

CONFUSION AT THE BOTTOM OF THE PYRAMID IN BRAZIL

Confusão na Base da Pirâmide no Brasil

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ABSTRACT

The popular ‘bottom of the pyramid’ (BOP) proposition argues that large companies can make a fortune by selling to poor people and simultaneously help eradicate poverty. The BOP proposition is characterized by much hyperbole and weak research methodology. One source of confusion is to wrongly classify middle-income people as poor, which artificially increases the market size and attractiveness of the BOP market. This confusion was prevalent in the initial research on BOP and continues to be so in the contemporary BOP research in Brazil.

KEYWORDS: Bottom of the pyramid, poverty, middle-income.

RESUMO

A popular proposta ‘base da pirâmide’ (BOP) argumenta que grandes empresas podem fazer fortuna vendendo para pessoas pobres e simultaneamente erradicar a pobreza. A proposta da BOP é caracterizada por muita hipérbole e fraca metodologia de pesquisa. Uma fonte de confusão é classificar equivocadamente as pessoas de classe média como pobres, que artificialmente aumenta o tamanho do mercado e a atratividade do mercado da BOP. Esta confusão foi predominante nas pesquisas iniciais sobre a BOP e continua sendo assim nas pesquisas contemporâneas da BOP no Brasil.

PALAVRAS-CHAVE: Base da pirâmide, pobreza, classe média.

1 Introduction

Widespread poverty is an economic, social, political and moral problem. For many decades, various institutions have tried to address this challenge: local governments, developed country governments, international organizations (such as the World Bank and the United Nations), aid foundations and non-governmental organizations. So far, the intellectual discourse has been largely in the fields of public policy and development economics. More recently, management experts and business school academics have entered this arena. The late CK Prahalad was one of the pioneers of this movement, and the most visible and prolific writer in this field. His book *The Fortune at the Bottom of the Pyramid: Eradicating Poverty Through Profits* (Prahalad, 2005) attracted much attention. The book was preceded by a few articles Prahalad had published with his co-researchers (Prahalad and Hart, 2002; Prahalad and Hammond, 2002; Hammond and Prahalad, 2004).

The bottom of the pyramid (BOP) proposition (Prahalad, 2005) can be summarized as follows:

1. There is much untapped purchasing power at the bottom of the pyramid. Private companies can make significant profits by selling to the poor.
2. By selling to the poor, private companies can bring prosperity to the poor, and thus can help eradicate poverty.
3. Large multinational companies (MNCs) should play the leading role in this process of selling to the poor.

Thus, Prahalad argues that selling to the poor can simultaneously be profitable and eradicate poverty. This is, of course, a very appealing proposition and has drawn much attention from senior managers, large companies and business schools.

The BOP proposition is indeed too good to be true. It is seductively appealing, but it is riddled with fallacies. There is little glory or fortune at the bottom of the pyramid – unfortunately, it is (almost) all a mirage; I have argued elsewhere that the BOP proposition is both logically flawed and inconsistent with the evidence (Karnani, 2007; Karnani, 2011). More recently there has been much research refuting the BOP proposition (for example, Achrol and Kotler, 2016). Even Stuart Hart, one of the original researchers of the BOP proposition, has recently conceded that “the unfortunate truth is that most BOP ventures and corporate initiatives over the past decade have either failed outright, or achieved only modest success at great cost” (Hart, 2015).

In this paper I will focus on the first element of the BOP proposition: there is much untapped purchasing power at the bottom of the pyramid. The BOP proposition is critically dependent on there being a large attractive market at the bottom of the pyramid. I will show that the bottom of the pyramid market is much smaller and much less attractive than the BOP proponents claim. And, this is true in the context of contemporary Brazil. A major source of confusion is to wrongly classify middle-income people as poor, which artificially increases the apparent market size and attractiveness of the BOP market. This has serious implications for both public policy and firm strategies.

2 Poverty Line

There is much confusion in the BOP field on how to define poverty. Prahalad and Hart (2002) started with a definition of the poor as per capita annual income at purchasing power rates (PPP) of \$1500 or less. In the next article, Prahalad and Hammond changed the income level to \$2000 per year (Prahalad and Hammond, 2002). In his book, Prahalad (2005) defines it as \$2 per day, equivalent to \$730 per year. Alan Hammond, one of the original BOP researchers, co-authored The Next 4 Billion report, which defines the poor as those with annual incomes below \$3,000 PPP (World Resource Institute, 2007). These are, of course, big differences ranging from \$2/day to \$8.2/day. To an affluent researcher, a person living on \$8/day seems very poor, but to a person living on \$2/day, an income of \$8/day is a dramatic improvement. There is no discussion at all in the BOP literature of how to choose the income level for defining the poor.

