The economic lives of the poor

14.73, lecture 3, February 9, 2009

A summary of last time's lecture

- When the GDP of a country increase by X%, the income of the poor also increase by X%
- So when poverty decline, the number of people who live with less than 1 dollar per day decline
- However, the *survey data* (where we directly count the fraction of people who consume less than a dollar a day) show less progress in poverty reduction than the growth in GDP would suggest: Growth would suggest MDG 1 is already achieved!

Summary of last time

- Who should we trust?
 - Both data sources have problems: survey may underestimate consumption, GDP may overestimate income
 - But the survey data has the advantage to measure directly what we are looking for, and in a consistent way.
- Should we really care about the number of people who live under a dollar a day anyway?

Putting a face on poverty: Pak Solhin

- I met Pak Solhin in a small village in Indonesia, in the summer of 2008
- When I met him, he was all alone at home
- The older of his three children, a 13 year old, was working as a construction worker in the nearby city
- His wife was also in the city, as a live-in maid
- The other two children were staying with their grand-parents
- His house does not have a single item of furniture, no water, no electricity

Pak Solhin

- Until that summer, Pak Solhin was a farm laborer
- He does not have any land, because his parents had 13 children, and they had to cut the land in many small pieces to build homes on them.
- But that summer, because of the increase in fertilizer and oil prices, farmers stopped hiring workers to save money, and started to work the farm themselves.
- Pak Solhin could not accept a lower wage instead of losing his job, because the food prices had increased to: at a lower wage, he would not even have enough strength to work a whole day.
- He cannot work as a construction worker, because he is too weak for the basic job, too unskilled for the better jobs, and too old to be an apprentice.

Pak Solhin

- He had no money to feed himself or the kids, so his wife and older kid went to the city. Even with their salary, he cannot pay for the food for the younger ones and himself.
- Nobody can lend him money; but the grand parent agreed to take the two young children with them.
- He eats about once a day, when he gets subsidized rice, or he catches a fish on the bank of the river: he cannot swim, so he cannot properly fish.
- He is very depressed, and negative about the future. He almost cries during the interview.

What are the striking aspects of this story?

Anecdote or illustration?

What is unique in the case of Pak Solhin, and on the contrary, what seems to be representative of the lives of many of the poor?

The economic lives of the poor

- We will try to find whether some of these patterns can be found in a more systematic way in the data.
- We identify the very poor as those living under a dollar a day.
- Bringing together data on the very poor, defined as those with consumption below \$1.08 (\$1) a day at 1993 PPP.
- The poor defined as those below \$2 a day at 1993 PPP
- The **Middle class** defined as those between \$2 and \$4 dollars a day, or \$6 and \$10
- From a number of detailed households surveys (LSMS, RAND, our own data).

Topics

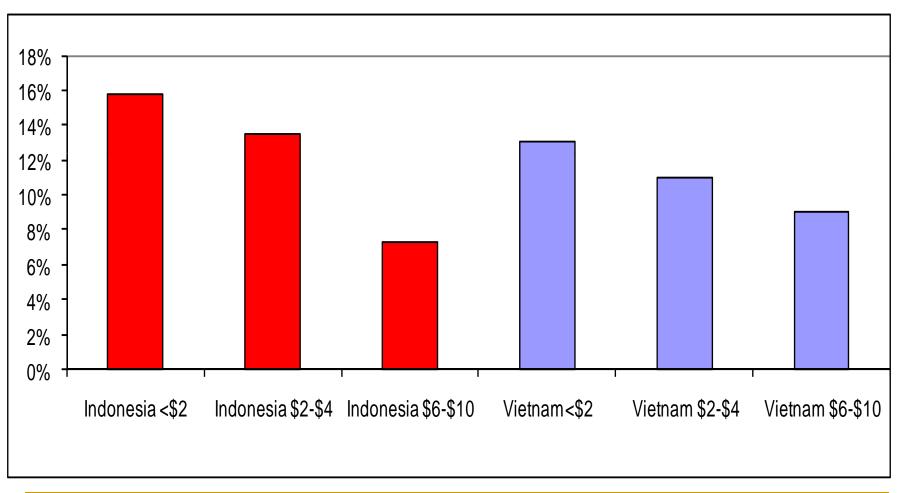
- The demographic structure
- How do the poor spend their money?
- What are their living conditions (houses, health, etc.)?
- How do they earn their money?
- How is it different from the middle class?
- What are the main puzzles that emerge from this portrait?

