
Introduction and Overview

Why Study Development (Micro) Economics?

Astonishing Differences between Countries:

- **World Development Report (2009):**

- A threshold of \$11,455 per capita in 2007 to distinguish between ‘High-Income Countries’ and ‘Low- and Middle-Income Countries’.

	Population (Millions) 2007	GNP per capita (US \$) 2007
Low Income	1,296	578
Middle Income	4,260	2,872
Low and Middle Income	5,556	2,337
High Income	1,056	37,566
World	6,612	7,958

- Despite many caveats and qualifications, the ubiquitous fact of these astonishing disparities remains.

- **World Development Report (2009):**

- World Production: \$52.6 trillion of output in 2007.
 - 24.7% of this came from the low- and middle-income developing countries
 - a pittance when we see that these countries house 84% of world's population.
 - Norway, the world's richest country, enjoyed a per capita income (\$76,450) that was 695 times the per capita income of Burundi (\$110), the world's poorest.
 - Switzerland: \$59,880; USA: \$46,040.
- An index of income that controls for purchasing power (Purchasing Power Parity, PPP) would place these numbers far closer together:
 - World Production: \$66.6 trillion
 - High income countries: \$35.6 trillion
 - Low and middle income countries: \$31 trillion
 - The per-capita disparities are enormous, and no amount of fine-tuning in measurement method can get rid of the stark inequalities that we live with.

