

Core Economics: Concepts and Applications

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Chapter 9: Poverty and Economic Inequality

Table of Contents

Poverty and Economic Inequality	1
Chapter flow	2
US poverty measures	2
Measuring poverty in the US	3
US poverty rate methodology is flawed	4
Insights from estimated official and unofficial poverty rates	5
US poverty rate ignores regional differences	7
Eligibility limits for poverty-related subsidies in the US	8
Cities and States set their own limits	9
Low-income housing has its own measure	10
International poverty measures - World Bank	11
Measuring poverty worldwide -World Bank method	11
Current status of worldwide poverty -World Bank method	12
Regional differences	12
Botswana – a success story in Sub-Saharan Africa	15
International poverty measures - UN and Oxford	15
Comparison of World Bank and MPI results	16
Geographical concentration of poor people	16
Comparison summary	17
MPI Methodology	17
European Union poverty measures	19
EU poverty measurement system	19
EU Low-income criterion	22
EU Part-time work criterion	23
Material deprivation criterion	24
Measuring inequality	25
Intuitive measures of inequality	26
Share measures	26
Ratio measures	31

Statistical measures of inequality	31
Gini coefficient measure of inequality	31
Atkinson's measure of inequality	31
Two other statistical measures of inequality	32
What should we do about income and wealth inequality?	33
Kuznets hypothesis	33
Recent work of Professors Piketty and Saez	34
Recommendations of the World Inequality Report 2019	35
Key takeaways	36
Poverty	36
Inequality	37

Chapter 9

Poverty and Economic Inequality

In Chapter 1, we introduced the major economic variables in an economy. That list did not include the poverty rate. Why? That's because economic theory does not provide an explicit definition of poverty.

And, poverty does not figure significantly in the popular US economics textbooks related to Microeconomics and Macroeconomics.

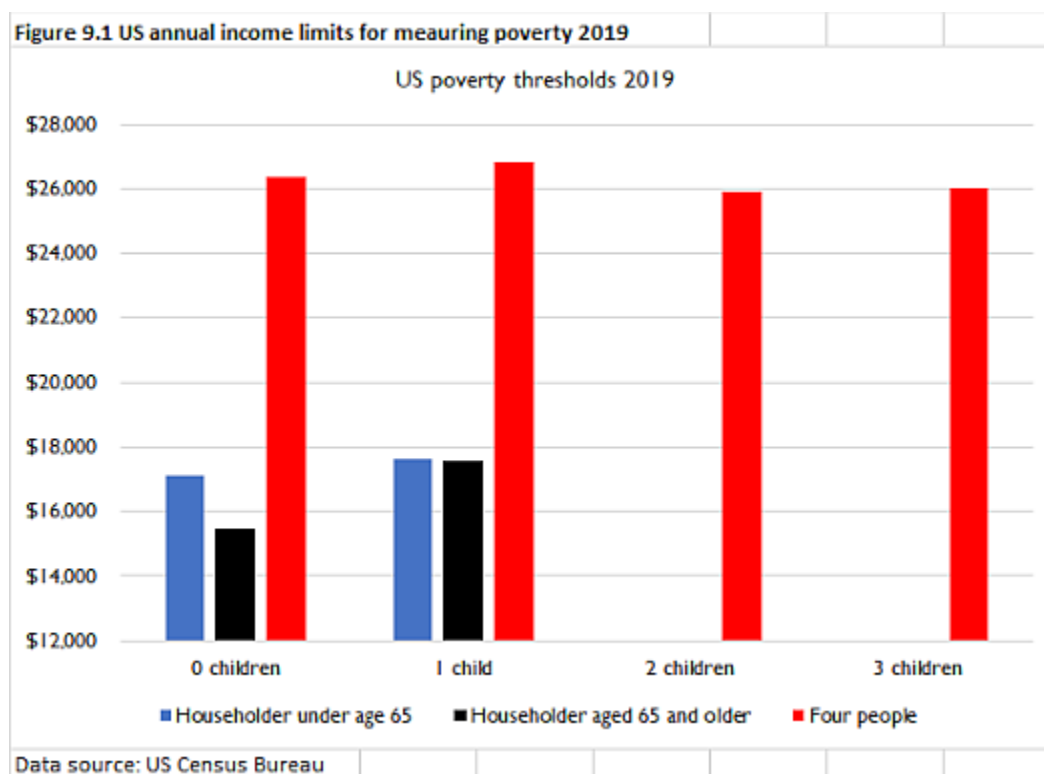
Nonetheless, **the poverty rate has great significance in developing countries, where poverty and hunger were widespread just a few decades ago.** In China, millions of people died in a famine in 1959-1961. While India did not have such a large number of deaths after it became independent in 1947, food shortages persisted for many years. Getting rid of poverty was a major social goal in these and other developing countries.

