ECON-102: Principals of Microeconomics

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1 Unit 1: Fundamental Concepts

1.1 Section 1: Economics

In general terms, economics is defined as the study of how we can best increase a nation's standard of living and citizens' happiness with the resources that we have available to us.

Standards of living include:

- cars
- houses
- leisure time
- access to health care
- cleaner air

1.1.1 Marginal Benefit & Marginal Cost

Marginal benefit and marginal cost can be though of as a positive cause-and-effect in a business environment, with the benefit being the effect and cost being the cause. When your marginal benefit is greater the marginal cost, the more likely a positive investment is at play. For example, you may buy an expensive car for your long commute, but it has the best MPG in the current car market and is heavily relaiable (maringal benefit)–potentially outweighing the initial cost (marginal cost).

1.1.2 Difference between Macro- & Micro- economics

Macroeconomics focuses on the wider concepts that play a role on the entire economy. Components of this include:

- national unemployment rate
- inflation rate
- interest rate
- federal government budgets & fiscal policies
- economic growth
- Federal Reserve System & monetary policy
- foreign exchange rates
- balance of payments

Microeconomics deals with the smaller concepts of an economy such as:

- supply and demand of individual goods and services
- price elasticity (sensitivity) of goods and services in demand
- production
- cost functions
- business behavior and profit maximization
- income inequality & distribution
- effects of protectionism (tarrifs, quotas, trade restrictions, etc.)

If macroeconomics is studying a forest, microeconomics is studying the individual trees.

1.2 Section 2: The Production Possibilities Curve

1.2.1 Production Choices

Production choices are the idea that if you have limited resources to produces various products, you want to optimize the resources at hand so that you can make the most of the available resources, not underuse, and not over-promise a production value that is not achievable.

1.2.2 Points on the Curve and Trade-Offs

In a given graph, any values that lie on the curve means that the operating cost of the products are being used as efficiently as possible. The idea is that the output cannot increase if it is limited by a constant resource and technology. Scarcity talks about the limited resources at hand–which directly correlates with the Production Possibility Curve. If a value lands on the curve, increasing the production of one good/category will be at the expense of other goods/categories. Points E, C, B, A, and D depicted in firgure 1 represents the most optimized products that can be produced with resources at hand. It also shows varying priorities for both Guns and Roses productions.

Any points that fall inside the curve (to the left of the curve, i.e point G in figure 1) shows an inefficent use of resources to produce products. Some reasons for this could be using fewer than the available resources (unemployment), or using all resources but inefficiently (underemployment).

Points that fall outside the curve (to the right of the curve, i.e point G in figure 1) shows a combination that cannot be achieved with the available resources. This value does not mean point F will never be achievable– the economy may grow and F may fall on or inside the Possibility curve, but at the current analysis of the economy, it will not be possible. Increases in technology and/or resources can help contribute to the growth of the Production Probability Curve, which can help reach point F in the future.

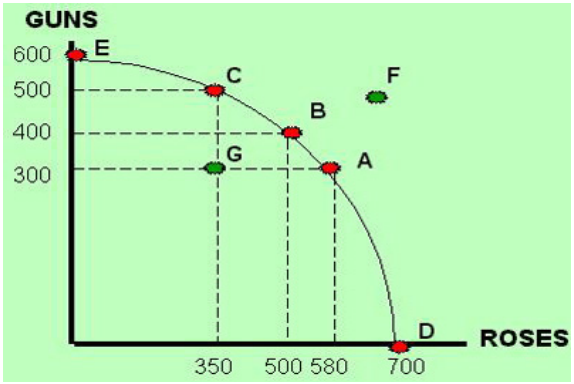

Figure 1: Example of a Possibility Curve of Guns and Roses production

1.3 Section 3: Economic Growth

Economic growth occurs when the economy realizes greater production levels. Essentailly, when either the number of resources increase, or the way we use resources becomes more efficent, is the only time the curve can shift outwards.

In short, economic growth is made possible by advances in technology and/or increase in resources.

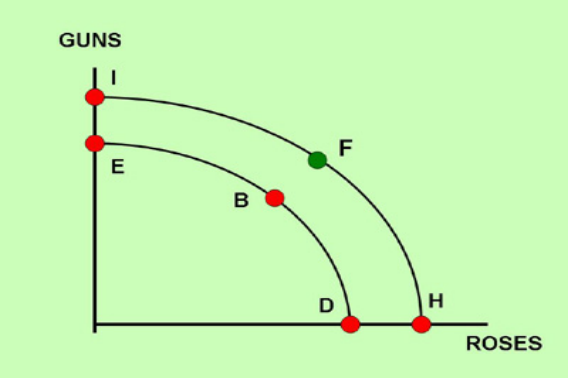

Figure 2: Example of how economic growth now reaches point F

1.3.1 Increase in Capital Goods

If a country is producing at full employment, more capital goods can be produced only inf the country produces fewer consumption goods. A few ways governments can encourage more production of capital goods can be through tax breaks for the production of capital goods, or increasing taxes on the production/sale of non-capital (consumption) goods.

1.3.2 Advances in Technology

Advancements in technology that contribute to economic growth are usually due to entrepreneurs who have incenteives to produce more efficiently and lower their costs. When this model is successful, this usually drives the entrepreneur to continue to improve their models to become more efficent with both the work/effort needed, and the money saved. Governments that allow entrepreneurs to keep most of their profits and tax them less has been shown to produce greater rates of technological growth. In addition to new technology, the more human technological advancements made (greater education, training, skills, etc), the higher the production probability curve also grows.

1.3.3 Economic Growth and Economic Systems

There are various factors that can lead a country to economic growth and downfalls. For example, in a capitalist country, having a government that

supports just reward systems (taxes and regulations that reward work and entrepreneurship), just legal system, infrastructure, national security, and protection of individual property rights can all lead to great economic growth. Also, political incentives can also lead to economic growth. For example, India's switch to international trade in the 90's has led to greater opportunities, and the same for China in the 80's when they adopted the free market elements.

Countries that practice communistic or command economy policies have seen signifigantly less economic growth due to the sheer control the government has over resources and entrepreneural incentives.

In third world countries, instability with governments, corruption, civil strife, national security, and uncertainbilities make is extremly difficult to have a steady, growing economy.

1.3.4 Conditions for Economic Growth

Countries with the highest per capita earnings are characterized by all or most of the following:

1. **Strong private property rights.**

   this is a test.