

The Economic Lives of the “Middle Classes”¹

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The middle class seems to be in fashion these days. Based on a comparison of a large number of countries, Easterly (2001) concludes that countries that have a larger middle class tend to grow faster.² In another recent piece, Birdsall, Graham and Pettinato (2000), rue the shrinking of the middle class---“the backbone of both the market economy and of democracy in most advanced societies”---in the face of burgeoning globalization. And the economic historian David Landes, writing about the Wealth and Poverty of Nations (1998), explains England’s early ascendancy in terms of the “the great English middle class” of the 18th and 19th centuries.

The hope attached to the middle classes, at least relative to the poor, comes in part from the simple fact that they are richer and therefore more able to make the kinds of investments that capitalism demands. This is where, we might think, the vicious cycle of poverty turns into a virtuous cycle, with growing wealth allowing people to make those investments that make them even richer. And for many, ranging from Max Weber to Margaret Thatcher, there is a further expectation---the promise of “middle class values”, that slightly paradoxical combination of diligence and acquisitiveness, prudence and risk-taking, that constitutes, in their various narratives, the life-blood of capitalism.

This essay is about the people in the middle. It follows on our previous essay (Banerjee and Duflo, 2007a), which was about the people at the bottom. In that essay, we used household surveys³ from thirteen countries to describe the economic lives of the very poor (those whose per capita daily consumption, valued at Purchasing Power Parity, is below 2 dollars): How they earn their money; how they spend it; the investments they make; the businesses they run; the way they school their children. Here we do the same thing for the rest of the population. This inevitably means the middle group, since the very rich are too infrequently picked up in household surveys to be a subject of this kind of study.

The focus here, however, is less to describe than to compare them to the poor. We wish to ask whether and in what sense are these people in the middle fulfilling the role that so many have imputed to them. Do they invest differently? Do they save more? Do they

¹ We are once again indebted to Andrei Shleifer for encouraging us to write this essay. We thank Remi Jedwab and Stefana Stancheva for outstanding research assistance, and Pascaline Dupas for her comments.

² Actually he thinks this is only true if they are not too divided along ethnic or religious lines.

³ The surveys we used are Living Standard Measurement Surveys (LSMS), Family Life Surveys, and two surveys we collected with co-authors.

work harder? Do they show more enterprise? And to the extent that there are differences, are these the inevitable concomitant of their relative affluence, or can we catch a whiff of some deeper difference? In other words, is there evidence that our people in the middle have laid claim to those middle class values that so many have theorized on their behalf?

To answer these questions, we went back to the surveys for the 13 countries listed in Table 1 (Cote d'Ivoire, Guatemala, India, Indonesia, Mexico, Nicaragua, Pakistan, Panama, Papua New Guinea, Peru, South Africa, Tanzania, and Timor Leste). From them we extracted the same information that we had put together in the previous paper for the poor for two groups of richer people in the same countries:⁴ Households whose daily per capita expenditures valued at Purchasing Power Parity (henceforth, dpce) is between \$2 and \$4 and those whose dpce is between \$6 and \$10 (at Purchasing Power Parity, as before).⁵

These are still very poor households by developed country standards: The poverty line in the U.S. for someone who lives in a family of five, for example, works out to be about \$13 per day. On the other hand, they are clearly much better off than the poor.

In what sense do they deserve to be called a “middle class”? Table 1 shows the position of the \$1, \$2, \$4, \$6 and \$10 lines in the income distribution of the countries in our sample.⁶ In all countries except rural India, Pakistan, Tanzania and Panama, the \$2 to \$4 category comprises between 23% and 40% of the population, and is primarily composed of what Easterly (2001) calls the “middle class” (those lying between the 20th and 80th percentile of the distribution of consumption). In rural India, Pakistan and Tanzania, the \$2 line lies above the 80th percentile, so that the \$2 to \$4 category is richer than the middle class by this definition, but even there it seems reasonable to think of this group as a middle class, especially since it seems hard to imagine calling them rich. Panama is the one country where most of those whose consumption lies between \$2 and \$4 are actually poorer than the middle class.

The \$6 to \$10 group is smaller in most countries. In many of them, belonging to this group makes people richer than the middle class as defined by Easterly, though again given how poor they are by first-world standards, it suggests that we may want to use a more inclusive definition of the middle class: In India, Cote d'Ivoire, Pakistan, Tanzania, Timor Leste and Indonesia, the \$6 line is located above the 90th percentile. In Nicaragua, Peru, Papua New Guinea and Guatemala, it is around the 80th percentile, while the \$10 line is around the 90th percentile. It is only in three of the richest countries (Mexico,

⁴ Except for Table 1, all the tables discussed here are presented in the appendix.

⁵ Table 1 also reports the number of observations in each category. In the poorest countries or in places where the surveys were targeted towards the poor (the two Indian surveys from Udaipur and Hyderabad, rural Pakistan, and rural Peru), we have too few households in the \$6 to \$10 category to be able to form a reliable estimate of what is happening in that group. In what follows, we follow the rule of never reporting statistics for a group with less than 50 households.

⁶ This information is generated from the data for all the surveys which are meant to be representative of the population (although many argue that like the surveys used in the World Bank poverty databases, they probably exclude many of the very rich), and calculated using the data available in the World Bank “Povcalnet” website for countries where the surveys are not representative.

South Africa and Panama), that the bulk of the \$6 to \$10 category has consumption per capita lower than then 80th percentile.

There are of course other definitions of the middle class, but by those definitions as well, most of the people in the \$2 to \$4 category fall into the middle class. Birdsall, Graham and Pettinato (2000) define the middle class as those between 75% and 125% of median per capita income. By this definition as well, the \$2-\$4 category seems to represent the middle class well. For example, in Mexico, they calculate that this puts them at per capita incomes between \$1,000 and \$1,666 at PPP according to their calculations, which, accounting for the fact that this is income and not consumption, makes them very similar to our \$2-\$4 per day category. In Peru, the corresponding group is between \$908 and \$1,513, per capita per annum at PPP, which also fits very well the \$2-\$4 group. In Panama, on the other hand, the middle class is significantly richer---between \$1,718 and \$2,864---which puts them at the low end of the \$6-\$10 group.

Finally, how does our population compare with the English middle class of the 19th century? Boot (1999) uses data about clerks in the English East India Company to come up with a measure of middle class incomes in the high years of the industrial revolution in England. By his calculations, around 1825 the average clerk who had between 11 and 15 years of experience and hence was around 31-35 years of age (most people joined when they were about 20) earned about 400 British pounds a year.

