1 Innovating for the Middle of the Pyramid in Emerging Countries

Alvaro Cuervo-Cazurra

INTRODUCTION

The middle of the pyramid, i.e., the middle-income classes, in emerging countries are increasingly becoming a large consumer market but one that is little understood.[1] This increasingly growing middle-of-the-pyramid group is the result of the recent economic progress of many emerging economies. Individuals who until recently were very poor, and commonly ignored as consumers by most companies, are no longer so. They have become entrepreneurs or are employed in jobs that provide them with higher and more stable income. As a result, their consumption patterns have shifted, becoming an attractive but underserved and in most cases misunderstood market.

The middle of the pyramid in emerging markets differs significantly from the middle classes in advanced economies that most companies are used to serving, especially multinationals from advanced economies. One reason is that the middle of the pyramid in emerging economies has much lower levels of income. Although they are middle class in the emerging markets in which they live, they would be considered poor in advanced economies by their level of income alone. Another reason is that their consumption patterns differ markedly. Up until recently, the middle of the pyramid in emerging economies was very poor and just able to purchase necessities. As their income has grown, they are not just replacing older, basic products with upgraded ones but rather buying new products and services that fulfill previously unmet needs. At the same time,

1 See *The Economist* 2009 for an accessible overview of middle classes in emerging markets. For a discussion on how to identify middle classes, see Kharas 2011.

they are still demanding low prices because their residual income is nonetheless limited and they still have remnants of a frugal mentality from when they were poor. However, they have high aspiration needs in their consumption and are willing to splurge on some products.

This rise of the middle of the pyramid in emerging economies challenges our understanding of innovation. Most of the studies of innovation have focused on how innovations in advanced economies are created to serve the needs of sophisticated and wealthy customers there.[2] However, these studies have implicit assumptions that limit their applicability to the reality of the middle of the pyramid in emerging economies. First, these studies tend to presuppose that customers are highly sophisticated and discerning, and willing and able to pay premium pricing for advanced technologies and innovations that address their needs better than previous products did. The customers seek novelty and advanced features and are used to replacing products periodically. Second, the studies also take for granted that companies operate in advanced economies and can rely on sophisticated suppliers to obtain new technologies and collaborate with them in creating innovations. These firms benefit from a highly sophisticated innovation system that supports their ability to produce and use new technologies in creative ways.[3] When considering emerging markets, firms sell the innovations developed in advanced countries to the elites of emerging economies. These elites have the income to afford luxuries, as well as knowledge about these products, because they commonly take trips to advanced economies and shop there.

However, recently studies have started analyzing a different type of innovation: innovations to address the needs of the very poor

2 For overviews of studies on innovation, see the chapters in the handbooks edited by Dodgson, Gann, & Phillips 2014, Fagerberd, Mowery, & Nelson 2005, Hall & Rosenberg 2010, and Stoneman 1995.

3 For a review of national systems of innovation, see the entries in the book edited by Lundvall 2010 and the overview by Edquist 2005.

in emerging economies, which are called frugal innovations,[4] and how some of these innovations may eventually be sold in advanced economies, becoming what is termed as reverse innovations.[5] These innovations that serve the poorest consumers of emerging economies, which have been called the bottom or base of the income pyramid,[6] require a different approach. The poorest in emerging economies have extremely low levels of income. They tend to purchase simple, inexpensive products and services to cover basic needs, in many cases for the first time. Innovations created for these customers are sold primarily on the basis of a low price point at which poor customers can buy them. Companies can make money from serving the poor via the repeated sale of low-priced single-serve units; poor consumers in general cannot afford to buy large packages because they do not have sufficient cash to buy in bulk. Firms can also serve the poor profitably by redesigning packaging and the distribution system to reach these consumers in small neigborhood retailers that tend to keep a low inventory and require continuous replenishment.

The expectations regarding the products of middle-of-the-pyramid consumers differ from other groups. These new middle classes already had experience with basic products and services when they were poor and are now looking to replace those products with more sophisticated ones that match their higher levels of income and expectations. Thus, innovations for the base of the pyramid no longer meet their aspirational needs. At the same time, the middle of the pyramid in emerging markets still has relatively low levels of income and still purchase products based on price. Innovations designed with advanced economy consumers in mind are mostly out of their reach.

4 There is a multiplicity of terms, as I discuss later, but for an overview of the topic see *The Economist* 2010 and Zeschky, Widenmayer, & Gassmann 2011.

