What Constitutes the Bottom of the Pyramid (BOP) Market?

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Abstract: The BOP is a concept of dividing the world into an economic pyramid by keeping the privileged on the top and unprivileged poor at the bottom. Businesses need to adopt innovative ways of doing businesses in a market consisting of billions of underprivileged poor consumers. However, the main question is, does this huge segment have the capability of becoming profitable for companies? This research analyzes the viewpoints of various theorists and organizations about the agreed income level of a typical BOP and in doing so attempts to arrive at an ideal definition of the BOP market for businesses. Further, the research is critical of including only income as a major determinant of the BOP and incorporates broader (social and educational) dimensions while establishing the boundaries of an ideal BOP market assuming that income cannot solely measure poverty.

Keywords: Bottom of Pyramid (BOP), Income, Definition of BOP, Macro characteristics of BOP

1. Introduction

The phrase Bottom of the Pyramid (BOP) was used first by the president of United States (US), Franklin D. Roosevelt, on seven April 1932 in his radio address, ‘The Forgotten Man’. He said that “These unhappy times call for the building of plans that rest upon the forgotten, the unorganized but the indispensable units of economic power, for plans like those of 1917 that build from the bottom up and not from the top down, that put their faith once more in the forgotten man at the bottom of the economic pyramid” (Roosevelt, 1932).

‘Base of Pyramid’ and ‘Bottom of Pyramid’ are used interchangeably in academic literature to represent people at the bottom of the economic pyramid. The most significant and early work done in an academic field related to BOP is by C. K. Prahalad. According to Prahalad, BOP is a population of more than 4 billion people living on less than $2 per day (Prahalad, 2005; 2006; 2012).

The BOP is an unexploited emerging market worth trillions of dollars to be taken advantage of by companies that are striving hard to tap into an already maturing market. To tap a huge segment of the BOP, companies need to reconfigure their business assumptions, models, and practices (Nicole, 2003). Any company, irrespective of size, seeking profitable business in the emerging market of the BOP requires new products or services or a new way of doing business and hence needs to innovate. However, the main question is, does this huge segment, with $2 earnings per day, have the capability to become consumers and a profitable segment for the companies? Alternatively, does the huge population warrant considerable profits? Many companies have failed, and many have not decided to enter the BOP due to the complexities associated with the market (Ramdorai & Herstatt, 2017). The concept of poverty line and income is crucial in this sense to determine an ideal definition and boundaries of BOP. However, this research is critical about including only income as a major determinant of BOP. Hence this research is an attempt to analyze viewpoints of various theorists and organizations about the agreed income level of a typical and ideal BOP. Moreover, this research includes broader (social and educational) dimensions whilst establishing the boundaries of an ideal BOP market assuming that poverty cannot be measured alone with the income. This research tries to arrive at
a definition of BOP which constitutes the most profitable and sustainable market for companies interested in doing businesses in the BOP market.

2. Economic Indicators and Factors

Defining the BOP is dependent on the definition of absolute poverty, which is determined based on a person’s daily income. Many researchers have considered $1 and $2 per day as approximate measures of poverty (Chien & Ravallion, 2001; Ravallion, Datt, & Walle, 1991). Moreover, the purchasing power parity (PPP) level is considered a useful measure of poverty. PPP is used to equate the price of a basket of identically traded goods and services across countries providing a standardized comparison of real prices (Prabhalad, 2005). However, it is a matter of common observation that poverty cannot be measured solely by income. In fact, it will be irrational to define poverty in economic terms as it is also about a broader set of needs (Kernani, 2007a). Kernani (2007a) further argues that many approaches to reduce poverty focus solely on economic ends and view social, cultural, and political benefits as by-products.

To further elaborate the term of BOP, it is important to identify the boundaries of this market. Therefore, the question arises as to what constitutes the BOP? To answer this question, Prahalad explained the concept of PPP threshold (Prahalad & Lieberthal, 1998) to identify the size of the BOP population. However, the $2 per day range defined by Prahalad is inconsistent with many other definitions including his own where he mentioned 4 billion people with per capita income less than $1500 per year (Prahalad & Hart, 2002). Again, in Prahalad & Hammond (2002) the figure is 4 billion people with per capita income below $2000 per annum. Later in his book, Prahalad (2002) explained that there are more than 4 billion people with per capita income below $2 per day. In the same book, he states the population as 5 billion.

