

CHAPTER ONE

Introduction and Market Overview





In an informal suburb of Guadalajara, Mexico, a growing family is struggling to expand their small house. Help arrives from a major industrial company in the form of construction designs, credit, and as-needed delivery of materials, enabling rapid completion of the project at less overall cost.

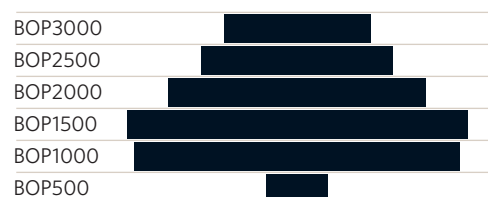
In rural Madhya Pradesh, an Indian farmer gains access to soil testing services, to market price trends that help him decide what to grow and when to sell, and to higher prices for his crop than he can obtain in the local auction market. The new system is an innovation of a large grain-buying corporation, which also benefits from cost saving and more direct market access.

A South African who lives in an impoverished, crime-ridden neighborhood of Johannesburg has no bank account, cannot order items from a distant store, and is sometimes robbed of her pay packet. She finds that a new financial service offered by a local start-up company allows her mobile phone to become a solution—her pay is deposited directly to her phone-based account, she can make purchases via an associated debit card, and she carries no cash to steal.

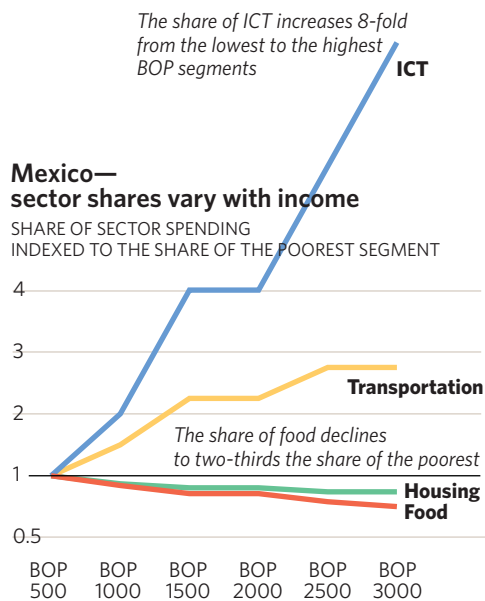
In a small community outside Tianjin, China, a small merchant whose children have been repeatedly sickened by drinking water from a heavily-polluted river is distraught. He finds help not from the overwhelmed municipal government but from a new, low-cost filtering system, developed by an entrepreneurial company, which enables his family to treat its water at the point of use.

Four billion people such as these form the base of the economic pyramid (BOP)—those with incomes below \$3,000 (in local purchasing power). The BOP makes up 72% of the 5,575 million people recorded by available national household surveys worldwide and an overwhelming majority of the population in the developing countries of Africa, Asia, Eastern Europe, and Latin America and the Caribbean—home to nearly all the BOP.

BOP market—\$5 trillion
TOTAL BY INCOME SEGMENT



Four billion people form the base of the economic pyramid (BOP)—those with incomes below \$3,000 (in local purchasing power).



This large segment of humanity faces significant unmet needs and lives in relative poverty: in current U.S. dollars their incomes are less than \$3.35 a day in Brazil, \$2.11 in China, \$1.89 in Ghana, and \$1.56 in India. Yet together they have substantial purchasing power: the BOP constitutes a \$5 trillion global consumer market.

The wealthier mid-market population segment, the 1.4 billion people with per capita incomes between \$3,000 and \$20,000, represents a \$12.5 trillion market globally. This market is largely urban, already relatively well served, and extremely competitive.

BOP markets, in contrast, are often rural—especially in rapidly growing Asia—very poorly served, dominated by the informal economy, and as a result relatively inefficient and uncompetitive. The analysis reported here suggests significant opportunities for more inclusive market-based approaches that can better meet the needs of those in the BOP, increase their productivity and incomes, and empower their entry into the formal economy.

The analysis draws on data from national household surveys in 110 countries and an additional standardized set of surveys from 36 countries. Using these data—on incomes, expenditures, and access to services—it characterizes BOP markets regionally and nationally, in urban and rural areas, and by sector and income level. The results show striking patterns in spending. Food dominates BOP household budgets. As incomes rise, however, the share spent on food declines, while the share for housing remains relatively constant—and the share for transportation and telecommunications grows rapidly.

The composition of these BOP markets differs markedly across countries. Some, like Nigeria's, are concentrated in the lowest income segments of the BOP; others, like those in Ukraine, are concentrated in the upper income segments. Regional differences are also apparent. Rural areas dominate most BOP markets in Africa and Asia; urban areas dominate most in Eastern Europe and Latin America and the Caribbean.



What's new in this analysis?

The underlying proposition that business activities can help reduce poverty is not new. Many books and influential reports have outlined both the need and the preconditions for a greater role for the private sector in development (see, for example, Commission on the Private Sector and Development 2004).

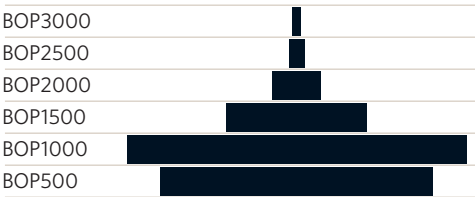
This report adds two important missing elements: a detailed if preliminary economic portrait of the BOP—based on recorded incomes and expenditures—and an overview of sector-specific business strategies from successful enterprises operating in BOP markets. These data and the record of experience back the calls for broader business engagement with the BOP. Moreover, a guide to BOP markets is timely because significant new investment—public and private—is being committed to serving the BOP.

This work builds on concepts introduced by Hart and Prahalad (2002), Prahalad and Hammond (2002), Prahalad (2005), and Hart (2005) and explored by a growing number of authors (Banerjee and Duflo 2006; Kahane and others 2005; Lodge and Wilson 2006; Wilson and Wilson 2006; Sullivan 2007). Based on their own definitions of the BOP, these analysts have offered preliminary estimates of the BOP population varying from 4 billion to 5 billion. Providing an empirical foundation and a consistent, worldwide set of baseline data is one motivation for the analysis reported here. The analysis, with a focus on documenting BOP income and expenditures, parallels similar efforts by Hernando De Soto to document their assets (see box 1.1).

