FACTS Reports

Field Actions Science Reports

Special Issue 4 (2012)
Fighting Poverty, between market and gift

Reuben Abraham

Doing Business at the Base of the Pyramid: The Reality of Emerging Markets

http://factsreports.revues.org/1582
Published 31 May 2012

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E- Doing Business at the Base of the Pyramid: The Reality of Emerging Markets

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Abstract. The role of business has traditionally been ignored in the global debates around economic development and poverty alleviation. The recent global success of the mobile telephony industry, and the rapid growth in emerging markets over the last two decades has, however, forced a rethink. Instead of top-down, development aid-driven strategies, more discussions now focus on providing goods and services profitably to the base of the economic pyramid (BOP), like mobile phone companies have.

Research teams at the Centre for Emerging Markets Solutions (CEMS)[1] have found that while it is possible to profitably serve BOP markets, it requires some departure from strategies advocated in the traditional BOP literature. In particular, it requires addressing issues around the macro-economic and business climate of the country; mispricing of risk; entrepreneurship; and a shift of focus away from multi-national corporations to the small business sector, and the transaction costs that bedevil it.

This piece also examines a few commercially sustainable business models that have worked in these markets, and investigates a few sectors that commercial capital will find highly attractive and investable. Finally, we look at how to structure and commercialize the huge business opportunities that exist in addressing the inefficiencies of BOP markets, using a combination of business model innovation (especially around reduced cost structures), research, entrepreneurship, and patient capital.

Keywords. Entrepreneurship, base of the pyramid, business and poverty, small and medium size enterprises.

1 Introduction: Does Business Matter?

In the long-standing debate around poverty and economic development, rarely does the word business get mentioned. In some ways, this is not surprising since business and the merchant class have always got short shrift, from the time of the Phoenician trading fleets to Nehru's India[2]. Business was something to be tolerated as a necessary evil, rather than encouraged.

What is the reality? Even assuming one is in favour of redistribution, what exactly is being redistributed? You cannot, after all, redistribute poverty. You can only redistribute wealth, and to redistribute, you have to create the wealth first. And the only agent of society that can create wealth is business. One could argue whether private business or state-run businesses do a better job of creating wealth. I tend to favour private business because I believe they have better incentive systems in place for optimal resource allocation. Best of all, business is sustainable without dependence on handouts and aid, and the discipline of the markets ensures that mistakes are rectified quickly.

[1] CEMS is a research centre at the Indian School of Business in Hyderabad, India.

[2] This did not however stop Nehru's Congress party from soliciting largesse from business houses.

This may seem like stating the obvious, but clearly not, else the role of business would be looked on much more favourably. As the management guru C.K. Prahalad once said, "common sense is not so common!"[3] Before we go any further, let's look at some data from China and Korea.

As you can see above, economic growth in China has created the most dramatic fall in poverty in human history, lifting close to 600 million people out of absolute poverty in 26 years. In particular, witness the drop after 2001 when China joined the World Trade Organization (WTO).

Now, let's look at South Korea from 1970 to 2008, and compare it with North Korea and Ghana for the same time period.

Once again, the data above presents a very strong case for why industrialization and growth are the key to raising productivity and incomes, as well as reducing poverty. In both these graphs, we find that countries that created a business and market friendly environment were successful in reducing poverty drastically. It therefore beggars belief that there is still some dispute on the centrality of business and entrepreneurship to economic development.

Another reason why business solutions to poverty alleviation have gained traction in recent years has been the

[3] Private comment to author at a conference at the Univ of Ann Arbor, Michigan.

