Lecture 2,3
Measuring Development

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- *What criteria do we use to evaluate the extent of "development" a country has undergone or how "developed" or "underdeveloped" a country is at any point in time?*
- *How do we measure development?*
- *How do we know who is poor and who is not?*
- *Is poverty the same as hunger?*
- *What is the relationship between economic growth and poverty reduction?*
- *How will we know that world poverty is falling at all?*

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- Measuring poverty across countries;
- The economic lives of the poor;
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Introduction

There are two broad methodologies of measuring development:

1. **Economic growth criterion:**
   - Income levels are reasonably good approximate measures for comparing the level of development of nations.
   - The level of income per person can serve as a logical surrogate for gauging overall social progress.

2. **The indicators criterion:**
   - Development is such a complex, multi-faceted notion and goal that it should be conceived from the outset as considerably broader than economic growth alone.
   - Development can only be measured by entirely different standards.

Economic Growth Criterion

- It is convenient to use income as a substitute gauge for the broader goals of development.
- Income per person is highly correlated with key measures that attempt to capture the broader aspirations of economic, social, and political progress.
- The greatest number of the other dimensions of development are more easily attained at higher income levels.
- It is precisely the expansion in income over time that provides the means which make the broader end goals of development easier to achieve.
- All countries collect data on their level of economic activity.

Economic Growth Criterion

The two most common measures used for international income and output comparisons, and hence for measuring economic growth, are

1. *gross national product (GNP)*
2. *gross domestic product (GDP)*

Economic Growth Criterion

GNP

the total value of all income (=value of final output) *accruing to residents of a country*, regardless of the source of that income, that is, irrespective of whether such income is derived from sources inside or outside the country.

GDP

total value of all income *created in a country*, regardless of whether the ultimate recipient of that income resides within or outside the country.

Economic Growth Criterion

1. *GNP or GDP: which is the appropriate measure to use?*

Economic Growth Criterion

1. GNP:
   - The level of output and income measured by GNP is a proximate gauge of the material welfare or well-being of the residents of a nation.
   - If one is going to use the economic growth criterion as the proxy measure for the broader goals of development, it makes sense to use real GNP per capita as the standard.
   - It measures what is available for contributing to the standard of living of the population, both now for current consumption and, in the future, as investment.

Economic Growth Criterion

2. GDP:
   - An index of the value of all new *production* occurring within the frontiers of a nation, rather than of the income available for use.
   - Real GDP per capita is a less desirable measure to use if one is interested in a surrogate welfare measure for the broad range of development goals of nations.
   - Real GDP per capita does give information on the pace of aggregate production in a country, irrespective of who ultimately receives the income earned from such production.
   - But the GDP per capita measure is not as closely connected to what remains in the hands of the residents of the nation for current and future consumption.

Economic Growth Criterion

Table 2.1 GDP and GNP comparisons, selected nations, 1993

Country	Population (millions) (1)	GDP[a] (2)	GNP[a] (3)	GDP/GNP gap[b] (4)	GNP per capita [(2) ÷ (1)] (5)
Botswana	1.4	3,813	3,906	−93	2,790
Congo	2.4	2,385	2,280	105	950
Côte d'Ivoire	13.3	8,087	8,379	−292	630
Ethiopia	51.9	5,750	5,190	560	100
Ghana	16.4	6,084	7,052	−968	430
Kenya	25.3	4,691	6,831	−2,140	270
Mozambique	15.1	1,367	1,359	8	90
Rwanda	7.6	1,359	1,596	−237	210
Algeria	26.7	39,836	47,526	−7,690	1,780
Egypt	56.4	35,784	37,224	−1,440	660
Morocco	25.9	26,635	26,936	−301	1,040
Turkey	59.6	156,413	177,012	−20,599	2,970
Bangladesh	115.2	23,977	25,344	−1,367	220
China	1,118.4	425,611	577,416	−151,805	490
India	898.2	225,431	269,460	−44,029	300
Indonesia	187.2	144,707	138,528	6,179	740
Malaysia	19.0	64,450	59,660	4,790	3,140
Pakistan	122.8	46,360	52,804	−6,444	430
Philippines	64.8	54,068	55,080	−1,012	850
South Korea	44.1	330,831	337,806	−6,975	7,660
Thailand	58.1	124,862	122,591	2,271	2,110
Argentina	33.8	255,595	244,036	11,559	7,220
Brazil	156.5	444,205	458,545	−14,340	2,930
Guatemala	10.0	11,309	11,000	309	1,100
Jamaica	2.4	3,825	3,456	369	1,440
Mexico	90.0	343,472	324,400	18,572	3,610
Venezuela	20.9	59,995	59,356	639	2,840

Source: World Bank (1995: Table 1, pp. 162–3; Table 3, pp. 166–7).

