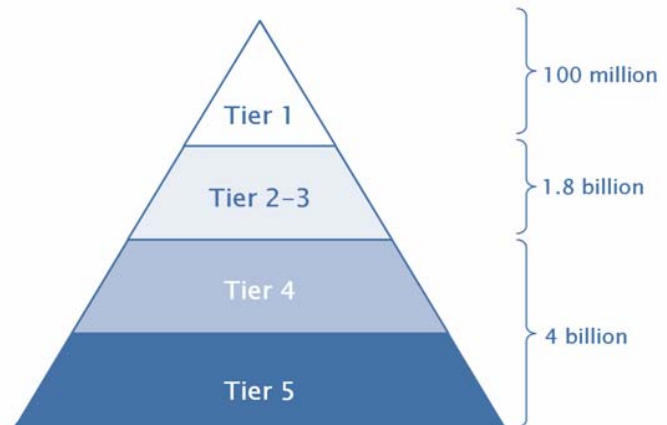


Is There a Market at the Bottom of the Pyramid?

In 2004, [C.K. Prahalad](#), a professor at University of Michigan's Ross School of Business, published the groundbreaking [book](#) *The Fortune at the Bottom of the Pyramid*. The basic premise is that multinational corporations (MNCs) have concentrated their sales and marketing efforts on the richest citizens of the world while ignoring the 4 billion consumers who live on less than \$2 per day at the Bottom of the Pyramid (BOP).

He asserts that introducing market choice to the poor will free villagers from local monopolists, creating a virtuous cycle of consumer access and improved product quality. MNCs that sell products in this enormous, underserved market stand to make hefty profit. And, as more and more companies turn their attention to the BOP, competition would drive private sector innovations that address the needs of the poor. By giving MNCs an economic stake in this developing markets, they will also draw the attention to problems of governance in the developing world.



Although the work is primarily empirical and draws too heavily from examples in India, the BOP argument is an intriguing one. It eschews the notion that concentrating on the poor need be a secondary “corporate social responsibility” initiative. It provides a blueprint for the private sector to help achieve what non-governmental institutions and multi-lateral lenders such as the World Bank have not: pulling billions out of poverty.

We should applaud the BOP [adherents](#) for their novel approach, but it is an approach that too closely resembles the idealism typical of a first-year Peace Corps volunteer. It is only after the corruption, complacency, intestinal ailments, and constant economic opacity have wrung out the initial naiveté that you can have an informed discussion.

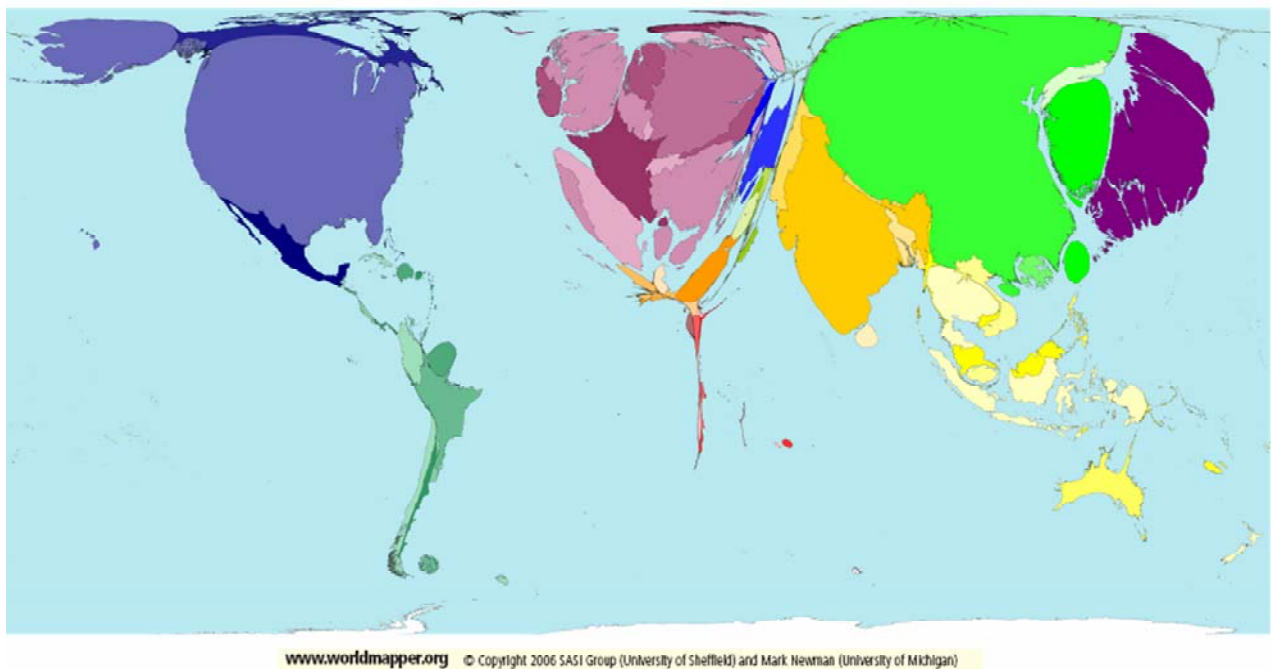
And a dose of cynicism is exactly what [Professor Aneel Karnani](#)—also of the Michigan School of Business—introduced in a recently-released working paper, “[Fortune at the Bottom of the Pyramid: A Mirage](#).” He asserts that, “Rather than focusing on the poor as consumers, we need to view the poor as producers. The only way to alleviate poverty is to raise the real income of the poor.”