The development community has tended to focus on meeting the needs of the poorest of the poor—the 1 billion people with incomes below \$1 a day (in local purchasing power). This analysis argues that a much larger segment of the low-income population—the 4 billion people of the BOP, all with incomes well below any Western poverty line—both deserves our concern and is the appropriate focus of a market-oriented approach. The starting point for the analysis is not just the BOP's relative poverty. Instead, it is the fact that BOP populations for the most part are

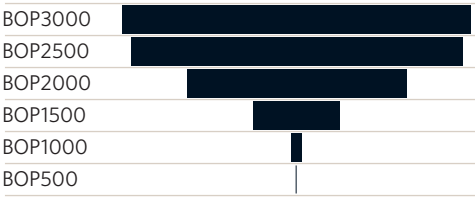
Nigeria

TOTAL SPENDING BY INCOME SEGMENT

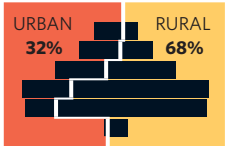


Ukraine

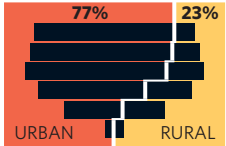
TOTAL SPENDING BY INCOME SEGMENT



Asia



Latin America



Total BOP spending by income segment, urban and rural

BOX 1.1: **HIDDEN PURCHASING POWER, DEAD CAPITAL**

The income and spending patterns of the BOP, made explicit in this report's analysis, have for too long been hidden from business by lack of data on the informal economy and the perception of the purchasing power of the poor as insignificant. As Hernando De Soto (2003) has pointed out, this purchasing power could be substantially increased if the BOP could leverage the wealth trapped in the assets of the informal economy. A recent study showed, for example, that the "dead capital" represented by informal properties and businesses in 12 Latin American countries is worth as much as US\$1.2 trillion (ILD 2006; IDB 2006). Unlocking these assets, by providing land titles and lowering barriers to formal registration of small businesses, could greatly expand BOP markets.

not integrated into the global market economy and do not benefit from it. Those in the BOP also have significant unmet basic needs and often pay higher prices than mid-market consumers for the same service or commodity—a BOP penalty. These characteristics profile a unique market (see box 1.2).

A key issue in understanding BOP markets is informality. The International Labour Organisation (ILO 2002) estimates that more than 70% of the workforce in developing countries operates in the informal or underground economy, suggesting that most BOP livelihoods come from self-employment or from work in enterprises that are not legally organized businesses. This informal economy is a significant fraction of the size of the formal economy.

According to a detailed study by economist Friedrich Schneider (2005), the informal economy averages 30% of official GDP in Asia, 40% in Eastern Europe, and 43% in both Africa and Latin America and the Caribbean. Informality is a trap for the assets and the growth potential of micro and small businesses and those who work in them.

Another important source of income for many BOP households is remittances from family members working overseas, much of which travels through informal channels. Recent work by the Inter-American Development Bank and the World Bank has documented the growing importance of remittances. In 2005 such transfers through official channels amounted to US\$232 billion, of which US\$167 billion went to developing countries—though actual amounts, including remittances through informal channels, may have been as much as 50% more (World Bank 2006a).³

These results together suggest that a significant part of BOP income comes from activities and sources that are only indirectly reflected in national economic statistics. Household surveys, in contrast, usually seek to capture all sources of income or total expenditures. Reporting of income may not be precise, but in this report the income data are buttressed by detailed, standardized expenditure data in a substantial subset of countries. Thus the BOP market analysis here, based on household surveys,



provides the most direct measure of total income and expenditures and of the economic impact of informal employment and remittances.

Moreover, the surveys, despite some limitations for the purposes here,⁴ provide direct information on the BOP as consumers that is not available from other sources of economic data. This report uses those data to dissect and characterize the economic behavior of the BOP in some detail—providing, for the first time, a systematic empirical characterization of BOP markets.

This work underlines the fact that the low income market includes far more people than the very poor—and the entire market must be analyzed and addressed for private sector strategies to be effective, even if there are segments of that market for which market-based solutions are not available or not sufficient.

Addressing the unmet needs of the BOP is essential to raising welfare, productivity, and income—to enabling BOP households to find their own route out of poverty. Engaging the BOP in the formal economy must be a critical part of any wealth-generating and inclusive growth strategy. And eliminating BOP penalties will increase effective income for the BOP. Moreover, to the extent that unmet needs, informality traps, and BOP penalties arise from inefficient or monopolistic markets or lack of attention and investment, addressing these barriers may also create significant market opportunities for businesses.

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BOX 1.2:

A BOP PORTRAIT

LIVING AT THE BOP

The BOP is characterized not only by low income—below \$3,000 per capita per year—but also by several other shared characteristics:

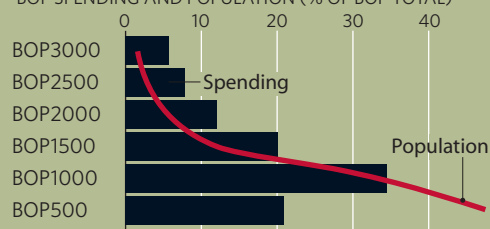
- **Significant unmet needs.** Most of those in the BOP have no bank account or access to modern financial services—if they borrow, it is typically from local moneylenders at very high interest rates. Most do not own a phone. Many live in informal settlements and have no formal title to their dwelling. And many lack access to water and sanitation services, electricity, and basic health care.
- **Dependence on informal or subsistence livelihoods.** Most of those in the BOP are poorly integrated into the formal economy, which limits their economic opportunities. As producers, they often lack good access to markets to sell their labor, handicrafts, or surplus crops and have no choice but to sell to local employers or to middlemen who exploit them. As subsistence and small-scale farmers and fishermen, they are uniquely vulnerable to destruction of the natural resources they depend on but are powerless to protect (World Resources Institute and others 2005). In effect, informality and subsistence are poverty traps.
- **Impacted by a BOP penalty.** Many of those in the BOP, and perhaps most, pay higher prices for basic goods and services than do wealthier consumers—either in cash or in the effort they must expend to obtain them—and they often receive lower quality as well. For some services BOP consumers lack access altogether. The high cost of being poor is widely shared: it is not just the very poor who must walk long distances for water or firewood, or who often pay more for the transportation to reach a distant hospital or clinic than for the treatment, or who face exorbitant fees for loans or for transfers of remittances from relatives abroad.