5 For a discussion of the process of creation of frugal innovation in emerging economies and transfer to advanced countries, see Immelt, Govindarajan, & Trimble 2009, Govindarajan & Trimble 2012, and Govindarajan & Ramamurti 2011.

6 The concept of the base of the pyramid was popularized in the management field by C. K. Prahalad (Prahalad & Hammond 2002; Prahalad 2005).

As a result, these middle-of-the-pyramid customers require new ways of thinking about how to innovate to fulfill their needs and desires. The traditional approach of taking products created for middle classes in advanced economies, stripping them of extra features to lower production costs, and selling them in emerging economies at a low price no longer works. Thanks to their exposure to mass media and access to the Internet, the new middle classes in emerging economies know about the products that consumers in advanced economies are purchasing, and resent being sold second-level products that make them feel like not-good-enough consumers.[7] At the same time, the new middle classes are able and willing to pay more for products that are better than the traditional products they used to buy when they were poor to make them feel like they are progressing in life. Hence, managers need to rethink how they serve these new middle classes, developing products and services that are creative in the ways that fulfill the new needs of these middle classes but are also inexpensive enough that they can be enticed to purchase them.

These innovations are the topic that we analyze in this book: how companies create new products and services that serve the needs of the middle of the pyramid in emerging economies. The analyses reveal a large diversity of companies creating the innovations. Some firms have a long and distinguished history of addressing the needs of nascent middle classes in emerging economies. Others have only very recently focused on creating innovations for this market segment. The chapters also reflect the diversity of innovations created by the firms in solving government and market failures that are common in emerging economies. In some cases, the innovations were created because of government failures in the provision of public goods and services, such as quality and affordable education or health care.

[7] For example, consumers in Eastern Europe were furious about what they thought were lower quality versions of the same products being sold in their countries while better products were sold across the border in Western Europe (*The Economist* 2017).

Companies were able to find creative ways to address these challenges, both satisfying the needs of new customers and addressing the inability of the government to meet these needs. In other cases, there were significant market failures from inefficiencies in the allocation of goods and services that limited the customers' access despite their willingness to pay for them. Some companies developed resourceful ways of producing and delivering products to solve the consumption needs of the middle of pyramid while reducing market failures. In all cases, firms created new products and services to address the unmet needs of the middle of the pyramid in emerging economies in ways that had not been done before.

THE MIDDLE OF THE PYRAMID IN EMERGING ECONOMIES

A traditional view of consumer markets in emerging economies is that they are composed of two main segments: one that is wealthy and cosmopolitan and has the income to purchase luxury imported products, and another that is poor and local and barely covers its needs with domestic products. This was neatly summarized by the Brazilian economist Edmar Bacha in 1974, with the metaphor of Brazil being "Belindia," i.e., a wealthy Belgium-like economic core within a larger India-like poor periphery.[8]

As a result, the interest of many foreign multinationals was to sell to the elite consumers who had the money and were willing to pay for imported products, even if in many cases products were more expensive than in advanced countries because of tariffs. Some foreign multinationals produced locally to get around tariffs and transportation costs, selling their products as aspiration ones at a high price point. Domestic companies were left to create products for the rest of the market and sell them at a lower price. In many cases, these were products of inferior quality that could only be sold locally.

[8] This two-way grouping seems to still apply to the companies, with a few world-class, highly efficient, and technologically advanced multinationals and many domestic and inefficient domestic firms, according to *The Economist* 2015.

In the early 2000s, the concept of the fortune at the bottom of the pyramid changed this view by pointing out that the poor in emerging economies could be a profitable market for multinationals from advanced countries, if only these firms redesigned the products to sell them at the low price points at which these poor consumers could buy them.[9] The challenge was not that the poor were not consumers. On the contrary, they are heavy consumers in the sense that much of their income is spent on daily consumption products such as food and beverages. Moreover, because of inefficiencies in distribution and access, and their inability to buy in bulk, they tend to pay more than wealthy consumers for the same products. For example, in a comparison of prices in a slum and a middle-class neighborhood in Mumbai, poor consumers were shown to be paying several times more than middle-class consumers. The price multiples ranged from ten times more for diarrhea medication to thirty-seven times more for municipal-grade water to fifty-three times more for credit.[10]

The concept of the bottom of the pyramid became very appealing to managers and consultants, and companies rushed to create new products and services that would serve the needs of poor consumers in emerging markets. Among them, microcredit became one of the main new products that targeted these consumers.[11] New financial institutions, many of them nonprofit organizations, loaned very small sums of money to groups of individuals who would use the funds to create new entrepreneurial ventures and then repay the money loaned. Consumer product firms redesigned their offering for this market segment, for example, by selling shampoo in single-use

9 This is discussed in more detail in Prahalad & Hart 2002, Hammond et al. 2007, and Prahalad 2005. The latter presents many examples of the products and services that multinationals from advanced economies, and some domestic firms, have created to serve the needs of the poor in emerging economies.

