

# 1 Chapter 1

## 1.0

There are 6 main issues we will focus on in economics:

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**Definition 1.** *Productivity Growth*

Productivity is measured by  $Productivity = Output/Worker$

Incentives lead to productivity growth.

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**Definition 2.** *Population Growth*

Canada is open to immigrants, we have a low birth rate compared to past generations. No population growth leads to less workers, meaning workers must work harder. There are benefits and costs of having children.

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**Definition 3.** *Climate Change*

Cities in Canada and moving towards bodies of waters. Risk of submersion. Need to think about city design and allocation of people and resources.

**Example 1.1.** Farmers' harvests are affected by climate change. Impacts their income.

Economic impact of climate change is a big issue.

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**Definition 4.** *Technological Change*

Changing many industries, including education. Automation, job losses but also new job markets. Presently, might technological change may seem to be bad news but the future brings changes.

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**Definition 5.** *Protectionism*

Has been, unfortunately, on the rise over 20-40 years. Opposed to trade or comes with conditions. Countries have decided to tie trades to labour and climate conditions and standards. Free trade resists protectionism.

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**Definition 6.** *Inequality*

Highly undesirable, unless you are at the top of the distribution. Not within your control. Income inequality is problematic but has a deeper understanding. There is a difference between unfair and inequal. Need to analyze individual potential.

## 1.1

**Definition 7.** *Economics is a social science that studies how we allocate limited resources to satisfy unlimited wants.*

**Definition 8.** *Social science is the study of people.*

Is the allocation of resources fair? just? efficient? By resources we mean:

- Land (T)
- Labour (L)
- Capital (K)

Note: Money is not a resource, it is a means of making exchange easier. With Land, Labour or Capital you could make use of them on a island alone.

These resources are limited or scarce but **our wants are unlimited**. Even billionaires give away their money for their wants. Scarcity → Choice.

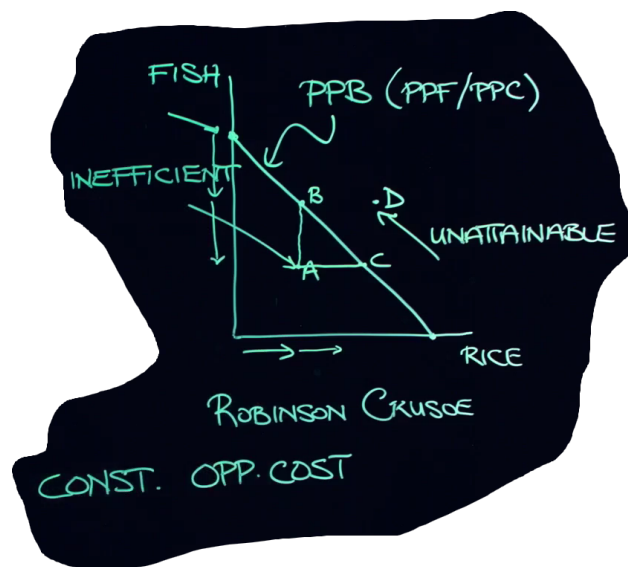


Figure 1: Robinson Crusoe<sup>a</sup>'s Constant Opportunity Cost

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<sup>a</sup>Story of a life of comfort to a solitary existence on a deserted island

Naturally we try to equalize the values of rice and fish (EQUITY). If we used all of Crusoe's resources we would get a linear line (PPB/PPF/PPC meaning Production Possibility). Say that point A is below the line. This means it is potential with his resources but we say it is **inefficient**. Same with point B and C but they maximize his resources. Point D is above the line and is **unattainable**, meaning he cannot achieve it.

**Definition 9.** *Opportunity Cost is the value of the next best alternative forgone.*

**Example 1.2.** If Crusoe has maximized his use of resources, to acquire more rice, Crusoe must give up some fish. The cost is constant in this example.

*Note: In real life, a constant opportunity cost is generally not realistic.*

Imagine Crusoe's opportunity cost is no longer constant but increasing. The graph of his resources would be a slope.