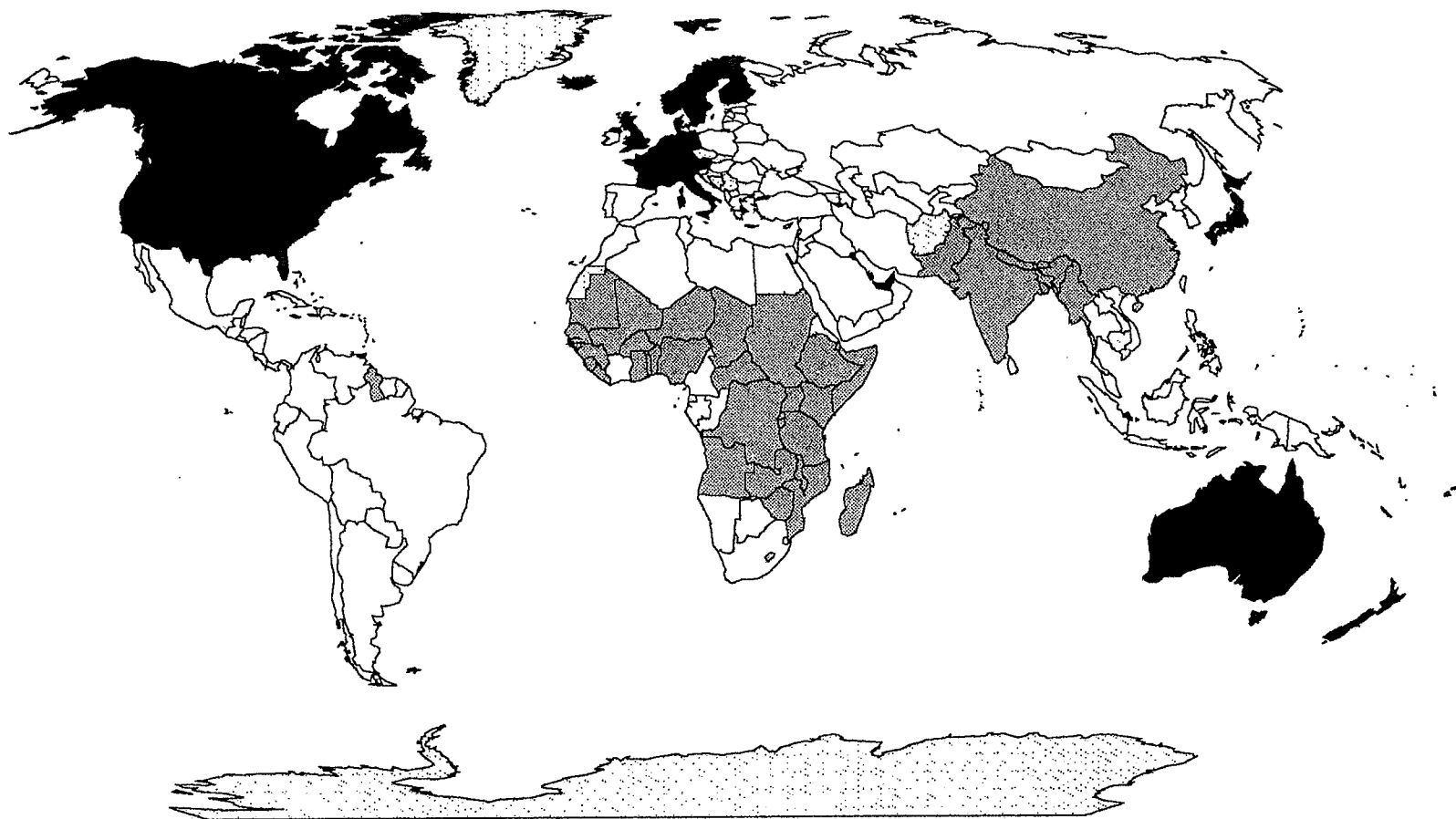
The World by Income

This map presents economies classified according to World Bank estimates of 1997 GNP per capita. Not shown on the map due to space constraints are: American Samoa (upper middle income); Fiji, Kiribati, Samoa, Tonga (lower middle income); French Polynesia (high income); Tuvalu (no data).

Low \$785 or less
Lower middle \$786 to \$3,125
Upper middle \$3,126 to \$9,655
High \$9,656 or more
No data



MAP 1. The Rich and the Poor



The countries in black contain 15 percent of world population but produce 50 percent of world GDP. The countries in gray contain 50 percent of world population but produce 14 percent of world GDP.

The Magnitude of the Problem:

- Poor countries are very poor indeed.
 - 61.2% of the population in Mali in the 2001 lived on less than \$1.25 a day at 2005 PPP prices and 86.4% in Nigeria lived under \$2 a day in 1996-1997.
- This translates into
 - 30% of the children under 5 in Mali in 2000-2007 had measurable signs of malnutrition (44% in India, 0 in Sweden);
 - Under 5 mortality rate in Mali was 217/1000 in 2006 (270 in Sierra Leone, 4 in Norway);
 - Life expectancy at birth for males was 52 years in Mali (41 years in Sierra Leone, 79 in Sweden);
 - 76% of adults were illiterate in Mali in 2005 (61% in Niger, 0 in Sweden).

- The *Poverty Line* in India is 16 rupees per person and per day.
 - This is also the average poverty line for the 50 countries where most of the poor live.
- 16 rupees is 36 cents (US). . . . But life is cheap in India, so if we correct for world prices, it corresponds to 99 cents (this is what we mean when we talk about “life under a dollar a day”):
 - The poverty line in the US is 14 dollars per day.
 - Average GDP per capita in the US is \$47,400, implying \$130 per person per day!
- **865 million people in the world live with less than 99 cents per day in 2005.**

- Poverty is not only lack of income, but also
 - Poor health:
 - 9 million children every year die under the age of 5, mainly of diseases that could have been prevented;
 - 6.5 million children die every year before their first birthday;
 - 27 million children every year do not get the essential vaccinations.
 - Poor education: 50% of children enrolled in schools in India cannot read a simple paragraph.
 - Poor quality of life: hours collecting water instead of playing, working, learning.
 - Difficulty to realize your ambition: Get a loan for a business; be insured for the risk of your farm.
- **Amartya Sen: Development as Freedom.**

The Story of Abu

- From *A Quiet Violence*, by Betsy Hartman and James Boyce, 1983.
 - A quasi-journalistic account by two economists of life in rural Bangladesh, in 1975.
 - These were the worst years in the history of Bangladesh. Things have gone much better since.
 - This is the story of one peasant family.
- The First Visit:
 - Abu is sick. He has not been able to work for the last three weeks.
 - His children are hungry.
 - His oldest daughter, who is still a child, is the only earner in the family. She gets 1/4 kilo of rice for husking rice all day.
 - Abu cannot afford the Rs. 100 that he needs to pay a doctor.

