

International Development

Development Concepts



SAPIENZA
UNIVERSITÀ DI ROMA

International Economic Policy and Development
Finance and Development (LM-81), a.a. 2016-2017
Prof. Emanuele Ragusi

Presentation taken from *Reinert, K.A. (2012) An Introduction to International Economics, Instructor Materials*

What Is Development?



Higher living standards



END
POVERTY

A black silhouette of a hand with fingers spread, positioned to the right of the text "END POVERTY".

Equity

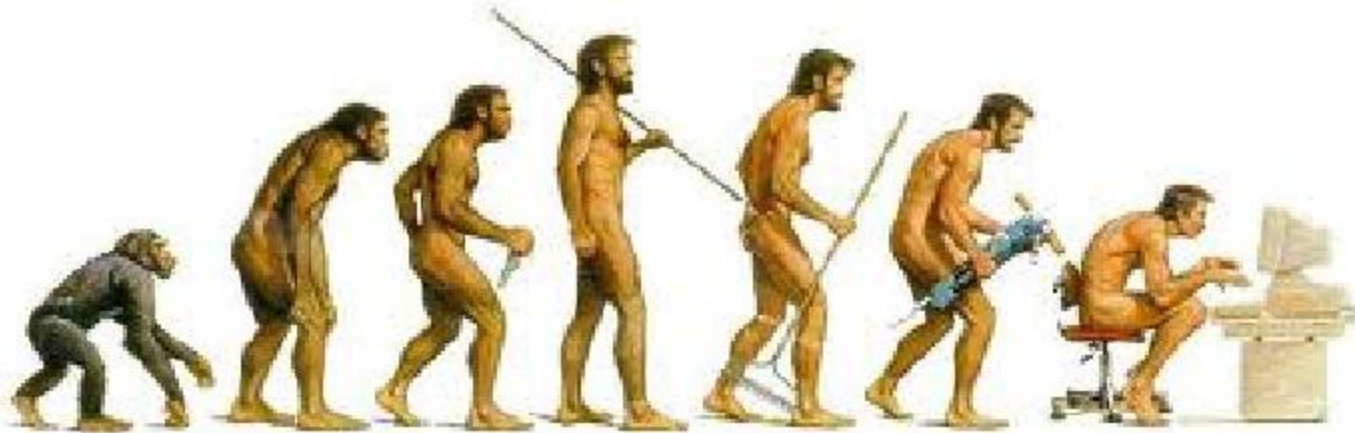
From an economic standpoint, the primary goal of international economic development is *the improvement of human well-being*

What is Development?



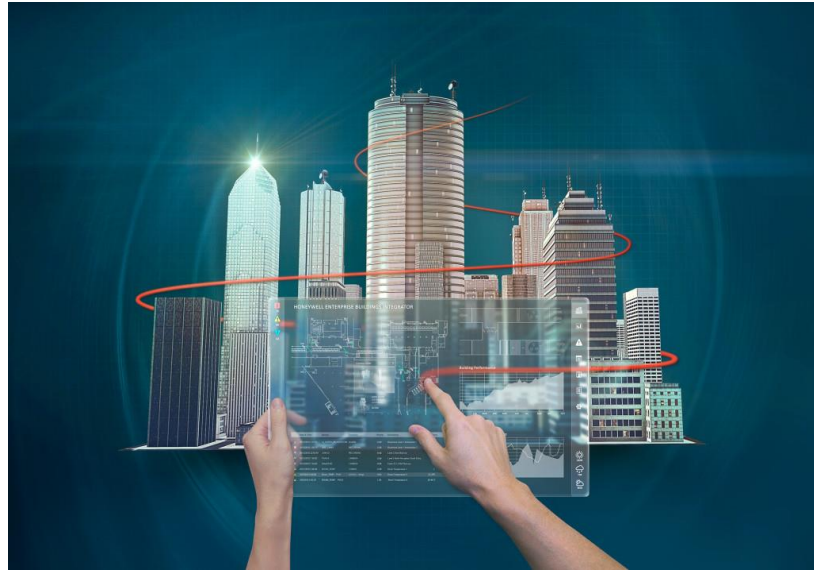
- Development as *growth* views development as the sustained increase in either output per capita or income per capita
 - It is related to the conception of poverty as a deprivation of income.