Poverty is, of course, a matter of degrees and involves subjective judgments. There is no objective or consensus definition of the poverty line. In most countries the government determines its own national poverty line. Since 1990, the World Bank has measured poverty by the standards commonly used in low-income countries, which generated the widely accepted 'dollar a day' poverty line. People below the 'extreme poverty' line of '\$1 per day' cannot meet basic needs for survival: nutrition, health care, safe drinking water, sanitation, education for children, adequate shelter and clothing. This poverty line is then converted to local currency using the latest PPP exchange rates, and the local consumer price indices are then used to adjust for inflation. This work was updated recently resulting in a poverty line of \$1.90 per day in 2011 PPP prices, still often referred to as '\$1 per day' poverty line. This definition of 'extreme poverty' is probably too conservative. Another commonly used standard, more representative of middle-income countries, is '\$2 per day,' equivalent to \$3.10 in 2011 PPP prices. At this level of 'moderate poverty,' the basic needs of survival are met, but just barely.

Both these measures of poverty are widely used in development economics and public policy fields. For example, in 2002 all the 191 United Nations member states agreed to the Millennium Development Goals. The first goal of this declaration is to eradicate extreme poverty and hunger, and set the target: "Halve, between 1990 and 2015, the proportion of people whose income is less than \$1 a day" (United Nations, 2005). The World Bank uses both \$1/day and \$2/day poverty lines. In his book on BOP, Prahalad (2005) uses the \$2 per day criterion; I too shall use the \$2/day poverty line (\$3.10 in 2011 prices) in this paper. Brazil's government set its national poverty line at R\$ 2,004 per year, which is equivalent to about \$3.40 per day in 2014 PPP prices, not that far from the \$2/day criterion.

The BOP argument tends to set the poverty line very high, perhaps in a misguided attempt to increase the estimate of the BOP market size and thus appeal to companies. The BOP market proposition also often confuses the emerging middle class in developing countries for the poor. The Next 4 Billion report claims that 98.6 percent of the population of India is in the base of the pyramid! According to this report, in most developing countries, at least 95 percent of the population falls below the poverty line. Actually these high percentage numbers include both the poor and the growing middle class. Some other BOP proponents equate the BOP with the entire population of a developing country, thus ignoring the sizable and growing middle class in these countries (for example, London, 2007). Indeed, economist Warnholz (2007) remarks, "Seen in this light, the BOP argument could simply be restated as a call for big business to sell their products in low and middle-income countries. This is neither a novel nor a particularly provocative idea." In reality it is the growing middle class in emerging countries that is the attractive market.

3 BOP Market Size

Having chosen a poverty line, the next step in assessing the size and attractiveness of the BOP market is to estimate the number of people below the poverty line. Prahalad and Hart (2002) state that there are 4 billion people with per capita income below \$1,500 per year. Prahalad and Hammond (2002) assert there are 4 billion people with per capita income below \$2,000 per year. Prahalad (2005, p.4) states that there are 4 billion people with per capita income below \$2 per day. The Next 4 Billion report also estimated the BOP population to be 4 billion even though it used the poverty line of \$3,000 per year (World Resource Institute, 2007). There must be something magical about the number 4 billion! So what are the true facts?

The World Bank estimated the number of people below the \$2/day poverty line at 2.7 billion in 2001 -- not even close to the 4 billion number used (overused?) by the BOP literature. These are big difference given the total population of the world at that time was only 6.1 billion. Surprisingly, Prahalad (2005, p.33) even claims that "the poor as a market are 5 billion strong." This is not to minimize the problem of poverty; by any measure, the prevalence of poverty is a crisis. These are important issues for defining the nature and scope of the poverty problem, and the potential solutions. Precision is not critical, but getting the order of magnitude right is necessary for understanding the nature of the problem and size of the profit opportunity.

Using an inappropriately high poverty line and/or overestimating the number of people below the poverty line will lead to an overestimation of the size (and attractiveness) of the BOP market. Prahalad (2005, p. 21) claims that the BOP potential market is \$13 trillion at PPP. This grossly over-estimates the BOP market size. The average consumption of poor people is \$1.21 per day (The World Bank, 2005). Assuming there are 2.7 billion poor people, this implies a BOP market size of \$1.2 trillion, at PPP in 2002. The BOP market is huge in terms of number of consumers, but small monetarily. Compared to this, the world's gross national income in 2005 was \$55 trillion at PPP. So, the bottom 44 percent of the world's population accounts for only 2 percent of total purchasing power.