- The Past:

- Abu used to have enough land to live on, but he needed money to take care of his mother who was sick, and sold some of the land.
 - She died any way.
- They had a number of children and the land they had was no longer enough to feed everyone.
- When there was no food, they borrowed from the money lender at very high rates, which ate into their future income.
- Abu started working for a landlord who gives one meal and 1.25 kilos of rice a day.
- He could sharecrop and get to keep half of what he grows but he gets it after the harvest and in the meanwhile they starve.
 - Also renting a plough-team costs 2 days labor/day.
 - He had to mortgage more land to his landlord.

- The Future:
 - At the first visit they are still optimistic.
 - Abu had planted a jackfruit tree four years ago.
 - In a couple of years it will yield fruits that can be sold and bring in good money.
- The Second Visit:
 - Abu has sold land to pay the doctor.
 - His wife has no work.
 - In the lean season he cannot find work either, so they are starving.
 - Abu cuts down a jackfruit tree and sells the wood for 25 takas.
 - It never got a chance to bear fruit.

Is the vicious circle completely closed?

- Should you take away from the story of Abu that there is no need to take this course: as long as people are poor they will be sick and as long as they are sick they will be poor?
 - In fact, there are many examples where the vicious circle can be broken: many interventions could durably help Abu and others.
 - Development economics is largely about this question: how do vicious circles emerge and what can we do about them?

Topics to be Covered in This Course:

- **Households:**

- **Nutrition**

- Formalizing the poverty trap argument;
 - Is it relevant in practice?

- **Health**

- Status and determinants of health; health behaviors;
 - Impact of health status.

- **Education**

- How do get children into school?
 - How to teach any thing to children?
 - What are the returns to education?

– Gender Discrimination

- The extent of the problem;
- Why do households discriminate against girls?

– The Family

- How does the family function?
- Does it matter?

● Markets:

– Insurance

- Do households get together to pool risks in income?
- What are the difficulties and the limits of these arrangements?

– Land Markets

- Who owns and who tills?
- Is there a role for land reform?
- Can individuals borrow to make productive investments?
- If not why not? Can they be helped?

– Credit Markets

– Savings

- Can households save to cope with fluctuations in their income and to invest?

● Institutions:

– Formal and Informal Institutions:

- Development policy does not happen in the void.
 - Roles, designs and consequences of formal and informal institutions.

Perhaps we just need to study growth (macroeconomics)?

- Banerjee (2008) “Big answers for Big questions”.
- Will the tide lift all boats (growth is sufficient for poverty reduction)?
 - No correlation between growth and increase in inequality (Sala-i-Martin, 2006; Dollar and Kray, 2002); growth is correlated about one for one with poverty reduction.
 - Widely debated:
 - Data is poor; debate on counting the poor is hot and raging, e.g., India;
 - Experiences vary: the effect of growth on poverty is different from country to country (Ravallion, 2001).
- Even if true, it could still be the case that poverty reduction causes growth, rather than the other way around.

Do we know what makes growth happen?

- Aggregate production function: $Y = f(A, K, H)$.
- The optimistic message of Mankiw, Romer and Weil (1992) have now been replaced by more pessimistic results.
 - Mankiw, Romer and Weil (1992) showed that differences in saving rates, population growth rates, and rate of investment in human capital can explain nearly 80% variation in GDP levels.
 - Caselli (2005) in his review suggests 66% of the variation remains unexplained if one replaces their measure of human capital (% population who have some secondary schooling) with a more continuous measure that gives weight on primary and tertiary schooling (Klenow, and Rodriguez-Clare, 1997).
- Also, at a conceptual level, even if Mankiw, Romer and Weil (1992) was right, the explanatory variables they use are more like symptoms as opposed to causes.
 - Does education cause growth or the other way around (Bills and Klenow, 2000)?