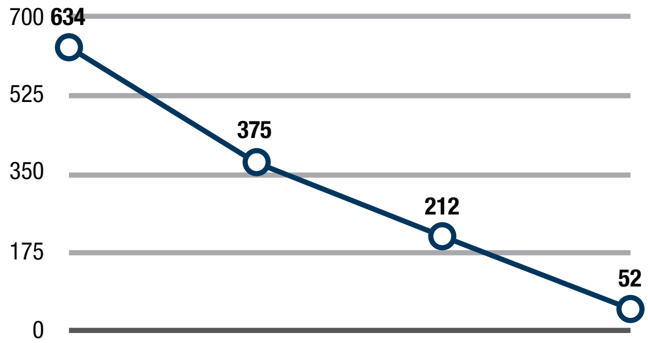

Figure 1. Poverty in China (millions of people).[4, 5]

phenomenal rise in mobile phone penetration around the world. Though the initial conditions were partly subsidized,[6] the subsequent boom in mobile telephony has been entirely market led, as competitive markets for telecoms relentlessly drive down prices of handsets and voice/data minutes. The number of mobile phone subscribers has rocketed from around 1 billion–almost entirely in developed markets–in 2000 to over 5 billion now,[7] with the vast majority of subscribers being poor or lower middle income and located in developing countries. Adoption of mobile phones has led to increased productivity and incomes in many low-income markets.

2 The Base of the Pyramid (BOP) framework

Stuart Hart and C.K. Prahalad gave us a conceptual framework[8] to think of low-income markets, by dividing the economic pyramid into layers, including a substantial base. They argued that there was a large market opportunity in providing high quality products and services at an affordable price to the base of the economic pyramid.

For simplicity's sake, I tend to think of the very bottom of the pyramid as consisting of about the billion people who live on less than $1.50 a day, who are also most likely beyond the reach of markets today. On top of the pyramid are about 1-1.5 billion people who tend to be high income and mostly live in developed countries, though elites in developing countries belong in this category as well. In the middle lie about 4.5-5 billion people who probably make between $1.50 and $15 a day, and this segment represents a vast untapped market. One must of course be careful to not get theocratic with the definitions presented here, since they are only used to create a conceptual framework and are by no means exact.

3 Going beyond the BOP framework

While the Hart/Prahalad pyramid provides an extremely useful construct to think about low-income market opportunities, I think it's useful to think beyond the framework in a way that also addresses the two primary criticisms[9] of the model:

- An over-focus on foreign multinationals.
- An over-focus on consumption, instead of production.

I think it's vital to focus for the large part not on the poorest segment of the market, but on the middle tier including the working poor[10], which is a very real (and very large) market, and would be considered poor by any western definition of the term. And in this segment, the question of whether people are consuming stuff they don't really need is less relevant since the opportunity cost of each dollar is lower than among the absolute poor.

Most importantly though, I believe the focus on the multinational corporation misses the point around small and medium enterprises/businesses (SME or SMB), which lie at the heart of any economy, especially from a job creation standpoint. Large companies, in their relentless push towards greater productivity, don't create that many new jobs. In fact, if we look at the numbers, we'll find that the SME/SMB segment produces about 85% of the jobs in the United States and over 90% of all jobs in Europe. In fact, lower job creation in the SMB sector is a big reason for the current unemployment numbers in the United States. The chart below, from the Economix blog of the New York Times,[11] will make this point clearer.

The vast majority of employment in OECD countries is created in the SME segment. Yet, in developing countries like India, SMEs employ fewer than 10% of the population. As these countries transition from a primarily agriculture-driven economy, they need SMEs to grow rapidly and absorb the surplus labour freed up by productivity gains in agriculture. So, the relevant question to ask is if the SME segment is as important as it seems, then what retards its growth in developing countries? I believe the following transaction costs play a large role.

1. Government & Regulatory Policy: Despite good intentions, governments end up becoming a roadblock for the SME segment, primarily by creating a business unfriendly environment, despite all the evidence that shows that business-friendly countries tend to be far richer than unfriendly ones. A great example of this in many countries are both entry and exit problems for

[4] Percentage of people living below $1.08 a day at 1993 PPP.

[5] Chen, Shaohua and Ravallion, Martin, 2004. "How have the world's poorest fared since the early 1980s?" World Bank Policy Research Working Paper 3341. The World Bank also reported the numbers for 2007 as 4% of total population.

[6] Investments made by the International Finance Corporation (IFC), for instance.

[7] In India alone, the number of subscribers has jumped from 3 million in 2000 to over 850 million today. In the past two years, the country has added between 15-20 million new subscribers every month.

[8] Prahalad, C.K. and Hart, Stuart L., 2002. "The Fortune at the Bottom of the Pyramid." Strategy+Business, Issue 26, First Quarter, 2002.