Professor Karnani’s counter-thesis is that BOP de-emphasizes the role of government in providing basic services. Instead, we must focus on building the capacity of the world’s poor by focusing on government failures in education, health, and infrastructure.

This is not a novel approach. Multi-lateral lenders have been focusing on the failures of government for decades. Billions of dollars have been spent flying experts around the world to bolster child immunization rates, build water delivery systems, and advise on bankruptcy reform. As you can see from the [map](#) below, the last 27 years have been lean ones for many at the bottom of the pyramid. This is not to diminish any individual's efforts or passion. It is only to acknowledge that it is a very difficult goal and multi-lateral institutions do not have a recipe, much less a [consensus](#), for fostering economic growth.

Wealth Growth 1975–2002

Territory size shows the proportion of worldwide growth in wealth that occurred in that country between 1975 and 2002



One of the positive side effects of the BOP argument is that MNCs becomes stakeholders in new and underserved markets. To be sure, there are fatal flaws in the logic and research initiated by Prahalad. But MBAs are new to development and we should embrace that wide-eyed optimism even as we critique Prahalad's shaky methodology.

Is the Bottom of the Pyramid a Viable Market?

Karnani points out one inexcusable fallacy in Prahalad's work: market definition. Prahalad used the World Bank's estimates for the number of people living on an income of [\\$2 a day or less \(poverty\)](#), and [\\$1 a day or less \(extreme poverty\)](#). Both of these are measured at purchasing power parity (PPP).

Why is PPP important? Because no matter where in the world you spend \$1 PPP it buys the exact same goods, regardless of local prices. So the \$1 PPP that the extreme poor earn in a day buys one loaf of bread in the U.S., just as it buys one loaf of bread in India. Since the actual price of bread is much lower in developing countries, the same loaf of bread might only cost \$.10 in India. The implication is that the extreme poor living in India are only earning only 10 cents a day in real dollars. The market at the bottom of the pyramid will not pay MNCs in these conceptual PPP dollars; it will pay them in local currency, as Karnani explains:

[Prahalad] 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 \$1.25 per day and assuming there are 2.7 billion poor people, which implies a BOP market size of \$1.2 trillion, at PPP in 2002.

From the perspective of a multi-national company from a rich country, profits will be repatriated at the financial exchange rates, not at PPP rates. In that case, the global BOP market is less than \$0.3 trillion, compared to \$11 trillion economy in the US alone – making the BOP a difficult place to look or a fortune.

Another problem is that the poor spend about 80% of their income on food, clothing and fuel. Suddenly the \$300 billion market at the bottom of the pyramid shrinks to \$60 billion of disposable income at current exchange rates. Spread amongst 2.7 billion people, that's about a nickel a day for disposable income.