POPULATION AND SPENDING

Low income is not no income. While the lowest BOP income segments are very poor by any standard, the economic structure of low-income populations varies from region to region and country to country. In addition, there are very large numbers of people in the mid- to high-income segments of the BOP itself, and these populations represent significant purchasing power.

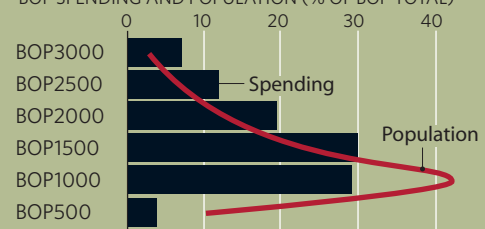
Africa

BOP SPENDING AND POPULATION (% OF BOP TOTAL)



Asia

BOP SPENDING AND POPULATION (% OF BOP TOTAL)





REGIONAL PROFILES

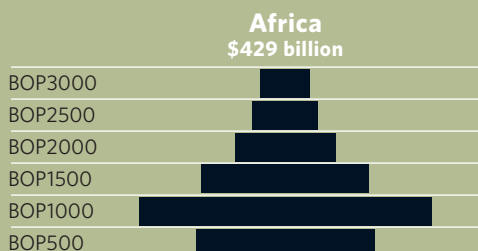
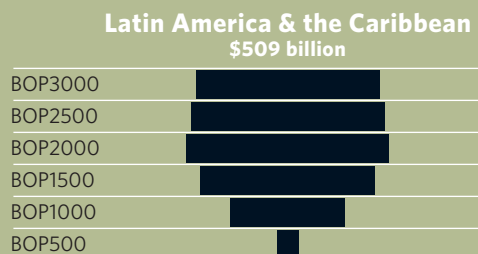
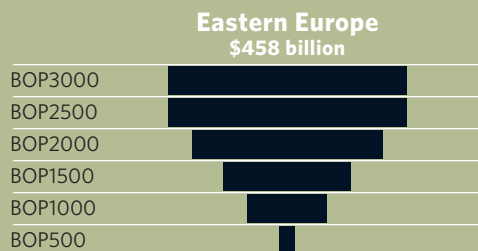
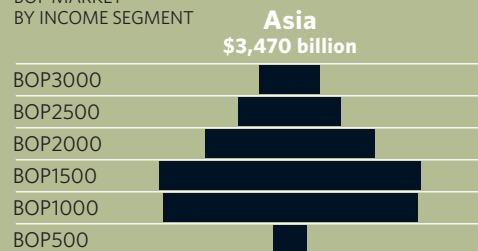
The BOP market in Asia (including the Middle East) is by far the largest: 2.86 billion people in 19 surveyed countries, with an aggregate income of \$3.47 trillion (box 1.4). The BOP market in these countries represents 83% of the region's population and 42% of its aggregate purchasing power—a significant share of Asia's rapidly growing consumer market. In rural areas the BOP is the majority of the market—representing 76% of aggregate household income in rural China and effectively 100% in rural India and rural Indonesia.

The BOP market in Eastern Europe is \$458 billion and includes 254 million people in 28 surveyed countries, 64% of the region's population, with 36% of the region's aggregate income. In Russia, the region's largest economy, the BOP market includes 86 million people and \$164 billion in income.

In Latin America the BOP market is \$509 billion and includes 360 million people, 70% of the population in the 21 countries surveyed. The BOP market accounts for 28% of the region's aggregate household income, a smaller share than in other developing regions. In both Brazil and Mexico the BOP constitutes 75% of the population, representing aggregate income of \$172 billion and \$105 billion.

In Africa the BOP market, \$429 billion, is smaller than that of Eastern Europe or Latin America. But it is by far the region's dominant consumer market, with 71% of aggregate purchasing power. The African BOP includes 486 million people in 22 surveyed countries—95% of the population in those countries. South Africa has the region's strongest and most modern economy, yet 75% of the population remains in the BOP. The South African BOP market has an aggregate income of \$44 billion. Other countries in the region offer even larger BOP market opportunities, notably Ethiopia (\$84 billion) and Nigeria (\$74 billion).

BOP MARKET
BY INCOME SEGMENT



A new way of thinking about poverty reduction

The BOP market analysis in this report is intended to help businesses and governments think more creatively about new products and services that meet BOP needs and about opportunities for market-based solutions to achieve them. For businesses, characterizing the market in empirical terms is an important first step toward identifying business opportunities, considering business models, developing products, and expanding investment in BOP markets. Put simply, while an analysis of the depth of poverty does not generate private sector enthusiasm for investment, an analysis of BOP market size and willingness to pay might—and is thus a critical step toward market-based solutions.

For governments, such an analysis can help focus attention on reforms needed in the operating and regulatory environment to allow a larger role for the private sector.

The market-based approach to poverty reduction and empirical market data described in this report are equally important for the development community. They can help frame the debate on poverty reduction more in terms of enabling opportunity and less in terms of aid. A successful market-based approach would bring significant new private sector resources into play, allowing development assistance to be more sharply targeted to the segments and sectors for which no viable market solutions can presently be found. Market-based approaches and smart development policies are synergistic strategies.

There are distinct differences between a market-based approach to poverty reduction and more traditional approaches, and it is useful to clarify those differences. As suggested, traditional approaches often focus on the very poor, proceeding from the assumption that they are unable to help themselves and thus need charity or public assistance. In contrast, a market-based approach starts from the recognition that being poor does not eliminate commerce and market processes: virtually all poor households trade cash or labor to meet a significant part of their basic needs. A

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market-based approach thus focuses on people as consumers and producers and on solutions that can make BOP markets more efficient, competitive, and inclusive—so that the BOP can benefit from them.

Traditional approaches also tend to address unmet needs for health care, clean water, or other basic necessities by setting targets for meeting those needs through direct public investments, subsidies, or other handouts. The goals may be worthy, but the results have not been strikingly successful. A market-based approach recognizes that it is not just the very poor who have unmet needs and asks about the willingness to pay of different market segments. It looks for solutions in the form of new products and new business models that can provide goods and services at affordable prices.