[9] One of the most prominent critics was Prahalad's colleague at the Ross School of Business, Aneel Karnani, who posted a paper titled "Mirage at the Bottom of the Pyramid."

[10] In the Indian context, working poor would include a two-income household earning between $150 and $400 per month.

[11] Source: http://http://economix.blogs.nytimes.com/2011/06/29/nurturing-start-ups-and-small-businesses-around-the-world-part-1/. The source of the data in the graph is the OECD report, "Entrepreneurship at a Glance 2011" available at http://www.oecd.org/document/0/0,3746,en_2649_33715_48107008_1_1_1_1,00.html.

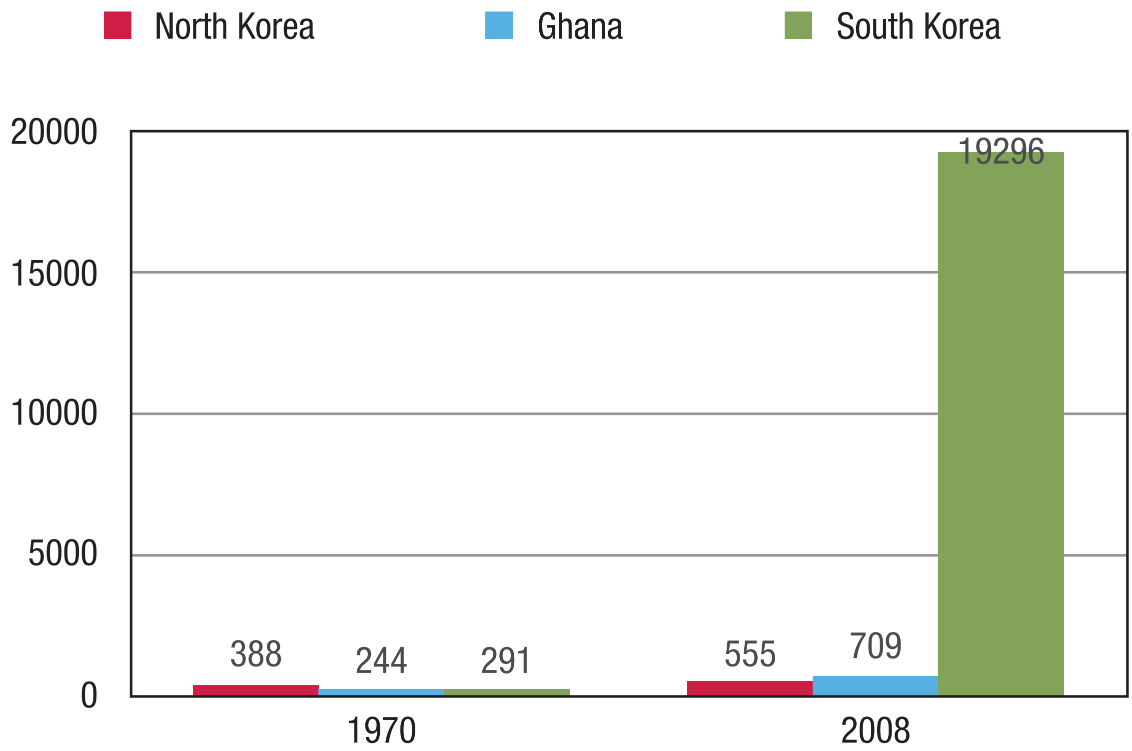

Figure 2. Per Capita GDP (1970-2008) in North Korea, Ghana and South Korea (USD).[12]

business, as well as onerous labour laws which prevent the hiring and firing of labour.

2. Access to Finance: Along with policy issues, access to finance is probably the biggest stumbling block for SME development. Small businesses, especially ones in bread and butter businesses (as opposed to technology), have a hard time raising any form of capital, be it debt or equity. This leads to a much higher cost of capital, and the primary sources of capital remain friends, fools and family. A related problem at the enterprise end is the obsession with ownership[13], which makes access to equity finance that much harder.
3. Access to markets: Even in a best case scenario, where a business is doing fairly well, SMEs have problems accessing markets, especially distant (typically high-margin) markets.
4. Access to best practices, technology and knowledge networks: This point is obvious, but the lack of access leads to constant re-invention of the wheel, and use of sub-optimal and inefficient technologies and processes.
5. Access to talent: SMEs have a real problem accessing good people, both at the high and low end of the market, and attrition and churn await even those who do. Ownership and control issues compound the problem; owners seldom want to hand over responsibilities to professional management.