Karnani also takes issue with the number of poor:

Prahalad states that there are more than 4 billion people with per capita income below \$2 per day at purchasing power parity (PPP) rates.... Most researchers argue that the World Bank already over-estimates the number of poor people, with some researchers estimating the poor at 600 million (*The Economist*, 2004).

There's no shortage of poor, I'm afraid. Sanjay Reddy and Thomas Pogge of Columbia University have written a persuasive [paper](#) that critiques the World Bank [calculation](#) of the number of poor in the world. While they give no new estimate, it's likely that the world's poor have been undercounted, stating that "There is some reason to think that the distortion is in the direction of understating the extent of income poverty."

So the bottom of the pyramid is left with billions of poor who have no money. Does this invalidate Prahalad's entire thesis? It is difficult to estimate disposable income at the bottom of the pyramid (BOP). It may not be a fortune, but there is empirical evidence that the world's 4 billion poor have more than a nickel a day of disposable income.

For example, many of the extreme poor live in rural areas and derive much of their diet from subsistence farming. This means that relatively little of their income is spent on food. In family or tribe-oriented societies, there is also an income smoothing effect. Kinship networks affect income in ways that are difficult to measure. One family member with high government salary might be expected to help pay for expenses across the extended family. In addition, income such as flows from non-governmental aid, international transfers from foreign nationals living abroad, and the grey economy are often under-reported in GNP figures.

In response to Karnani's paper, the WRI's NextBillion.net noted that:

BOP households collectively spend money, lots of it, on a wide variety of goods and services, and are clearly willing to pay for services such as connectivity, clean water, financial services, energy, health care, and education for their children, as well as food, housing, and consumer goods. The BOP is already an economic actor, not just a passive, dependent group, and its collective actions define a market.

So there let's assume that there is indeed a market of billions at the bottom of the pyramid. Should companies try to reach them? Karnani cautions that viewing the BOP as a vast market of micro-consumers is "potentially a dangerous delusion." Let's look more closely at his argument.

Distribution and Economies of Scale

Concerned about the apparent gullibility of multinational corporations, Karnani warns that:

Not only is the BOP market quite small, it is unlikely to be very profitable, especially for a large company. The costs of serving the markets at the bottom of the pyramid are very high.... This increases distribution and marketing costs and makes it difficult to exploit economies of scale. Weak infrastructure (transportation, communication, media, and legal) further increases cost of doing business.

Two words: Coke and Guinness. Both have very deep penetration in West Africa. Granted these are not going to improve the health and well-being of the BOP (although Guinness bottles do read, "[Guinness is Good for You](#)"). The point is that these MNCs have overcome the challenge of distributing and marketing their products across a large geographic. Regardless of infrastructure and marketing costs, the market will help align buyers and sellers if the price is right for each.

Reducing Prices at the Bottom of the Pyramid

Prahalad's thesis is that attracting more competition to the BOP will drive down product prices, thus freeing up their disposable income for other purchases. This is basically how Wal-Mart has made low-income Americans feel richer even as real U.S. income has stagnated over the last decade for the lower middle class. But Karnani takes issue with Prahalad's assertion that the private sector can deliver high quality goods to the world's desperately poor at competitive prices:

There are only three ways to reduce prices: 1) reduce profits, 2) reduce costs without reducing quality, and 3) reduce costs by reducing quality.... the only realistic way to reduce price is to reduce cost. The BOP proposition is adamant that we should not reduce quality in this process.

