# ECONOMICS in the LONG RUN

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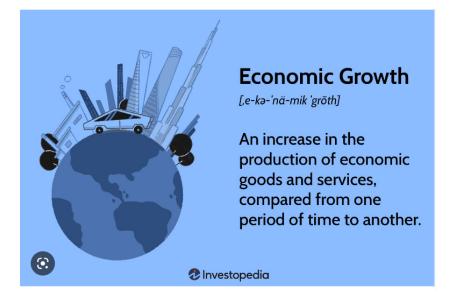
#### INVESTMENTS AND FINANCIAL PLANNING



"My short-term financial goal is to survive until Tuesday.

My long-term financial goal is to survive until Friday."







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# What Should Students Understand About Long Run?



- 1. What is Long Run?
- 2. Why should society be more concerned about Long Run than Short Run?
- 3. What contributes to Long Run?
- 4. How can politics affect Long Run?
- 5. How does Fiscal Policy affect Long Run?
- 6. How does the Federal Reserve affect Long Run?
- 7. How can student envision themselves in the Long Run?

### **EconEdLink**



- Economic Growth Video and Quiz
- EconEdLink Economic Growth Video and Quiz

- Economic Data Lesson by Scott Wolla
- EconEdLink Economic Data Lesson: Economic Policy Options

- How is Our Economy Doing?
- EconEdLink How is Our Economy Doing?

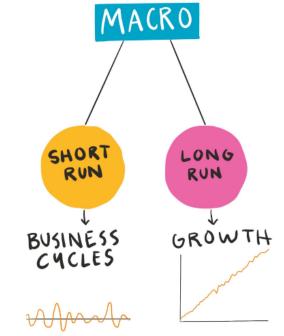
#### Resources- MRU-

Growth Rates Are Crucial | Marginal Revolution University (mru.org)









@unofficiallyecon



## **Production Function**

## Short Run

Short period of production – some of the inputs cannot be varied because there is not enough time.

For example: for an employer it is easier to add new labor than new equipment.

Labor is an input factor that can be varied – which impacts production.

## Long Run

There is enough time in this period of production for managers to vary all the inputs used to make a product – not just labor.

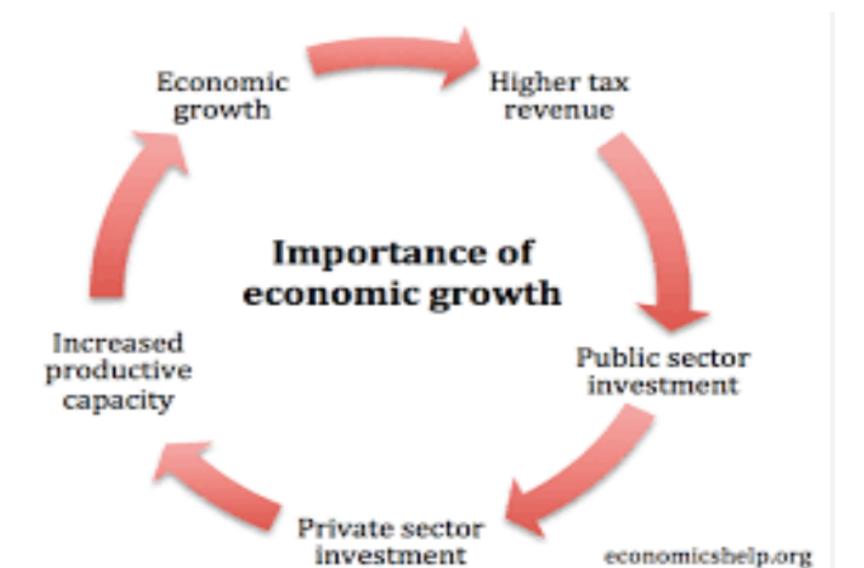
For example: new equipment, as well as labor, can be added to the existing setup to boost production.