What do we know about the effect of Policies on Growth?

- Acemoglu, Johnson and Robinson (2001, 2002); La Porta, Lopez de Silanes, Shleifer and Vishny (many papers): Very long run factors matter: who colonized you? did they decide to stay?
- Once you account for that, short run policies do not appear to be quite correlated with growth (Rodrik, Subramanian, Trebbi, 2004).
 - Very different policies lead to very different outcomes.
- It is difficult to learn from country experience in a statistical sense, because each is so specific.
- In contrast, we can learn a lot about the effect of a specific policy on a specific outcome in a particular place by looking at micro-data from this country.

Can we describe the economy with an aggregate production function?

- Aggregate production function: $Y = f(A, K, H)$.
- We don't think of the economy as one big machine.
- What justifies the aggregate production function is the assumption that each factor (human capital, capital) gets allocated to its most productive use: the marginal return of every investment is equalized.
 - This is a reasonable assumption, since this is what market forces should ensure.
 - And in this case, it does not matter where exactly capital and human capital are invested: we can think of one aggregate stock (Solow).
- One nice thing about this assumption is that it can be tested: is it true that the returns to capital are equalized within an economy?
 - We can look at the returns to capital in various places.

- And the answer is: it is not at all true!!
 - Returns to capital (and human capital) vary much more within countries than across countries, which is the puzzle that set Lucas (1988) on his path-breaking effort to think about growth.
- What are the barriers that would prevent the returns to capital to equalize in developing countries?
- We better start thinking about that in some details.
- We won't get a good understanding of growth until we understand the micro-mechanisms at play;
 - once we do, we will be able to think better about how everything aggregates up.

What is There to Study? A Birdview of the Course

“The Economic Lives of the Poor” and “What is Middle Class about the Middle Classes” (Banerjee and Duflo, 2007, 2008)

- Bring together data from various detailed household surveys on
 - the **very poor**, defined as those with consumption below \$1.08 a day at 1993 PPP,
 - the **poor** defined as those below \$2.16 a day at 1993 PPP, and
 - the **middle classes** (\$2-4 and \$6-10).
- Give us a sense of how the poor live, what are the big questions to be asked.

- Banerjee and Duflo (2007, 2008) look at household level survey data from 13 countries, including India (Table 1).
 - Describe the patterns of consumption and income generation of the very poor, poor and middle classes, as well as their access to markets and public goods.
- This is based on
 - the Living Standard Measurement Surveys (LSMS) of the World Bank,
 - the Family Life Surveys by the Rand Corporation, and
 - surveys carried out in the Udaipur district of Rajasthan, and in the slum areas of Hyderabad by the authors along with their collaborators.
- While the surveys are not exhaustive or representative by any stretch,
 - it is still a novel attempt to use household level data across countries to get a glimpse into the economic lives of the poor that remain hidden behind dry aggregate statistics such as what percentage of the population lives below the poverty line.