Those solutions may involve market development efforts that include elements similar to traditional development tools—hybrid business strategies that incorporate consumer education or other forms of capacity building; microloans, consumer finance, or cross-subsidies among different income groups; franchise or retail agent strategies that create jobs and raise incomes; and partnerships with the public sector or with nongovernmental organizations (NGOs). Many successful companies are adopting such innovative strategies, as this report illustrates, sometimes even co-creating solutions with community groups and civil society (Brugman and Prahalad 2007). But the solutions ultimately are market oriented and demand driven.

Perhaps most important, traditional approaches do not point toward sustainable solutions, while a market-oriented approach recognizes that only sustainable solutions can scale to meet the needs of 4 billion people.

Growing private sector interest

Already business interest in BOP markets is rising, both among large national companies and multinational corporations and among small entrepreneurial ventures and social entrepreneurs. One indicator is the business presence at conferences devoted to the topic⁵ and the growing journalistic coverage in business publications.⁶

A stronger indicator is the number of large companies conducting pilots, launching new businesses, or extending product lines in existing businesses that serve BOP markets. Of these, multinational consumer product companies such as Unilever and Procter & Gamble have the most

extensive track record, with “sachet” marketing now widely known and single-serving product sizes now dominant in many consumer markets.

Large national companies have proved to be among the most innovative and adept in meeting needs of BOP consumers and producers. Standouts include India’s ITC in agriculture and ICICI Bank in financial services, Brazil’s Casas Bahia in consumer goods, and Mexico’s Cemex in housing (Annamalai and Rao 2003). But perhaps the strongest and most dramatic BOP success story—whether measured by market penetration, by the documented benefits to low-income customers, or by the financial success of the companies—comes from mobile telephony.

A decade ago phone service in most developing countries was poor, and few BOP communities had access to phone service or could afford it on the terms offered. The entry of mobile phone companies transformed this picture. The number of mobile subscribers in developing countries grew more than fivefold between 2000 and 2005 to reach nearly 1.4 billion. Growth was rapid in all regions, but fastest in Sub-Saharan Africa: Nigeria’s subscriber base grew from 370,000 to 16.8 million in just four years. Meanwhile, the Philippines’ grew sixfold to 40 million (World Bank 2006b). Wireless subscribers in China, India, and Brazil together now outnumber those in either the United States or the European Union (ITU 2006).⁷

Comparison of these numbers with the size of BOP populations suggests substantial and growing penetration of mobile phone use in the BOP, confirmed by the household surveys analyzed in this report. Industry analysts expect more than 1 billion additional mobile subscribers worldwide by 2010, with 80% of the growth in developing countries, almost entirely in BOP markets (Wireless Intelligence 2005).

Low-income populations have clearly benefited from access to mobile phones, which ease access to jobs, to medical care, to market prices, to family members working away from home and the remittances they can send, and, increasingly, to financial services (Vodafone 2005). All this depends on the affordability of mobile services, and a critical factor in this has been innovative business models such as prepaid voice and prepaid text-messaging services, available in ever-smaller units. For example, the Philippines’ Smart Communications has a growing, profitable business with more than 20 million BOP customers, virtually all of whom use pre-



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paid text-messaging services bought in units as small as US\$0.03 (Smith 2004b).

Another innovative business model—shared access, in which an entrepreneur with a phone provides pay-per-use access to a community—has extended the social and economic impact of mobile phones beyond the subscriber base. In South Africa more than half the traffic on Vodacom's mobile network in 2004 came not from its 8 million subscribers but from 4,400 entrepreneur-owned phone shops where customers rent access to phones by the minute. In Bangladesh, Grameen Telecom's village phone entrepreneurs now serve 80,000 rural villages, generating more than US\$100 in monthly revenue per phone by aggregating the demand of (and providing service to) entire villages (Cohen 2001).

A strong value proposition for low-income consumers has translated into financial success for mobile companies. In 2006 the Kenyan mobile company Safaricom posted the biggest profit ever in East Africa—K Sh 12.77 billion (US\$174 million)—edging out East African Breweries as the region's biggest profit maker.⁸ Celtel, an entrepreneurial company founded by a British entrepreneur of Sudanese descent and operating in some of the poorest and least stable countries in Africa, went from start-up to telecom giant in just seven years. In 2005 the company was acquired for US\$3.4 billion. It now has operations in 15 African countries and holds licenses covering more than 30% of the continent.⁹

Not all sectors have found their footing yet in BOP markets, however. Privatized urban water systems, for example, have encountered financial and political difficulties in developing countries, and the result has been neither better service for low-income communities nor success for the companies. The energy sector has similarly had only limited success in providing affordable off-grid electricity or clean cooking fuels to rural BOP communities.

Even in these sectors, however, there are encouraging entrepreneurial ventures—providing affordable water filters or home treatment systems so that households can purify water for themselves, offering low-cost solar-powered LED (light-emitting diode) lighting systems that can provide a few hours of light in the evening, or introducing efficient, multi-fuel cookstoves that can burn propane, plant oils, or gathered biomass fuels. Further development of technology and business models may expand BOP markets in these sectors.



Some observers have raised concerns about market-based approaches to reducing poverty (box 1.3). On the ground, however, BOP-oriented business activity is accelerating, in many cases generating evidence of significant benefits for BOP households and communities.

The enabling environment for business

The operating and regulatory environments in developing countries can be challenging. Micro and small businesses especially face disadvantages. If they are informal, they cannot get investment finance, participate in value chains of larger companies, or sometimes even legally receive services from utilities. Condemned to remain small, they cannot generate wealth or large numbers of jobs. Nor do they contribute to the broader economy by paying taxes.

Most face significant barriers to joining the formal economy in the form of antiquated regulations and prohibitive requirements—dozens of steps, delays of many months, capital requirements beyond attainment for most of the BOP. In El Salvador, for example, it used to take 115 days and many separate procedures to start a legitimate business—until recent reforms reduced the effort to 26 days and allowed registration with four separate agencies in a single visit (World Bank and IFC 2006). Even for legitimate small businesses investment capital is generally unavailable and supporting services scarce.