Prahalad also claims that the BOP potential market is $13 trillion at PPP. According to Kernani (2007b) this is an obvious over-estimate of the BOP market size. He further justifies his point by saying that if we assume that there are 2.7 billion poor people, keeping the World Bank’s statistical data in consideration, this evolves into a BOP market size of $1.2 trillion at PPP in 2002. This inconsistency in defining the range of the BOP market continues, and various researchers have disagreed with the Prahalad PPP threshold level and have given different figures. The statistical survey by the World Bank in 2001 estimated the population of poor people (living on less than $2) as 2.7 billion (Kernani, 2007b). Even at that time, many researchers claimed that the number of poor people estimated by World Bank is over estimated (Martin, 2006; Virmani, 2006). While arguing the position of the poverty line, The Millennium Development Goals adopted by the United Nations uses the $1 per day measure (Sachs, 2005). However, the survey result of the World Bank (2008) estimated the average consumption of poor people as $1.25 per day. Other researchers took the middle approach of $1.5 per day (Bhalla, 2008). A collective look at the literature signifies that the most probable range of PPP lies somewhere in a range of $1500 to $2000 per annum or in the case of per day income between the range of $1 to $2 (Kernani, 2007a; Mendoza & Thelen, 2007; Prahalad & Hammond, 2002). Similarly, the BOP is considered as $8 per day or less according to the World Economic Forum (2009).

Many studies have been conducted by the World Resource Institute, World Bank, United Nations Population Division in different years. They define the income rate of the population at the base of the pyramid based on the collected data. However, the reports are insufficient as a few things are not fully explained (Ted, 2007). Nevertheless, such research has provided a lot of interesting facts about the BOP. Below is the data collected by the World Resource Forum from the above resources:
According to Prahalad (2002), more than 4 billion people live at the BOP on less than $2 per day. However, this statement has been criticized considering the fact that it is almost impossible for a big company to engage in profitable business with people earning less than $2 per day. Also, most of the examples of companies given by Prahalad support that the BOP is profitable because they are selling to the people with more than $2 income per day (Karnani, 2007b). All the criticisms are based on the confusion regarding the meaning of BOP. The International Business Times (2010) suggested breaking the pyramid into three segments. The top segment comprises higher income people with maximum affordability to buy goods. The middle segment of highest population consists of people earning $2 to $8 per day and possesses the capability of affording essential goods. While the lower segment is the real poor with less than $2 earning and are thus considered as the real BOP by many researchers.

Keeping the BOP consumer market as a profitable opportunity in mind, it seems near to impossible to expect profit from a market where consumers are struggling to meet basic needs. This research suggests the four segments of an economic pyramid based on the World Bank statistical data of 2008 (World Bank, 2008). The first segment comprises the upper class (UC) with the highest income of US$108.73 per day with PPP of US $37,193 per annum. The population of this tier is 1.069 billion. The second segment consists of the upper middle class (UMC) with a comparatively low income of US$22 per day and with PPP of US$12,214 per annum but has the potential to become UC. The total population of this tier is 0.949 Billion. The third segment is the lower middle class (LMC) earning US$5.68 per day with annual PPP of US $4593 and the potential to become UMC. This is the largest chunk of the world’s population comprising 3.7 billion people. This segment is also the BOP market and has the capability to afford innovative products and services and can be an untapped market. In this segment, most people have basic education and working skills. They are even able to produce and supply goods and services. Thus, the companies and organizations offering micro-financing can avail better profits from this BOP market (International Business Times, 2010).

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### Table: BOP Population from diverse sources

<table>
<thead>
<tr>
<th>Category</th>
<th>Source</th>
<th>Method of classification</th>
</tr>
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<tbody>
<tr>
<td>World Population 4.3 billion</td>
<td>United Nations population division “world population” (2008)</td>
<td></td>
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<tr>
<td>Rest of the world 4.8 billion (non high-income countries)</td>
<td>World Bank, “Agriculture for Development”, 2004, Table 1, below1</td>
<td>Classification of developing countries as used by the World Bank, “Agriculture for Development”, 2008 report</td>
</tr>
<tr>
<td>Base of the Pyramid 3.7 billion</td>
<td>World Resources Institute, The Next 4 Billion, 20052</td>
<td>BOIncome threshold of US$5,000 (PPP)</td>
</tr>
<tr>
<td>Rural Base of the Pyramid 2.5 billion</td>
<td>World Bank, Agriculture for Development, 20083</td>
<td>Below 3.0% of total poor</td>
</tr>
<tr>
<td>Rural BOP smallholders and their families 1.5 billion</td>
<td>World Bank, Agriculture for Development, 20084</td>
<td>Below 50% percent of BOP (excluding poor based on definition of members for rural poor and rural/3rd of the world)</td>
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Figure 1: BOP Population from diverse sources, Source: World Economic Forum (2009)
The fourth segment is of the poorest of the poor, which is the lower class (LC) with an income of US$1.45 per day and annual PPP of US $1355. This segment has the population of 0.976 that is around 1 billion. Although, theoretically they come under BOP, however, this segment possesses less likeliness of being a potentially profitable market for most of the companies. A non-governmental organization (NGO) Bangladesh Rural Advancement Committee (BRAC) in Bangladesh and Aravind Eye Care System in India experienced the same affordability issues of poorest of the poor BOP with less than $2 earning per day (International Business Times, 2010). Nevertheless, combing the LMCs with the LCs, the total population becomes 4.67 billion. This is around 4.5 billion people who are not the poorest as the World Bank data calculated that they earn US$4.79 per day on average. Many companies can do profitable business with this BOP with earnings of $4.79 per day.