Table 1
Description of Data Sets

Country	Source	Year	Avg. monthly consumption per capita (In PPP\$)	Households (HHs) living on less than			
				\$1.08 per person per day		\$2.16 per person per day	
				Number surveyed	Percent of total surveyed HHs	Number surveyed	Percent of total surveyed HHs
Cote d'Ivoire	LSMS	1988	664.13	375	14%	1,411	49%
Guatemala	GFHS	1995	301.92	469	18%	910	34%
India-Hyderabad	Banerjee-Duflo- Glennerster	2005	71.61	106	7%	1,030	56%
India-Udaipur	Banerjee-Deaton- Duflo	2004	43.12	482	47%	883	86%
Indonesia	IFLS	2000	142.84	320	4%	2,106	26%
Mexico	MxFLS	2002	167.97	959	15%	2,698	39%
Nicaragua	LSMS	2001	117.34	333	6%	1,322	28%
Pakistan	LSMS	1991	48.01	1,573	40%	3,632	83%
Panama	LSMS	1997	359.73	123	2%	439	6%
Papua New Guinea	LSMS	1996	133.38	185	15%	485	38%
Peru	LSMS	1994	151.88	297	7%	821	20%
South Africa	LSMS	1993	291.33	413	5%	1,641	19%
Tanzania	LSMS	1993	50.85	1,184	35%	2,941	73%
Timor Leste	LSMS	2001	64.42	662	15%	2,426	51%

Table 1
Consumption Levels by Country

	<i>Mean per capita consumption</i>	<i>Median per capita consumption</i>	<i>Percent living with less than</i>				
			<i>\$1</i>	<i>\$2</i>	<i>\$4</i>	<i>\$6</i>	<i>\$10</i>
			<i>a day</i>				
Guatemala ^a	\$301.92	\$102.82	18%	34%	59%	72%	84%
India (urban) ^c	72.28		20%	62%	90%	96%	100%
India (rural) ^c	44.80		40%	88%	98%	99%	100%
Indonesia ^c	74.2		7%	55%	92%	97%	99%
Ivory Coast ^a	89.80	65.23	16%	50%	84%	93%	98%
Mexico ^a	173.50	86.45	14%	37%	68%	80%	91%
Nicaragua ^a	145.48	100.00	6%	28%	63%	81%	93%
Pakistan ^b	41.66		48%	88%	98%	99%	100%
Panama ^a	359.73	242.90	3%	10%	26%	41%	64%
Papua New Guinea ^a	133.38	81.89	16%	42%	69%	82%	92%
Peru ^a	155.39	102.50	9%	25%	62%	78%	91%
South Africa ^a	196.08	97.30	8%	30%	57%	68%	78%
Tanzania ^a	62.14	43.33	34%	71%	92%	97%	99%
Timor Leste ^a	64.42	38.97	18%	57%	84%	94%	98%

Family Sizes

- The poor of the world consists of a very young population.
- Look at Table A2 (Banerjee and Duflo, 2008):
 - Large families:
 - Number of family members varies between 6 and 12 with a median value of between 7 and 8;
 - compared to 2.5 in the 2000 US census.
 - Many children:
 - The median value of the ratio of number of young people (below age 18) to the number of older people (above age 51) is around 6;
 - compared to 1 in the US.
 - Big changes from the very poor to the middle class.
- Do large family sizes cause poverty or the other way around?

How the Poor Spend Their Money: Food

- As one would expect, food would be a major item of expenditure and that given their resources and nutritional needs they would be putting in as much they can on essential food items.
- Yet, interestingly, as the following tables show, while food is indeed a major item of expenditure (50%-78%), the poor spend non-trivial sums on
 - alcohol and/or tobacco (up to 8%); festivals (up to 14% when asked in detail).
- The poor spend 30% of their food budget on rice and wheat which cost between 70% and 100% more per calorie than other grains.
- Food share is falling over time in most countries. So is calorie share!
- Consistent with findings on nutrition in developing countries: a 1% increase on overall expenditure translates into about 0.66% increase in food expenditure.
- Yet, average BMI is 17.8 in Udaipur, Rajasthan (compared to a cut-off for under-nourished of 18.5, WHO), and 55% are anemic.