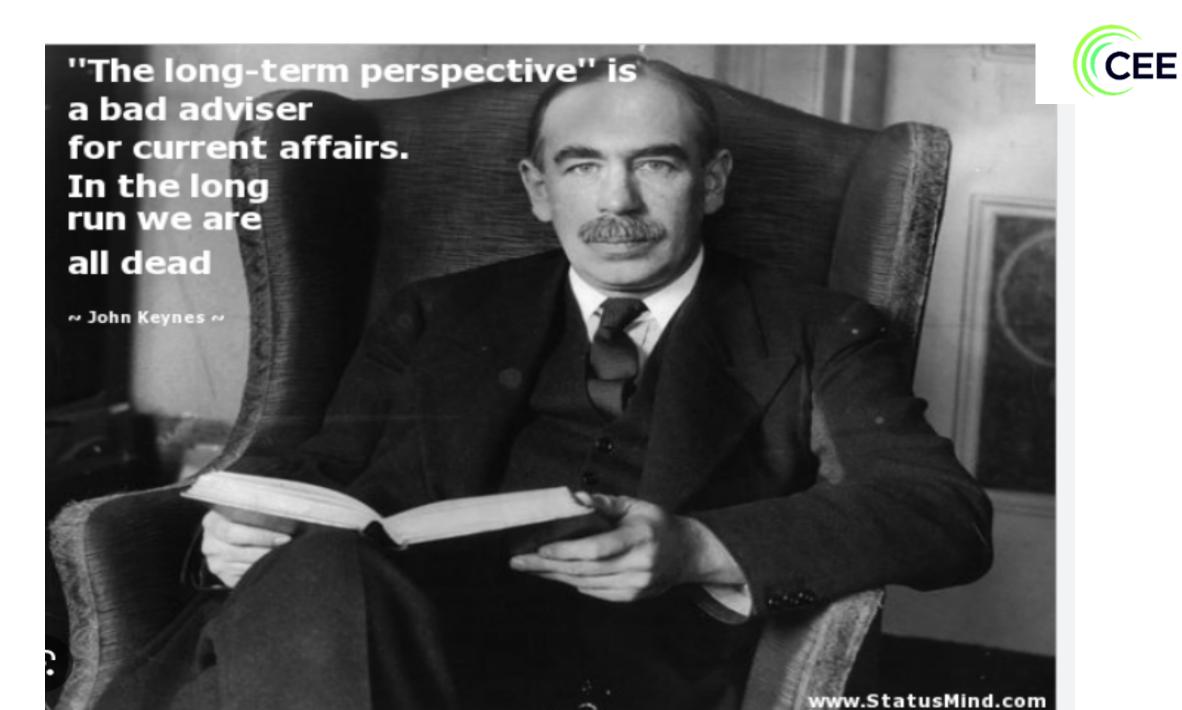
## **Definitions of Long Run**

The long run is a period of time in which all factors of production and costs are variable. In the long run, firms are able to adjust all costs, whereas in the short run firms are only able to influence prices through adjustments made to production levels.( Microeconomics)

In Macroeconomics, the long run is the period when the general price level, contractual wage rates, and expectations adjust fully to the state of the economy. This stands in contrast to the short run, when these variables may not fully adjust.





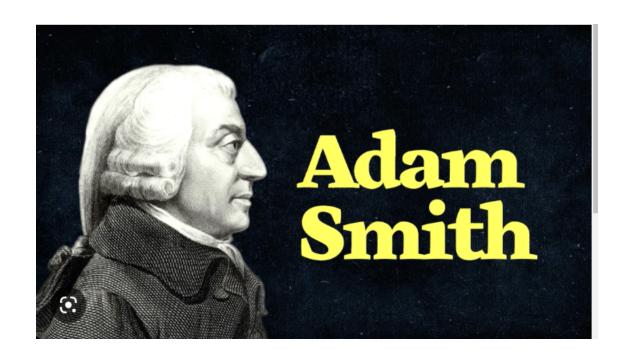








"We can't afford long term planning. We may not even be here tomorrow."





Tomorrow the sun will rise and shine According to Adam Smith the economy will self-correct and all will be fine in the Long Run.