Fortunately, there is growing recognition of the importance of removing barriers to small and medium-size businesses and a growing toolbox for moving firms into the formal economy and creating more efficient markets. These tools, and country ratings of progress on reform, are available in the World Bank and International Finance Corporation's (IFC) annual Doing Business report, along with growing evidence that the tools work. In El Salvador five times as many businesses register annually since its reforms. Many countries, including China, have dropped minimum capital requirements. The pace of reform is accelerating, with more than 40 countries making changes in the most recent year surveyed (World Bank and IFC 2006). Accelerated formation of legitimate small businesses creates benefits for individuals (owners, workers, customers), the enterprises, and the larger economy.

Coupled with reform is growing attention to enterprise development initiatives focused on BOP markets and investment capital for small and medium-size enterprises. The Inter-American Development Bank, as



BOX 1.3:

RESPONDING TO CRITICISMS OF THE MARKET APPROACH

Market-based approaches to meeting the needs of BOP households raise concerns about their appropriateness, especially among some academics, NGOs, and development professionals. Some argue that capitalism in these circumstances is unacceptable or that “profiting from the poor” is morally wrong. Others, pointing to examples of corporate exploitation of low-income workers or ill-informed consumers, argue that the poor are uniquely vulnerable and powerless and so need safeguards. Still others seek to protect the poor from “bad” products or the perceived excesses of a consumer society.

Some of these concerns are appropriate. But others may reflect misunderstanding—of the BOP or of market processes. As both consumers and producers, largely in the informal economy, those in the BOP already suffer from inefficient and uncompetitive markets (see box 1.2).

New formal business entrants can potentially improve competition, lower prices, and increase consumer choice—often bringing products and services previously unavailable or unaffordable. Some of these services, such as mobile telephony or financial services, can directly improve productivity, earning power, and access to jobs. Others, such as access to basic health care and pharmaceuticals or to means for securing clean water—often available to the BOP only from the private sector—translate directly into greater welfare. The potential benefits to BOP households and to the countries in which they live go well beyond consumption and are an essential step toward inclusive markets.

For many in the BOP, jobs are the critical missing ingredient, because cash income is increasingly essential. With few exceptions, job creation requires additional business investment and business formation. Expanded private sector engagement in the BOP, especially by small and medium-size enterprises, is the only sustainable source of large numbers of jobs.

Moreover, there is not enough charity or aid to meet the needs of 4 billion people on an ongoing basis. Without sustainable—that is, profitable—businesses involved, efforts to address unmet needs must fall short. And profitability is essential to attract additional investment and scale solutions to reach the full extent of the need. Even in areas traditionally served by government, such as health care and education, it is clear that in many countries the public sector cannot meet all the needs in the near term—and that private sector solutions are desirable and essential.

part of its Opportunity for the Majority program, is committing US\$1 billion over five years to new investments to support private sector efforts for the BOP, including small and medium-size enterprises. The Asian Development Bank is launching several new investment funds for the same purpose. The Japan Bank for International Cooperation aims to increase its funds for African private sector development including small and medium enterprises. IFC is expanding its technical assistance and investment activities for small and medium-size enterprises.

These efforts, and the growing private sector interest in investing in small and medium-size enterprises in developing countries, explicitly

recognize that an expanded private sector role and a bottom-up market approach are essential development strategies.

Characterizing BOP markets

Total annual household income of \$5 trillion a year establishes the BOP as a potentially important global market. Within that market are significant regional and national variations in size, population structure income distribution, and other characteristics.

Market size

The BOP market in Asia (including the Middle East) is by far the largest: 2.86 billion people in 19 countries, with an aggregate income of \$3.47 trillion (box 1.4). The BOP market in these countries represents 83% of the region's population and 42% of its aggregate purchasing power—a significant share of Asia's rapidly growing consumer market (figure 1.1). In rural areas the BOP is the majority of the market—representing 76% of aggregate household income in rural China and effectively 100% in rural India and rural Indonesia.

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In Latin America the BOP market of \$509 billion includes 360 million people, 70% of the population in the 21 countries surveyed. The BOP market accounts for 28% of the region's aggregate household income, a smaller share than in other developing regions. In both Brazil and Mexico the BOP constitutes 75% of the population, representing aggregate income of \$172 billion and \$105 billion.

BOX 1.4:

ALTERNATIVE MARKET METRICS

Unless otherwise noted, the market sizes in this and subsequent chapters are denominated in international dollars, which reflect the purchasing power of local currencies and thus are the appropriate frame of reference for local companies and for BOP producers and consumers. But for multinational companies U.S. dollars provide a more useful metric. By this metric the global BOP market is US\$1.3 trillion, while the Asian BOP market is US\$742 billion, the Latin American market US\$229 billion, the Eastern European market US\$135 billion, and the African market US\$120 billion. (See appendix A for BOP market sizes in both international and U.S. dollars for selected countries.)



In Africa the BOP market, \$429 billion, is slightly smaller than that of Eastern Europe or Latin America. But it is by far the region's dominant consumer market, with 71% of aggregate purchasing power. The African BOP includes 486 million people in 22 surveyed countries—95% of the population in those countries.¹⁰ South Africa has the region's strongest and most modern economy, yet 75% of the population remains in the BOP. The South African BOP market has an aggregate income of \$44 billion. Other countries in the region offer even larger BOP market opportunities, notably Ethiopia (\$84 billion) and Nigeria (\$74 billion).

Market composition

Population distribution across BOP income groups is far from homogeneous. In Nigeria, for example, most of the BOP is concentrated in the lowest income segments. Mexico has a more even distribution of population by income within the BOP. The contrast between rural and urban China is particularly striking, showing that economic opportunities for BOP populations are significantly better in urban than in rural areas of that country—a disparity that has implications both for business and for social stability.

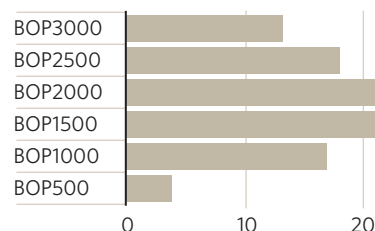
Spending patterns

Population structure by itself is not a reliable guide to market composition. Accordingly, this analysis also examines BOP spending patterns by country, sector, and income level. This analysis is based on a World Bank initiative—the International Comparison Program—to standardize the expenditures reported by national household surveys into defined categories.