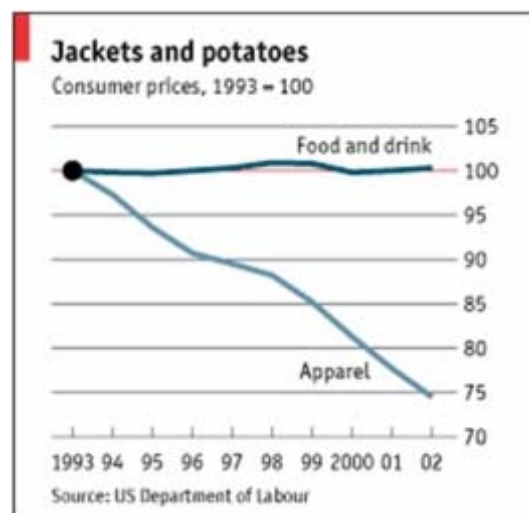
Unless all the current producers are grossly inefficient, the only way to reduce cost... without reducing quality will always require a significant improvement in technology. Good examples of this are found in the areas of computers, telecommunications and various electronic products. It is difficult to find examples of such dramatic cost reduction in other product categories. It is not surprising that the BOP proposition repeatedly uses these same examples. We should also note that the ultimate impact on the real income of the poor due to these major price reductions is quite low because the poor spend only a small part of their income on such electronic products. The poor spend over 80% of their income on food, clothing and fuel – products that have not benefited from such dramatic technological changes in a long time.

Karnani asserts that price competition at the BOP is unlikely because the poor spend a majority of their income on basic needs that do not benefit from technological innovation. Let's evaluate that last statement and have a look at how technology has already delivered cheaper, better food, clothing, fuel, and public health:

- **Food:** There are constant improvements in pest-resistant crops, hybrid seeds, or high volume animal husbandry. Many famers in Africa still till individual family farms by hand. Certainly technology could help them improve efficiency which would lead to lower prices.

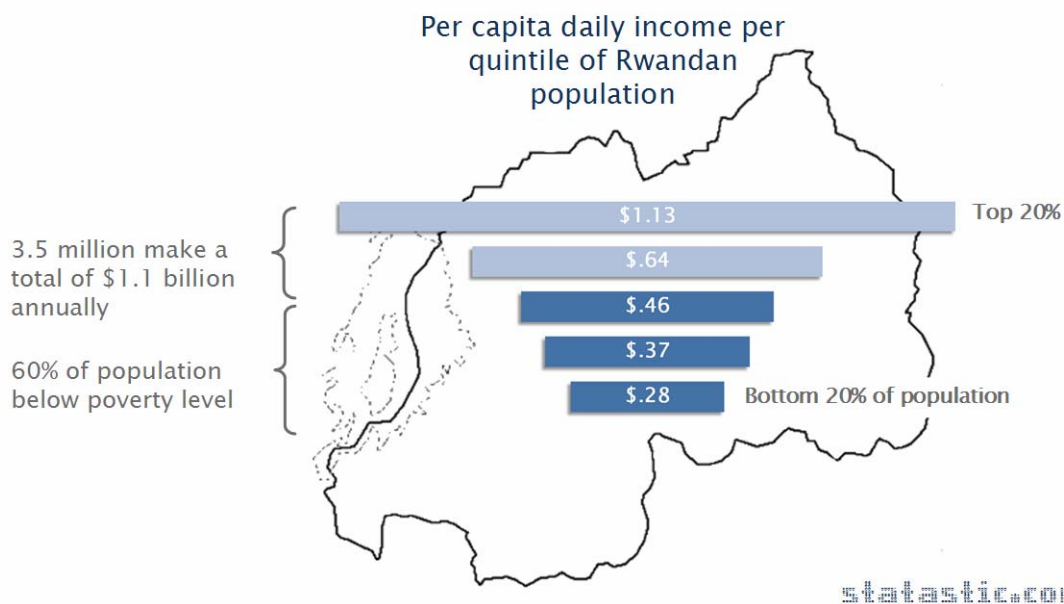
And technology improvements in computers and telecommunications do not exist in a vacuum. There are numerous positive spillover effects that affect the BOP as producers. The [Washington Post](#) recently reported that cell phones in Congo have enabled farmers and fishermen to "...use text messaging to check market prices, eliminating middlemen and increasing profits — and preventing long trips to the market on days it is canceled." So a technology unrelated to agriculture has helped farmers saved on input prices (transport to the market on days when it's cancelled) and output prices.

- **Clothing:** According to [The Economist](#) (see chart at right) apparel prices have tumbled over the past decade. Much of this is due to reduced quotas on Chinese apparel imports in the U.S. and Europe. Thus, the assertion that "the only way to reduce cost... without reducing quality will always require a significant improvement in technology" is inaccurate. Clothing prices have dropped as a result of trade policy, not an improvement in technology. Indeed this does have a [trickle-down](#) effect for the world's poor.