What is Development?



- Development as *human development* views development as an increase in what individuals can achieve in the broadest sense of that word
 - It is related to another conception of poverty as deprivations of achievements of various kinds, namely education and health

What is Development?



- Development as structural change views development as involving significant alterations in patterns of production, consumption and even social relations.

Growth

- An basic conception of international development is in terms of the sustained increase in either per capita production or per capita income, or in other words *growth*
- The focus here is with either *gross domestic product* (GDP) or *gross national income* (GNI)
- Table 20.1 gives information on GDP per capita for twelve countries of the world for the year 2010
 - The range of GDP per capita among countries is *significant*
 - The average per capita income in Japan and the United States is more than 100 times that in Ethiopia

Table 20.1: Development Indicators (2010, except where indicated)

Country	GDP per capita (US\$)	PPP GDP per capita (US\$)	Growth rate of GDP per capita (%)	Gini coefficient index (0 to 100)	Life expectancy (years)	Mean years of schooling	HDI (0 to 1)
Ethiopia	358	1,035	10	30 (2005)	59	1.5	0.358
Haiti	664	1,101	-5	59 (2001)	62	4.9	0.449
India	1,375	3,373	10	33 (2005)	65	4.4	0.542
Indonesia	2,952	4,312	6	34 (2005)	69	5.8	0.613
China	4,433	7,568	10	42 (2005)	73	7.5	0.682
Costa Rica	7,774	11,601	5	51 (2009)	79	8.3	0.742
Turkey	10,050	15,616	9	39 (2008)	74	6.5	0.739
Brazil	10,993	11,202	8	55 (2009)	73	7.2	0.715
South Korea	20,540	28,798	8	..	81	11.6	0.894
Spain	30,026	31,889	0	35 (2000)	82	10.4	0.876
Japan	43,063	33,916	4	..	83	11.6	0.899
United States	46,702	46,702	3	41 (2000)	78	12.4	0.908

Limitations of the GDP Per Capita Perspective

- Per capita GDP does not account for *factor income flows* among the countries of the world
- Per capita GDP only includes market activities, and many activities in developing countries take place *outside the market*
 - GDP does not include farmers' production of agricultural products for consumption within his or her family

Limitations of the GDP Per Capita Perspective

- Per capita GDP does not account for certain *costs associated with development* such as the use of nonrenewable resources, the loss of biodiversity, and pollution
- Per capita GDP is an average measure that *hides the distribution of income* among the households of a country
 - If income distribution becomes more unequal as per capita GDP increases, the level of well-being of the poorest groups in the country could fall