The Demographic Structure

The demographic structure

- Large families
- Many young people
- Not many old people or among the poor
 - Higher mortality?
 - Or lower fertility?
- Can you tell from this data? Why or why not?
- Probability of dying (see next slide)
- Direction of causality??

Probability of death after 5 years, conditional on being alive at age 50



Question on demographics?

How do the poor spend their money?

Food?

- Food is the first place where people are looking for poverty traps (e.g Pak Solhin).
- Are the very poor spending every marginal penny they can on getting more food?
- The share of expenditure between 78% in Papua New Guinea and 50% in Mexico.
- Other large items include:
 - □ Tobacco/alcohol (up to 8%)
 - □ Festivals (up to 14% when asked in detail)
- They could easily spend more on food.

How the poor spend their money

As a Share of Total Consumption

| | | Alconol/ | | |
|-------------------------------|-------|----------|-----------|--------|
| | Food | Tobacco | Education | Health |
| Living on less than \$1 a day | | | | |
| Rural | | | | |
| Cote d'Ivoire | 64.4% | 2.7% | 5.8% | 2.2% |
| Guatemala | 65.9% | 0.4% | 0.1% | 0.3% |
| India - Udaipur | 56.0% | 5.0% | 1.6% | 5.1% |
| Indonesia | 66.1% | 6.0% | 6.3% | 1.3% |
| Mexico | 49.6% | 8.1% | 6.9% | 0.0% |
| Nicaragua | 57.3% | 0.1% | 2.3% | 4.1% |
| Pakistan | 67.3% | 3.1% | 3.4% | 3.4% |
| Panama | 67.8% | | 2.5% | 4.0% |
| Papua New Guinea | 78.2% | 4.1% | 1.8% | 0.3% |
| Peru | 71.8% | 1.0% | 1.9% | 0.4% |
| South Africa | 71.5% | 2.5% | 0.8% | 0.0% |
| Timor Leste | 76.5% | 0.0% | 0.8% | 0.9% |
| | | | | |

How the poor spend their money

| | | | % HHs with any Festival |
|-------------------------------|---------------|-----------|-------------------------|
| | Entertainment | Festivals | Expenditure |
| Living on less than \$1 a day | | | <u> </u> |
| Rural | | | |
| Cote d'Ivoire | 0.0% | 1.3% | 59.9% |
| Guatemala | | 0.1% | 7.7% |
| India - Udaipur | 0.0% | 14.1% | 99.4% |
| Indonesia | 0.0% | 2.2% | 80.3% |
| Mexico | 0.7% | 0.0% | 2.7% |
| Nicaragua | 0.0% | 0.0% | 1.8% |
| Pakistan | 0.3% | 2.4% | 64.8% |
| Panama | 0.6% | 0.0% | 0.0% |
| Papua New Guinea | 0.2% | 1.5% | 21.7% |
| Peru | 0.0% | | |
| South Africa | 0.1% | 3.2% | 90.3% |
| Timor Leste | 0.0% | 0.0% | 49.0% |

Education

- Fraction of children in school increase fast with income
- Share of income spent on education is higher in urban area
- Share of income spent on education constant or increase with income:
 - Money spent for each child increases a lot (income is much higher, fewer kid to educate)

Questions on consumption?