According to inflation tables reported by Offiicer (2007), it appears that one 1825 pound was worth about 44 1993 pounds. Hence, 400 pounds then was about 17,600 pounds in 1993, which, using the 1993 dollar-pound exchange rate of about 1.55 and the standard PPP correction of .85 for the U.K., works out to be about 23,200 dollars a year, or 63 1993 dollars a day, for an entire family. The typical family described in the article consisted of one earner, his wife and his three children. Per capita earnings therefore work out to be about \$12.5 a day per person, which given that these families probably saved quite a bit, puts them only a little above \$10 dpce.

1. Who are the “middle classes”?

What they do for a living

In our previous work, we had emphasized that the poor are often entrepreneurs, cultivating land in rural areas, and running a small business in urban areas. However, even in rural areas, we found that agriculture was often not their main source of income, even when they owned land. The non-poor do not appear very different in this respect. Strikingly, the rural non-poor are actually *less* likely to own land than the poor in all but three of our countries. Correspondingly, they are also less likely to be self-employed in agriculture. For example, in Cote d’Ivoire, the fraction of households self employed in agriculture goes from 37% among the extremely poor (dpce below \$1 per day) to 11% for those with dpce between \$2 and \$4, and 6% for those with dpce between \$6 and \$10; in

Panama, the numbers are respectively 69%, 35%, and 18%. But they are not working for a wage in agriculture either: The fraction of people who are earning a wage in agriculture among those with dpce between \$6 and \$10 falls to below 5% everywhere but Guatemala (20%) and Indonesia (12.5%).

How do these households make a living in rural areas, if it is not from agriculture? In some countries, they are rural non-agricultural entrepreneurs: 53% of those with dpce between \$6 and \$10 are self-employed outside agriculture in Indonesia (versus 33% among those with dpce below \$1). The same pattern, that the non-poor are more likely to be rural entrepreneurs outside agriculture, also shows up in Udaipur, Nicaragua, Pakistan, Panama and South Africa. In other countries, they are no more likely to own a business: In Cote d'Ivoire and Timor Leste, the probability of owning a business actually drops with economic well-being; in Guatemala and Mexico, it is roughly constant. In those countries, the rural non-poor are salary earners working outside of agriculture: Of those with dpce between \$6 and \$10, 96% are working for a wage in Cote d'Ivoire, 76% in Guatemala, and 60% in Mexico. Compared to the poor, they are less likely to have casual jobs, and more likely to work for a weekly wage or salary: For example, in Cote d'Ivoire, the fraction of those with a casual job drops from 51% to 0%. While this drop is clearly extreme, the same pattern obtains in most countries—in Indonesia it goes from 47.5% to 19%. The rural middle class is thus made less of landowners and rich farmers than school teachers, social workers, government and business employees, shopkeepers and artisans.

In urban areas in contrast, the broad occupation patterns are remarkably similar across the different levels of economic well-being. The share of entrepreneurs stays roughly the same, as does the share of employees. Like the poor, the middle class is diversified in what it does: 13% to 46% of the households receive incomes from multiple sectors. As in rural areas, however, they are much more likely to have stable salaried jobs: Among those who earn wages and have dpce between \$6 and \$10, the fraction of those paid weekly or monthly among those with dpce between \$6 and \$10 ranges between 76% (Peru) and 100% (South Africa), and it is above 95% for five of the eight countries for which we have data, while for the extremely poor it is only 42% in Indonesia and 60% in Peru.

Who do they live with?

We saw before that the poor are a remarkably young population. This is still true of the middle classes in our data, but less so. Among the rural poor, the population under 18 as a ratio of the total population ranges from 40% in Indonesia to 60% (Panama). In urban areas, it ranges from 34% to 63%. This ratio falls substantially in all countries as people get somewhat richer, although it remains high (it ranges between 35% and 42% for those with dpce between \$6 and \$10 in rural areas, and 28% to 42% for the urban population). In the majority of countries (though not in all), there are correspondingly more older people in the population, and more older people relative to the number of adults (Banerjee and Duflo, 2007b). Although the lack of consistent fertility histories in most LSMS makes it hard for us to check on fertility directly, this is clearly due in part to

lower fertility among the middle income group. This shows up very clearly when we look at the number of children per adult woman in the household: In all countries, the number falls sharply as we move from the below \$1 category to the \$2 to \$4 category and the \$6 to \$10 category. Among the extremely poor, there are between 2 (Indonesia) and 3.5 (Guatemala) children under 12 per adult woman in the household. Everywhere except in Guatemala, the number drops by at least 0.5 when we move to the \$2 to \$4 category. In Nicaragua, Pakistan, Peru, and Tanzania, the number of children actually drops by more than 1. There is a further drop of about the same size when we go from the \$2 to \$4 category to the \$6 to \$10 category (more than 0.5 children per adult woman in all countries except Cote d'Ivoire). As a result, the \$6 to \$10 families have relatively few children per adult woman---between 0.84 and 1.31 everywhere except in Guatemala where it remains high (2.91). Overall, the middle classes live in smaller families, and have fewer children.

2. The middle class consumer

Eating and drinking

Our previous work reports that even the extremely poor are far from spending their last penny on food. Nevertheless, the share of the budget spent on food falls sharply with increases in the standard of living. In rural Guatemala for example, the share of the budget spent on food falls from 63% among the extremely poor to 15% among those with dpce between \$6 and \$10. While the Guatemala example is extreme, in other countries the share spent on food varies between 38% and 54% among the households with dpce of \$6 to \$10 in rural areas, while it is between 50% and 76% among those with dpce below \$1. The patterns are similar in urban areas. This decline in the food share is well known and is accompanied in general by a shift toward more expensive foods, so that the number of calories consumed grows much more slowly than spending on food.

There is no comparable pattern for alcohol and tobacco: The share spent on these goods goes up in some countries and down in others. One reason for this may be that there are two forces pushing against each other here: Richer people can obviously afford to spend more on these things (because they spend less on food), but perhaps they are also more conscious of the health and social consequences of spending too much on these. Moreover, it is possible (though by no means obvious) that the non-poor are less subject to the kinds of acute stress that often create the need to take comfort in substance abuse.

Entertainment

One way the non-poor spend the money freed up by spending less on food is by spending more on entertainment. This is not particularly surprising in light of the unmet demand for entertainment that we found among the poor. The share of expenditure devoted to entertainment increases from next to zero among the extremely poor to between 1% and 5% among those with dpce between \$6 and \$10, both in rural and in urban areas, and

about half as much among those with dpce between \$2 and \$4. The share spent on festivals increases too.