### **Economic Growth and the Determinants of Productivity**

An economy's productive capacity is determined by the quantity/quality of its productive resources and technology. In the short run an economy's total productive capacity is fixed, but in the long run an economy can increase its capacity to produce goods and services by increasing the quantity and/or the quality of its productive resources or through technological progress.

An economy's productive capacity is determined by the quantity and quality of its resources, including:

- Human resources: labor resources and human capital. Human capital refers to the education and skills possessed by labor resources. Education is an investment in human capital because it increases workers' ability to produce.
- Natural resources: the gifts of nature that are useful in producing goods and services.
- Capital goods: goods (e.g., equipment and machinery) used to make other goods and services.
- Technology: technology refers to the way that resources are combined to produce goods and services. Technological progress means that there is a new and better way to produce. Technological progress occurs when production becomes more efficient—that is, when more output can be produced using the same inputs.





Education and development of specialized skills







Working capital – such as stocks of component parts



Major Transport Infrastructure such as the Underground



Bulky units of capital enables mass production to happen



Agriculture drones used to check crops and spray fertiliser



Giant servers used for cloud computing services



International air traffic control networks



## **Capital Goods**



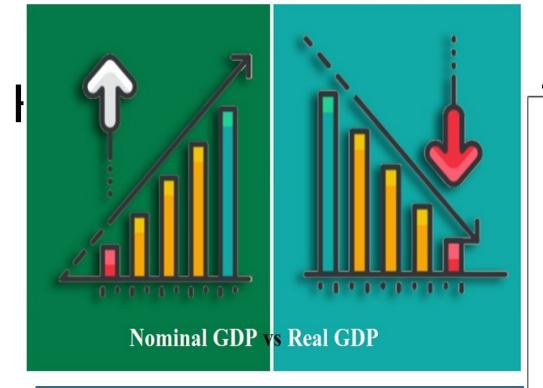
### Types of Natural Resources





## Natural Resources

 These are the gifts of nature. You have more resources such as land, water and mineral rights → you will have more economic growth.









# Real GDP Per Capita = Real GDP Population







## Government/Fiscal Policy & Long Run

- Government funded Research and Development
- Investment tax credit
- Research and Development tax credit
- Government job training programs
- Funding for Education