3 Macro-environmental Indicators or Factors

3.1 Difference in Characteristics Due to Geographical Location and Development Conditions of Countries

Needs and preferences of the BOP not only differ significantly from the developed world but also within the BOP market due to geographic, cultural, and religious variations (Praceus & Herstatt, 2017). Many researchers have found that the BOP population is non-homogeneous in nature both within the same country and across different countries due to large multi-cultural differences (Dawar & Chattopadhyay, 2002). Earnings of $2 or less per day meet different needs for the person living in a Western developed country as compared to those living in developing countries. The basic needs of poor people in Western or the developed world are provided for by the government which is unlikely in most developing countries. The poorer developing countries are struggling to provide the basic needs of shelter and food with this income. Moreover, the Western markets have a vast number of international companies making less space for new competitors and lower profit margins (Fletcher, 2005). Therefore, the profitable BOP market is in developing countries more so than developed.

3.2 Media Dark Areas and Access to BOP

It is a widespread fact that in developing countries with a huge BOP market, the rural population has comparatively fewer facilities than the urban population. Out of the 4 billion population of the BOP, 1.6 billion lack access to electricity (Ladd, 2017). Prahalad (2005) tagged such areas as ‘media dark’ as they cannot access audio and television and, therefore, are unaware of most of the information and knowledge communicated through these resources about the products or services. There are also difficulties of distribution channels making it highly inconvenient to make the products or services...
easily available to rural BOP market. The weak distribution infrastructure coupled with the lack of storage, telecommunications and transport facilities (Chikweche & Fletcher, 2012) makes the distribution of products and services to the BOP market a challenging task.

3.3 Little or No Formal Education
The BOP population mainly lives in rural villages, urban slums, and shantytowns (Prahalad, 2002). Those who are in rural villages do not have access to education. On the other hand, those who live in urban areas have very basic levels of education. The LMC-BOP are far better than LC-BOP. They are sometimes able to acquire education until high school, or even bachelors, unlike LC, where even the kids indulge in acquiring basic needs from a very young age instead of education.

3.4 Brand Driven and Acceptance of Technology
Surprisingly, BOP consumers are brand oriented (Prahalad, 2005), especially in the adoption of innovative products and services (Osakwe, 2016). Although it is commonly held that they only spend money on basic needs. Prahalad (2002) mentioned that in the Mumbai shantytown of Dharavi — 85% of households own a television set, 75% own a pressure cooker and a mixer, 56% own a gas stove, and 21% have telephones. Moreover, most researchers believe that technological innovation is readily acceptable by BOP consumers as they are flexible, adaptive and fast learner. The acceptance of technology among BOP markets is dependent on other factors including social influence, value, facilitation, ease of use and perceived usefulness (Hossain & Jamil, 2015).

3.5 Informal Business, Economic and Legal Issues
In Western economic markets, every transaction is done in light of enforceable contracts and property right protections (London & Hart, 2004). Unlike the developed world, one of the most important characteristics of the BOP mentioned by Hammond et al., 2007 is that they are not completely integrated into the formal global economy. Most developing countries run their businesses and transactions in an informal way as they hardly have knowledge, time and expenses to afford legal formalities. A high proportion of businesses is not registered in the BOP markets. The primary reason of informal activities in BOP is the general failure of ‘weak’ institutions to provide sufficient resources to warrant formalization (Kistruck et al., 2015).

4. Conclusion: What Constitutes BOP?
Based on the evidence presented in this research, this study categorizes the BOP market into LMC and LC. The major market where companies can play their role and profit can be generated is LMC. LC alone cannot become a profitable market, however, the combination of both LMC and LC can also contribute to a profitable BOP consumer market. Moreover, the BOP cannot be measured solely by income, but there are other socio-cultural and political factors which, when incorporated with income, can provide boundaries of any typical BOP. Thus, BOP consumer markets with profitable return constitutes the following:

1. The population of a little less than 4 billion that is 3.7 billion
2. Market with per day income between $2 to $6 per day on average
3. Can be of any geographical region
4. Access to basic knowledge and skills
5. Ready to buy innovative products and services to raise living standard
6. They communicate and transact in both formal and informal market economy
7. Ready to use innovative technology and possess adoptability
References