Savings and Accumulation

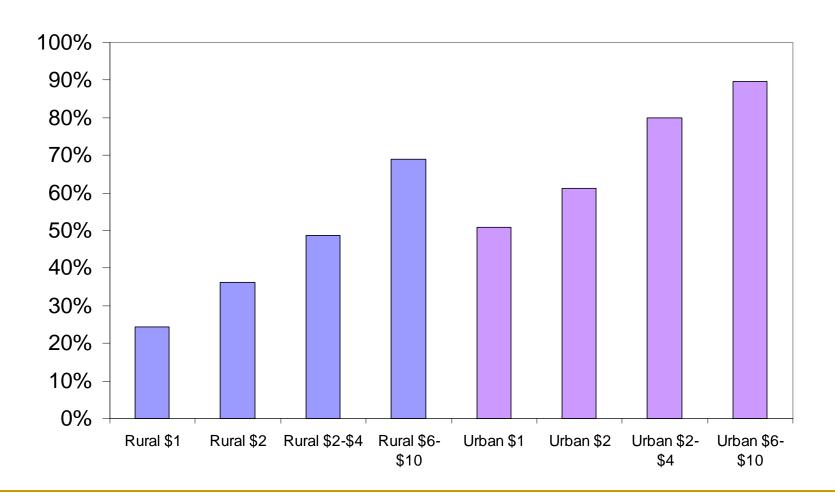
Assets and Savings

- In the median country a majority of the rural poor own land.
- Other than that they own very little: in the Udaipur sample, 10% or less have a chair or a table
- In the median country less than 15% have a bicycle and less than 10% own a television.
- The middle classes acquire televisions!
- In Udaipur very few possible business assets: Less than 1% own a tractor, a bullock cart, a motorized cycle, a fan
- Very little savings we can detect (bank accounts, Self Help Groups etc.) (table 12, page 3)

What the poor own

| | | Tercent of Households with. | | | | | |
|----------------|------------------|-----------------------------|------------|---------|-------|--|--|
| | | Radio | Television | Bicycle | Land | | |
| Living on less | than \$1 a day | | | | | | |
| Rural | | | | | | | |
| | Cote d'Ivoire | 43.3% | 14.3% | 34.4% | 62.7% | | |
| | Guatemala | 58.5% | 20.3% | 23.1% | 36.7% | | |
| | India - Udaipur | 11.4% | 0.0% | 13.5% | 98.9% | | |
| | Indonesia | | 26.5% | | 49.6% | | |
| | Mexico | | | 41.3% | 4.0% | | |
| | Nicaragua | 59.3% | 8.3% | 11.1% | 50.4% | | |
| | Pakistan | 23.1% | | 27.0% | 30.4% | | |
| | Panama | 43.6% | 3.3% | 0.0% | 85.1% | | |
| | Papua New Guinea | 18.0% | 0.0% | 5.3% | | | |
| | Peru | 73.3% | 9.8% | 9.8% | 65.5% | | |
| | South Africa | 72.2% | 7.2% | 20.0% | 1.4% | | |
| | Tanzania | | 0.0% | | 92.3% | | |
| | Timor Leste | 14.3% | 0.6% | 0.9% | 95.2% | | |

Percentage of household living in a household with a TV



Savings

| | % HH with a Savings Account |
|-------------------------------|-----------------------------|
| Living on less than \$1 a day | |
| Rural | |
| Cote d'Ivoire | 79.5% |
| India - Udaipur | 6.4% |
| Indonesia | 6.6% |
| Mexico | 6.2% |
| Pakistan | 11.7% |
| Panama | 0.5% |
| Peru | 0.5% |
| Timor Leste | 13.4% |

Living conditions

Health and health environment

- Housing conditions are dire
 - Electricity, sanitation, drinking water are still very rare in the poor's houses
 - □ This is something which changes very steeply with income: the middle class lives in much more comfortable conditions
- Lots of illnesses (table 11)
- Lots of visits, to private and public doctors
- High expenditures on health, which increase steeply with income

Basic infrastructure

| | Percent of Households with: | | | | |
|-------------------------------|-----------------------------|---------|-------------|--|--|
| | In-House | Toilet/ | | | |
| | Tap Water | Latrine | Electricity | | |
| Living on less than \$1 a day | | | | | |
| Rural | | | | | |
| Cote d'Ivoire | 11.8% | 27.1% | 45.1% | | |
| Guatemala | 37.7% | 50.5% | 29.9% | | |
| India - Udaipur | 0.0% | 0.0% | 8.3% | | |
| Indonesia | 5.6% | 30.5% | 96.9% | | |
| Nicaragua | 12.3% | 59.0% | 16.4% | | |
| Pakistan | 9.9% | 28.5% | 55.5% | | |
| Papua New Guinea | 1.7% | 95.2% | 2.0% | | |
| Peru | 29.7% | | 12.2% | | |
| South Africa | 4.4% | 58.9% | 5.6% | | |
| Tanzania | 0.7% | 91.6% | 1.1% | | |
| Timor Leste | 2.3% | 31.3% | 8.8% | | |