The standardized data allow detailed, sector-by-sector analysis within countries, insight into how spending patterns by income level differ among countries, and more meaningful aggregation of BOP consumer markets to a regional scale, though the surveys themselves vary across countries and over time.¹¹ (See appendix B for a description of the standardization methodology and country tables of standardized BOP expenditure data by sector and income level.) Combining income and expenditure data allows estimation of the size of regional sector markets (box 1.5).

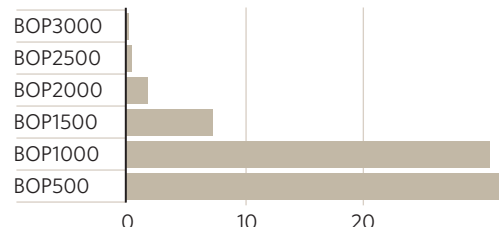
Mexico

PERCENT OF POPULATION BY INCOME SEGMENT



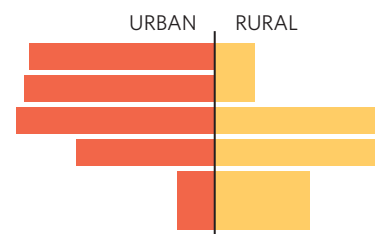
Nigeria

PERCENT OF POPULATION BY INCOME SEGMENT



China

URBAN AND RURAL BOP POPULATION BY INCOME SEGMENT

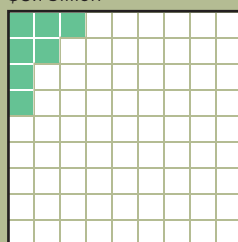
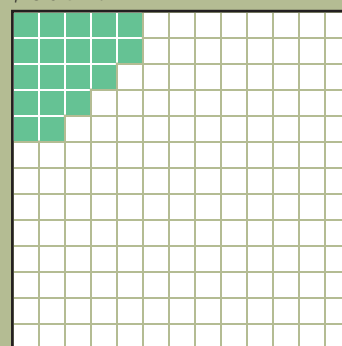


BOX 1.5:

ESTIMATING THE SIZE OF SECTOR MARKETS

The size of each sector market in a region is estimated by combining standardized sector expenditure data from the subset of 36 countries for which these data exist with the income-based measure of the regional market size (from 110 countries). In Africa, for example, the BOP health market measured across the 12 countries for which standardized expenditure data are available is about \$8 billion, which represents about 4% of total BOP spending in those countries. Extrapolating that expenditure pattern to all surveyed countries in the region leads to an estimate of \$18 billion for the total BOP health market in the region.¹²

A similar process for other regions gives \$95 billion for Asia's regional BOP health market, \$21 billion for Eastern Europe's, and \$24 billion for Latin America's—for a total BOP health market of \$158 billion.

Market size,
measured
and estimatedBOP SPENDING
IN THE HEALTH SECTORAfrica
\$8.1 billionMeasured
\$87.7 billionAfrica
\$18.0 billionEstimated
\$158.4 billion

Characterizing BOP sector markets

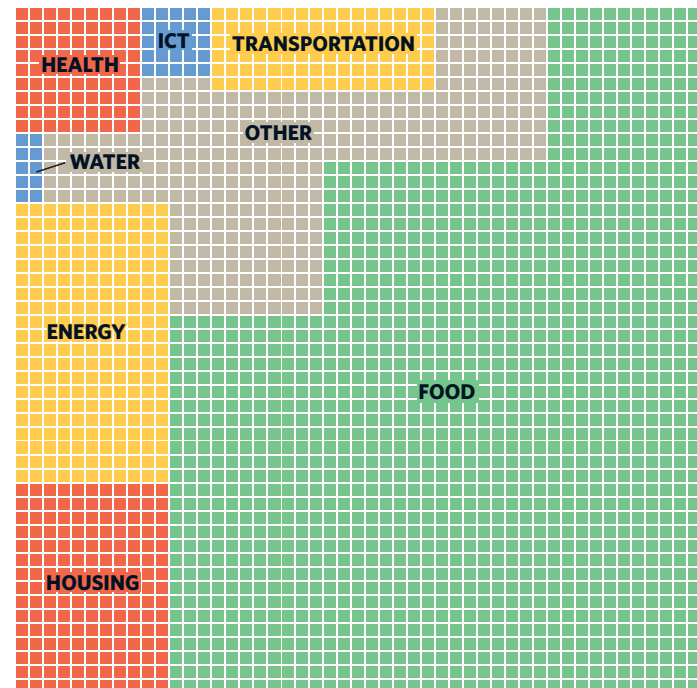
The following chapters analyze BOP sector markets in detail, drawing on the country data tables in appendix B. Highlights from those chapters show how the data in this report can be used to characterize BOP markets.

- How large is the market? Sector markets for the 4 billion BOP consumers range widely in size. Some are relatively small, such as water (\$20 billion) and information and communication technology, or ICT (\$51 billion as measured, but probably twice that now because of rapid growth). Some are medium scale, such as health (\$158 billion), transportation (\$179 billion), housing (\$332 billion), and energy (\$433 billion). And some are truly large, such as food (\$2,895 billion). BOP markets in Asia (including the Middle East) are the largest, reflecting the sheer weight of the population in that region. Many BOP sector markets in Africa, Eastern Europe, and Latin America and the Caribbean are roughly comparable in size, reflecting the smaller BOP populations but larger incomes in Eastern Europe and Latin America.
- How is the market segmented? BOP markets can be usefully characterized as bottom heavy, top heavy, or flat, depending on where spending is concentrated among the six income segments distinguished in the BOP. Bottom-heavy BOP markets predominate in



Estimated BOP market by sector

\$5 trillion

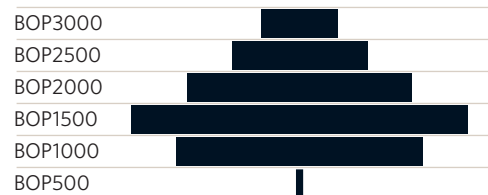


Asia and Africa, and top-heavy markets in Eastern Europe and Latin America. The ICT sector is an exception, with spending still typically concentrated in the upper income segments of the BOP in all regions.