10 See Prahalad & Hammond 2002 for more detail.

11 See Yunus 2007 for a history of how the Grammen Bank started the microlending segment.

sachets instead of the traditional bottle or selling simple-to-use water filtration systems.[12]

However, in the 2000s, the middle-of-the-pyramid market in emerging economies started to become noticed. It was both very large and different from other segments.[13] The transformation of emerging economies with the implementation of pro-market reforms in the 1980s and 1990s led to the renovation of income segments in emerging countries in the 1990s and 2000s. To the traditional two segments of very wealthy consumers and very poor consumers, a new segment was added: the middle of the pyramid.

This new middle of the pyramid is rapidly becoming the largest segment of the population in many emerging economies. Thus, the old view of emerging economies as consisting of a pyramid with a large base of poor people, those with less than USD 1500 a year; a small middle-income segment, those with between USD 1500 and USD 20000 a year; and a tiny elite, those with more than USD 20000, has changed.[14] In many countries, the shape of the pyramid is no longer a pyramid but has become more of a rhomboid, with a small segment of poor people, a very large middle-income segment, and a small segment of high-income individuals. In advanced economies, in contrast, there is an inverted pyramid, with a tiny segment of very poor individuals, a smallish middle-income sector, and a large segment of high-income people. Figure 1.1 illustrates the different shapes of the income pyramid in emerging economies in four geographic regions: Africa, America, Asia, and Europe.

The new middle classes in emerging markets are different. They were poor until very recently and had a very limited ability to consume. With their rise in income, they are able to consume more and consume new categories of products and services. They also change their attitude toward consumption and savings; instead of living

12 See some examples in Hammond et al. 2007.
13 See the special report in *The Economist* 2010.
14 These were 2000 prices, discussed in Prahalad & Hammond 2002 and Prahalad 2005.

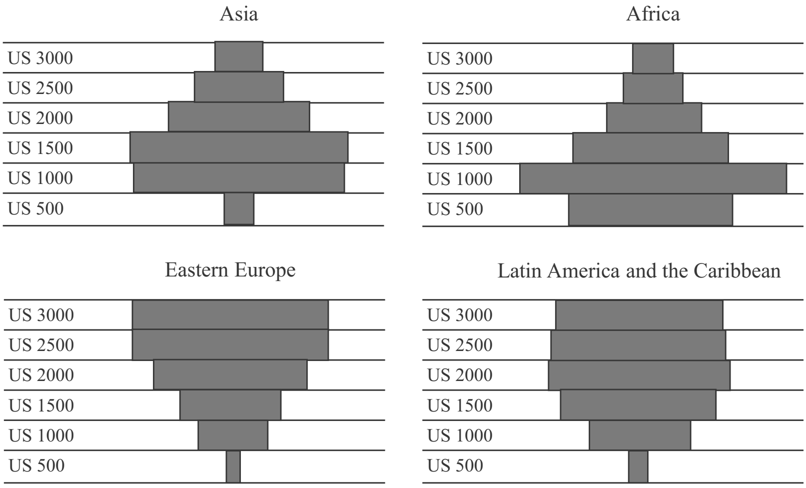

FIGURE 1.1 Market size in the base on the pyramid by income segments. Source: Created using information from Hammond et al. (2007)

paycheck to paycheck, they start saving and investing some of their income to ensure a better future. They are also able to think about the products they consume and begin considering them not only by the needs covered but also by the status provided. They are, in many cases, purchasing their first durable, sophisticated products, such as appliances, computers, motorcycles, and even cars.

Identifying the middle of the pyramid in emerging economies is difficult, unfortunately, because there is no fixed definition of what middle class is. The middle class seems to be more an attitude toward consumption and savings than a level of income. The attributes that are commonly associated with middle classes are people who do not have all their material needs fully covered (as the rich do), but who are able and willing to postpone consumption to improve their lives (unlike the poor who do not have enough income to save). Thus, middle classes have a level of discretionary income available (usually about a third of their income, after paying for housing and food) that enables them to buy consumer durables such as refrigerators and cars as well as services such as health care and education.