Notes:
a Millions of US dollars; GNP estimated as column (1) × column (5).
b GDP/GNP gap = column (2) − column (3), in millions of US dollars. A positive value indicates that GNP < GDP; a negative value indicates that GNP > GDP.

Economic Growth Criterion

1. GDP is a better indicator of the growth of production.
2. GNP is a better indicator of what is available to the residents of a country that can contribute to their potential welfare and human potential.

Which measure is employed will be determined by the use to which such a measure is to be put.

- If one is solely interested in the *pace of economic growth*, then the real GDP per capita measure will serve nicely.
- If one wishes to use an income proxy as a measure of the *level and pace of development*, in the broadest sense, it is more reasonable to use the real GNP per capita measure as the surrogate yardstick.

Economic Growth Criterion

2. *What are the problems with using monetary indicators of development, such as GDP or GNP?*

Economic Growth Criterion

Problems:

- Quality of data;
- Nonmarket goods and services;
- Innovation;
- Public sector;
- Other considerations.

Economic Growth Criterion

Quality of data:

"I wanted to examine how national income estimates were made in African countries. I was struck by the derelict state of the Central Statistical Office in Lusaka. The planned agricultural crop survey was being delayed by the need for car repairs, most of the offices were dark, and the computers were either missing or very old. The national accounts division had three employees, of whom only one was regularly in the office while I was visiting. No one at the office could account for how the income estimates had been made more than a decade ago.

... I was surprised by the lack of basic data and the rudimentary methods in use. Regular and reliable data were available only for the government finances and the copper sector. The entire agricultural sector was accounted for by observing trends in crops forecasts for eight agricultural commodities. For the rest of the economy there really was no usable data."

Morten Jerven (2013)

Economic Growth Criterion

Nonmarket goods and services:

Production boundary: Where to draw a line between economic activities that should/should not be included into GDP?

Examples:
- Household production?
  - The value of the labor services of women who cook and clean and tend children, who make and mend clothing, and who perform a variety of other unpaid tasks in the production of goods and services for their families' own consumption.
- Volunteering?
- Informal economy?
  - 60-80% of the food is produced in the "informal sector", and 70% of informal entrepreneurs are women (Snyder 1995: xv).
  - The "official" economy, whose measurements serve as the main indicators of growth, may be only a minor part of the *real* economy, whose true measurements are unknown.
- Illicit activities?

Economic Growth Criterion

Innovation:

Difficult to capture changing quality and the whole digital economy.

Digital economy:

- Valuation of digital goods, some of which are free but valuable for consumers.
  Example: music, Wikipedia.

Economic Growth Criterion

Other considerations:

- The production of all military goods, logging operations that cause environmental destruction of forests, and production processes that spew toxic wastes into the air and water contribute to the measured level of GNP and GDP.

- Such activities do not add to the level of development or to society's welfare to the degree that their market-valued contributions would suggest.

- **Measure of economic welfare (MEW)** and **the Genuine Progress Indicator (GPI)** attempt to adjust the GNP and GDP measures both for the omissions from measured production that contribute to human welfare not included in the traditional methodology for determining GNP or GDP, as well as for those included values that subtract from human welfare.

Economic Growth Criterion

High-quality growth

growth that is sustainable, brings lasting gains in employment and living standards, and reduces poverty.

- High-quality growth should promote greater equity and equality of opportunity.
- It should respect human freedom and protect the environment.

Economic Growth Criterion

Sustainable development

development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Efforts to 'green' the national accounts have been reflected in new measures, such as

- the Gross Progress Indicator (GPI);
- the Environmentally-adjusted net Domestic Product (EDP).

Economic Growth Criterion

Pollution of poverty

In many less-developed nations, environmental problems such as degradation of marginal lands leading to erosion of top-soil and desertification, clear-cutting of forests, poor water quality, a lack of sanitation, toxic fumes from cooking, and so on are the consequence of a lack of overall economic growth and of national systems of income and wealth distribution which lead desperate poor people to abuse their environment and their nation's stock of natural resources, simply to survive.