- What do households spend? For most sectors average BOP household spending is significantly higher in Latin America than in other regions. For ICT, for example, average BOP household spending for the median country is \$34 in Africa, \$54 in Asia, \$56 in Eastern Europe, and \$107 in Latin America. Comparable numbers for health care are \$154 in Africa, \$131 in Asia, \$152 in Eastern Europe, and \$325 in Latin America—and for transportation, \$211 in Africa and Asia, \$141 in Eastern Europe, and \$521 in Latin America. Spending is higher, but differences proportionately less, for food: \$2,087 in Africa, \$2,643 in Asia, \$3,687 in Eastern Europe, \$3,050 in Latin America.
- Where is the market? Urban areas dominate the BOP markets for water, ICT, and housing in all regions. BOP markets for transportation and energy are also heavily urban except in most of Asia, where rural areas dominate. For food and health care, rural BOP markets are larger in most countries of Africa and Asia, and urban BOP markets larger in most countries of Eastern Europe and Latin America.

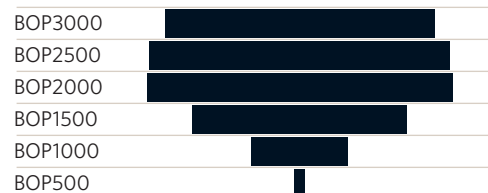
India

SPENDING BY INCOME SEGMENT

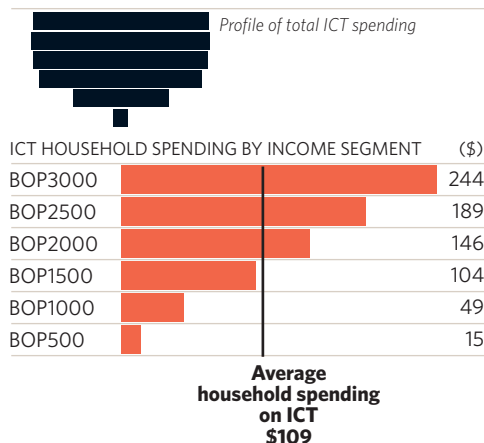


Mexico

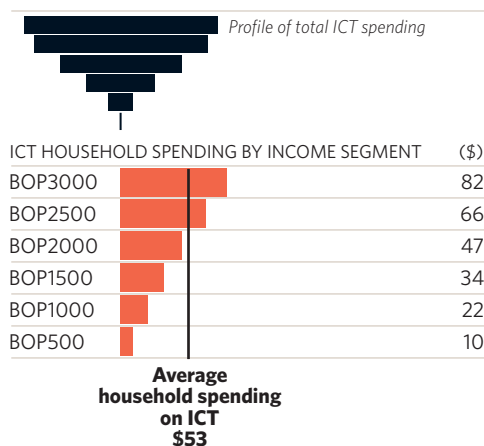
SPENDING BY INCOME SEGMENT



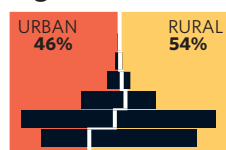
South Africa



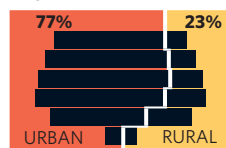
Russia



Nigeria



Brazil



Total BOP food spending by income segment, urban and rural

- What does the BOP buy? The survey data record interesting patterns in what BOP households buy. For health care, for example, more than half of BOP spending goes to pharmaceuticals. For ICT, phone service dominates recorded expenditures. Many BOP households don't pay cash for water: in Africa surface water is the primary source for 17% of BOP households, and unprotected wells the primary source for relatively large shares in some countries in the region. Access to electricity is virtually universal in Eastern Europe and high among BOP households in Asia and Latin America, but quite low in Africa. For all regions except Eastern Europe firewood is the dominant cooking fuel among lower BOP income segments, while propane or other modern fuels are dominant among higher BOP income segments and in urban areas.
- Is there evidence of a BOP penalty? Data for several sectors suggest a penalty—higher costs or lower quality for services, or no access at all—for BOP households. Wealthier mid-market households are seven times as likely as BOP households to have access to piped water. Some 24% of BOP households lack access to electricity, compared with only 1% of mid-market households. ICT spending and phone ownership are significantly lower among rural BOP households than either rural mid-market or even urban BOP households—consistent with the broad lack of access in rural areas confirmed by coverage data from other sources.

BOP business strategies

The following chapters also give case studies of business enterprises that are successfully serving BOP markets. Here, four broad strategies are distinguished that are used by enterprises operating in BOP markets and that appear to be critical to their success:

- Focusing on the BOP with unique products, unique services, or unique technologies that are appropriate to BOP needs and that require reimagining the business, often through significant investment of money and management talent.
- Localizing value creation through franchising, through agent strategies that involve building local ecosystems of vendors or suppliers, or by treating the community as the customer, all of which usually involve substantial investment in capacity building and training.



- Enabling access to goods or services—financially (through single-use or other packaging strategies that lower purchase barriers, pre-paid or other novel business models that achieve the same result, or financing approaches) or physically (through novel distribution strategies or deployment of low-cost technologies).
- Unconventional partnering with governments, NGOs, or groups of multiple stakeholders to bring the necessary capabilities to the table.

Enterprises may—and often do—use more than one of these strategies.