There is also a sharp increase in the fraction of households that own a TV. In urban areas, except in Tanzania and Timor Leste, where it remains low, over 80% of the households with dpce between \$6 and \$10 have a TV. In rural areas, the highest share of TV ownership among those with dpce below \$1 is 27%. Excepting Timor Leste and Papua New Guinea, it is between 34% and 76% among those with dpce between \$6 and \$10. A similar pattern emerges for radio ownership, except that in some instances (such as in Nicaragua), richer people are actually less likely to own a radio, most likely precisely because they own a television.

3. Investing in home life

Healthcare

In most countries, the likelihood of seeing someone about your health goes up sharply with dpce in both rural and urban areas, but the increase seems to be steeper in rural areas (increases of three times or more between those below \$1 and those above \$6). This conclusion is less obvious than it might seem: After all, we would expect poorer people to be sicker and richer people to be better educated and more able to self-medicate. It underscores what at some level we all recognize, that even the demand for healthcare is not just based on need.

However, while the number of consultations goes up, it does not go up nearly as fast as total expenditure, and therefore if they spent the same amount per consultation, the rich would actually spend proportionately less on healthcare. In fact, spending clearly goes up with dpce in a number of countries (in Mexico it goes from 0% to more than 8%, in urban Indonesia from 0.9% to almost 8%, in urban Peru from 0.4% to 5%, etc.) and either remains the same or goes down slightly in others. The non-poor consume much more expensive healthcare.

In part this reflects a shift towards private healthcare. Strikingly, this cannot be the whole story, since in some countries (India, Pakistan, etc.), even the poorest in our sample say that they go to private doctors, while in others (e.g., Mexico) everyone says that they use the public health system. In other words, while they are getting the same kind of consultations, they are spending more on them and perhaps getting more out of them. In particular, they are going to more expensive private doctors when they go and perhaps paying more to public doctors to jump the queue; the doctors they see are more competent and exert more effort (Das and Hammer, 2007, show this for the slums of Delhi), etc.; they buy more of the medicines suggested by the doctors; they get tests done instead of relying entirely on the doctor's judgment; they get the surgery they need done instead of living with pain or heightened risk of death; they deliver in hospitals rather than at home.

Education

The patterns we see in education mostly echo what we found in the case of healthcare. The middle classes are more likely to send their children to school. Enrollment rates in the 7-12 age group both in urban and rural areas go up by a substantial amount in Cote d'Ivoire, Pakistan, Udaipur, Nicaragua, Panama, Papua New Guinea, Tanzania and Timor Leste when we move from the below \$2 category to the \$6-\$10 group. The increase is especially large (by a factor of two or more) for both boys and girls in Cote d'Ivoire (urban and rural) and for girls in rural Pakistan. Elsewhere there is either no change or a slow increase. What is striking is that even with this increase, there is a substantial fraction of middle class children who are not in primary school: In Tanzania, Papua New Guinea, Pakistan and Cote d'Ivoire, the fraction of both boys and girls from families in the \$6-\$10 category going to primary school is less than 80%. Moreover, if this was confined to the rural sector, one might blame this on the lack of nearby schools, but the lowest number (58%) is actually for boys in *urban* Cote d'Ivoire.

One sees a similar pattern among the children above 13 and the gradient with respect to dpce is, understandably, somewhat steeper. The share of children that age in school goes up by more than 50% in a majority of countries and even triples in some (e.g., Cote d'Ivoire) though there are some places where it is flat or even goes down (e.g., Timor Leste, Peru, South Africa).

Even with these large increases in enrollment, if the expenditure per child in school remained the same, we would expect those between \$6 and \$10 to spend a smaller share on education than those below \$1, partly because the share of children going to school never goes up by anything like six times, and partly because the rich have fewer children. What we find in the data is that the share of educational spending remains more or less the same in rural areas of most countries and in the urban areas of more than half the countries. In the rest of the countries, it actually goes up quite sharply. For example, in Panama it goes from 6.5% among those with less than \$2, to 25% among those between \$2 and \$4 and 18.5% among those in the \$6-\$10 category; in Hyderabad, from 5% among the extremely poor to 10% for those with dpce between \$2 and \$4 and 15% for those with dpce between \$6 and \$10. Similar patterns are found in Mexico (6% to 10.4%), and Nicaragua (3.6% to 8.7%).

All of this points to the fact that the middle classes spend more, and in many cases much more, per child educated than the poor. To see the magnitudes involved consider the example of urban Hyderabad: In Hyderabad if someone with \$1 per day and someone with \$8 per day spent the same amount for the child's schooling, then given that a \$8 person is twice as likely to send their children to school as the \$1 person and the \$1 person spends 5% of his total expenditure on education, the \$8 person would have ended up spending 1.25% on education.⁷ In fact, they spend 15%. So they must be spending at least 12 times per child than their poorer counterparts. Even in the locations where total spending is flat, the spending per child can increase by a factor of two or three.

⁷ This calculation assumes that the richer people have the same number of children as the poorer families. As in fact they have fewer, this makes the difference even larger.

A part of this extra money pays for the fact that middle class children are more likely to remain in school after they are 18 (i.e., go to college), but a substantial part of it also goes to pay for private schools or on tutoring outside school hours. In almost all countries, the share of children attending private school increases substantially both in rural and urban areas, although there is a lot of variation across countries. In Nicaragua for example, the proportion of children in private school increases from 0 among the extremely poor to 23% among those with dpce between \$6 and \$10. In Mexico, it increases from 5% to 20%. In urban areas, more children of primary school age are enrolled in private school in all groups, but the fraction still increases with dpce: For example, it increases from 30% among the extremely poor to 73% in the \$6 to \$10 category in Hyderabad. In all countries except Tanzania (where it is 1%) and Timor Leste (where it is 13%), more than 30% of the children of those with dpce between \$6 and \$10 in urban areas are enrolled in private school. Another common phenomenon is tutoring after school. Kochar (2001) reports that, in India, the ratio of urban boys getting this kind of tutoring was about 20% for primary age children and close to 40% for the secondary and upper secondary age groups.

The idea that someone who is below the U.S. poverty line is paying for private schooling for their children might seem slightly bizarre to people who have in mind the image of private schools in OECD countries, but that would be the wrong analogy. There is perhaps no better metonymy for the kind of education they offer than the large billboard that used to be on the outskirts of the city of Udaipur cheerfully advertising a new *Engleish Medium School*. Private schools in developing countries are often very cheap (in South Asia, it is not uncommon for them to cost less than \$150 per year, in PPP dollars) and largely unregulated, and the quality is correspondingly mediocre or worse.