Economic Growth Criterion

Pollution of affluence

the environmental damage resulting from increased industrial production and from higher-income consumption patterns, such as motor vehicles and non-recycled waste and refuse.

Purchasing Power Parity

What does a comparison of The Gambia's 1993 GNP per capita of $350 with Germany's 1993 GNP per capita of $23,560 mean?

3. *Does one dollar of income in each country purchase an equivalent quantity of goods?*
Example: Could one say that $1,500 of income provides the same standard of living in Germany, Malaysia, Mexico and The Gambia?

Purchasing Power Parity

- The official exchange rate only makes comparable traded goods:
  Example: computers, motor cars, oranges, and wine.
- In international trade, the prices of such traded goods, when converted at the official exchange rate, will be quite similar.
  - Due to the forces of international competition and the potential for arbitrage that large differences in prices between countries would offer.
- However, for *non-traded goods* and, especially, non-traded services, which, by definition, do not enter into international trade between nations, prices between countries can vary quite substantially, depending on
  - the average level of income;
  - local customs, regulations;
  - the degree of competition, etc.

Purchasing Power Parity

- For non-traded goods and services, there are no international forces of competition or the possibility of arbitrage to bring prices into line with one another between economies.

  $\Rightarrow$ GNP and GDP comparisons based on converting domestic currency measures to a common US dollar are potentially deceiving.

Purchasing Power Parity

Table 2.3 The purchasing power parity (PPP) measure of GNP per capita[a]

Country	GNP per capita, 1993 at official exchange rate $	GNP per capita, 1993 PPP $
Chad	210	720
Côte d'Ivoire	630	1,400
The Gambia	350	1,170
Kenya	270	1,200
Mozambique	90	550
India	300	1,220
Pakistan	430	2,170
Sri Lanka	600	2,990
Philippines	850	2,670
Turkey	2,970	3,920
South Korea	7,660	9,630
Singapore	19,850	19,510
Peru	1,490	3,220
Colombia	1,400	5,490
Jamaica	1,440	3,000
Chile	3,170	8,400
Brazil	2,930	5,370
Lithuania	1,320	3,110
Spain	13,590	13,510
United Kingdom	18,060	17,210
Italy	19,840	17,830
Japan	31,490	20,850

Source: World Bank (1995: Table 1, pp. 162–3; Table 30, pp. 220–1).
Note: a calculated in 'international' dollars; these are roughly, in the aggregate, equal to US dollars.

Purchasing Power Parity

Example: Mozambique's PPP GNP ('purchasing power parity GNP') per capita is determined as

$$PPP \ GNP \ per \ capita = \frac{\sum_{i=1}^{n} P_{i,US} Q_{i,M}}{population} \tag{1}$$

where

- $Q_{i,M}$ is the output vector of all newly produced final goods and services, i, in Mozambique;
- $P_{i,US}$ is the price vector for goods and services, i, in US prices.

Purchasing Power Parity

4. *Is the purchasing power of income in <u>lower-income countries</u> understated or overstated by measures of aggregate or per capita income converted at official exchange rates?*

Purchasing Power Parity

The purchasing power of income in lower-income countries tends to be *understated* by measures of aggregate or per capita income converted at official exchange rates.

5. *Why?*

Purchasing Power Parity

The purchasing power of income in lower-income countries tends to be *understated* by measures of aggregate or per capita income converted at official exchange rates.

- Relatively low prices of non-traded goods and services due to a lower standard of living.
  Examples: housing, haircuts and local transportation.

Purchasing Power Parity

6. *Is the purchasing power of income in* <u>*more developed economies*</u> *understated, similar or overstated by measures of aggregate or per capita income converted at official exchange rates?*

Purchasing Power Parity

The more developed economies tend to have their PPP GNP per capita closer to that calculated at the official exchange rate.

- Greater openness to world trade;
- A mix of production with more traded goods relative to non-traded goods;
- More modern structures of production which result in greater efficiency in production in both traded and non-traded goods and service sectors.

The Indicators Criterion

Composite indicators of development:

- Human Development Index (HDI) (UNDP 1990) is obtained by taking a symmetric geometric mean of the 3 dimension indices. A dimension index is composed by setting maxima and minima to the dimensions, and then tracking "achievement" by the ratio of the path already traversed along that dimension to the entire length of the path. It creates a number that takes a value somewhere between 0 and 1. The number is to be interpreted as the "fraction of ultimate development" that has been achieved by the country in question.
    - income;
    - life expectancy;
    - literacy.
        - Mean years of schooling;
        - Expected years of schooling viewed from the current year onwards.