4 Three types of entrepreneurs

Before elaborating on these challenges, it is useful to have some clarity on the issue of entrepreneurship, which has unfortunately become rather confusing since the advent of microfinance.

In my mind, there are three kinds of entrepreneurs: the entrepreneur selling tea at a road side stall, the SME owner, and the Steve Jobs/Bill Gates style of entrepreneur who builds a massive business, creates enormous shareholder wealth and employs thousands of people. Any well functioning society will try to eliminate the first kind, mostly because it is survival disguised as entrepreneurship, and is often misdiagnosed as such.

Unfortunately, an unwelcome side effect of the microfinance boom of the last decade has been a celebration of the first sort of entrepreneur. Entrepreneurship is a hyper-specialized skill set, which a tiny fraction of the population possesses[14]. If I were to look at the average MBA class at the Indian School of Business (ISB), where I am based, less than 5% become entrepreneurs, while the rest are looking for regular jobs. Why do we assume that low-income populations are any different, and more importantly, why would we assume that they possess a higher acumen for entrepreneurship? In fact, all a sub-scale 'survival' entrepreneur really wants most of the time is a full-time, formal sector job with

[12] Source: National Accounts Estimates of Main Aggregates. United Nations Statistics Division. http://data.un.org

[13] Entrepreneurs seem to prefer owning 100% of a $1 million company than 20% of a $1 billion company.

[14] This obviously makes it very rewarding to the few who do, and strike it big.