Nevertheless, most analyses of middle classes rely on income to identify them because it is easier to measure. In this regard, there are two distinct approaches to identifying middle classes: one relative and another absolute. The relative approach considers middle classes to be those that have incomes in a bracket; for example, those in the 20% to 80% range of income.[15] This measurement of middle classes takes into account the differences across nations in the distribution of income. At the same time, it limits comparisons because income levels vary from one country to another. Thus, a person considered middle class in an emerging economy by income would likely be considered poor in an advanced country.

The alternative is to use an absolute approach and consider middle classes to be those segments of the population that have a daily income above the poverty level but below what can be considered wealthy. The challenge with this definition is deciding which are the appropriate cutoff points. Depending on the level that one chooses, the differences are stark.[16]

First, we have a distinction between emerging market middle classes and global middle classes. Emerging market middle classes are people who are no longer poor in emerging markets but are still not able to afford global products and brands, while the global middle classes of emerging markets can. This classification is usually based on the level of income, with the middle classes in emerging

15 This is the approach taken by, for example, Easterly (2000). There are alternative levels such as between 0.75 and 1.25 times the median of income per capita, as done by Birdsall, Graham, & Pettinato (2000).

16 There is a wide disparity in preferred levels across authors. For example, Banerjee & Duflo (2007) identify middle classes as those with daily incomes of USD 2 to USD 4, as well as those with daily per capita expenditures between USD 6 and USD 10. Ravallion (2009) identifies two middle classes: an emerging market middle class as those with incomes between the median poverty line of developing countries and the poverty line of the USA (USD 2 to USD 13 daily in 2005 PPP), and a global middle class as those with incomes above the US poverty level. Milanovic & Yitzaki (2002) measure (global) middle classes as those with incomes between the average income in Brazil and Italy, or about USD 12 and USD 50 in 2000 PPP.

Cambridge University Press
978-1-108-48019-2 — Innovating for the Middle of the Pyramid in Emerging Countries
Edited by Alvaro Cuervo-Cazurra , Miguel A. Montoya
Excerpt
More Information

economies defined as those with incomes between USD 2[17] and USD 10 in power purchasing parity (PPP) per day, and the global middle classes identified as those with incomes between USD 10 and USD 50 PPP per day.

Second, an alternative is to be more fine-grained in the analysis, considering the dynamics of income and how individuals move from one level to another.[18] With this approach, we can identify three levels of income, using the cutoff points of USD 4 and USD 50 as the levels at which we have a transition from lower to middle to upper class. Thus, we can consider the lower class to be those who have incomes below USD 4 PPP per day, which is about USD 6000 per year for a family of four. Within this segment we have two sub-segments: abject poverty, or individuals with an income below USD 2 PPP per day; and plain poor, or those individuals with an income between USD 2 and USD 4 PPP per day. This is roughly equivalent to incomes of about USD 3000 to USD 6000 per year for a family of four. The middle class is those individuals who have incomes between USD 4 and USD 50 PPP per day. Within this segment, we have two sub-segments: the vulnerable middle class, or individuals with an income between USD 4 and USD 10 PPP per day; and the solid middle class, or individuals with an income of USD 10 to USD 50 PPP per day. The term vulnerable middle class acknowledges that these people are no longer considered poor but are still at risk of falling back into poverty. These segments correspond roughly to a family of four with an annual income of USD 6000 to USD 15000 for the vulnerable middle class, and USD 15000 to USD 73000 for the solid middle class. The upper

17 The World Bank used the level of US$1, later revised to USD 1.25 and since 2016 to USD 1.9, as the level of income below which individuals are considered poor (Ferreira, Jollifee & Prydz 2015). In its classification of countries, it uses the level of 2018 per capita income of USD 1025 (roughly USD 2.8 a day) or less to classify countries as low-income; USD 1026 to USD 3995 (USD 2.8 to USD 11 a day) as lower middle-income; USD 3996 to USD 12375 (USD 11 to USD 347 a day) as upper middle-income; and above USD 12376 (US 34 a day) as high-income (World Bank 2020).

18 This follows the approach of Lopez-Calva & Ortiz-Juarez (2011), who identify middle class as those who are less vulnerable to falling back into poverty, using income surveys from Chile, Mexico, and Peru.