, 31% of the total market), with average spending of \$652.

These expenditures by BOP households may not be large. But in Mexico they are large enough to fuel two significant and growing corporate efforts to tap BOP housing markets (case study 6.1).

#### Ukraine

TOTAL HOUSING SPENDING BY INCOME SEGMENT



#### Brazil

TOTAL HOUSING SPENDING BY INCOME SEGMENT

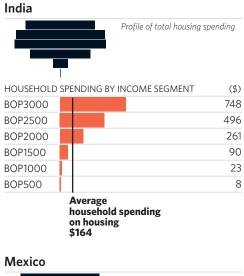


#### **Burkina Faso**

SHARE OF HOUSEHOLD SPENDING ON HOUSING (%)

BOP3000	9
BOP2500	9
BOP2000	9
BOP1500	9
BOP1000	9
BOP500	10

71



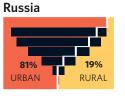






BOP500

URBAN RURAL 29% 71%



Total BOP housing spending by income segment, urban and rural

# Where is the market?

In 24 of the 36 measured countries, BOP housing markets are predominately urban. However, it is often difficult for national surveys to accurately measure housing expenditure in poor rural areas—often rents must be imputed.

In Asian and African countries, housing markets are often predominantly rural. The Ugandan BOP housing market, for example, is 71% rural. Most Asian BOP housing markets also are predominantly rural. In Sri Lanka, for example, 77% of the BOP housing market is rural. Rural housing markets can be substantial—\$9 billion in Thailand, for example. An exception to the pattern of rural dominance is Pakistan, where urban squatter settlements account for much of the imputed BOP rent and the BOP housing market is only 36% rural.

In Eastern Europe, where countries were so heavily urbanized under Soviet rule, much of the housing is in cities. In Russia just 19% of the BOP market is rural. Only two countries have BOP markets in which at least a quarter of the spending takes place in rural areas—FYR Macedonia (31%) and Belarus (25%).

In many Latin American countries reported spending on housing also occurs mostly in urban areas. In Colombia, for example, urban spending is 92% of the total for BOP housing. In Guatemala, however, the BOP housing market is 52% rural and 48% urban.

Large urban BOP communities represent huge untapped market opportunities. Mexico's urban BOP housing market is nearly \$16 billion annually (see case study 6.1). Brazil and Colombia each report urban BOP housing spending of more than \$8 billion a year.

India has the largest measured BOP housing market in Asia, \$62.1 billion; BOP spending accounts for 48% of the national housing market and averages \$164 per household a year.

### Is there evidence of a BOP penalty?

Household surveys seek to capture all sources of income, but they do not measure the "dead capital" trapped in the informal economy. For many BOP households, their dwelling and the land it sits on is their primary capital. When they lack formal title to that asset, or when they must contend with ineffective land markets or barriers to transferring title, housing becomes dead capital. Under these circumstances BOP households face a significant BOP penalty—one that artificially curbs their potential purchasing power and often their access to services.

The problem extends to the multitude of enterprises in the informal economy. These businesses, operating outside the formal legal system, cannot easily leverage their assets into working capital. The dead capital trapped in houses and businesses together is enormous: a recent study showed that informal properties and businesses in just 12 Latin American countries are worth as much as US\$1.2 trillion (ILD 2006; IDB 2006). Worldwide, the figure is estimated to be at least US\$9.3 trillion, and is probably much larger (De Soto 2004).

Informal home ownership also poses a barrier to service delivery. Many governments require proof of title before a household can receive social benefits. And municipalities often are unwilling to connect undocumented homes to water, sewer, and electricity networks, since they have no legal recourse to collect un-

# CASE STUDY 6.1 MEXICO: HOUSING INNOVATIONS AT WORK

Two competing corporate programs serve the BOP housing market in Mexico: Patrimonio Hoy and Mi Casa. Each is the initiative of a major cement manufacturer in the country.

Cemex, the third largest cement manufacturer in the world, decided it needed to move from selling materials to selling solutions. With low fixed prices, materials on credit, precosted housing designs, and even supervised construction services for Mexicans working abroad, its Patrimonio Hoy program, launched in 1998, makes housing affordable for poor people in Mexico.