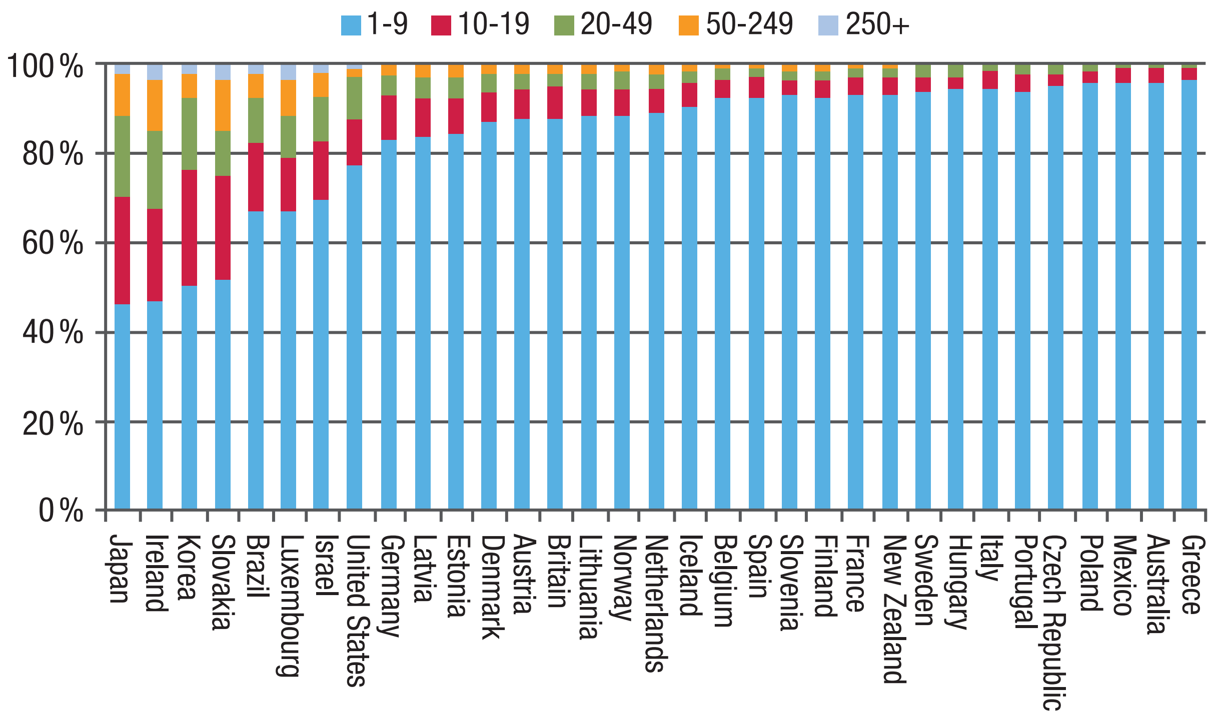

Figure 3. Enterprises by Number of Employees, as a Share of All Enterprises (2007).

fixed income and benefits, not the variable, high-risk game his brand of entrepreneurship often becomes.

What's worse is that in a misguided attempt to turn survival entrepreneurs into real entrepreneurs, one may even miss the real opportunities to create businesses. In my experience, the tea vendor outside the ISB has no interest in scaling up and becoming the Starbucks of Tea. In fact, he'd rather be a permanently employed driver at my school, which comes with fixed income and some benefits. So, an attempt to 'scale' his business will not only bear no fruit, but will also result in two 'real' opportunities being missed, namely a skills training business to upgrade his skills, or a car company business which owns hundreds of cars and can employ a few thousand drivers, mechanics etc.

It's very important to take note of this difference, especially at a time when the notion of micro-entrepreneurship is in vogue. The growth of the formal sector is not just good for the tax collector, but also for employees who currently languish in the shadows of the informal sector.

5 Mispricing of risk & access to finance

Once we are clear about what sort of entrepreneurship to back, we can then address its transaction costs, especially access to finance. I firmly believe that very large investment opportunities exist in the provision of high quality goods and services in low income markets. In my opinion, developing country markets, especially BOP markets, are plagued by instances of mispriced risk and asymmetric information. Though market clearance–in which supply is equal to demand so the market 'clears'–is a central tenet of free markets, a nudge is often required to kick-start markets, as the examples in the next few pages will show. There is therefore an opportunity to put social/philanthropic/patient capital to use in re-pricing this risk. In addition, there's a very real role for research in uncovering some of these investment opportunities.[15]

6 Examples of investments by commercial investors

Let's now look at some specific investment examples from India. Back in 2005, not too many people paid attention to the vocational skills training space, though all the macro trends[16] indicated that India would face a major challenge in educating people over the next 20 years, especially in the trades. A fair amount of research showed what the macro numbers could look like, and a hedge fund took a position in a skills training company which provided basic electronics training[17] for low-income customers. At the time of exit less than two years later,

[15] Research and insights can either be commercialized internally or open-sourced to outsiders who may build new businesses on the back these insights. In some ways, this is no different to the way universities like Stanford played a large role in catalyzing the high-tech cluster around Silicon Valley.

[16] India needs to educate 700 million students by 2025, of which 200 million need to be University educated and 500 million need to be vocationally trained. The line between demographic dividend and a demographic nightmare can be a very thin one.

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the hedge fund had made 350% returns on its investment, while the company was creating close to 20,000 low-income jobs a year.

In 2007, another hedge fund made an investment into another seemingly 'un-investible' opportunity, namely municipal waste collection and transportation. Today, that company is India's largest stand-alone[18] waste management company with close to $75 million in revenues, with EBITDA margins of about 40%. On the social side, the company provides direct employment to a few thousand low-income workers, while its environmental footprint[19,20] affects the lives of over 15 million people today at a conservative estimate. It must be mentioned here that in setting up a reverse auction for waste collection, where the lowest bids per tonne won the contract, the government was not only being innovative but also saving the taxpayer a lot of money, as it turned out.

Clearly, there was nothing wrong with these investments and today you see a plethora of investors and entrepreneurs in both the waste management and the vocational training space. So, one can only assume that it was a perception of risk and a lack of understanding that kept most investors out in 2005 and 2007. I drew the following conclusions from analyzing these investments closely:

a. Demonstration plays a large role in opening up low-income markets. A few successful investments can draw others in.

b. The mispricing of risk can be corrected through a combination of high quality research and clever, long-term capital.

c. The entrepreneurs, though they created enormous social/environmental benefits, were not social entrepreneurs, but simply entrepreneurs who happened to create these benefits by running a business well.

d. Both of these investments were larger ticket deals, and it was obvious that access to capital was an even bigger issue at earlier stages of the companies' growth.