How the poor spend their money

As a Share of Total Consumption

	<u>Food</u>	<u>Alcohol/ Tobacco</u>	<u>Education</u>	<u>Health</u>
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%
India - UP/Bihar	80.1%	3.1%	0.3%	5.2%
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

As a Share of Total Consumption

Rural	Entertainment	% HHs with any Festival Expenditure	
		Festivals	
Cote d'Ivoire			
Guatemala	0.0%	1.3%	59.9%
India - Udaipur		0.1%	7.7%
India - UP/Bihar	0.0%	14.1%	99.4%
Indonesia	0.1%	2.2%	
Mexico	0.0%	2.2%	80.3%
Nicaragua	0.7%	0.0%	2.7%
Pakistan	0.0%	0.0%	1.8%
Panama	0.3%	2.4%	64.8%
Papua New Guinea	0.6%	0.0%	0.0%
Peru	0.2%	1.5%	21.7%
South Africa	0.0%		
	0.1%	3.2%	90.3%
Timor Leste	0.0%	0.0%	49.0%

How the Poor Spend Their Money: Health and Education

- Lots of illnesses.
- Lots of visits, to private and public doctors.
- High expenditures on health, which increase steeply with income.
- Most children are in school, even among the poor.
 - But expenditure on education increases steeply with income as well.



Health in the Household

	In Last Month				
	Percent of HH Members Sick	A Household's Average # of Consultations	Percent of Households that met At Least Once with a Consultant		Infant Mortality
			Public	Private	
Rural					
Cote d'Ivoire	21.4%	1.28	49.7%	3.2%	6.2%
Guatemala					6.2%
India - Hyderabad					
India - Udaipur	46.1%	0.11	20.1%	58.1%	10.0%
India - UP/Bihar	12.5%	0.81	13.9%	47.3%	7.7%
Indonesia	24.2%	0.77	20.7%	27.3%	3.4%
Mexico	46.3%	1.11	47.7%	0.0%	6.9%
Nicaragua	34.9%	0.15	46.0%	5.0%	
Pakistan	28.0%	0.45	24.0%	48.8%	16.7%
Panama	15.2%	0.10	23.8%	0.0%	
Papua New Guinea					
Peru	11.1%	0.10	20.9%	8.5%	
South Africa	12.5%	0.12	16.4%	6.9%	8.6%
Tanzania	13.2%	0.07	23.2%	14.0%	8.7%
Timor Leste	11.7%	0.21	30.2%	0.5%	



Education

Percent of Children in School

Female, Age:		Male, Age:	
<u>7-12</u>	<u>13-18</u>	<u>7-12</u>	<u>13-18</u>

Rural

Cote d'Ivoire	32.3%	22.8%	45.5%	21.1%
India - Udaipur	60.7%	13.0%	82.6%	24.7%
India - UP/Bihar	51.4%	20.2%	72.1%	51.2%
Indonesia	93.4%	45.9%	82.4%	39.3%
Mexico	94.5%	56.5%	93.5%	38.6%
Nicaragua	67.5%	38.0%	65.4%	27.5%
Pakistan	30.7%	9.2%	64.1%	41.3%
Panama	79.0%	14.6%	85.1%	27.0%
Papua New Guinea	53.0%	33.5%	71.4%	70.9%
Peru	94.2%	64.7%	93.3%	73.7%
South Africa	83.6%	87.5%	80.5%	76.9%
Tanzania	51.2%	53.3%	47.2%	61.4%
Timor Leste	76.6%	89.7%	80.0%	86.8%

Saving and Accumulation: Ownership

- In the median country a majority of the rural poor own land.
 - In the Udaipur sample, much of the land owned by the extremely poor is dry scrub-land that cannot be cultivated for most of the year.
- In general even when the very poor do own land, the plots tend to be quite small.
 - The median landholding among the poor who own land is
 - one hectare or less in Udaipur, Indonesia, Guatemala, and Timor;
 - between one and two hectares in Peru, Tanzania, Pakistan;
 - between two and three hectares in Nicaragua, Cote d'Ivoire, and Panama.
- Other than that they own very little.
 - In Udaipur 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 TV.
 - In Udaipur very few possible business assets: less than 1% own a tractor, a bullock cart, a motorized cycle, a fan.