Focusing on the BOP

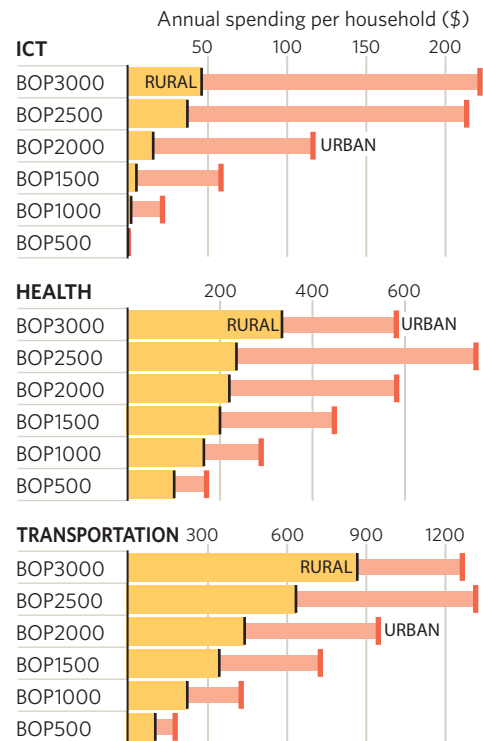
In the water sector, filters and other point-of-use treatment approaches that enable BOP households to purify dirty water exemplify a strategy of focusing on the BOP, responding to BOP circumstances with unique products and technology. This strategy is also found in the food sector, in the development of healthier products that address BOP needs; in the housing sector, in the packaging of design, financing, and as-needed delivery of materials services; and in the energy sector, in the marketing of solar-powered LED lighting and high-tech home cookstoves. In financial services, microfinance and low-cost remittance systems reflect a BOP focus.

Localizing value creation

Franchising and direct marketing by agents of pharmaceuticals, health services, and preventive health materials are gaining traction in the BOP health sector, as are distribution systems (such as Shakti in India) in the food and consumer goods sectors. These approaches create jobs and help ensure local value creation as well as provide efficient, low-cost distribution. In the ICT sector mobile phone companies have built extensive ecosystems of small shops, village phone entrepreneurs, and other vendors to sell or deliver their services to BOP markets; in the Philippines even McDonald's franchises serve as points of delivery for remittances sent by phone from overseas.

Community water treatment systems and mini-hydropower systems enable the community to be the provider as well as the customer.

Urban and rural spending—Cameroon



Data for several sectors suggest a penalty—higher costs or lower quality for services, or no access at all—for BOP households. Wealthier mid-market households are seven times as likely as BOP households to have access to piped water.

Extractive industries use a similar strategy when they source goods and services locally.

Enabling access

Sachet marketing—packaging products in single-use or other small units that make them more affordable to the BOP—is associated with fast-moving consumer goods. But the strategy is also widely used in the food sector and in ICT (pricing voice or text-messaging units at US\$.50 or less and selling Internet access by the quarter hour). These packaging strategies are critical to enabling access in BOP communities, where cash is scarce.

Cross-subsidy strategies—where wealthier customers help subsidize services for BOP clients—play a big part in enabling access in the health sector. Financing strategies—microloans, consumer finance, or mortgage financing for the BOP or even community-based health insurance—play a similar part in a range of sectors, enabling access to housing, to health care, to solar power systems, and to fertilizers or advanced seeds in agricultural supply chains for the food sector.

Franchising and other local value creation strategies also are often critical to enabling access to services for the BOP, especially in rural areas.

Unconventional partnering

Public-private partnerships are common in the energy and water sectors. Less common but gaining momentum are partnerships between businesses and NGOs—to build distribution and service networks for cookstoves in the energy sector, to build and manage distribution networks for food and consumer goods, to create and manage franchise networks in health care. As banks move into providing financial services to the BOP, some are partnering with microfinance entities and community self-help groups. And partnerships between multiple stakeholders are being used to transform urban transportation systems.



Endnotes

1. In this report current U.S. dollars means 2005 dollars. Unless otherwise noted, however, market information is given in 2005 international dollars adjusted for purchasing power parity; for convenience, BOP and mid-market income cutoffs are given in international dollars for 2002 (the base year to which household surveys used in this analysis have been normalized). See appendix A for the methodology.
2. The high-income population segment is approximately 0.3 billion worldwide. But neither its size nor its very large aggregate income can be reliably measured by household surveys, because the sample of such households in national surveys, especially in developing countries, is too small.
3. In 2004 recorded remittances were the second largest source of external financing in developing countries, after foreign direct investment, and amounted to more than twice the size of official aid. Including unrecorded flows, remittances are the largest source of external financing in many developing countries. (World Bank 2006a).
4. While household surveys are regarded by economists as a source of reliable economic data, here they are applied as market research tools in ways for which they were not designed. As a result, some limitations apply: household surveys rarely capture unit prices for commodities purchased, for example, and are not standardized across countries or over time. For rapidly developing sectors, such as mobile communications, even relatively recent surveys can markedly understate use rates and expenditure.
5. Conferences include “Eradicating Poverty through Profit” (World Resources Institute, San Francisco, December 12–14, 2004; <http://www.nextbillion.net/sfconference>); “Business Opportunity and Innovation at the Base of the Pyramid” (World Resources Institute, Multilateral Investment Fund, and Ashoka, São Paulo, August 30, 2005); “Business Opportunity and Innovation at the Base of the Pyramid” (World Resources Institute, Multilateral Investment Fund, and Ashoka, Mexico City, September 1, 2005); and “Global Poverty: Business Solutions and Approaches” (Harvard Business School, Cambridge, MA, December 1–3, 2005; <http://www.nextbillion.net/harvard05conference>).
6. World Resources Institute, “News: NextBillion.net,” <http://www.nextbillion.net/newsroom> (accessed January 12, 2007).
7. According to the International Telecommunication Union, there were 2,137 million mobile subscribers in 2005. India, China, and Brazil together accounted for 555.6 million of those, the European Union for 470.6 million, and the United States for 201.6 million.
8. East African, “Safaricom Makes \$12.77 Million Profit, a Record for Region,” October 30, 2006, <http://allafrica.com/stories/200610301138.html>.
9. Mo Ibrahim, presentation to World Bank, April, 2006.
10. Many African countries lack current household surveys. If the missing countries were included, the African BOP population and market size might be as much as twice that of the “surveyed” BOP figures given here. In other regions the missing countries would not affect reported totals significantly.
11. While the data are standardized, the household surveys are not and so do not capture the same information in each country. Direct comparisons between countries should thus be avoided or used with great caution.
12. The estimation procedure is based on the following formula applied to BOP markets: measured sector expenditure/total expenditure = estimated regional sector expenditure/total regional income, which is then solved for estimated regional sector expenditure. This amounts to assuming that the average ratio of sector expenditure to total expenditure as sampled in a measured group of countries is a good estimator for the same ratio in another group of countries in the region for which income but not standardized expenditure data are available. It also assumes that total household income equals total household expenditure, an equivalence already assumed in the methodology for assembling the income survey data.