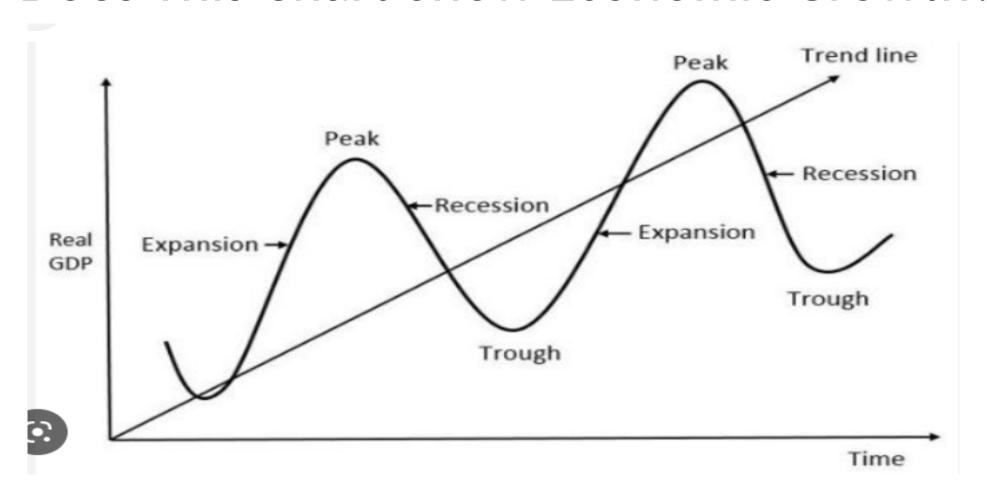






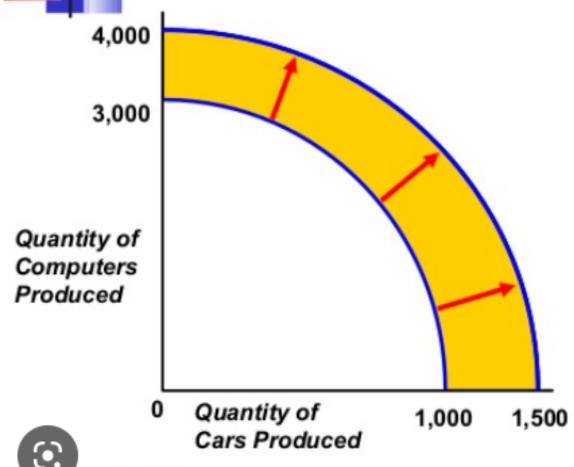


### Does This Chart Show Economic Growth?



Trend line shows Economic Growth

# Economic Growth—Long Run



- Over time an economy can grow
  - More labor and capital
  - Technological progress
- What happens to the PPF?
- Shifts outward!
- Previously unattainable levels of production...

...now become attainable



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## Federal Reserve Bank & Long Run

# Low Interest rates allow the private sector to A. Invest in capital stock

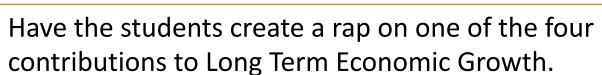
- B. Spend money in Research and Development
- C. Become more efficient and specialize in products and services
- D. Further their education opportunities
- E. Plan for the future with growth in mind
- F. Become more efficient and specialize in products and services

## Class activity

- Long Run Growth
- •Line up your students one behind another in the center of the room or in the center of the hallway.
- •Explain to them that they represent LRAS. They are going to react to the following statement by:
  - Moving to the left (shows contraction)
  - Moving to the right (shows growth)
  - No movement at all
- More discoveries of natural gas have been found in Connecticut
- The US exports have increase
- Education is presently limited because of the online learning experience.
- If the pandemic continues for a year, high school children will be behind in their studies
- More people are entering the workforce.
- The government is increasing regulations for various businesses.
- OPEC has stopped drilling for oil for the year

# Create a RAP

Human Resources Natural Resources Technology Capital Goods



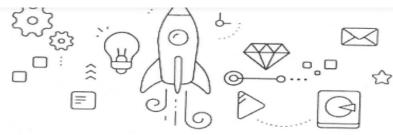
- CEE
- 1. Divide the class into groups 4-5 students. Assign each group a contribution to LR Growth. (Or have them select)
- 2. The rap should be at least 10-12 lines
- 3. Give the students 15-20 minutes.
- 4. You can play a beat on the computer to get them in the mood
- 5. Present and the share the raps on your class page.
- 6. I had some of them present on the annoucements Once a week.

# RAP ON LONG RUN (Based on the CEE page on LR growth)



#### •RAP FOR LRAS HUMAN RESOURCES

- •Yo yo yo study economics and it's a sure bet
- •You can't accomplish anything without a little sweat
- •If you wanna start a business, I'm doin' you a favor
- •You can't do everything, you gotta have labor
- •It's not just people, its only where you start
- •You don't just hire anyone, they gotta be smart
- •They gotta have skills and knowledge in their head
- •If you wanna have a shot at getting that bread
- •So help 'em with their training, improving what they know
- •And the overall economy is really gonna grow





#### STARTUP IDEAS

#### INNOVATION:

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Innovation is what drives an economy. In te past 16 years (your life span) there has been numerous innovation developments. We will be looking at various innovations in the USA to appreciate the advances in making our lives better. This will be counted as a project/ alternative assessment. Lt your creativity emerge as a poster which will include the following:

#### Part 1 Project

You will research in ONE area a d compile this on your poster of  $11 \times 17$ 

- Description of the innovation
- 2. Explain how it has changed the condition of society
- 3. What other innovation did this help create?
- 4. Create a picture ( draw or copy)

Here are the area in which you will select

- Medicine
- 2. Entertainment/ Music
- Sports
- 4. Production/ Manufacturing/ Distribution
- Education
- 6. Energy



IS END OF MY

POWERPOINT PRESENTATION

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