

# Principles of Macroeconomics

## Module 6

Productivity and Economic Growth

# Productivity

***Productivity – the amount of goods one worker can produce in one hour***

- Explains the differences in living standards across the world
- Determines economic growth and economic well-being

# Productivity and Growth

- When a nation's workers are very productive, real GDP is large and incomes are high
- Higher productivity means the economy is producing more goods and services
  - The economy has more to sell and therefore incomes are higher on the aggregate
  - Higher incomes are correlated with better education systems, better health care, better access to technology, leading to higher living standards

## **3 Key Determinants of Productivity:**

- Physical capital per worker
- Human capital per worker
- Technological Knowledge

# Determinants of Productivity

## **Physical Capital per worker (K/L)**

- With more machines available in the country, each worker can produce more
- Farming in US vs. farming in Zambia

## **Human Capital per worker (H/L)**

- Skills, education, training and technical knowledge
- With a more educated work force, a country can produce a wider range of goods

# Determinants of Productivity

## **Technological Knowledge**

- Access to latest technology
- Use of best practices in production
- Advancement in knowledge that boosts productivity

# Productivity and Economic Growth

- Improvements in productivity yield higher economic growth
  - Example: China over the last few decades
  - Huge improvements in productivity yielded growth rates of 10% + each year
- Comes of point of diminishing returns
  - Investment in K/L, H,L Technology pay off
  - Reach a tipping point →
    - Growth slows down

# Economic Policies to Enhance Growth

## **1. Promoting savings and investment**

- Productivity will increase as capital increases
- Requires more investment
- To invest more today – need to consume less today and save!
- Greater savings today → greater investment today → greater growth in the future!

# Economic Policies to Enhance Growth

## 2. Attracting investment from abroad

- **Foreign direct investment:**  
a capital investment (e.g., a factory) that is owned & operated by a foreign entity
- **Foreign portfolio investment:**  
a capital investment financed with foreign money but operated by domestic residents



# Economic Policies to Enhance Growth

## **3. Promoting Universal Education**

- Promoting universal education increases human capital of the whole population
- Better educated population – everyone is more productive

## **4. Ensuring Proper Access to Health and Nutrition**

- Healthy people are more productive
- Access to medicine, doctors and nurses is crucial to ensure health
- Access to food and clean water – essential for the well-being of the population

# Economic Policies to Enhance Growth

## **6. Promoting Free Trade**

- Improves productivity by allowing a country to specialize in a goods they have a comparative advantage
- Promotes growth and access to the global market

## **7. Encouraging Research and Development**

- Access to technology – essential in increasing productivity
- R&D promoted by governments

# Key Takeaways

- Differences in productivity explain the differences in living conditions across many countries
- Human Capital, Physical Capital and Technological Progress are essential to boosting productivity
- Governments can help productivity through promoting growth-enhancing policies