Based on this understanding, and the macro-research around BOP markets, our research group[21] played an active role in putting together an early stage SME venture capital fund with Soros Economic Development Fund (SEDF), Omidyar Network and Google as investors. The fund has a corpus of $17 million and was set up to make $1-1.5 million investments into compelling BOP businesses.

One clarification is in order here. I believe there are two kinds of SMEs, ones that have the potential to scale up dramatically, and ones that will always remain SMEs. The SONG Fund,[22] as an equity vehicle, targets the first kind, though there is a very real opportunity[23] to provide debt finance to the other variety of SMEs, especially given the unwillingness of banks to lend to them.

7 The SONG fund

The SONG Fund was set up in 2009 to address issues around early stage access to finance in India's BOP markets. A fundamental premise of the fund was that if we targeted the BOP market well, the social impact would follow. For instance, if we fund low-income education, we don't need to do complicated impact metrics to understand we've made an impact on the lives of the poor. We have done so, simply by catering to that market segment. In addition, SONG is a returns-first fund, so social impact cannot be used as an excuse to not return money to the investors. Finally, SONG was set up with a belief that the social lens belonged to the investor and not to the entrepreneur.

This is a point that merits explanation. Often, investors make the mistake of backing mission-oriented people who turn to entrepreneurship as a way to execute on mission. However, in keeping with our belief that entrepreneurship is a highly specialized skill, we back strong entrepreneurs who cater to BOP markets. This guarantees the social impact, irrespective of whether the entrepreneur is actively working towards that outcome or not. Our experience shows that scale and success are closely related to the ability to making bets on the right kind of entrepreneurs, rather than the right cause.

7.1 Some examples of SONG investments

Eye Q Hospitals: SONG invested into Eye-Q, a chain of low-cost eye hospitals in northern India, which provides a vital service in a region that is underserved for high quality eye care, especially at low cost. The hospital operates using a hub-and-spoke model, with a main hub hospital in a big city providing spokes into Tier 2 and Tier 3 towns. Since the SONG investment in 2010, the chain has treated 105,000 patients and has approx $2.5 million in revenues. As of November 2011, SONG has partially exited the investment with a valuation mark-up of 3.5 X.

K-12 Education/Gowtham Schools: Gowtham Schools provide low-income families with high quality K-12 schooling, with the fees running between $12 and $25 per month. The company currently operates 64 schools, employs 2500 teachers and provides education to 42,000 students, generating $9 million in revenues in the process. As of Nov 2011, SONG has completed a full exit from the company by selling to a strategic partner.

8 Another major opportunity: Low-income housing

Low-income housing is another large untapped opportunity across most developing countries, especially as they grow

[18] There are larger companies in the waste mgmt business, but they tend to be conglomerates that do a lot more than just waste management.

[19] Environmental footprint refers to the number of households in the wards of municipalities in which the company operates.

[20] This is a crucial point since uncollected waste is a source of many public health hazards, including dengue and malaria.

[21] The Centre for Emerging Markets Solutions at the Indian School of Business.

[22] SONG is an acronym for Soros, Omidyar Network, and Google.

[23] A non-banking finance company (NBFC) is the most likely vehicle to do this.

Figure 4. Pilot project for low-income housing.

rapidly thanks to urbanization and industrialization, and urbanize even faster as a consequence.[24] In India alone, there is estimated to be a 30 million house shortfall, of which over 95% of the demand is in the low-income segment. Our research[25] of the housing development market identified just two housing projects aimed at the low-income segment, which represents a huge mismatch between demand and supply. We did 12 months of research and identified the following key insights:

1. Most developers made a fundamental mistake by segmenting the market by income, when in fact a slum dweller in Mumbai most likely makes more money than a middle class person in a Tier 3 town. We discovered that segmentation is best done geographically, with each geography requiring a different housing solution.
2. Industrial clusters[26] alone have a shortfall of over 6 million houses, despite formal sector jobs and the potential for payroll deductions.
3. Outside of the big cities, low-income home owners prefer to live in ground-only, brick-and-mortar structures.
4. Moving to a working capital model with quick exits, rather than the traditional real estate model of land banking,[27] there was a potential for generating significant profits.