Nevertheless, the fact that the people in our sample are not sending their children to the free public schools, even for the lower grades, must tell us something about the quality of the public schools. Indeed, looking at teacher absence rates in India, Kremer et al (2006) show that, in villages, private schools spring up in areas where the public schools are particularly bad, and in those communities, the private schools, whose teachers are often paid a fraction of what the public school teachers are paid, are much less likely to be absent.

The switch towards private schools and tutoring could also explain why the phenomenon of sharply increasing educational spending is primarily an urban phenomenon. Clearly there is a simple market size effect. As most rich people live in urban areas and the population is much more geographically concentrated, it is natural that there would be a greater supply of more expensive options for education in urban areas. Of course, one could also see it as an example of the fact that aspirations are set by neighbors or people one frequently meets. Households living with dpce between \$6 and \$10 in urban areas have many more rich people to look up to than their rural counterparts, and these are the people who set the norms for the education that they want for their children. Yet another possibility is that households in this category of consumption are differently selected in urban and rural areas: In urban areas, as we will see, they are often migrants. They may

therefore be more ambitious for themselves and their children than comparable people who remain in rural areas.

Domestic infrastructure

Another area where we do see a big difference between the poorest households and the non-poor is in their access to quality domestic infrastructure.

The richer households live in bigger houses---their houses have between 2.34 (Mexico) and 6.56 (Indonesia) rooms. In most countries, they have about 1.5 extra rooms than those of the extremely poor, despite the fact that the families are much smaller. The fraction with tap water at home increases with dpce in most countries and in some countries by quite a large margin: From 12% (for the extremely poor) to 73% (for those with dpce between \$6 and \$10) in rural Cote d'Ivoire, 2% to 63% in rural Tanzania and 12% to 55% in Nicaragua. In urban areas, in seven countries out of the nine for which we have data, 70% or more of the households with dpce between \$6 and \$10 have tap water, whereas the share is below 50% in all countries but one for the extremely poor. The same pattern holds for latrines (where the share of those who have one among the households with dpce between \$6 and \$10 is above 80% in seven countries) and electricity (the share that have access to electricity in this group is above 90% in seven of the countries).

Investment or consumption?

Economists are used to thinking of health and education choices as investment decisions, but there is surely an element of pure consumption in the pride with which a parent goes back to read, one more time, her child's admission letter to Harvard, or in the reassuring words of the third specialist, called upon in the hope that she would confirm what the others have already said. Perhaps all the extra expenditure on health and education that we saw from the middle classes is just an indulgence or a display; perhaps they do not live any longer than they would have had they adopted the health habits of the poor, and nor do their children earn any more than they would have had they gone to the same schools as their poorer counterparts. And surely, even though spacious houses and latrines contribute to cleaner environments and better health, and tap water is safer to drink, this is not the only reason why people aspire to twelve bedroom mansions.

Can we show that at least some of these extra investments appear to pay off in terms of something palpable, like a longer life or a higher income? Life expectancy provides a striking, if somewhat coarse, glimpse at this question. Thus, in another paper (Banerjee and Duflo, 2007b) we asked whether any of this is associated with differences in mortality. First we observed that the non-poor adults are more likely than the poor to report that their parents are alive, which suggests lower mortality among those 50 and above. We then used panel data from the two countries where we have detailed consumption data and where the households were interviewed at least twice at an interval of about five years---Indonesia and Vietnam---to ask a very simple question: Are those

who were poor in a particular survey year less likely to survive until the next survey year compared to the non-poor?

The answer turns out to be surprisingly clear cut. Among those who were 50 years or older in the base year, the poor are much more likely to die than the non-poor. In Indonesia, for example, about 15% of those who were 50 and above in 1993 and poor had died by 1997. The corresponding number for those between \$6 and \$10 was 7%. The difference is particularly striking in rural areas (15% versus 3%) but substantial also in urban areas (18% versus 11%). The patterns are similar in Vietnam. Overall, 14.4% of those aged 50 and above who lived in extremely poor households in 1992/93 had died by 1997/98, versus 9.8% among those who were living in households with dpce between \$6 and \$10. In rural areas, the probabilities are respectively 15% and 5%.

Of course, the direction of causality here is unclear. It could be that the poor die because they are poor: They live in poor sanitary conditions, they have eaten less well over their lifetime, hard physical work has taken a toll on their bodies, they are less well treated when sick, etc. But it is also possible that they are poor because they are already sick. To separate these alternative theories, it helps to look at those who are unlikely to be the main income earners for the family. When we do this, we still find a big difference: In Vietnam, for women above 50 who live with prime-age adults, the 5-year mortality rate goes from 12% among the poor to 7.7% among those with dpce between \$6 and \$10. However, this goes only a part of the way: To the extent that poor health is in part inherited, it could still be the case that unhealthy old people live with unhealthy younger adults, and this is the reason why the household is poor. But on balance, it seems plausible that the richer households live substantially longer in part because they live healthier lives, and if this is true it suggests that these investments in home life---water on tap, a latrine, better doctors, fewer child births, better nutrition---not only allow the middle classes to live more comfortable lives or to show off their wealth, they also keep them alive.

4. Investing in work-life

Business investments

The striking fact about business investments, especially given what we just discussed about human capital investment, is how little difference there is between the poor and the middle classes.

As we saw above, the middle classes are about as likely to be business owners as the poor, and less likely to be in the farming business when they live in rural areas. When they do operate a non-agriculture business, the type of business they operate is also not very different from that of the poor. The number of employees is still tiny (the businesses of those with dpce between \$6 and \$10 have on average only 0.5 to 1 more paid employee), and they still seem to operate with very little in the way of assets, such as machinery or a form of transport: For example, unlike radios and televisions, ownership

of bicycles does not really increase as we go from the poor to the non-poor. In fact, bicycle ownership actually goes down between \$2-\$4 and \$6-\$10 in some countries.

To take a specific example of how the businesses of the middle classes are run, consider the businesses operated by those with dpce between \$2 and \$4 in Hyderabad: 21% are general stores, 17% tailor shops, 8.5% telephone booths, and 8% fruit or vegetable sellers. The rest are spread across a wide variety of other occupations, including rag-pickers, milk sellers, cow-dung collectors, etc. These businesses are also the most frequent among the poor, though their businesses are spread among an even wider variety of activities (there are only 13% of stores, 13% of tailors, and 5% of phone booths among the businesses operated by those with less than \$2 per day).