From the perspective of a multi-national company from a developed country, even \$1.2 trillion is an overestimate of the BOP market size. Profits will be repatriated by the multinational firm at the financial market exchange rates, not at PPP rates. In that case, the global BOP market is less than \$0.3 trillion – making the BOP a difficult place to look for a fortune.

Companies following the BOP proposition often fail because they overestimate the purchasing power of poor people and set prices too high. Virtually none of the examples cited by BOP proponents support the recommendation that companies can make a fortune by selling to the poor. As mentioned earlier, Hart (2015) concludes that most BOP ventures and corporate initiatives have not succeeded. Karnani (2007) assesses the nine case studies presented by Prahalad (2005) and concludes not a single one of the case studies supports the BOP proposition. Several of the examples that apparently support the BOP proposition involve companies that are profitable by selling to people well above the \$2/day poverty line.

4 Context of Brazil

Brazil has been one of the major success stories in reducing poverty and inequality in recent times. The official statistics on income distribution in Brazil divide the population into five classes, as shown in Figure 1. Classes D and E are below the Brazilian national poverty line; as mentioned earlier, the Brazilian national poverty line is roughly equal to the \$2/day criterion. Class C is the middle class; and, classes A and B are considered affluent. As can

be seen from the evolution of the income distribution in Figure 2, Brazil has succeeded in reducing poverty significantly from 54.9% of the population in 2003 to 24.9% in 2014. During the same time, 52 million people joined the middle class expanding it from 37.5% of the population in 2003 to 60.2% in 2014. The Gini coefficient decreased from 0.58 in 2003 to 0.515 in 2014 (World Bank, 2016).

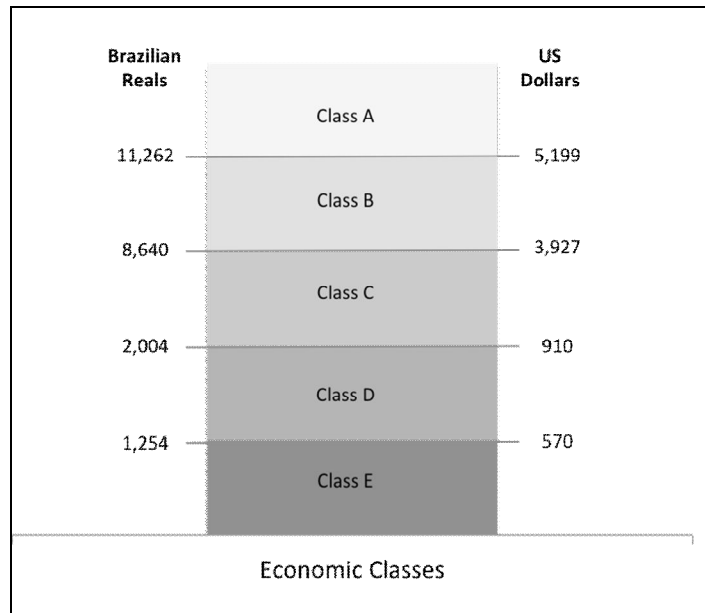


Figure 1 - Economic Classes Defined by Annual Income per Capita, in Brazil, 2014

Source: Neri, Marcelo. 'Brazil's New Middle Classes.' Available at: http://www.ipea.gov.br/agencia/images/stories/PDFs/140319_neri_ncm_brics.pdf [Accessed October 15, 2016]

Prahalad defined the BOP to be income below \$2 per day. But, while discussing Casas Bahia, Prahalad (2005, p. 119) stated that economic segments C, D, and E in Brazil are considered to be the bottom of the pyramid. This implies a poverty line of annual income of \$3,927 per capita in 2014 (see Figure 1), and even higher if we adjust for PPP rates.