What do the poor own

Percent of Households with:

	<u>Radio</u>	<u>Television</u>	<u>Bicycle</u>	<u>Land</u>
Rural				
Cote d'Ivoire	43.3%	14.3%	34.4%	62.7%
Guatemala	58.5%	20.3%	23.1%	36.7%
India - Hyderabad				
India - Udaipur	11.4%	0.0%	13.5%	98.9%
India - UP/Bihar	28.3%	7.3%	65.8%	
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%

Savings and Fluctuations

- The poor seems to have very little by way of savings.
- Only a few have bank accounts.
- Large fluctuations: Udaipur
 - In the last year 37% of the very poor households the adults starved for an entire day.
 - 45% cut the size of their meals.
 - Only 57% report that they have enough to eat throughout the year.
 - Those families that report missing meals have 0.23 standard deviations less well-being.

How the Poor Spend Their Money: Questions

- Why so many children?
- Why don't they eat more?
- Why so many illnesses?
- Why so many private visits?
- Are the poor getting enough education?
- Why so few assets?

How the Poor Earn Their Money: Occupation (A Little Bit of Everything!)

- In most countries a majority of household earn income from self-employment.
- Agriculture is far from being everything!
 - Even in rural areas self-employment is both in agriculture and outside it, and many do both.
 - Compared to the middle class, the poor are as likely to be entrepreneurs.
- 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.
- The big difference between the poor and the middle classes is the stability of the job (casual labor vs salaried job).

How the poor earn their money: Occupation

Rural	Percent of Households that own land	Median Ares Of Land Owned	Percent of Households in which At Least One Member: Is Self Employed In	
			Agriculture	Other
Cote d'Ivoire	62.7%	300	37.2%	25.9%
Guatemala	36.7%	29	64.4%	22.6%
India - Udaipur	98.9%	60	98.4%	5.9%
India - UP/Bihar		40	72.1%	40.2%
Indonesia	49.6%	60	49.8%	36.6%
Mexico	4.0%		4.9%	20.4%
Nicaragua	50.4%	280	54.7%	11.6%
Pakistan	30.4%	162	72.1%	35.5%
Panama	85.1%	300	69.1%	17.7%
Peru	65.5%	150	71.7%	25.2%
South Africa	1.4%		0.0%	9.1%
Tanzania	92.3%	182		
Timor Leste	95.2%	100	78.5%	12.0%

How the poor earn their money: Occupation

	Percent of Households in which At Least One Member:		Percent of HHs
	Works for a Wage or Salary in		That Receive Income
	Agriculture	Other	From Multiple Sectors
Rural			
Cote d'Ivoire	52.4%	78.3%	72.1%
Guatemala	31.4%	86.4%	83.8%
India - Udaipur	8.5%	90.7%	94.0%
India - UP/Bihar	2.0%	18.9%	41.8%
Indonesia	31.1%	34.3%	50.4%
Mexico	2.8%	72.6%	13.2%
Nicaragua	0.3%	42.8%	18.4%
Pakistan	32.6%	50.8%	66.8%
Panama	0.0%	0.0%	19.2%
Peru			34.8%
South Africa	27.9%	26.6%	0.4%
Tanzania			
Timor Leste			10.4%

How the Poor Earn Their Money: Non-Agriculture Enterprises

- 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 an autorickshaw.
 - Except for tailoring none of these require the high level of specialized competence that take a long time to acquire.



Non-Agriculture Enterprises Owned by Household

	Percent of HHs with at least One Non-Agricultural Business	In Each Business:		Percent of Businesses that Own:	
		<u>Average Number of Employees</u>		<u>Vehicles</u>	<u>Machines</u>
Rural		<u>Paid Workers</u>	<u>Paid + Unpaid</u>		
Cote d'Ivoire	66.4%	0.14	2.48	2.6%	66.5%
India - UP/Bihar	35.0%				
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		

How the Poor Earn Their Money: Migration

- In most countries in the sample long-term migration for work is rare among the poor;
 - more frequent among the rich.
- 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.