The Indicators Criterion

Dimension	Indicator	Minimum	Maximum
Health	Life expectancy (years)	20	85
Education	Expected years of schooling (years)	0	18
	Mean years of schooling (years)	0	15
Standard of living	Gross national income per capita (2011 PPP $)	100	75,000

$$Dimension\ index = \frac{actual - minimum}{maximum - minimum}$$

$$HDI = (I_{Health} * I_{Education} * I_{Income})^{\frac{1}{3}}$$

- *Do you know which country had the highest HDI in 2021?*

The Indicators Criterion

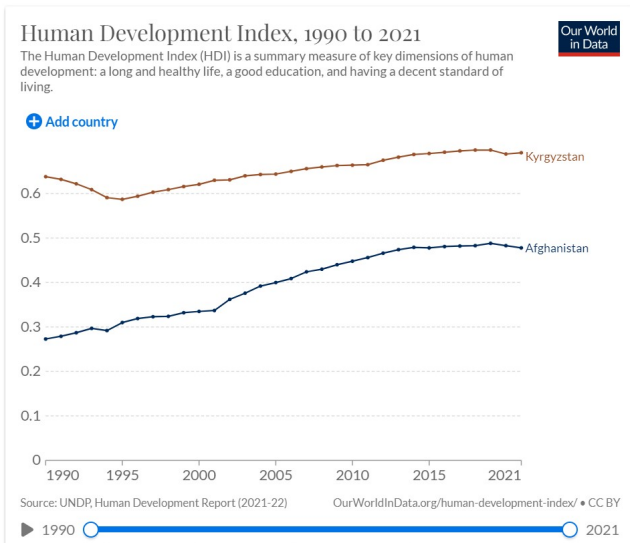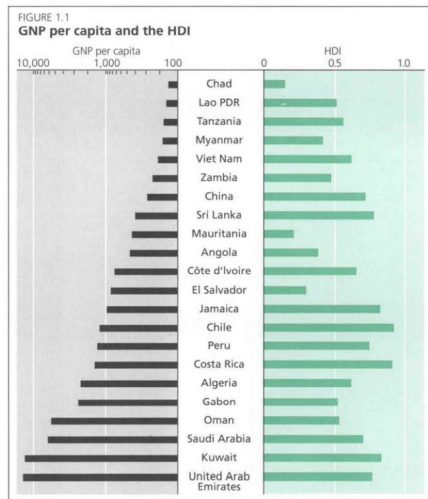| Dimension	Indicator	Minimum	Maximum
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- *Do you know which country had the highest HDI in 2021?*
  - Switzerland!

The Indicators Criterion
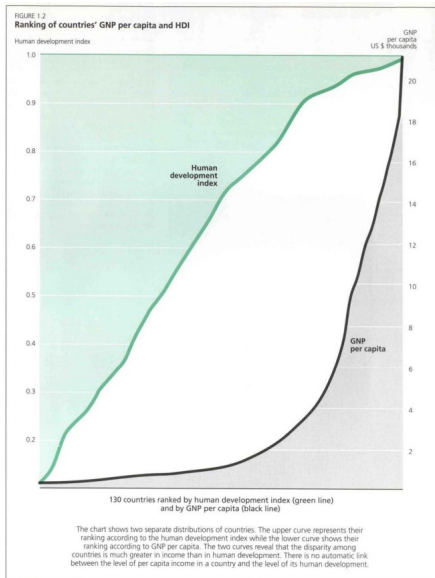

Human Development Index, 1990 to 2021

The Human Development Index (HDI) is a summary measure of key dimensions of human development: a long and healthy life, a good education, and having a decent standard of living.

Source: UNDP, Human Development Report (2021-22)   OurWorldInData.org/human-development-index/ • CC BY

The Indicators Criterion

FIGURE 1.1
GNP per capita and the HDI

The Indicators Criterion

FIGURE 1.2
Ranking of countries' GNP per capita and HDI

130 countries ranked by human development index (green line)
and by GNP per capita (black line)

The chart shows two separate distributions of countries. The upper curve represents their
ranking according to the human development index while the lower curve shows their
ranking according to GNP per capita. The two curves reveal that the disparity among
countries is much greater in income than in human development. There is no automatic link
between the level of per capita income in a country and the level of its human development.