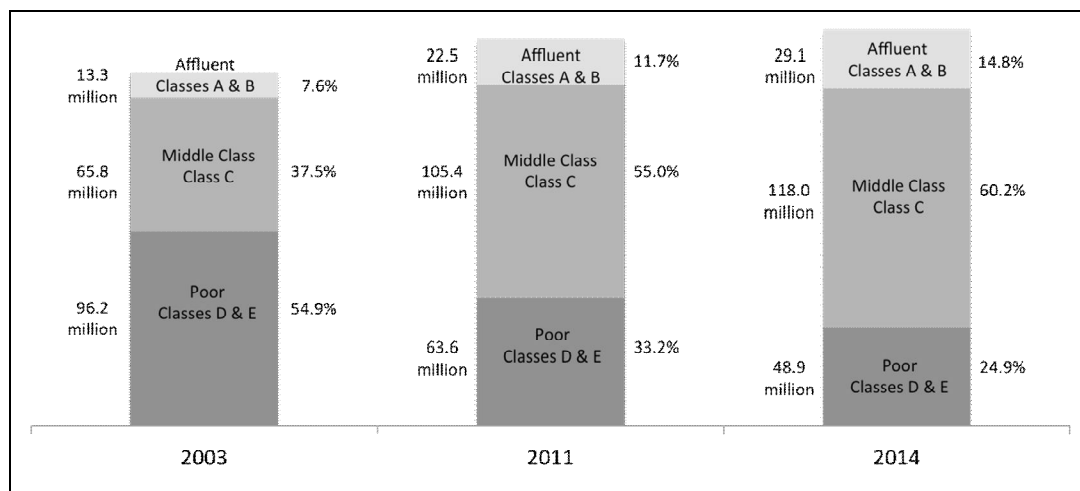


Figure 2 - Income Distribution in Brazil

Source: Neri, Marcelo. 'Brazil's New Middle Classes.' Available at: http://www.ipea.gov.br/agencia/images/stories/PDFs/140319_neri_ncm_brics.pdf [Accessed October 15, 2016]

The recent research on the BOP in Brazil continues to suffer from the same confusion as the initial BOP research, and has not learned from the criticism of the BOP proposition. Spers and Wright (2015) cite several studies on the Brazilian BOP. Virtually all of them consider the BOP to include classes C, D and E, which “together accounted for 88% of the total population in 2011” -- a very high fraction that is at odds with the fact that Brazil is an upper middle-income country that has made significant progress in reducing poverty since 2003. According to these authors the Brazilian BOP “portion of the population accounted for 81.7% of the total population in 2001 and 85.6% of the total in 2011” -- contrary to all the evidence from Brazilian statistics and the World Bank that Brazil has achieved significant reduction in poverty during this period. Barki and Parente (2010) define poverty using the \$8/day standard, and accordingly consider the Brazilian BOP to include classes C, D and E. They argue that “this classification is in accordance with other studies” and cite their own earlier work and Prahalad (2005), and ignore the subsequent criticism of the BOP research. Their paper considers 67.9% of the population to belong to the Brazilian BOP in 2008.

Spers and Wright (2015) cite several Brazilian studies that have shown that companies pursuing BOP strategies have obtained better results than companies focusing on economic classes A and B. This is not surprising: it is Brazil’s large and growing middle class that is driving these results. These results do not support the original BOP proposition that the poor represent a large and attractive market. This is exactly the fallacy that prompted BOP critic Anand Jaiswal (2008) to title his article “The Fortune at the Bottom or the Middle of the Pyramid.”

Research that is an exception to the above confusion is Zilber and da Silva (2011), which studies in depth the BOP strategies of three multinational companies in Brazil. The authors divide the Brazilian population into four tiers, with the third tier defined as people with annual per capita income between US\$1,500 and US\$15,000. The research finds that the “main focus of the major companies in Brazil is precisely the Tier 3, that represents approximately 58% of the population ... because they consider that the economical stratification below that tier is not attractive enough.” Note that this definition of Tier 3 is even higher than that of Class C discussed above. They conclude that Tier 4 people living on less than US\$1,500 per year, which represent 28% of Brazil’s population, are not an attractive market for large companies, and “the scale appeal proposed by Prahalad and Hart (2002) does not apply to the Brazilian market volume.”

5 Role of the Government

There is much hype accompanying the BOP proposition. The Millennium Development Goals adopted by the United Nations member states targeted the halving of extreme poverty in 25 years. Finding this pace too slow, Prahalad (2005, page 112) states, “I have no doubt that the elimination of poverty and deprivation is possible by 2020.” Further, Prahalad and Hammond (2002) assert that the BOP initiative will not only eradicate poverty, but also cure economic stagnation, deflation, governmental collapse, civil wars, and terrorism. And all this in 15 years!

Even if not intentional, a by-product of the BOP proposition is its de-emphasis of the role of the government in providing a social safety net, basic services and infrastructure. Actually, the BOP proposition goes even further. Prahalad is quoted as saying, “if people have no sewage and drinking water, should we also deny them televisions and cell phones? ... It is absolutely possible to do well while doing good” (Time, 2005). The poor surely have a right to buy televisions; the issue is whether it is in their self-interest to buy televisions. Prahalad and Hammond (2002) argue that the poor accept that access to running water is

not a “realistic option” and therefore spend their income on things that they can get now that improve the quality of their lives.