General stores like the ones we see in Hyderabad are a familiar sight in most parts of India, urban and rural, as well in many other developing countries. Each village has several of these, all run out of a corner of somebody's house or a rented kiosk by the road, no bigger than four feet wide and four feet deep. Figure 1 shows the inventory of one such shop in a village on the outskirts of the mediaeval town of Gulbarga in Northern Karnataka, about a five hour drive from Hyderabad. The family runs a metal scrap business and the household's daily consumption puts it into the \$2-\$4 category. The store consisted of a set of plastic jars arranged on top of one another in a dimly lit side-entrance to the house. During the two hours we spent with household, we saw two clients. One bought a single cigarette, the other a box of incense. Given that, it probably made sense that their inventory was not huge: There was one jar of fried snacks, 20 bars of soap, 20 tea bags, etc. More strikingly, at least on a quick look, what the shop was selling seemed identical to what one could have bought at a couple of other similar operations elsewhere in this small village and indeed, with some small local variations, at any of the millions of similar venues elsewhere in India. We noticed nothing that would make one want to come to this particular store, either in terms of its product lines or the shopping environment (though in the personality of the owner, a vivacious woman of around thirty, this particular shop seemed to have a potential commercial advantage). The spirit of the exercise seemed to be to try to run a business to occupy the wife's time while still allowing her to raise her children with as little commitment, at least in financial terms, as possible.

This sense of maximizing what you can get without a large resource commitment appears to infuse most of the businesses of the middle class. In Hyderabad, as elsewhere, the businesses run by the non-poor still have very few employees: the maximum number is 3, and the 95th percentile is 1. These businesses are mostly run by one person, though 25% of the businesses have 2 or 3 household members working. When a household member other than the owner does work in the business as well, it is usually not full time. The median number of hours worked by household members other than the owner is 25 hours in a month (about an hour per working day), and the mean is 63 hours in a month (a little over 2 hours per day).

On the other hand, the owner commits a lot of his time to the businesses he owns. Sixty-two percent of the businesses are operated full-time by their owner (in the other cases,

they spread their activities around several jobs). Where they work full time, they report very long hours: In our data, the number of hours worked in the last week ranges between 40 hours per week and 119 hours per week. The mean is 72, and the median is 77, which means more than ten hours a day, seven days a week. Some businesses, like the shop we saw in Gulbarga, are also part-time business, one of the many activities the owner operates: He or she then works between 4 to 49 hours per week, with a mean (and median) number of hours of 24 hours per week.

The average monthly sales of these businesses are Rs 11,751 (\$900 at PPP), and the median is Rs 3,600 (\$280 at PPP). The average monthly profit, including any rents they pay, but not including the unpaid time spent by household members is Rs 1,859, and the median is Rs 1,035 (about \$80 at PPP). Fifteen percent of the businesses have lost money in the last month, when profits are calculated in this way. Five percent of these businesses make more than Rs 11,000 in profits, and 25% make more than Rs 2,700. When we value the hours spent by household members, even at the low rate of Rs 8 an hour (which would give someone close to the minimum wage for a 8 hours day), the average profits turn mildly negative: The median profit in the last month is negative Rs 268, and the mean is negative Rs 200. It is possible, however, that they could not work as hard as they do in their own business if they worked for someone else: The woman who owned the shop outside Gulbarga could afford to spend two hours talking to us while running her store, with only occasional interruptions. If we value the opportunity cost of their time at the max of the number of hours they actually work and a full-time work week at 8 hours per day 6 days a week (48 hours per week), they turn a mean profit of Rs 384 per month. Median profits are Rs 29, essentially zero. Working on their own thus allows them to make slightly more money than if they worked for someone, though in exchange of very long but less intensive hours. In other words, like for the poor, these businesses might be less to be an engine of growth than a means of sustenance, a way of “buying a job”.

There may also be an important gender dimension to these businesses. It is not entirely clear that husbands are always concerned about the extra hours of work that they are making for their wives by encouraging (coercing?) them to start a business. After all, as long as she does not have to go out, and/or the household continues to run, the fact that she now has less time to rest may not be such a bad thing as far he is concerned. On the other hand, it could be (and has been) argued that she too gets something out of having her own little operation that she could not get otherwise---some cash of her own, an opportunity to go out occasionally, a chance to meet other people, a challenge. In other words, neither side may see the extra work for what it is to us---just hours of avoidable tedium. The imputed opportunity cost may in this sense be somewhat exaggerated and effective profits may be higher than we suggest. It is worth emphasizing however that even if we brought the opportunity cost of time down to zero, the average profits would be less than \$150 per month at PPP, or a dollar a day for a family of five---clearly something, but hardly a fortune.

Despite these low profits, the returns to investing in the capital stock of those firms are actually quite high: Indeed, De Mel, McKenzie and Woodruff (2007), who gave to

randomly selected owners of firms in Sri Lanka that were very similar to these an infusion of capital equal to 100% to 200% of the capital stock, found very high returns to capital, over 5% a month. This is consistent with the fact that when these businesses borrow the interest rate is on average 3.84% per month.

The obvious interpretation of this is that these businesses are severely under-capitalized, because the non-poor, much like the poor, do not have particularly good access to capital (the interest rates they face are only a little bit below the 3.99% per month paid by the poor). The reason why average returns are low even though the marginal returns are very high is that running a business has significant fixed costs (including the cost of the owner's time), and a business needs to sell enough to cover these fixed costs before it can be profitable. The shop in Gulbarga was a case in point. With so little to sell, there was very little our host could have done to increase her productivity.

In sum, the non-poor do not run very different businesses than the poor. Clearly, they make a little more money than the poor (this is presumably one reason why they are not poor!): The mean profits of the poor are even more negative than those of the non-poor if we fully take their hours into account (the median profit is negative Rs 612) and remains negative when we cap the opportunity costs of their time (the median is then negative Rs 312), but the differences are not enormous.

Migration and work hours

Where we do see some evidence of middle class enterprise is in their migration decisions: Unlike the extremely poor, they are actually quite likely to have moved from elsewhere to the areas where they now live. It is particularly true in urban areas, where the share of the people who have migrated since birth among those with dpce between \$6 and \$10 ranges between 34% (in Nicaragua) and 90% (in Timor Leste); it ranges between 29% (Cote d'Ivoire) and 72% (Timor Leste) for those with dpce between \$2 and \$4 and only between 14% to 62.5% among the poor. Even in rural areas, a much higher fraction of the non-poor has permanently changed location since birth for work reasons. Also, while temporary migration remains as important a phenomenon for the non-poor as it is for the poor (about 52% of the households in Udaipur who live on more than \$2 a day have had a temporary migrant over the last year), the migration takes them further (64% of temporary migrants from households living on more than \$2 a day have gone to a city outside Rajasthan, compared to 42% for the extremely poor), and lasts longer (twice as long as the extremely poor). Both of these suggest a greater commitment to the job that they are pursuing when they are away from home.