The Indicators Criterion

8. *What are the advantages and limitations of composite indicators?*

The Indicators Criterion

<u>Advantages</u>:

- Allow for easy comparison (between countries, over time);
- Incorporate multiple dimensions of development.

<u>Limitations</u>:

- Arbitrary methodological choices;
  "In some sense, such indexes can be best described as measurement without theory" (BEA, 2020)
  "mashup indices of development... Neither the menu of the primary series nor the aggregation function is predetermined from theory and practice, but are "moving parts" of the index - key decision variables that the analysis is free to choose, largely unconstrained by economic or other theories intended to inform measurement practice".
  (Ravallion, 2012)
- No consensus on one indicator, but HDI is the most well-known.

How to Measure Poverty?

Ways to identify the poor:

Subjective well-being: Self-identification.

1. **Evaluative (cognitive) well-being**
   - Cognitive evaluation of one's own life;
   - Typical scales: 0-10, 1-10, 1-7 (or Cantril ladder)
   - *Example:* "In general, how happy would you say that you are - *very* happy, *fairly* happy, or *not* very happy?"

2. **Experienced/experiential (affective, hedonic) well-being**
   - Actual feelings and emotional states;
   - Both positive (joy, happiness) and negative (anxiety, pain)

3. **Eudaimonian well-being**
   - How worthwhile people consider the things they do in their life;
   - *Example:* purpose, feeling worthwhile, meaningfulness.

How to Measure Poverty?

What happens if the wording changes?

	(1)	(2)	(3)
AIPO	Very happy	Fairly happy	Not very happy
NORC	Very happy	Pretty happy	Not too happy

- We would expect individuals to consider the NORC's rating (2), *"pretty happy"*, closer to (1) and farther from (3) than the AIPO's rating *"fairly happy"*.
- We would expect that
    - some respondents who chose category (1) in the AIPO poll would have chosen (2) in the NORC poll;
    - some who chose (2) in the AIPO poll would have chosen (3) in the NORC poll.
- The results confirm this expectation:
    - The percentage in group (1) tends to run lower;
    - The percentage in group (3) runs higher in the NORC polls.

How to Measure Poverty?

Subjective well-being: Self-identification.

- *Example*: In the participatory rural assessment (PRA) villagers are asked to say who is well off, who is not well off, who is poor.
    - 9. *What are the potential problems with relying on this information if we want to distribute funds to the poor?*
- *Example:* The Gallup Poll in USA asks people to report what is the smallest amount of money a family of four, two adults and two children, would need "to get along in the community".
    - 10. *Can we use this information to set the poverty line?*

How to Measure Poverty?

Subjective well-being: Self-identification.

- *Example*: In the participatory rural assessment (PRA) villagers are asked to say who is well off, who is not well off, who is poor.
  - ⑨ *What are the potential problems with relying on this information if we want to distribute funds to the poor?*
    - Incentive to identify their friends and relatives (or themselves) as poor;
    - Underreporting of income.
- *Example:* The Gallup Poll in USA asks people to report what is the smallest amount of money a family of four, two adults and two children, would need "to get along in the community".
  - ⑩ *Can we use this information to set the poverty line?*
    - Interest groups may ask people to inflate their answers with the expectation of higher benefits.

How to Measure Poverty?

Subjective well-being: Self-identification.

Problems:

- Interpersonal comparability
    - If my happiness is 8, am I happier than your happiness of 6?
- Bounded scales
    - If people report happiness of 10, cannot life be better for them?
- Social desirability bias
    - People may exaggerate their ratings to conform with the norms.
- Questionnaire design
    - Order bias:
      If the "happiness" question is preceded by questions on some other
      aspects of life, the answers on "happiness" questions differ.

How to Measure Poverty?

Subjective well-being: Self-identification.

Nevertheless, evidence of validity:

- External validity
    - Correlation with scores by friends, family members, interviewer.
- Correlates with predictable factors
    - Employment, partnership, income.
- Predicts future outcomes
    - In professional and personal life
- Physiological and neurological evidence
    - Correlation with respondent health and emotional expressions

How to Measure Poverty?

The Evidence: Within-Country Comparisons

Does greater happiness go with higher income?

TABLE 2

PERCENTAGE DISTRIBUTION OF POPULATION BY HAPPINESS, BY SIZE OF INCOME, UNITED STATES, 1970[a, b]

Income (in $1000)	(1) Very happy	(2) Fairly happy	(3) Not very happy	(4) No answer
All classes	43	48	6	3
15+	56	37	4	3
10–15	49	46	3	2
7–10	47	46	5	2
5–7	38	52	7	3
3–5	33	54	7	6
Under 3	29	55	13	3

[a] Data from AIPO Poll of December 1970.
[b] $N = 1517$.