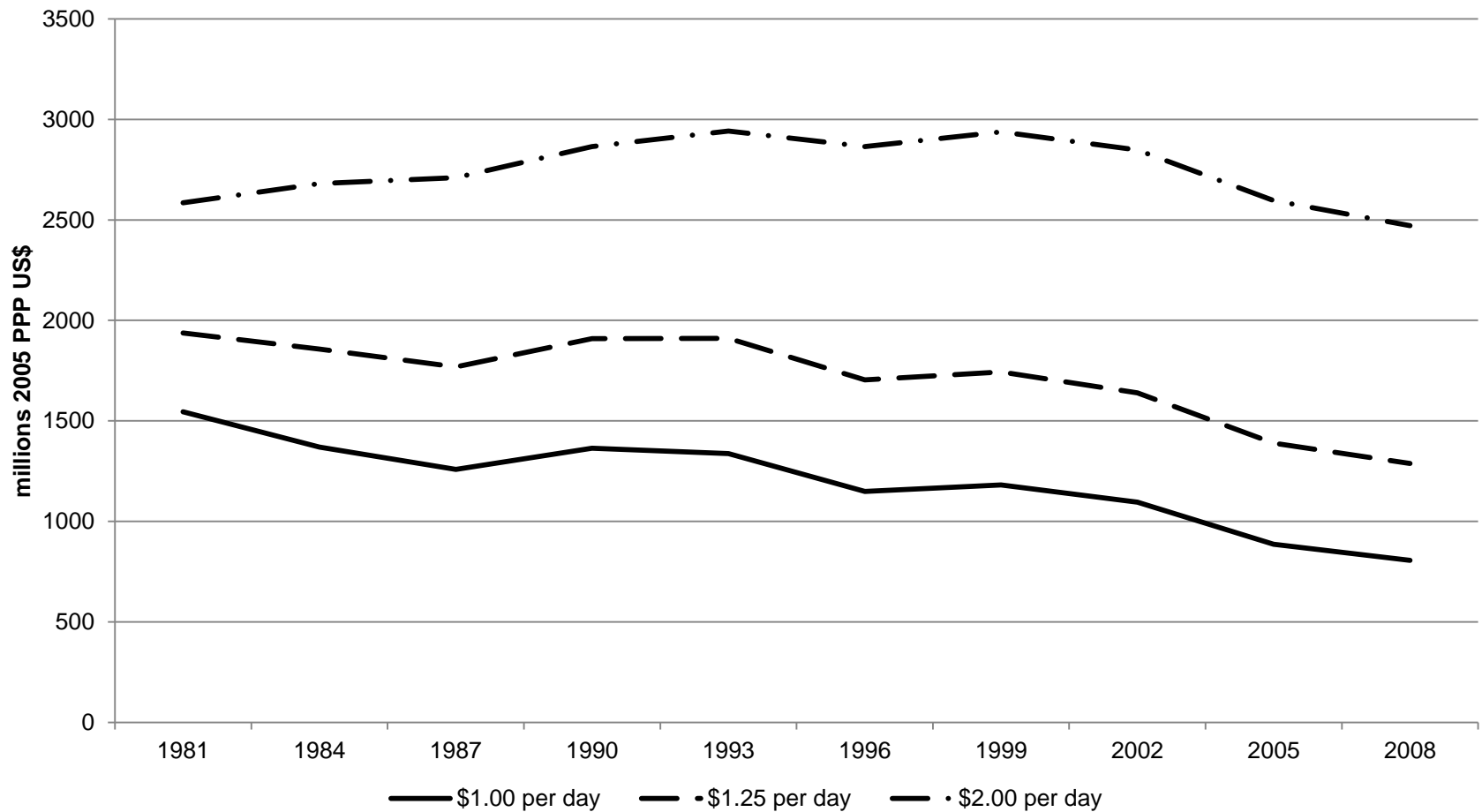
Limitations of the GDP Per Capita Perspective

- Per capita GDP is not always an accurate predictor of *human development*
 - It is not always well correlated with indicators of human development such as levels of education and health.
- The nominal or currency exchange rates used to convert GDP into US dollars for comparison among countries are misleading
 - A large part of economies consist of *non-traded services* and these tend to be less expensive in developing countries, so a US dollar buys more in developing countries than in developed countries

Adjusting for PPP

- The last of the above limitations is addressed by adjusting GDP per capita for purchasing power parity (PPP)
 - The PPP methodology uses US dollar prices to value all goods in all countries
 - This has the effect of increasing the GDP of developing countries
- In Table 20.1, the PPP adjustment increases all GDP per capita measures except for Japan and the United States
 - Japan's measure decreases because the cost of living is higher there than in the United States
 - The United States' measure stays the same because it is the reference point for prices used in the PPP methodology