Europe does not have the kind of poverty seen in developing countries. However, the European Union (EU) uses a broad definition of poverty, and has a policy goal of reducing the poverty rate.

Income and wealth inequality are related to poverty, but the two are conceptually different. It is entirely possible for a country to reduce its poverty rate significantly but still increase income and wealth inequality. Further, two countries with similar income inequalities could have very different poverty levels. Hence, it is best to look at inequality separately from poverty.

Measuring poverty in the US

The US Federal government measures the poverty rate by income limits that are called **poverty thresholds**. These dollar limits, which you can see in Figure 9.1, vary based on age and number of children. **The income limits for households with a person older than 65 are lower than those of younger people.**



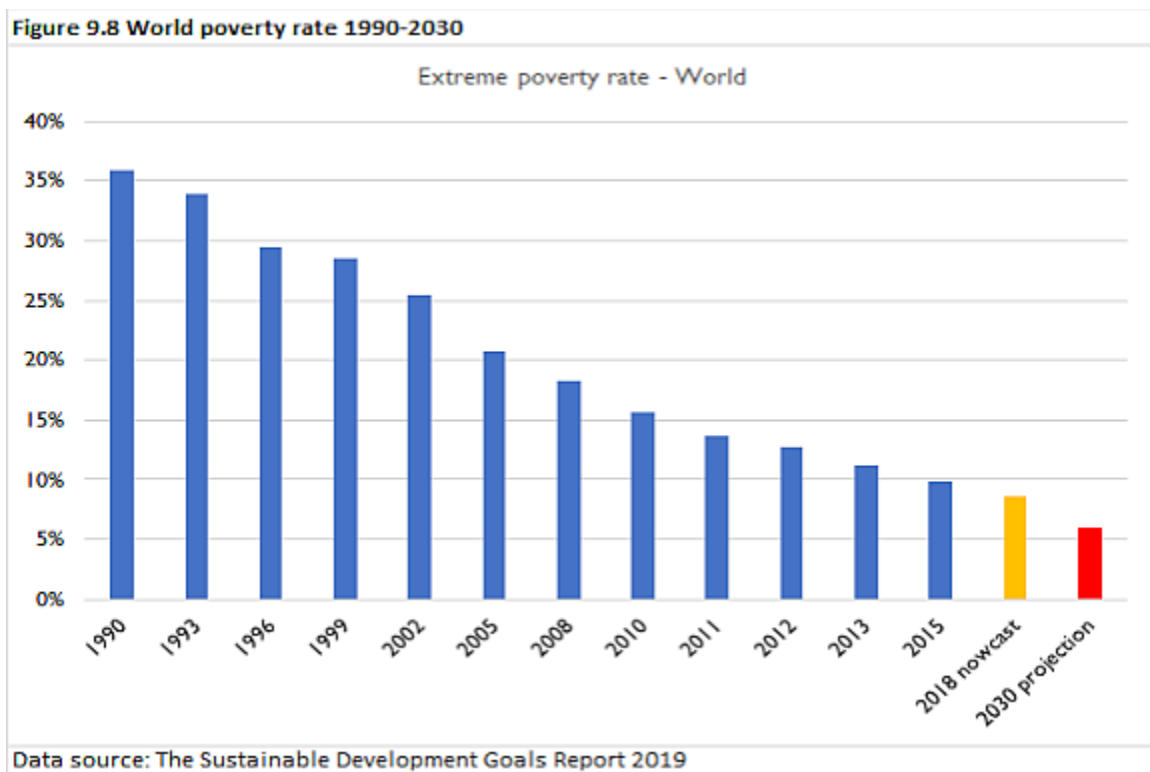
For example, in households with no children, the limit is about \$ 15,540 if a senior citizen is present. However, if there is no senior citizen present, then the limit is about \$ 17,100. Above these income levels, this household is not poor.

Children add less to the income limit than adults. For example, a four-person household with no children has a limit of about \$ 26,400. However, the limit is only about \$ 25,900 for a four-person household with two children.

Two underlying issues reduce the validity of the US estimates of the poverty rate. One issue relates to the methodology used. The other issue is a failure to recognize the regional differences within the US.

