# Core Economics: Concepts and Applications

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# Chapter 1: What is economics about?

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## Chapter 1

# What is economics about?

The focus of this chapter is to give you a broad introduction to economic concepts and their applications.

We will look at the details in later chapters.

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Let's begin by asking what do economists do. As I see it, economists do broad two things. **First, they try to understand how the economic world works.** 

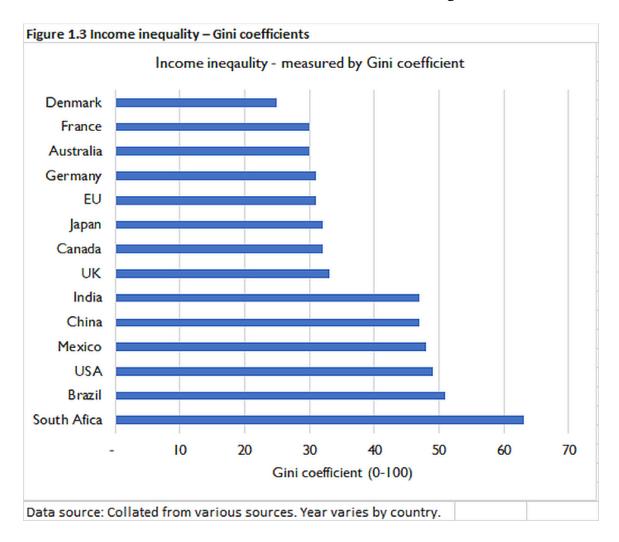
The economic world is complex. In a market or an economy, there are many relevant factors. If you try to look at all of them at the same time, you will find that it is hard to figure out the relationships between them. It's hard to see the forest when you are looking at the trees.

Economists avoid this problem by looking at a simplified version of the real world. We do this simplification by making assumptions. As we discuss later in this chapter, economists make assumptions because they allow us to focus on the main issues, features, and economic variables. Of course, we run the risk that some of our assumptions will give us misleading results. So, **it's an art to formulate your assumptions so that they are balanced – so that they simplify without giving you misleading conclusions.** 

And it remains an art even when you use mathematics. In economics, mathematics is just a tool that helps you to be clear, explicit, and precise. In the

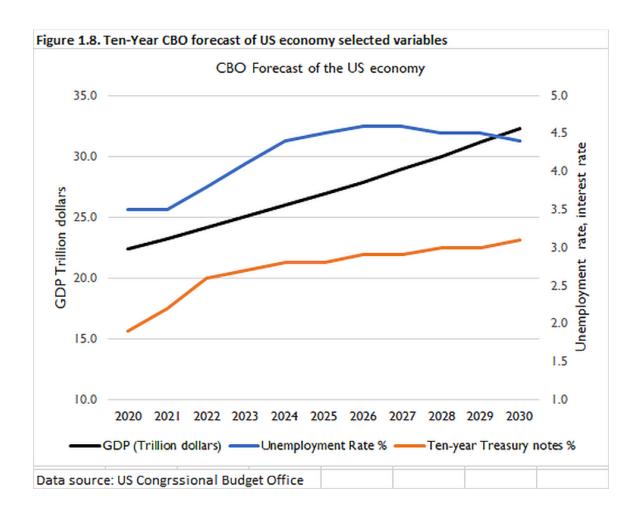
values of the Gini coefficient indicate more inequality and 0 implies perfect equality.

You can see the Gini coefficients of several countries in Figure 1.3.



In 2019, the US Gini coefficient was about 49, just a bit higher than China. Germany, the fourth-largest economy in the world, had a Gini coefficient of around 30. This indicates that incomes in Germany are less unequal than in the US and China. The Nordic countries generally have low Gini coefficients. For example, Denmark's Gini coefficient is around 25.

We will discuss income inequality in Chapter 9.



#### Analysis of policy changes

We now look at two separate policy changes. First, we look at the changes in tax rates enacted in 2017 under the *Tax* Cuts and Jobs (TCJ) Act. For this, we look at the CBO's analysis. Then we look at the increase in US tariffs in recent years. For this, we look at several studies.

#### Impact of Tax Cuts and Jobs (TCJ) Act of 2017 on the economy

When the CBO analyzes the effect of policy changes, the changes are reflected in the values of one or more exogenous variables in CBO's macroeconomic model. In 2018, the CBO postponed the release of its ten-year forecast from January to April to have the time to analyze the effects of the changes in tax rates enacted in 2017 under the TCJ Act. In brief, the TCJ Act reduced the tax rates for businesses and individuals, though it expanded the definition of taxable income.

These are the costs in the short term. If tariffs persist, then over time, US importers will look for and find ways to adjust their activities so that they have to buy less of the higher cost imports. Thus, in the longer run, the annual costs will be lower than the short-run costs. By how much? We don't know that from these studies.

# **Key Takeaways**

Economists do two broad things. One, they try to understand how the
economic world works. Second, economists use this understanding to
forecast the economy, and to figure out the impact of policy changes on
the economy.

### Prof. Akerlof's Nobel Prize-winning model

• Markets will work better when buyers and sellers have the same or similar information about the product. Hence, it is worthwhile to reduce information asymmetries.

#### Let's look more generally at economic models

- Economic models have endogenous and exogenous variables. A variable is endogenous if its value is determined by the actions of the economic participants in the economic model. Otherwise, it is an exogenous variable.
- Economic models have coefficients, which measure the strength of the relationships between the model's variables.

#### Let's look at the core fields within economics

• The core fields of specialization within economics are microeconomics, macroeconomics, international economics, and econometrics.