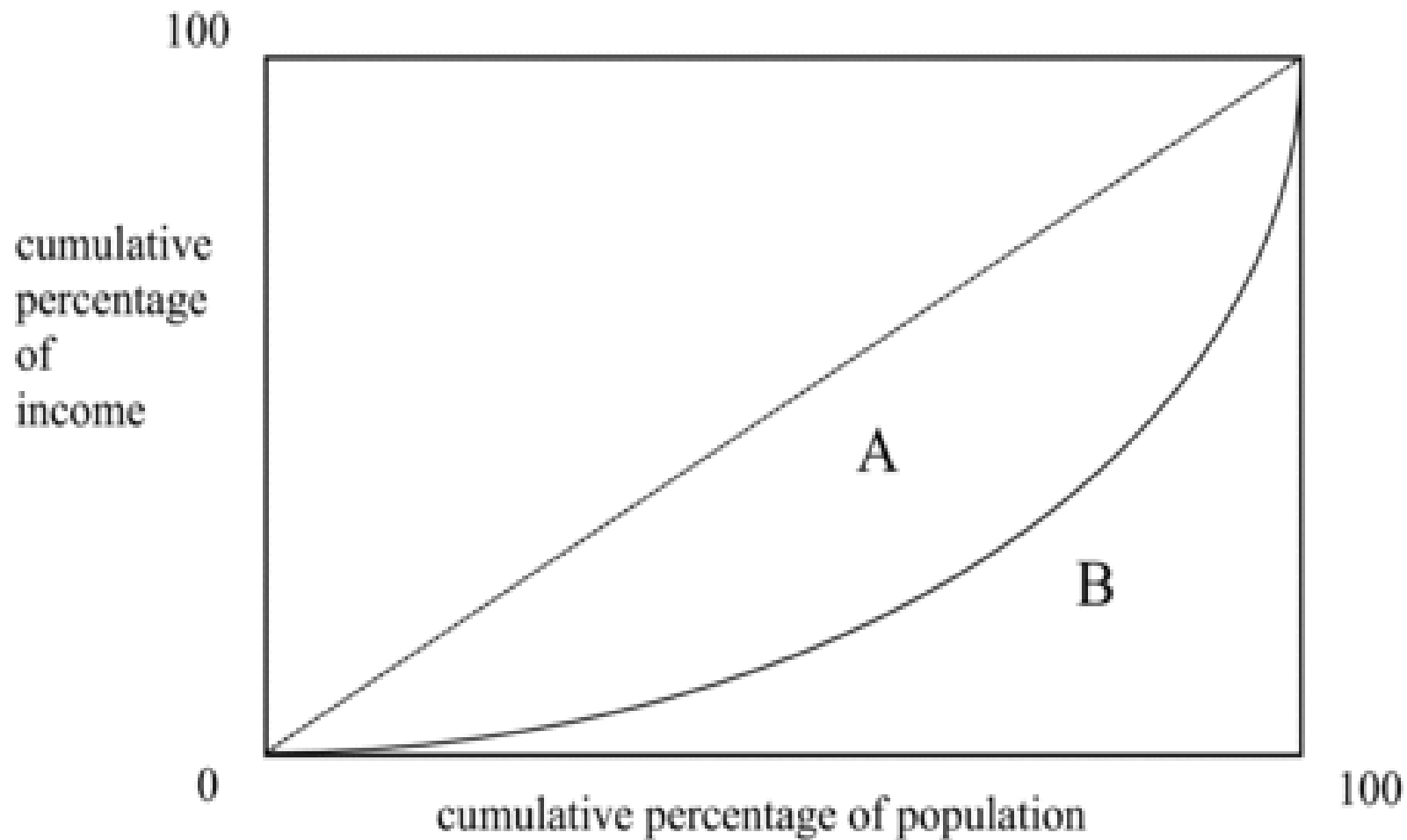
Figure 20.1: Recent Evolution of World Poverty



The Lorenz Curve and Gini Coefficient

- A standard means of measuring income inequality is the *Lorenz curve* and the associated *Gini coefficient*
- The Lorenz curve is depicted in Figure 20.4
 - It relates *cumulative* percentage of income received (measured on the vertical axis) to the *cumulative* percentage of population (measured on the horizontal axis)
 - The diagonal line in the figure is therefore the line of perfect equality, where each person receives the same income
 - Actual Lorenz curves, however, lie below the diagonal line, and the farther they are to the southeast corner of the box, the greater the level of inequality

Figure 20.4: The Lorenz Curve



The Lorenz Curve and Gini Coefficient

- The Gini Coefficient is measured using the area between the diagonal and the actual Lorenz curve, area A, and the area under the diagonal, area A+B

$$\text{Gini Coefficient} = \frac{A}{A + B}$$

- The greater is the area of A, the higher the value of Gini coefficient, and the greater the degree of inequality.
- In theory, Gini coefficients range from the extremes of zero (perfect equality) to unity (perfect inequality)
- In practice, the coefficient ranges from approximately 0.25 (relatively low inequality) to 0.60 (relatively high inequality)