Based on these insights, and with capital of about $500,000, we decided to test the hypothesis with a commercial pilot project of about 220 houses, priced between $6000 and $11,000.[28] Such a price point would make home ownership affordable to families earning between $150 and $300 in household income per month (typically two incomes). Owners would have to put 20% of the cost in down payment and then apply for a mortgage; formal sector employment makes the process easier for banks, especially ones with priority sector lending targets.

Given the unmet demand in the market, 75% of the homes[29] were sold out on the first day the project opened to pre-sales. Coupled with low construction costs and the 20% down payment, this ensured that the project was debt-free (no need for project finance) and cash-flow positive from day one. At closure, the project generated IRRs in excess of 100% and private equity capital has now come into the company, allowing it to scale up.[30]

Based on our research and commercialization experience, we have identified 3 commercial opportunities in the low-income housing space:

1. Ownership across geographical segments (as outlined above)
2. Rental Housing–There is an acute shortage of rental stock in the market, across all price points, but especially in low-income housing. Below a certain income level, ownership is out of the question and rental housing becomes a more attractive option. A migrant worker who moves newly to a city has neither the need nor the ability to maintain a house, until his family joins him and his space needs go up.[31]
3. Housing Finance–Currently, banks provide mortgages to our clients because they have formal sector jobs. However, there may be a significant opportunity to provide housing finance for informal workers at lower cost

[24] In my view, urbanization is both a cause and a consequence of economic growth.

[25] Research conducted by Roopali Raghavan and Reshma Apte, researchers at the Centre for Emerging Markets Solutions (CEMS) at the ISB.

[26] Most Indian cities have these large SME clusters on the periphery, which employ large numbers of people.

[27] In these cases, land value appreciation is the source of large amounts of profits, so developers hold on to land and develop slowly as land values climb.

[28] 200 or 300 sq ft homes, not including a front yard and a back yard, provided to every home.

[29] The images above are from the pilot site, where a couple of demonstration houses were first built.

[30] Given the success of the idea, the company has now been spun out of the ISB, and is a stand-alone real estate development company.

[31] According to our research, migrant workers typically need dormitory housing, which costs between $10 and $25 per month (single or double occupancy), assuming the migrant worker earns approximately $85-100 per month.