Health in the household

| | | In Last Month | | | | | |
|-----------------------|-----------|---------------|---------------|------------------|------------------|--|--|
| | | | A Household's | Percent of House | cholds that met | | |
| | | Percent of HH | Average # of | At Least Once w | ith a Consultant | | |
| | | Members Sick | Consultations | Public | Private | | |
| Living on less than S | S1 a day | | | | | | |
| Rural | | | | | | | |
| Cote | l'Ivoire | 21.4% | 1.28 | 49.7% | 3.2% | | |
| India | - Udaipur | 46.1% | 0.11 | 20.1% | 58.1% | | |
| Indon | esia | 24.2% | 0.77 | 20.7% | 27.3% | | |
| Mexic | 0 | 46.3% | 1.11 | 47.7% | 0.0% | | |
| Nicara | agua | 34.9% | 0.15 | 46.0% | 5.0% | | |
| Pakist | an | 28.0% | 0.45 | 24.0% | 48.8% | | |
| Panan | na | 15.2% | 0.10 | 23.8% | 0.0% | | |
| Peru | | 11.1% | 0.10 | 20.9% | 8.5% | | |
| South | Africa | 12.5% | 0.12 | 16.4% | 6.9% | | |
| Tanza | nia | 13.2% | 0.07 | 23.2% | 14.0% | | |
| Timor | Leste | 11.7% | 0.21 | 30.2% | 0.5% | | |

How do the poor earn their money?

Little bit of everything

- In most countries a majority of households get income from self-employment (even in rural areas self-employment is both in agriculture and outside it and many do both)
- The next commonest occupation is wage work, including a lot of casual work. Many households do both.
- 20% of the households in rural Udaipur say agriculture is their main source of earnings. 75% say their main earnings come from wage work. Yet almost all of them own land and cultivate it.
- Another survey which identifies all the occupations the households are in (26 occupation, including sewing, gathering fuel) finds that each family has 3 working members and 7 occupations.

Occupations: rural

| | Percent of House | seholds in whi | Percent of HHs | | |
|-------------------|------------------|----------------|----------------|-----------------|-----------------------|
| | Is Self Emp | oloyed In | Works for a Wa | ge or Salary in | That Receive Income |
| | Agriculture | Other | Agriculture | Other | From Multiple Sectors |
| Living on less th | an \$1 a day | | | | |
| Rural | | | | | |
| Cote d'Ivoire | 37.2% | 25.9% | 52.4% | 78.3% | 72.1% |
| Guatemala | 64.4% | 22.6% | 31.4% | 86.4% | 83.8% |
| India - Udaipur | 98.4% | 5.9% | 8.5% | 90.7% | 94.0% |
| Indonesia | 49.8% | 36.6% | 31.1% | 34.3% | 50.4% |
| Mexico | 4.9% | 20.4% | 2.8% | 72.6% | 13.2% |
| Nicaragua | 54.7% | 11.6% | 0.3% | 42.8% | 18.4% |
| Pakistan | 72.1% | 35.5% | 32.6% | 50.8% | 66.8% |
| Panama | 69.1% | 17.7% | 0.0% | 0.0% | 19.2% |
| Peru | 71.7% | 25.2% | | | 34.8% |
| South Africa | 0.0% | 9.1% | 27.9% | 26.6% | 0.4% |
| Timor Leste | 78.5% | 12.0% | | | 10.4% |