Poverty

- Deprivations in per capita GDP (and therefore of per capita GNI) is a central measure of poverty, namely poverty as income deprivation
- The World Bank estimates income poverty at three levels as shown in Figure 20.1
 - those living below US\$2.00 per day
 - those living below US\$1.25 per day
 - those living below US\$1.00 per day
- The number of extremely poor individuals living on US\$1.25 or US\$1.00 per day is declining over time
- The number of poor, while appearing to be on a recent downward trend, is still approximately 2.5 billion

Pro-Poor Growth

- Poverty reduction depends on initial inequality levels and changes in inequality as well as growth itself
- The possibility of *pro-poor growth* relates to the *growth elasticity of poverty*
 - the ratio of the percentage change in a poverty rate to the percentage change in a growth measure such as GDP per capita
- This elasticity can vary by country, time period and region within a country
- The link between growth and poverty alleviation is not uniformly one-for-one
- Development policy analysts need to consider how to best increase the growth elasticity of poverty

Human Development

- The human development perspective sees the growth of GDP or GNI per capita as an important but limited measure of the rate of economic development
- The most fundamental contribution of the human development perspective is the *human development index* (HDI)
- The HDI consists of equal, one-third components of per capita income, life expectancy, and education
 - The per capita income component is calculated using PPP Gross National Income (GNI) per capita
 - Life expectancy is taken as an overall measure of health
 - Education is measured with one-half weights given to mean years of schooling and expected years of schooling