- Income and happiness are positively associated.

How to Measure Poverty?

The Evidence: International Comparisons

Are richer countries happier countries?

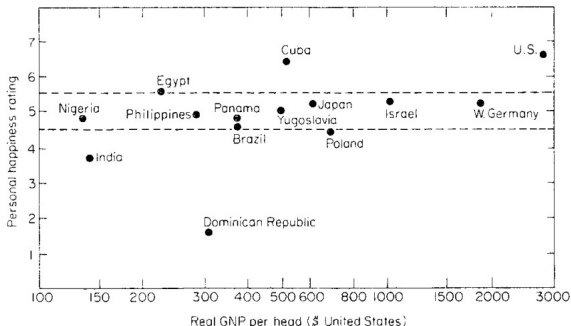
FIG. 1. Personal happiness rating and GNP per head, 14 countries, ca. 1960. (Source: Table 6.)

- Not really!

How to Measure Poverty?

The Evidence: National Time Series

Will raising the incomes of all increase the happiness of all?

TABLE 8
PERCENT DISTRIBUTION OF POPULATION BY HAPPINESS,
UNITED STATES, 1946–1970[a]

A. AIPO Polls

Date	Very happy	Fairly happy	Not very happy	Other	N
Apr. 1946	39	50	10	1	3151
Dec. 1947	42	47	10	1	1434
Aug. 1948	43	43	11	2	1596
Nov. 1952	47	43	9	1	3003
Sept. 1956	53	41	5	1	1979
Sept. 1956	52	42	5	1	2207
Mar. 1957	53	43	3	1	1627
July 1963	47	48	5[b]	1	3668
Oct. 1966	49	46	4[b]	2	3531
Dec. 1970	43	48	6[b]	3	1517

B. NORC Polls

Date	Very happy	Pretty happy	Not too happy	N
Spring 1957	35	54	11	2460
Dec. 1963	32	51	16	1501
June 1965	30	53	17	1469

[a] Data from Table 2 and AIPO Polls 369, 410, 425, 508, 570,
571, 580, 675, and 735. NORC data from Bradburn, 1969, p. 40.
[b] Question read "not happy" rather than "not very happy."

- No indication of any net trend up or down.

How to Measure Poverty?

Easterlin paradox

At a point in time happiness varies directly with income both among and within nations, but over time happiness does not trend upward as income continues to grow.

How to Measure Poverty?

Ways to identify the poor:

Poverty lines.

- Calculating how much it costs to obtain enough food, usually in terms of meeting a calorie norm of around 2,000 calories per day.
    - Different norms for people in agriculture (4,000 calories);
    - Different norms for adults and children.

    11 *Why focus on food?*
    12 *What are the problems with focusing on food?*
    13 *What does the poverty line mean in terms of allocation of transfers, especially for people close to poverty line?*

How to Measure Poverty?

Ways to identify the poor:

Poverty lines.

- Calculating how much it costs to obtain enough food, usually in terms of meeting a calorie norm of around 2,000 calories per day.
    - Different norms for people in agriculture (4,000 calories);
    - Different norms for adults and children.
    - ⑪ *Why focus on food?*
        - The poorest people in poor countries spend most of their money on food.
    - ⑫ *What are the problems with focusing on food?*
        - Even the poorest buy things other than food.
    - ⑬ *What does the poverty line mean in terms of allocation of transfers, especially for people close to poverty line?*
        - Someone just below the poverty line will get help, while someone just above the line will not.

How to Measure Poverty?

Poverty lines.

- Head count ratio: the fraction of the population in poverty.
  - ⑭ *What are the implications for the government if it cared only about reducing the statistics of poor people?*

- Poverty gap: measure of poverty obtained by multiplying the head count ratio by the average value of the fractional shortfall among the poor.
  Example: If someone is at half the poverty line would have a fractional shortfall value of 0.5, while someone with nothing would have a value of 1.0.
  - ⑮ *Which of the measures is better, and why?*

How to Measure Poverty?

Poverty lines.

14 *What are the implications for the government that cares only about reducing the statistics for poor people?*

- It may give small amounts of money to those just below the poverty line, just enough to lift them out of poverty. This money could even come from the very poor-once someone is poor, taking money away from him or her does nothing to add to the poverty count.