A second, related, difference shows up in the hours of work. In rural areas, conditional on having worked at least part of the week, men living in households with dpce between \$2 and \$4 work more hours per week than the extremely poor in all countries. The difference is around 3 hours per week—in total those between \$2 to \$4 work between 33 hours a week (Peru) and 55 hours (South Africa). The same is largely true in urban areas, excepting in two countries where the numbers of hours per week do not change. Everywhere but in South Africa and Mexico, the number of hours per week continue to

increase for those with dpce between \$2 and \$4 and those with dpce between \$6 and \$10. The same pattern holds for women.

5. Similarity and difference: the middle classes versus the poor

Within country differences: “Middle class” aspirations?

Richer people spend less on food and more on entertainment. They have fewer children, and these children get a more expensive education and better healthcare. They work harder and are more likely to have moved to take advantage of job market opportunities.

These differences are enormously important and form the basis of much of the hope that is invested in the middle classes. In particular, the implied differences in the earnings of the present generation and the earnings potential of the next might be enough to set off a virtuous cycle of higher earnings and greater productivity. But is there anything here that one can confidently point to as evidence of a distinct “bourgeois” or “middle class” pattern of choices, informed by a different understanding of the world and a distinct set of aspirations and preferences?

In the face of it, the most promising evidence from this point of view is in the simple fact that the non-poor have fewer children and live in smaller families. In pre-capitalist societies richer people had more children. The fact that this is now reversed is striking. However, some part of this difference is a result rather than a cause—some people are poor because they were unlucky enough to have too many children. More importantly, as Gary Becker pointed out a long time ago, it is still not clear that this difference in choice reflects differences in preferences. It could be that the poor just do not have the financial or social resources to make the really paying investments in their children (send them to private school, pay for their college education, etc.). Given that they will not be able to make these investments, it perhaps makes sense to have many children and send them to work as soon as they are able to.

One could make a very similar argument about the observed differences in work life: The greater propensity to move could be telling us that the middle classes are more acquisitive and/or enterprising, or it could be that the non-poor have greater skills and therefore put greater value on being at a location where the skills are valued, which would be consistent with the fact, already noted, that when they work for a wage, they are more likely to have a regular job, rather than being in casual employment. Likewise, the longer hours worked need not mean greater diligence. It could be driven by the fact that the poor are much less likely to hold a regular job, and therefore more likely to be looking for work on any given day, though the same kind of difference also shows up for the self-employed in most countries. A different possibility is that the middle classes live under more sanitary conditions and therefore are less prone to disease (while the reported incidence of disease is not lower, this could just be that the rich are more inclined to whine), which allows them to work more. Finally, they may just have better opportunities, which might make it more rewarding for them to work hard: The employed

among the middle classes have jobs where there is potential for promotions, while the self-employed among them have more working capital with which to work.

Healthcare expenditure is another place where we seem to see a substantial gap between the poor and the non-poor. In many of the countries, increases in healthcare expenditure are quite abrupt and happen almost entirely between the \$2-\$4 category and the \$6-\$10 category: From around 2% in all the lower expenditure categories to 5.4% in rural Cote d'Ivoire, from around 0 in all the other categories to over 8% in both rural and urban Mexico, from 1-2% to over 5% in Indonesia, from less than 1% to 5% in Peru, from about 0.5% to over 2% in Papua New Guinea, etc.. These differences translate into differences in expenditure per visit to a health professional that are even larger, by a factor of 2 or 3 times.

Taking care of one's health is a clearly a part of being prudent and, as such, naturally associated with the stereotype of the middle classes. Nevertheless, there are several reasons why it is not obvious that this is evidence of "middle class" aspiration. To start with, it is not clear why these would be the countries where we would observe the transition first: Some of the countries where there is a big jump are among the poorest in our sample, like Cote d'Ivoire and Papua New Guinea, where one expect public health to be of relatively low quality, but others are among the richest—Mexico and Peru. For the same reason it cannot really be that "middle class" behavior is driven by the relative position in the distribution of income in the country since the \$6-10 category is at a very different place in the distribution in Cote d'Ivoire and Papua New Guinea than it is in Mexico or Peru.⁸

Moreover, a common "middle class" aspiration would probably make education and health spending move up together. But while we do see an increase in education expenditures with dpce in the urban areas of some countries, these are not necessarily the countries where health spending jumps up. Of the countries where the share of health spending in urban areas at least doubles between the \$2-4 category and the \$6-10 category---Cote d'Ivoire, Indonesia, Mexico, Panama, Papua New Guinea, Peru and South Africa---education spending goes up sharply for the same people only in Mexico.

As we noted, another area where there is a substantial difference between the poor and the non-poor is in the amenities that they enjoy at home. In particular, the fact that being richer is strongly associated with better access to tap water and a latrine at home, both of which clearly lead to more sanitary living conditions, fits well with the greater focus on health in this group. However, the increase in access to tapped water, latrines and electricity appears to be more or less smooth, with no sharp jump for those with more than \$6 of dpce. It is only with respect to tap water that we see several instances of increases of 50% or more between these groups, and that only in rural areas. Moreover, in this case it is not clear that the poor face the same choices as the non-poor. While the poor could in principle spend somewhat more money on food or visits to the doctor (our previous paper argues that they do have some slack in their budgets to do so), it is not at

⁸ This might suggest looking for a jump between \$2 and \$2-\$4 in the poorer countries, but there is none.

all clear that they can afford to move to an area where they could have tap water at home, which entails a large fixed cost. Therefore, it would be rash to assume that the observed differences here necessarily reflect differences in priorities: The poor may aspire to exactly the same kinds of living conditions as the non-poor, but they may not be able to exercise this choice.

Making the case that there is a clear shift in preferences is therefore not easy. The problem is that in most cases the poor would also behave differently just because they have less money.