- Fuel:** Fuel has indeed become more expensive. Women have to scavenge farther for firewood. Oil prices lead Nigerians into the [deadly practice](#) of siphoning off crude oil from pipelines running through their villages. But technology can improve access to energy sources. Military applications such as [SkyBuilt](#) mobile solar power could be re-purposed for the market at the BOP. Mobile solar power sources could help keep vaccines refrigerated at medical centers or provide a short term power source for processing crops.
- Public Health:** As patents expire on novel drugs, cheaper generic drugs will enter these markets. [Playpump](#) is an innovative approach to water delivery. [LifeStraw](#) promises to exploit economies of scale in order to drive down prices for its personal water filtration device.
- Technology:** Last week, the Wall Street Journal ran a front-page [story](#) about an American entrepreneur, Greg Wyler, who was building an Internet infrastructure in Rwanda. The focus of his company is to first focus on market access, then profits. Mr. Wyler might disagree with Karanani's ideas about providing a quality product at reasonable prices for the poor. He is quoted as saying, "We're on a mission here to see what happens when we drive prices down and quality up." And lest you think that Rwanda is an obvious market for an outside investor, have a look at the graph below.

Rwanda's Market at the Bottom of the Pyramid: 5.2 million people living on less than \$.50 per day



Paternalism and the Bottom of the Pyramid

The World Resources Institute [writes](#) in response to Karnani's critique:

The pertinent development question is whether the BOP is well served by the present (often informal) markets, and whether there are unmet needs that could be better served by more competitive markets and broader participation by the legitimate private sector.

I believe that private sector innovation help can drive prices lower, maintain or increase quality, and help deliver goods that result in better livelihoods for those at the bottom of the pyramid. But what if multinationals start marketing products that the poor don't need? Are BOP consumers rational economic actors? Or is Karnani correct when he says that, "The problem is that the poor often make choices that are not in their own self interest."

Professor Karnani's primary critique is that it focuses multinationals on the extreme poor as consumers. Instead Karnani offers that "...we should emphasize buying *from* the poor. By far the best way to alleviate poverty is to raise the income of the poor" (emphasis added).

This is not a new idea, nor is it at odds with the idea of marketing innovative products toward the poor. Karnani's argument against the poor as consumers often boils down to naked paternalism:

Holding the poor consumer's income constant, the only way he can purchase the newly available product is to divert expenditure from some other product. If he is a "rational" consumer, this will increase his welfare. However, as a practical matter, this is unlikely to result in a significant change in his poverty situation. Additionally, if for some reason, the poor consumer is irrational in his resource allocation choice, the BOP initiative might even result in reducing his welfare.

The poor surely have a right to buy televisions; the issue is whether it is in their self interest to buy televisions.

So if there is a risk that poor consumers might make irrational buying decisions, who should help guide them? The United Nations? The dictator of that poor country? A local tribal leader? Religious clerics? In an ideal market, consumer choice is best left to... the consumer.

Professor Karnani emphasizes that the government should be focused on consumer protection. But we have to remember that consumer protection laws in the West have taken a century to build. Should developing nations that can't even deliver basic sanitation, infrastructure, and public health services shift their focus to developing consumer protection laws? Consumer protection is a worthy goal, but it is ultimately citizens who must hold their own governments accountable when the forces in the free market are perceived as harmful to their society or environment.

Karnani also has more specific targets in Prahalad's work. For example, Karnani claims that the Fair & Lovely skin whitening cream marketed to women in India by international giant Unilever entrenches women's disempowerment. He writes that:

The BOP proposition is not satisfied with just giving the company the right to sell skin lightening cream. It goes further and commends the company for empowering women and helping eradicate poverty. This is an intellectually and morally problematic position.

He also notes that Unilever's marketing campaign was failure:

The All India Democratic Women's Association campaigned against this and another advertisement as being racist, discriminatory, and an affront to women's dignity. ...