The program provides consultations with architects to help would-be home owners design their project, schedules deliveries of materials over what is typically a 70-week building period, and keeps prices stable through that period. The cost is about US\$14 a week over the building period. Participants in the program "found they were building homes faster, and generally cheaper, than they could on their own" (Sandoval 2005).

By late 2006, according to Cemex, the Patrimonio Hoy program had served 150,000 clients in 45 cities throughout Mexico. Now the company is expanding the strategy to other countries.

Facing strong competition from Cemex in the bagged cement market, Holcim Apasco has focused on innovation in distribution. By setting up its own Mi Casa distribution centers, it can bypass two to three distributors and thus keep prices more affordable. Since 1996 the company has established more than 120 standard Mi Casa locations, where resellers have a full range of building materials and products available locally at reasonable prices.

A parallel scheme has trained more than 10,000 people in the skills needed to build their own homes. The Mi Casa project recognizes that the real need of the market is not cement but the knowledge to build a safe and comfortable home—along with the delivery of affordable materials (WBCSD 2004).

Both of these examples illustrate a strategy of **focusing** on the **BOP**.

## CASE STUDY 6.2 ENTITLED: SOLUTIONS FOR SECURE HOUSING

Hernando De Soto's Institute for Liberty and Democracy has designed land reform programs in Egypt, El Salvador, Haiti, Tanzania, and, most notably, Peru. The Peruvian program, which ran from 1982 through 1996, resulted in 1.2 million families and nearly 400,000 informal businesses receiving title to their home or business. Independent evaluations show that the reform program generated US\$10 billion in net benefits for home owners. The value of newly formalized real estate increased by US\$2.2 billion, for example, and that of already formalized real estate by US\$3.2 billion. The program also generated US\$300 million in new annual tax revenue and 560,000 new formal sector jobs.

Saiban, a housing development NGO, has taken a different approach in Pakistan, where an estimated 30% of the population live in unplanned squatter settlements. These squatters, with no legal title to the land on which they live, can be evicted at any time and also lack the collateral that could give them access to formal credit markets. Saiban's solution is to provide plots of developed land in several settlements at affordable rates, giving the former squatters secure tenure. It offers the new home owners a low-cost mortgage, with 20% (about US\$175) due as a down payment and the rest (about US\$525) to be repaid in monthly installments over eight years.

Saiban's success in offering mortgage products to people earning only about US\$3 a day has generated interest from at least two commercial banks. Both are now experimenting with their own low-cost mortgage products aimed at this market (Azfar and Rahman 2004). paid fees from a home that—in the eyes of the government—does not exist.

Economist Hernando De Soto (2003) has suggested that one way out of this informality trap is to make extralegal ownership more formal—for example, by offering home owners official title to their home. A different strategy, in Pakistan, has focused on providing lowcost mortgages that enable low-income families to buy new homes with secure titles (case study 6.2). Informal home ownership poses a barrier to service delivery. Many governments require proof of title before a household can receive social benefits. And municipalities often are unwilling to connect undocumented homes to water, sewer, and electricity networks, since they have no legal recourse to collect unpaid fees from a home that—in the eyes of the government—does not exist.

#### Endnotes

- Reported household expenditures in a given country should be regarded as a minimum estimate of actual expenditures, because surveys may not have collected information on all types of housing-related spending. Moreover, many surveys do not account for the expenditure value of an owner-occupied dwelling; these surveys are standardized using a rent imputation to estimate the amount of money owners would spend if they were renting the house they own.
- 2. Many surveys in Latin American countries suffer from measurement and imputation problems in rural areas, which may lead to underrecording of the rural housing market.
- 3. Institute for Liberty and Democracy, "Mapping Dead Capital.." Inter-American Development Bank, http://www. iadb.org/bop/mapping\_capital.cfm (accessed January 12, 2007).
- 4. Cemex, "Construye tu futuro hoy," http://www.cemexmexico.com/se/se\_ph\_pf.html (accessed March 1, 2007), and "Patrimonio Hoy Developing and Launching a Market Transforming Innovation to Low-Income, Developing World Markets," http://www.vision.com/clients/client\_stories/cemex\_pat.html (accessed March 1, 2007).
- Institute for Liberty and Democracy, "Documented Impact of ILD's Reforms," http://www.ild.org.pe/eng/facts. htm and http://www.ild.org.pe/pdf/annex/Annex\_01.pdf (accessed January 30, 2007).

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