15 *Which of the measures is better, and why?*

- The **poverty gap** measure is theoretically better, as someone just below the line now counts for less than someone a long way below it. But it is difficult to explain this measure to the public.

How to Measure Poverty?

Ways to identify the poor:

Capabilities.

- Poverty as the absence of one or more of the basic capabilities that are needed to achieve minimal functioning in the society in which one lives.
  - Being adequately fed;
  - Being clothed;
  - Being sheltered;
  - Being healthy;
  - Having access to education, political participation, etc.

How to Measure Poverty?

Capabilities.

- 8 Millenium Development Goals (MDGs) to be reached by 2015;
- 17 Sustainable Development Goals (SDGs) to be reached by 2030.

How to Measure Poverty?

Capabilities.

- Relative poverty: measure of poverty constructed by using poverty lines that move with average income, so that the minimum acceptable income is tied to what other people get.

  Example: The Council of Ministers of the European Community recognizes someone as poor if he or she lives in a household whose income is less than half of the average household income.

  16 *Is this measure more applicable to rich or poor countries?*

How to Measure Poverty?

Capabilities.

16 *Is this measure more applicable to rich or poor countries?*

- It is more applicable to rich countries where meeting basic needs is no longer an issue for the vast majority of households.

Measuring Poverty Across Countries

International poverty line:

- **"Extremely poor":** 1.90 USD per day using 2011 PPP (as of October 2015);

The Economic Lives of the Poor

The Living Arrangements of the Poor

- The typical extremely poor family tends to be large:
  - The number of family members varies between 6 and 12, with a median value of between 7 and 8.
  - The number of adults (over age 18) ranges from 2.5 to 5, with a median of 3.
    $\Rightarrow$ family structure where it is common for adults to live with parents, siblings, uncles, cousins, and so on.
  - These families also have a large number of children.

The Economic Lives of the Poor

How the Poor Spend Their Money:

Food and Other Consumption Purchases

- Poor people spend most of their money on food:
    - Food represents from 56 to 78% of consumption among rural households, and 56 to 74% in urban areas.
- **But not only!**
    - The poor spend significant amounts of money on alcohol and tobacco.
        - 4.1% in Papua New Guinea, 5.0% in Udaipur, India; 6.0% in Indonesia; and 8.1% in Mexico.
    - Spending on festivals is an important part of the budget for many extremely poor households.
        - In Udaipur, over the course of the previous year, more than 99 % spent money on a wedding, a funeral, or a religious festival. The median household spent 10% of its annual budget on festivals;
        - In South Africa, 90% spent money on festivals;
        - In Pakistan, Indonesia, and Cote d'Ivoire, more than 50% did likewise.

The Economic Lives of the Poor

How the Poor Spend Their Money:

The Pursuit of Health and Well-being

- There is remarkably high level of morbidity:
  - Most households report the incidence over the last month of health episodes that left a household member bedridden for a day or more, or that required a household member to see a doctor.
- While the poor certainly *feel* poor, their levels of self-reported happiness or self-reported health levels are not particularly low.
- On the other hand, the poor do report being under a great deal of stress, both financial and psychological.

The Economic Lives of the Poor

How the Poor Spend Their Money:

Investment in Education

- The extremely poor spend very little on education.
  - The expenditure on education generally hovers around 2% of household budgets.
  - This low level of expenditure on education is not because the children are out of school.
  - The reason is that children typically attend public schools or other schools that do not charge a fee.

The Economic Lives of the Poor

How the Poor Earn Their Money:

Entrepreneurship and Multiple Occupations among the Poor

- A substantial fraction of the poor act as entrepreneurs in the sense of raising capital, carrying out investment, and being the full residual claimants for the resulting earnings.

- Many poor households have multiple occupations.

- This pattern of multiple occupations is stronger in rural areas.

The Economic Lives of the Poor

How the Poor Earn Their Money:

Lack of Specialization

- Poor families do seek out economic opportunities, but they tend not to become too specialized.
    - They do some agriculture, but not to the point where it would afford them a full living (for example, by buying/ renting/ sharecropping more land).
    - They also work outside, but only in short bursts, and they do not move permanently to their place of occupation.

The Economic Lives of the Poor

How the Poor Earn Their Money:

The Problem of Scale

- The businesses of the poor typically operate at a remarkably small scale.
  - The average landholding for those who own land is usually quite tiny, and renting land is infrequent.
  - The scale of nonagricultural businesses run by the poor also tends to be small.