Migration

Percent of Adults who Have 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%	

How the Poor Earn Their Money: Questions

- Why are the businesses so small?
- Why so many entrepreneurs?
- Why don't they migrate for longer?
- Why so little specialization?

The Economic Environment of the Poor: Credit and Savings

- An enormous fraction of the poor in many countries carry some debt.
- Almost none of them got it from the formal banking sector.
- High interest rate: often more than 3% a month!
- Very few people have formal savings accounts.

Market for Credit and Savings and the poor

	<u>Savings Group</u>	<u>Shopkeeper</u>	<u>Villager</u>	<u>Relative</u>	<u>Friend</u>	<u>Other</u>	<u>% HH with a Savings Account</u>
Rural							
Cote d'Ivoire	0.0%		94.3%		0.0%	0.0%	79.5%
India - Udaipur	2.6%	36.4%	4.0%	21.6%	2.1%	2.8%	6.4%
India - UP/Bihar	1.5%		60.9%		0.0%	1.3%	
Indonesia	17.8%	0.0%	0.0%		0.0%	51.3%	6.6%
Mexico				53.5%	18.3%	8.3%	6.2%
Nicaragua							
Pakistan	0.0%	15.8%	11.2%	38.1%	29.0%	3.7%	11.7%
Panama							0.5%
Papua New Guinea							
Peru		9.2%		23.9%			0.5%
South Africa		71.3%			26.1%	16.7%	
Timor Leste							13.4%

The Economic Environment of the Poor: Insurance

- Very little formal insurance against anything.
- Large fluctuation in food consumption and / or school enrollment in response to exogenous income shocks.

The Economic Environment of the Poor: Land

- The very poor are very likely to have land.
 - Incomplete land records implying that many people do not have titles to their land.
 - Unclear title makes it harder to sell or mortgage the land.



Market for Insurance and the poor

Percent of Total Households with Insurance:

Any Type

Health

Life

Rural

Cote d'Ivoire			
Guatemala			
India - Hyderabad			
India - Udaipur			3.8%
India - UP/Bihar	9.2%	4.7%	3.8%
Indonesia	6.0%	3.9%	0.0%
Mexico		50.7%	
Nicaragua	0.0%	5.5%	
Pakistan			
Panama		0.0%	0.0%
Papua New Guinea			
Peru		5.6%	0.0%
South Africa	5.4%		
Tanzania			
Timor Leste			

The Economic Environment of the Poor: Questions

- Why no formal credit and insurance?
 - Are informal systems good substitute for formal systems?
- Why are interest rates so high?
 - How can the poor afford such high interest rates?
- Why don't they repay their debt as a way to save?
- Why do so many people have land?

Public Goods and Infrastructure

- Poor quality of public good and infrastructure.
- Enormous variation across country/income groups in availability of physical infrastructure (water/electricity).
- Health and education infrastructure:
 - Expenditures of the poor on education are not too high despite fairly high enrollment.
 - However, private school enrollment rises steeply with income; so does expenditure per health visits.
- *Quality of public infrastructure??*



Economics environment of the poor: Basic infrastructure

Percent of Households with:

	<u>In-House Tap Water</u>	<u>Toilet/ Latrine</u>	<u>Electricity</u>
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%
India - UP/Bihar	1.9%	3.4%	8.7%
Indonesia	5.6%	30.5%	96.9%
Mexico			99.0%
Nicaragua	12.3%	59.0%	16.4%
Pakistan	9.9%	28.5%	55.5%
Panama		37.7%	0.0%
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%

The Game Plan

- This semester is about building blocks.
 - Household behavior (nutrition, health, education);
 - Markets (land; credit; savings; insurance);
 - Institutions (formal and informal).
- In the Development Macroeconomics course next semester we will incorporate these building blocks in good models to answer the “big questions”.

References

- This note is based on

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