Similarity: being from the same country matters

What is much clearer than any differences between the poor and the middle classes is the many ways in which the middle classes look like the poor in their own country. For example, the relative ranking of countries by the fraction of amount spent on food is relatively uniform across the various income categories within the rural or urban sector of the same country. The same countries that are above the median in terms of how much they spend on food among those below \$2 a day are almost always also above the median among those who are below \$1 as well as those who are between \$2 and \$4, though it is harder to see a similar pattern among those between \$6 and \$10. The ordering of countries by food share is also reasonably similar across urban and rural areas within the same country, though the levels are somewhat different---people living in urban areas typically spend less on food than their rural counterparts.

The patterns are even clearer when we look at tobacco and alcohol. Mexico, Papua New Guinea and Indonesia report some of the highest shares of spending both in urban and rural areas, while Peru and Timor Leste are at the bottom. Moreover, this is more or less uniformly true at all levels of well-being. In the case of spending on education and even more so in the case of health, the set of countries that are at or above the median level is more or less the same across both urban and rural locations and spending levels within the same country, and we see a similar pattern in the more limited number of countries that report spending on entertainment and festivals.

Why should being from the same country be so important? After all, there are enormous differences within countries in how people live---between, say, the mansions of Mumbai and the hovels of Hyderabad. A possible answer is that everyone we look at, including the \$6 to \$10 group, is still poor, probably even within the context of their own country: Perhaps they cannot afford to do anything very different. The problem with this story is that it does not quite add up: In South Africa, for example, the average person who spends \$2 or less per day spends about 67% on food. Say that person spends \$1 per day (naively averaging \$0 and \$2): This would suggest one can more or less survive on about 1.30 cents a day. Now someone who is living on \$8 a day in the same country spends roughly \$3.50 per day on food (using the 44% average food share for those between \$6 and \$10). That means that she could save about \$2.20 a day by buying cheaper food and still survive. For a family of five, this means \$11 a day, or \$4,000, give or take a few, a year. Now these are PPP dollars, so that is only about \$2,000 in traded goods, which is

still not bad at all: Certainly enough to take a nice vacation somewhere not too far or buy some very expensive clothes for everyone in the family. For those living under a dollar a day, none of these are options.

Why then do we see a connection between the consumption habits of the poor and the non-poor within the same country? A depressing possibility is that there are flaws in the data collection apparatus, and each country has its own unique flaws, which affects everyone within the same country. One might also worry that the reporting biases systematically vary across country. For example, in Pakistan, there may be some reluctance to admit consumption habits that are proscribed by Islam: This might explain why the Pakistanis in the \$2 to \$4 category appear to spend more in absolute terms on these proscribed goods than their richer counterparts (who may be more constrained by the claims of respectability in what they can talk about). However, for most other goods it seems reasonable to trust that the LSMS questionnaires are getting it more or less right. Moreover, the fact that they are based on similar (although not identical) methodologies and data collection instruments makes it less likely that the differences across countries are entirely due to correlated errors in measurement. Another possibility is that there are country-specific tastes or norms.

Another idea, and one that comes naturally to an economist, is that everyone within a country behaves in a relatively similar way because they are all responding to the same relative prices. In South Africa, \$4,000 at PPP is, as we said above, equivalent to about \$2,000 at the current exchange rate. In India, the same amount at PPP will only buy \$800 worth of traded goods, which are goods that sell on the world market. In other words, if we take two families who spend about the same total amount, one in South Africa and the other in India, the one in India can afford much less in terms of traded goods but is compensated by being able to buy goods that do not get traded on the world market much more cheaply than in South Africa. Hence, we might expect Indians to be more inclined towards those non-traded goods (eating out, locally made cigarettes, traditional garments) and South Africans towards traded goods (televisions, refrigerators, but also many kinds of edibles).

Price differences can also result from institutional differences. The reason why the share spent on healthcare is so very low in Mexico, Peru and South Africa is not because they are especially healthy, but because public healthcare is available more or less for free. We suspect the same goes for the very low share of education spending in Guatemala. On the other side, poor performance of the nominally free public healthcare system probably explains why in India and in Pakistan even the poorest spend quite a bit on healthcare.

In a similar vein, in our previous paper we speculated that the high share spent on festivals in the rural Indian data (from Udaipur district) was in part a result of the fact that people in these villages do not have many alternative ways to entertain themselves: Television channels mostly do not transmit to these areas and there are no movie theaters in the vicinity. In effect, the market price of other forms of entertainment is so high that festivals become the form of choice of entertainment for everyone in the area. And indeed, the proportional expenditures on these festivals, weddings, and religious

ceremonies are, if anything, even higher among the non-poor in Udaipur than it is among the poor.

Of course, it does not have to be a price difference. There could also be national differences in taste that, in turn, could be a result of geography (for example, coca leaves grow in Peru, which is why everyone smokes and drinks less there) or shared norms, resulting, perhaps, from the need to keep up.

The difference that is not there: The businesses of the poor and the middle classes

In our previous piece, we had argued that the businesses owned by the poor suffer from being too small. We now see that middle class businesses are not much bigger and suffer from all the same problems.

In the case of the poor, we had explained this by a combination of low savings and scarce and expensive credit. Compared to the poor, the middle classes have better access to formal sources of credit. While the fraction of a household's borrowing stays roughly constant across groups, the fraction of those loans which have been extended by a bank is larger, especially for urban households (although it varies a lot from country to country). For example, in urban Indonesia, the share of loans to households extended by banks is 32% for households with dpce below \$1, and it is 67% for households with dpce between \$6 and \$10. In Peru, the share goes up from 0 for the poorest to 15% for households with dpce between \$2 and \$4.

They also are more likely to have some type of formal insurance, which also makes it easier for them to bear the extra risk that comes from expanding their businesses, although there again the variation from country to country is huge: 60% of the households with dpce between \$6 and \$10 have insurance in South Africa, while only 1% of households with dpce below \$1 do; in contrast, in Nicaragua, only 1.4% of the households with dpce between \$6 and \$10 have some insurance.

Of course there is nothing here that says that the middle classes have as much access to finance as they would want. It is possible that a lot of the bank credit is tied to specific purchases of consumer durables, which makes it useless for starting a business. We found that in Hyderabad, those among the non-poor who borrow for their businesses pay rates that are comparable to those paid by the poor (almost 4% per month).

All of this begs the question of why they do not save more in order to grow their businesses? Clearly, for someone who is paying 4% per month on a loan, savings have a return of at least 4% per month (depending on whether they use the money to pay down the loan or invest more). One would imagine that at those lucrative rates, saving some more would be worthwhile.

What makes this really puzzling is that the non-poor do accumulate assets. They buy durables like a TV and/or a radio. They own larger houses with much better amenities.