Current status of worldwide poverty - World Bank method

The United Nations publishes an annual report on the Sustainable Development Goals. This report for 2019 found that the **world is not on track to meet its poverty reduction target, with a projected worldwide poverty rate of 6% instead of the target rate of 3% by 2030**. You can see in Figure 9.8 that the poverty reduction rate has slowed down in recent years. **The report found that, at present, poverty is mainly a rural phenomenon.**

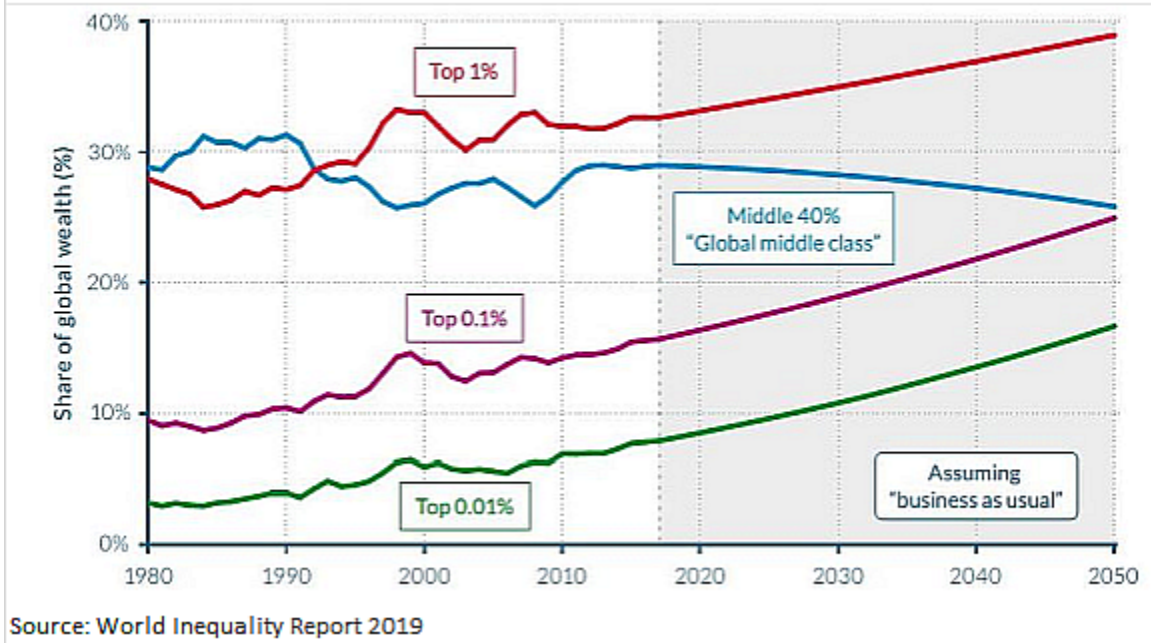


A World Bank report *Year in Review: 2019 in 14 Charts* published in December 2019 found that, in 2015, about 740 million people lived in extreme poverty.

Regional differences

There are significant regional differences in poverty rates and progress in reducing poverty.

Figure 9.19 Wealth shares – past and projected



The World Inequality Report found that in the US, the income share of the top 1% has increased over time while the share of the bottom 50% has declined, as you can see in Figure 9.20.

Figure 9.20 Share of top 1% and bottom 50% in the US 1980-2016



where the correlation is 0.89, which is low only in relation to the other high values.

Table 9.2 Correlation coefficients between US inequality measures 2000-2018

	Gini	Mean log deviation	Theil	Atkinson $\epsilon=0.25$	Atkinson $\epsilon=0.50$	Atkinson $\epsilon=0.75$
Gini	1.000					
Mean log deviation	0.969	1.000				
Theil	0.970	0.891	1.000			
Atkinson $\epsilon=0.25$	0.992	0.937	0.993	1.000		
Atkinson $\epsilon=0.50$	0.999	0.970	0.973	0.993	1.000	
Atkinson $\epsilon=0.75$	0.993	0.991	0.941	0.974	0.993	1.000

Data source: US Census Bureau

The different statistical measures do give different results, and these differences are meaningful when you are looking to get a detailed understanding of inequality. However, **if you are looking for just the big picture, it is reasonable to use the well-established Gini coefficient for this purpose.**

What should we do about income and wealth inequality?

Kuznets hypothesis

The conventional answer in economic theory is that there is no need to worry much about these inequalities. Prof. Kuznets, a Nobel Prize winner we discussed in Chapter 2, wrote a seminal paper in the 1950s. **Kuznets put forward a hypothesis, based on a pattern he found in the data, that inequality would initially increase with economic growth but would later decline with further growth.** People interpreted this to mean that it would be enough to focus on maintaining full employment, and let inequalities be resolved on their own over time.

This hypothesis continues to be discussed and debated in academic studies. And, Kuznets's hypothesis was later extended to environmental degradation. Meaning that the environment would degrade initially with economic growth but would