Occupation: urban

| | Percent of Ho | useholds in | Percent of HHs | | | |
|-------------------|---------------|-------------|-------------------------------|-------|-----------------------|--|
| | Is Self Emp | loyed In | Works for a Wage or Salary in | | That Receive Income | |
| | Agriculture | Other | Agriculture | Other | From Multiple Sectors | |
| Living on less t | han \$1 a day | | | | | |
| Urban | | | | | | |
| Cote d'Ivoire | 35.0% | 4.8% | 92.3% | 26.3% | 47.4% | |
| India - Hyderabao | 0.0% | 18.0% | 0.8% | 89.8% | 11.5% | |
| Indonesia | 9.6% | 50.8% | 35.6% | 77.0% | 56.9% | |
| Mexico | 27.3% | 20.7% | 24.3% | 36.3% | 24.2% | |
| Nicaragua | 24.9% | 37.7% | 0.0% | 31.6% | 8.3% | |
| Pakistan | 17.6% | 51.2% | 4.2% | 67.2% | 38.3% | |
| Peru | 6.2% | 57.6% | | | 21.9% | |
| South Africa | 0.0% | 6.8% | 9.0% | 46.4% | 0.0% | |
| Timor Leste | 80.6% | 7.6% | | | 2.1% | |

The businesses the poor run

- Families often run multiple businesses
- Businesses are very small. Almost no outside labor
- In Hyderabad only 20% of businesses have their own premises and the commonest businesses assets are pushcarts, scales and tables.
- In Hyderabad the main businesses are tailoring, fruit/vegetable selling, general stores, telephone booths, selling milk, driving a small taxi: Skills?
- Is there anything to worry about?
- Some evidence of the wrong scale:
 - Innumerable side by side identical businesses

| | | Percent of HHs with at least One Non-Agricultural | Average Numbe | | Business: Percent of B | Susinesses that Own: |
|---------------|-------------------|---|---------------|---------------|------------------------|----------------------|
| | | Business | Paid Workers | Paid + Unpaid | Vehicles | Machines |
| Living on les | ss than \$1 a day | | | | | |
| Rural | | | | | | |
| | Cote d'Ivoire | 66.4% | 0.14 | 2.48 | 2.6% | 66.5% |
| | Indonesia | 29.4% | 0.11 | 1.55 | 0.0% | |
| | Mexico | 7.8% | 0.59 | 2.16 | 0.0% | |
| | Nicaragua | 14.0% | 0.08 | 1.39 | 7.5% | 0.0% |
| | Pakistan | 34.3% | 0.13 | 1.16 | 36.7% | 0.0% |
| | Panama | 15.2% | 0.00 | 1.58 | 0.0% | |
| | Papua New Guinea | | | | | |
| | Peru | 34.5% | | 1.50 | | |
| Urban | | | | | | |
| | Cote d'Ivoire | 19.8% | 0.03 | 2.43 | 0.7% | 73.0% |
| | India - Hyderabad | 14.8% | | 1.85 | | 0.0% |
| | Indonesia | 44.4% | 0.15 | 1.49 | 0.0% | |
| | Mexico | 7.9% | 0.75 | 2.30 | 0.0% | |
| | Nicaragua | 40.6% | 0.03 | 1.18 | 0.0% | 0.0% |
| | Pakistan | 51.7% | 0.18 | 1.23 | 40.3% | 0.0% |
| | Peru | 63.2% | | 1.39 | | |

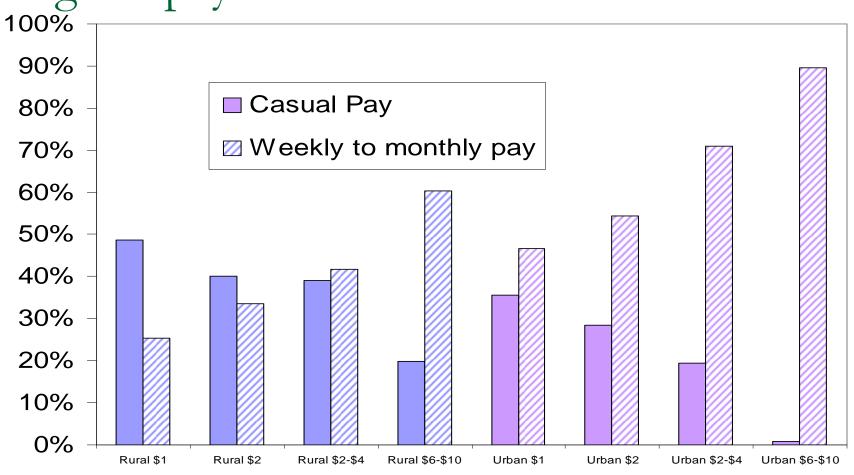
Is this different for the middle class?