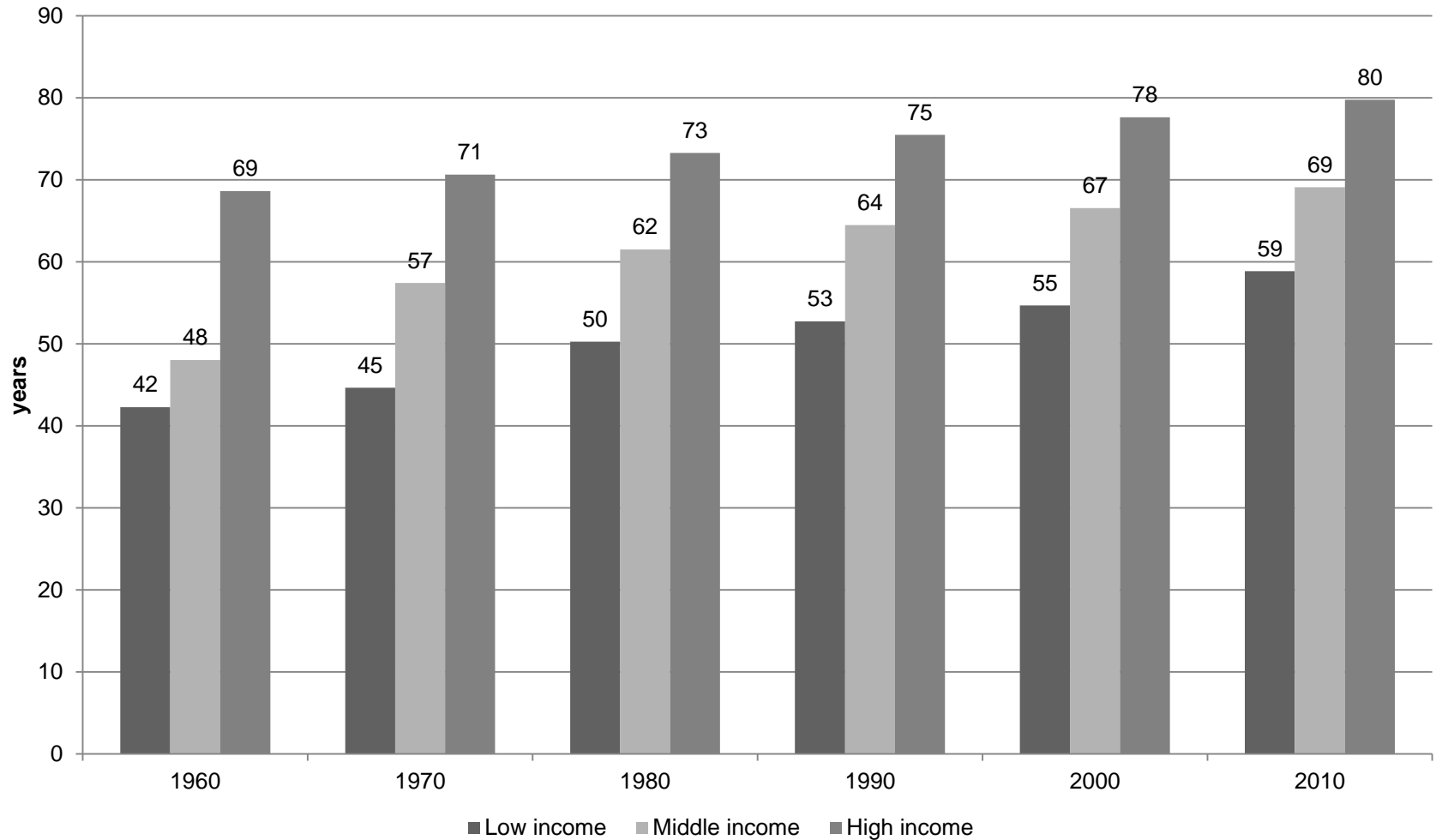
Human Development

- Major points concerning human development to note in Table 20.1
 - Achievements in health (life expectancy) and education (mean years of schooling) vary substantially
 - Within this sample of countries, life expectancy varies by a range of nearly 25 years
 - Mean years of schooling range by over 10 years.
- These dramatic different levels of human development result in a wide range of HDIs reported in the last column of Table 20.1
- Although there is a positive correlation between GDP per capita and life expectancy, important variation from the norm occur (e.g., Costa Rica)

Life Expectancy

- If there is a single-most important indicator of human development, it is life expectancy
 - Table 20.1 above reports life expectancy for a single year
 - Figure 20.3 reports life expectancy for 1970 to 2010 for low, middle and high income countries
- Increases in life expectancy for these three groups of countries have been 11 years for middle and high income countries and 17 years for low-income countries
- Despite the disparities of Table 20.1, there is a general improvement of life expectancy over time in most instances

Figure 20.3: Life Expectancy



Additional Human Development Indices

- The UNDP has introduced additional indices to supplement the HDI that are summarized in Table 20.2
 - The gender-related development index (GDI) and the gender-empowerment measure (GEM)
 - The GDI adjusts the HDI downward to account for levels of gender inequality
 - Human poverty indices 1 and 2 (HPI-1 and HPI-2) focusing on poverty in developing and developed countries, respectively
- In 2010, the HPI was replaced with the multidimensional poverty index (MPI) that attempts to capture multiple deprivations across health, education and standards of living

Table 20.2: Additional Human Development Indicators

Index	Health	Education	Standard of living	Social exclusion
HDI (through 2010)	Life expectancy	Adult literacy rate and enrollment ratio	PPP income per capita	
HDI (beginning 2011)	Life expectancy	Mean and expected years of schooling	PPP income per capita	
GDI	Female and male life expectancy	Female and male adult literacy rate and female and male enrollment ratio	Female and male PPP income per capita	
HPI-1 (through 2009)	Probability of not surviving to age 40	Adult illiteracy rate	Deprivation as measured by lack of access to safe water, lack of access to health services, and underweight children	
HPI-2 (through 2009)	Probability of not surviving to age 60	Adult functional illiteracy rate	Percentage of population below poverty line, defined as 50 percent of median income	Long-term unemployment rate
MPI (beginning 2010)	Malnutrition and child poverty	Lack of years of schooling and enrollment	Deprivations in electricity, drinking water, sanitation, flooring, cooking fuel and assets	

Structural Change

- Structural change is a third perspective on development
- Nobel Laureate Simon Kuznets noted that, as development proceeds, productive factors move out of lower-productivity activities into higher-productivity activities
- This insight is sometimes applied in a limited way
 - A standard claim has been that development is a process of resources moving out of agriculture and into manufacturing
- This limited application ignores potential productivity gains in agriculture
- It also ignores the important role of the service sector in development

The Service Sector

- As development proceeds, the service sector expands
- Part of the reason that the service sector expands is the role of *producer services*
 - These supply both agricultural and manufacturing sectors with important inputs.
 - Includes communications, transportation and logistics, and financial services
- These types of services grow in importance as development proceeds