Crusoe is able to give up the inefficient methods of obtaining fish/rice for the other initially. To obtain more

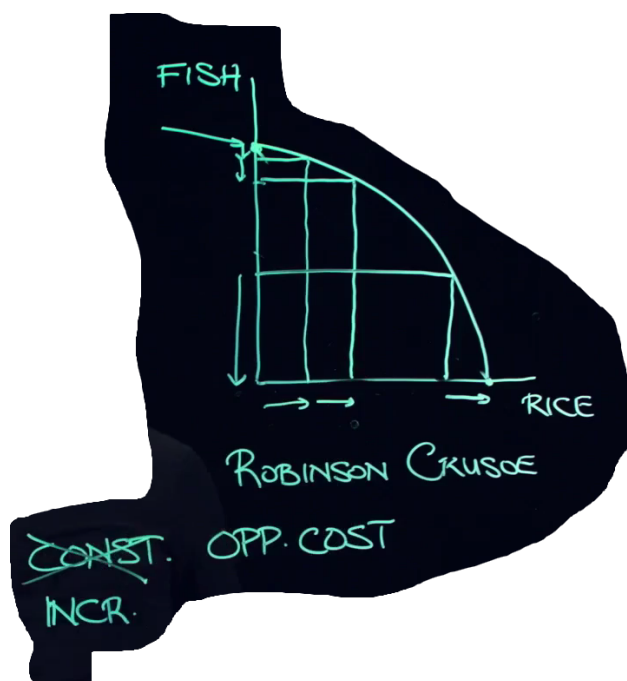


Figure 2: Robinson Crusoe's Increasing Opportunity Cost

and more of the other, he must give up more and more of the other. This is the law of increasing opportunity cost.

## 1.2

**Definition 10.** *Market Economy is an economy where resources are allocated through the decentralized decisions of many firms and households as they interact in markets for goods and services. The economy is characterized by being self-organizing and efficient. We assume that the agents of the market are self-interested and incentivized.*

The Three agents are individuals, firms and government and are all interested in maximizing something. Individuals maximize utility (happiness), firms maximize profit and government maximizes social welfare (in an ideal world).

**Definition 11.** *Incentives are rewards or penalties that motivate behaviour.*

**Definition 12.** *Free Trade is the policy of not discriminating against imports from other countries and relying on the market to allocate resources.*

**Definition 13.** *Protectionism is the policy of protecting domestic industries against foreign competition by imposing tariffs, quotas and other trade barriers.*

**Example 1.3.** Let us focus on two agents: individuals and firms and three markets: goods and services, financial and factor. Firms provide goods and services to the goods and services market and expect revenue.

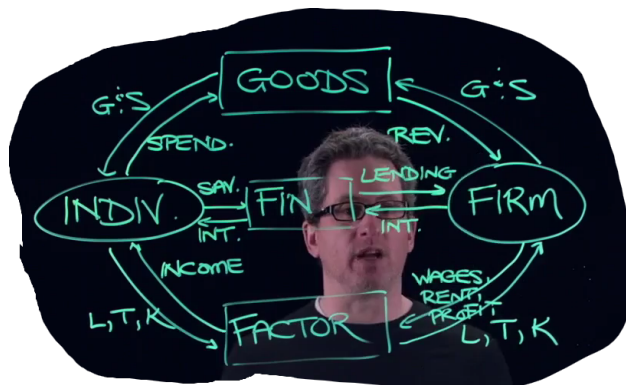


Figure 3: Circular Flow of Income and Expenditure

The factor market provides firms with resources (T, L and K) and expect wages, rent and profit. Individuals receive income (wages, rent and profit) from the factor market and provide resources (T, L and K). Individuals spend their income on goods and services in the goods and services market. Individuals save their income in the financial market and expect interest. Firms lend from the financial market and the market expects interest.

### 1.3

Market Economy is generally the most efficient way to allocate resources. However, there are some limitations to the market economy.

Alternatives to the Market Economy:

- Traditional Economy: Resources are allocated based on inheritance and custom.  
"We've always done it that way."
- Command Economy: Resources are allocated by a centralized authority.
- Mixed Economy: Resources are allocated by a combination of market, tradition and command.

Gouvernement's Role in the Market Economy, correcting where the market fails:

- Institutions
- Legal System
- Courts
- Justice
- Public Goods - Goods that cannot be efficiently provided by the market.