- The "romantic" view of the penniless entrepreneurs is that if they get an opportunity, they will create successful ventures.
- What happens to the businesses run by the middle class?
- We find them to be very similar to that of the poor: similarly small, undercapitalized, under-specialized.
- The fundamental difference between the middle class and the poor is that the middle class have steady jobs (regular salaried job that pay a monthly salary).

The scale of businesses

| | in each business: Average number of employees | | | |
|-----------------|---|-----|---------|----------|
| | paid + unpaid | | | |
| | \$1 | \$2 | \$2-\$4 | \$6-\$10 |
| <u>Urban</u> | | | | |
| India Hyderabad | 1.6 | 1.7 | 2.4 | |
| Indonesia | 1.4 | 1.6 | 1.8 | 2.8 |
| Ivory Coast | | 2.6 | 2.6 | 2.9 |
| Mexico | 2.1 | 2.2 | 2.6 | 2.5 |
| Nicaragua | 1.5 | 1.6 | 1.8 | |
| Pakistan | 1.2 | 1.3 | 1.7 | |
| Panama | | | 1.6 | 1.7 |
| Peru | | 1.4 | 1.6 | 2.0 |

Percentage of employees on casual or regular payments



Migration

- In most countries in our sample long-term migration for work is rare
- Temporary migration on the other hand seems quite common. In 60% of the very poor households in Udaipur someone had migrated for work.
- Average duration of a completed episode is 40 days.
- Total time spent away in a year on average is 18 weeks.
- Yet for many of them it provides the majority of their income.

Percent of Adults who Have Migrated

| | refeelt of Addits who flave Migrated | | |
|------------------|--------------------------------------|----------|--|
| | Since Birth | For Work | |
| Rural | | | |
| Cote d'Ivoire | 26.9% | 11.1% | |
| Guatemala | | | |
| Indonesia | 34.3% | 30.8% | |
| Mexico | 48.7% | 45.6% | |
| Nicaragua | 22.4% | 5.6% | |
| Pakistan | 16.7% | 3.7% | |
| Panama | 34.8% | 0.6% | |
| Papua New Guinea | 4.8% | | |
| Peru | 15.3% | 6.7% | |
| Timor Leste | 61.6% | | |

Migration to urban areas

| | 1 0100111 01 1 100112 1/110 110/0 1/11510100 | | |
|------------------|--|----------|--|
| | Since Birth | For Work | |
| Urban | · | | |
| Cote d'Ivoire | 14.1% | 6.0% | |
| Indonesia | 43.0% | 41.3% | |
| Mexico | 37.4% | 32.3% | |
| Nicaragua | 16.2% | 5.9% | |
| Pakistan | 23.1% | 3.6% | |
| Papua New Guinea | 18.9% | | |
| Peru | 16.5% | 9.6% | |
| Timor Leste | 62.6% | | |
| | | | |

Questions about how the poor earn their money?

The economic environment of the poor

The market for credit

- 1. Few Loans
- 2. From where?
- 3. High interest rates (3% a month in Hyderabad)
- 4. Low default rate

Savings and Insurance

- We already discussed the low savings
- Part of the problem is low access to savings opportunities
- Savings options:
 - Banks
 - SHG
 - Roscas
- Insurance: almost no formal insurance (health, life, weather). All the insurance will have to be informal

Infrastructure and public policy

- We have already seen that availability of electricity, tap water, etc is much lower for the poor
- Huge variation across countries: point out some of the key differences?
- Governments are typically providing schools and health center, yet, even the poor spend money on health and education: de facto privatization in some places.
- Poor spend fair amount of money on health and education, for very poor quality private sector.
- Why does that happen?

Questions about the economic environment of the poor?

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