The Economic Lives of the Poor

Markets and the Economic Environment of the Poor

The Market for Credit and the Poor

- The fraction of rural, extremely poor households having an outstanding debt varies between countries, from 11% in rural East Timor to 93% in Pakistan.
- Very few of the poor households get loans from a formal lending source.
    - Relatives, shopkeepers, and other villagers form, by far, the overwhelming source of borrowed funds.
- Credit from informal sources tends to be expensive.
    - These high interest rates seem not to occur directly because of high rates of default, but rather as a result of the high costs of contract enforcement. While delay in repayment of informal loans is frequent, default is actually rare.

The Economic Lives of the Poor

Markets and the Economic Environment of the Poor

The Market for Savings and the Poor

- A main challenge for the poor who try to save is to find safety and a reasonable return.
    - Stashing cash inside your pillow or elsewhere at home is neither safe nor well-protected from inflation.
- The poor, like everyone else, have problems resisting the temptation of spending money that they have at hand.
- Few people have savings accounts.

The Economic Lives of the Poor

Markets and the Economic Environment of the Poor

<u>The Market for Insurance and the Poor</u>

- The poor have little access to formal insurance.
- Instead, social networks provide informal insurance.

The Economic Lives of the Poor

Understanding the Economic Lives of the Poor

Why so Little Specialization?

17. *Why do the poor tend not to be too specialized?*

The Economic Lives of the Poor

Understanding the Economic Lives of the Poor

Why so Little Specialization?

17 *Why do the poor tend not to be too specialized?*

- Risk-spreading is one reason why the poor, who might find risk especially hard to bear, tend not to be too specialized in any one occupation.
  - They work part time outside agriculture to reduce their exposure to farming risk;
  - They keep a foot in agriculture to avoid being too dependent on their nonagricultural jobs.
- To occupy what would otherwise be wasted time;
- The poor cannot raise the capital they would need to run a business that would occupy them fully.
  - Most businesses operate with very little assets and little working capital.
  - Some poor farmers might be able to irrigate their lands and make them usable for a larger part of the year, but they lack the necessary access to funds.

Understanding the Economic Lives of the Poor

Why so Many Entrepreneurs?

18 *Why are so many of the poor entrepreneurs?*

The Economic Lives of the Poor

Understanding the Economic Lives of the Poor

Why so Many Entrepreneurs?

18. *Why are so many of the poor entrepreneurs?*
    - If you have few skills and little capital, and especially if you are a woman, being an entrepreneur is often easier than finding an employer with a job to offer.

Understanding the Economic Lives of the Poor

Why Don't the Poor Eat More?

19. *Why do the poor not spend more on food both on average and especially out of the marginal dollar?*

The Economic Lives of the Poor

Understanding the Economic Lives of the Poor

Why Don't the Poor Eat More?

19 *Why do the poor not spend more on food both on average and especially out of the marginal dollar?*

- Eating more would not help them that much, or not for long, because they would become weak again at the first attack of disease, which will invariably occur.
- Many poor people save money that they could have eaten today to spend more on entertainment in the future.
- The need to spend more on entertainment rather than on food appears to be a strongly felt need, not a result of inadequate planning. One reason this might be the case is that the poor want to keep up with their neighbors.

The Economic Lives of the Poor

Understanding the Economic Lives of the Poor

Why Don't the Poor Invest More in Education?

20. *Why are the poor not reacting to the low quality of schools attended by their children?*

Understanding the Economic Lives of the Poor

Why Don't the Poor Invest More in Education?

20. *Why are the poor not reacting to the low quality of schools attended by their children?*
   - Poor parents, who may often be illiterate themselves, may have a hard time recognizing that their children are not learning much.

Understanding the Economic Lives of the Poor

Why Don't the Poor Save More?

㉑ *Why don't the poor save more, given that they spend on alcohol, tobacco, festivals and other items?*

The Economic Lives of the Poor

Understanding the Economic Lives of the Poor

Why Why Don't the Poor Save More?

- ㉑ *Why don't the poor save more, given that they spend on alcohol, tobacco, festivals and other items?*
    - Saving at home is hard.
        - The money may be stolen or grabbed by your spouse or your son.
        - Also, if you have money at hand, you are constantly resisting temptation to spend.
        - Such temptations may be especially hard for the poor, because many of the temptations they are resisting are things that everyone else might take for granted.

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