They are also much more likely to have a savings account, which must help in accumulation: In rural areas, in all countries but Cote d'Ivoire where it is higher, between 27% and 30% of one-third of the middle class households have a savings account. In urban areas, the share is even larger.

Yet their businesses remain resolutely small, even as their healthcare spending, for example, explodes. In Hyderabad, the poor spend 6.3% of their dpce on healthcare. The middle class, defined as those between \$2 and \$4 dpce, spends about 10%. If they were to spend 6.3% instead, like the poor, which would still have them spending much more per capita in absolute terms (since they are richer and have smaller families), a family of five that is exactly at the margin of the middle class (i.e., one that has a dpce of \$2) could save Rs 128 per month (3.7% of Rs 3,450, which is their total monthly spending). This adds up to more than Rs 1,500 a year, which, according to our calculations, would allow the shop outside Gulbarga that we described earlier to double the value of its (rather meager) stock. A richer family (say, one with a dpce of \$3, and hence more typical of the middle class) could obviously do even better. If they do not do it, it is because it is not a priority.

6. What the middle classes want

The average middle class person does not seem to be a capitalist in waiting. They might run a business, but, for the most part, only because they are still relatively poor and every little bit helps. If they could only find the right job, something that pays enough to allow them to live the quite modest life they seek, they might be quite content to shut down.

Indeed, it could be argued that the one thing that ultimately differentiates the poor from the middle class is the fact that they are much less likely to hold a stable salaried job. The sense of control over the future that one gets from knowing that there will be an income coming in every month, and not just the income itself, may be key to the ability of the middle classes to focus on building their own careers and those of their children.

This is, of course, not to say that the entrepreneurial spirit is absent among everyone but the very rich. It may be that we would find it somewhere slightly higher in the income distribution. Or there may be specific sub-cultures where enterprise thrives. Or possibly, just possibly, the idea of the entrepreneurial spirit could be oversold. Perhaps most people only show enterprise when there is a really a lot of money to be made, not just to get 4% per month on the few extra dollars they can afford to invest.

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FIGURE 1: Inventory of a general store in a village in rural Karnataka, India

1 jar of snacks
3 jars of sweets
1 jar of candies
2 jars of chickpeas
1 jar of magimix
1 packet of bread (5 pieces)
1 packet of papadum (snack made from lentils)
1 packet of toasts (20 pieces)
2 packets of biscuits

1 bag of sweets
36 incense sticks
20 bars of lux soap
180 individual portions of pan parag (combination of betel nuts and chewing tobacco)
20 tea bags
40 individual packets of haldi powder
5 small bottles of talcum powder
3 packs of cigarettes
55 little packs of bidis (cigarettes)
35 packets of bidis (cigarettes)
3 packs of 500g of washing powder
15 small packs of parle G biscuits
6 individual size packets of shampoo

Table 1 : headcount ratios and sample sizes

	<i>Mean Per Capita Consumption</i>	<i>Median Per capita consumption</i>	<i>Percent living with less than</i>					<i>Sample size (number of household)</i>				<i>Sample size (number of households)</i>			
			<i>1\$</i>	<i>2\$</i>	<i>4\$</i>	<i>6\$</i>	<i>10\$</i>	<i>\$1</i>	<i>\$2</i>	<i>\$2-\$4</i>	<i>\$6-\$10</i>	<i>\$1</i>	<i>\$2</i>	<i>Urban</i>	
														<i>a day</i>	
Cote d'Ivoire ¹	89.80	65.23	16.1%	50.1%	83.8%	93.1%	97.6%	458	1503	1011	133	56	256	369	136
Guatemala ¹	301.92	102.82	17.7%	34.0%	58.7%	71.9%	83.5%	469	910	666	370	0	0	0	0
India (Urban) ³	72.28		19.6%	62.0%	90.0%	96.0%	99.7%	0	0	0	0	106	1030	816	47
India (Rural) ³	44.80		40.2%	88.0%	98.2%	99.1%	99.8%	482	883	122	7	0	0	0	0
Indonesia ³	74.2		7.0%	55.4%	91.8%	97.2%	99.0%	262	1518	2104	562	82	666	1474	824
Mexico ¹	173.50	86.45	14.2%	37.4%	67.8%	80.5%	90.8%	106	533	1005	516	811	2076	1437	443
Nicaragua ¹	145.48	100.00	6.2%	27.6%	63.4%	81.3%	93.3%	270	911	678	68	56	390	853	381
Pakistan ^{2,1}	48.01	36.97	40.4%	82.9%	96.9%	98.8%	99.5%	864	1926	386	18	690	1686	487	69
Panama ¹	359.73	242.90	2.9%	10.4%	25.7%	40.9%	64.1%	123	429	595	542	0	10	93	603
Papua New Guinea ¹	133.38	81.89	16.1%	41.7%	68.6%	81.8%	91.7%	175	458	294	92	14	37	72	76
Peru ¹	155.39	102.50	9.4%	24.6%	62.0%	78.4%	91.1%	253	789	365	39	44	256	724	449
South Africa ¹	196.08	97.30	8.2%	29.6%	56.7%	68.4%	78.0%	313	1107	979	291	43	333	783	824
Tanzania ¹	62.14	43.33	34.0%	71.0%	91.7%	96.8%	99.0%	877	1767	409	19	245	1069	1047	259
Timor Leste ¹	64.42	38.97	17.9%	56.7%	84.1%	93.8%	97.9%	482	1470	743	52	180	956	1006	395

Notes:

¹ source: authors' calculations from the LSMS/FLS data sets when the surveys are representative surveys

² LSMS survey is representative of 96% of the Pakistani population

³ summary statistics are from PovcalNet, available at <http://iresearch.worldbank.org/PovcalNet>

4) To compute the \$1.08 line for the countries in our sample, we use the 1993 consumption exchange rate provided by the World Bank (available at <http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp>) multiplied by the ratio of the country's Consumer Price Index to the U.S. Consumer Price Index between 1993 and the year the survey was carried out.

5) To compute average consumption per capita and the proportion of households in poverty, observations are weighted using survey weight*household size

6) The Mexican Family Life Survey is documented in Rubalcava and Teruel (2004) and available at <http://www.radix.uia.mx/ennvih/>

7) The LSMS are available from the World Bank LSMS project page.

8) The IFLS and GFLS are available from the RAND FLS page (<http://www.rand.org/labor/FLS/>)

9) The Udaipur data is available from www.povertyactionlab.org/data.

10) The paper does not report statistics based on cell sizes with fewer than 50 observations