Ravi Shankar Prasad, minister of Information and Broadcasting, said "Fair & Lovely cannot be supported because the advertising is demeaning to women and women's movement." Unilever has since discontinued these two advertisements in India.

Karnani advocates that we preemptively limit consumer choice because the poor might make economic decisions that seem irrational from a Western perspective. But it was Indian consumer pressure that ultimately drove Unilever to pull the ads. Isn't that the market at work? Would Karnani consider poor customers to have been rational economic actors in that case?

Paternalism Meets Micro-Credit

Karnani also finds harm in Prahalad's example of Casas Bahia. This Brazilian superstore facilitates the purchase of high-quality appliances by offering credit to poor consumers who have unpredictable income streams. Karnani argues that:

The BOP proposition again falls prey to a fallacy: providing credit does not change the affordability of a product. ... All that the financing scheme does is provide instant gratification at a price. For the privilege of this instant gratification, he pays an interest rate of over 4% per month. People with "low and unpredictable income" would be well advised to save and pay in cash; this will enable them to do a better job of comparison shopping too. It is not surprising that many of Casas Bahia's customers do not understand well how to unbundle the purchase price and the interest cost and instead focus on the monthly installment payment.

Using credit in a developing nation is rarely about instant gratification. Village groups in West Africa without access to micro-credit schemes organized themselves and made small loans to group members for the monthly interest rate of about 10%. These loans helped fund medicine for sick children or seeds for cash crops. Poverty tends to produce desperately pragmatic people. Would Mr. Karnani advocate that each individual farmer save money for several years before finally buying seeds to plant cash crops? Doesn't it depend on the rate of return? And who is best able to judge when to extend credit?

If a poor Brazilian consumer buys an appliance on credit, isn't it possible that this person might become more productive as a result? Washing machines liberate people from having to spend the day washing by hand. Gas stoves are more efficient than searching for firewood.

You don't have to question whether someone will make the right rational economic choices just because they are poor. Yes, government regulation is needed, but we should not discourage the private sector from extending credit just because poor consumers might buy something they don't need. If someone defaults on the loan at Casas Bahia, then Casas Bahia probably won't issue them additional credit.

Corruption: "Total instances found: 0"

Unfortunately this heading applies to a search for the word "corruption" in Professor Karnani's [working paper](#), not to the situation the facing the world's poor. Corruption hurts the poor both as consumers (by distorting prices) and producers (by discouraging investment). Neither Karnani nor Prahalad offer much insight into how to remedy this.

In fact, Karnani hardly acknowledges the difficult hurdle that corruption presents in establishing well-functioning institutions needed to turn the poor into producers. In attacking Prahalad, he seems to lose sight of the fact that billions of the world's poor live in countries with failed governments, writing that:

By emphatically focusing on the private sector, the BOP proposition detracts from the imperative to correct the failure of the government to fulfill its traditional and accepted functions such as public safety, basic education, public health, and infrastructure.

Karnani and BOP advocates both want to see improvements in governance. Both sides want to improve the conditions facing the poor. It's a question of how to reach that noble goal. Making a market at the BOP gives multinationals a stake in the improvement. Surely, sophisticated market analysts at the world's corporations would recognize that a well-educated, healthy population of consumers purchases more goods?

Conclusion

We could, of course, step back and try to figure out what is going wrong in the failed states of the world. We just need to fix the infrastructure, education, end corruption, and eliminate AIDS. The World Bank, United Nations and countless other academics, advisors and NGOs have been trying to achieve this for decades. As soon as we have that all figured out, will Karnani let companies sell approved goods to the poor? Karnani concludes that:

Private companies should try to pursue marketing to the poor. However, the profit opportunities are modest at best and we suggest a cautious approach. Large companies that require scale economies should be even more hesitant.

Why ward off large companies? Innovation is an invaluable tool. Companies should try to earn a profit in developing nations. Many will fail as thousands of companies before have failed in rich nations. Don't wave off the LifeStraws and PlayPumps of the world while we wait for developing nations to create consumer protection laws up to Western standards.

Karnani is correct to focus on establishing institutions that will help the poor earn more income. But while we wait, why not try the BOP approach?

Adapted from Statastic.com

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