Why do the poor accept that access to running water is not a realistic option? Even if they do, why should we all accept this bleak view? Instead, we should emphasize the failure of government and attempt to correct it. Giving a ‘voice’ to the poor is a central aspect of the development process. To solve the problem of poverty, we need to go beyond increasing the income of the poor; we need to improve their capabilities and freedoms along social, cultural, and political dimensions as well. The role of the government is critical in some of these dimensions. By emphatically focusing on the private sector, the BOP proposition detracts from the imperative to correct the failure of government to fulfill its traditional and accepted functions such as public safety, basic education, public health, and infrastructure, all of which increase the productivity and employability of the poor, and thus, their income and well-being.

The hype accompanying the BOP narrative carries the intellectual danger of diverting other social and political instruments of poverty alleviation. Achrol and Kotler (2016) agree that Karnani (2007) is “right to be concerned about the danger that it will feed a neoconservative development ideology that promotes a profit and private enterprise driven solution at the risk of diverting money and government attention from desperately needed social safety nets, health, and infrastructural programs.”

Many countries offer a grim perspective on the state of poverty and inequality reduction. Brazil has been a major and notable exception, and has significantly reduced poverty and inequality since 2003. This success is certainly not due to BOP strategies. Instead, a major cause of this success has been the Bolsa Família program, the largest conditional cash transfer program in the world (Sabry, 2016). This program provides financial aid to poor families with monthly income per capita below R\$150 (US\$47). The value of the payment ranges between approximately US\$10 and US\$80 per month. In return for small cash transfers, families must keep their children in school and vaccinate them, and ensure they attend preventive health care visits. The program was launched in 2003, and reached 13.8 million families in 2014, 26 percent of the Brazilian population. By one estimate this program reduced poverty by 12-18 percent between 2003 and 2009, and cost a mere 0.5 percent of GDP (Neri, 2014).

It has been argued that such welfarism (*assistencialismo*) undermines work incentives and weakens Brazil's economy. The Economist, a stalwart market-oriented newspaper, argues “such criticisms miss the mark by a mile” (The Economist, 2013). There is strong evidence that recipients of the Bolsa Família keep their children longer in school, and that those children end up better educated and eventually in better jobs.

Educational reform too has played a significant role in Brazil's success at reducing poverty. Public expenditure on education increased from 2.7 percent of GDP in 1980 to 4.5 percent in the 2000s, with most of the additional funding going towards primary education (Sabry, 2016). Average years of schooling in the workforce went up from less than 6 years in 1992 to almost 9 years in 2012 (Neri, 2014), and enrollment rates for 15-year-olds increased from 65 percent in 2003 to 78 percent in 2012 (Sabry, 2016).

According to Marcelo Neri, Brazil's former Minister for Strategic Affairs, Brazil's social policies “had massive success until 2012 but then slowed, and thus Brazil is now searching for a new formula to continue reducing its stubbornly persistent problem of inequality” (Sabry, 2016).

6 Conclusions

Representing the poor as being more affluent than they really are is harmful to both the companies and the poor. Companies following the BOP proposition often fail because they overestimate both the size of the market and the purchasing power of poor people, often setting prices too high, and putting their products well out of the reach of their target audience.

More fundamentally, conflating the emerging middle class and the poor harms the poor because it leads to ineffective poverty alleviation policies. Setting the poverty line too high, as is often done in the BOP literature, in effect marginalizes those usually considered poor (Warnholz, 2007). Muhammad Yunus (1998), the founder of Grameen Bank and Nobel Prize winner, cautions against such overly broad definitions of the poor:

“The inability to reach the poorest of the poor is a problem that plagues most poverty alleviation programs. As Gresham’s Law reminds us, if the poor and non-poor are combined within a single program, the non-poor will always drive out the poor. To be effective, the delivery system must be designed and operated exclusively for the poor. That requires a strict definition of who the poor are -- there is no room for conceptual vagueness.”

Much BOP research, and especially in Brazil, is guilty of confusion in even defining who the poor are. The BOP proposition is characterized by much hyperbole. The fortune and glory at the bottom of the pyramid is a mirage. The fallacies of the BOP proposition are exacerbated by its hubris. Prahalad (2005, page 45) states that all the examples used in his book challenge the current paradigm. Selling appliances on credit – as does Casas Bahia in Brazil – is not even a novel idea, let alone a new paradigm. Solving the crisis of poverty requires recommendations supported by logical analysis rooted in data, not exhortations based on unsupported assertions and hyperbole. The poor deserve no less.

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