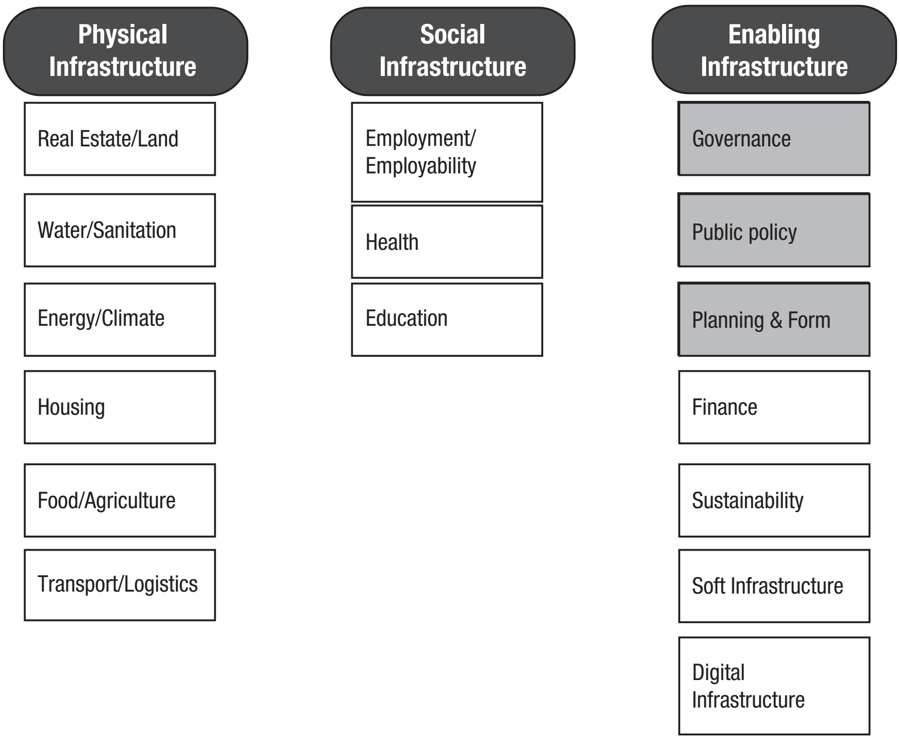

Figure 5. The pillars of urban growth.

than the banks.[32] There may also be ways to provide payment protection insurance to protects against defaults caused by income shocks[33].

How to think about opportunities in the BOP space

9 Contours of a well functioning society

Have a look at the figure below. You could think of it in terms of elements of a well-functioning society or think of it in terms of the pillars of urbanization or urban growth. Or you could think of it in terms of potential innovation and investment in the Base of the Pyramid (BOP) space, except for the 3 boxes in grey. You cannot have healthy societies or well-functioning cities without each of these issues being properly addressed.

9.1 Base assumptions

Each of these boxes effectively represents a $100 billion market in India alone, so there is no real market risk if a high quality, low-priced solution can be found; there will always be a market for clean water, for instance. In addition, all of these sectors can tolerate a high degree of competition. For example, in housing, an additional 10 companies in the space will not really hurt existing businesses, even while greatly benefiting consumers. Even assuming a best execution case, we will be hard pressed to build 100,000 houses in a 5-year period. Given the shortfall of 30 million houses (or 6 million in industrial areas alone), competition is the least of the worries. Execution is the real crux.

In the areas outlined above one is considering opportunities with very little market or technology risk, and execution risk is much easier for an investor to control. If the focus is on innovation, business fundamentals, execution, and being cash flow positive as soon as possible, there are huge opportunities in each of these sectors.

Role for multinationals?

Given everything mentioned in the preceding pages, is there a role for multi nationals to play in base of the pyramid markets? I believe yes. Some of it may involve direct-to-consumer opportunities, like selling shampoo to the poor, but there may be much bigger (and less costly) opportunities in addressing the transaction costs faced by smaller, more innovative and entrepreneurial firms. Finance is a good start, since entrepreneurs are likely better served by strategic investors (large companies in the same space) rather than financial investors most of the time.[34] In addition, MNCs also tend to have access to markets, radical new technologies and excellent management talent, all of which start-up firms could use in large doses. Finally, on the policy front as well, a large company is much likelier to be able to advocate for change than scrappy and unknown start-ups.

[32] Banks currently face high transaction costs because of their structure. If it weren't for priority sector lending requirements, one wonders whether banks would lend to these markets at all.

[33] Our research group is currently working on an insurance product that could be priced into a mortgage. [34] In the waste management business for instance, is the company better served by partnering with a large multi national like Vivendi or Suez, or a hedge fund? Obviously, the former because the investment goes far beyond just a financial transaction and there is potential for knowledge and technology transfers, additional management skills, joint bids etc.

10 Conclusion

Wealth creation is the best antidote to poverty, and any country that has made great strides in getting rid of absolute poverty has done so through rapid economic growth.

Therefore, there is a very strong case to be made for business, especially private business, to assume a central role in the development process of poor countries. Not through the mechanism of social entrepreneurs or any such feel-good process, but through regular entrepreneurs following their risk/reward instincts.

Given the right business climate, re-pricing of risk, and lowering of information asymmetries, we expect a large number of entrepreneurs to address the inefficiencies of what is called the social sector, but in fact represents huge investment opportunities. After all, the biggest entrepreneurial opportunities of all lie in building up a country, and opportunities the size of India and China come along maybe once every 200 years, if not less frequently. If entrepreneurs are successful at scale, they are bound to replicate in India, Africa and elsewhere, the remarkable run they've had in the 20th century in East Asia, most recently in China, including bringing down the levels of absolute poverty dramatically.