

3.3 Macroeconomic Objectives

Economic Growth

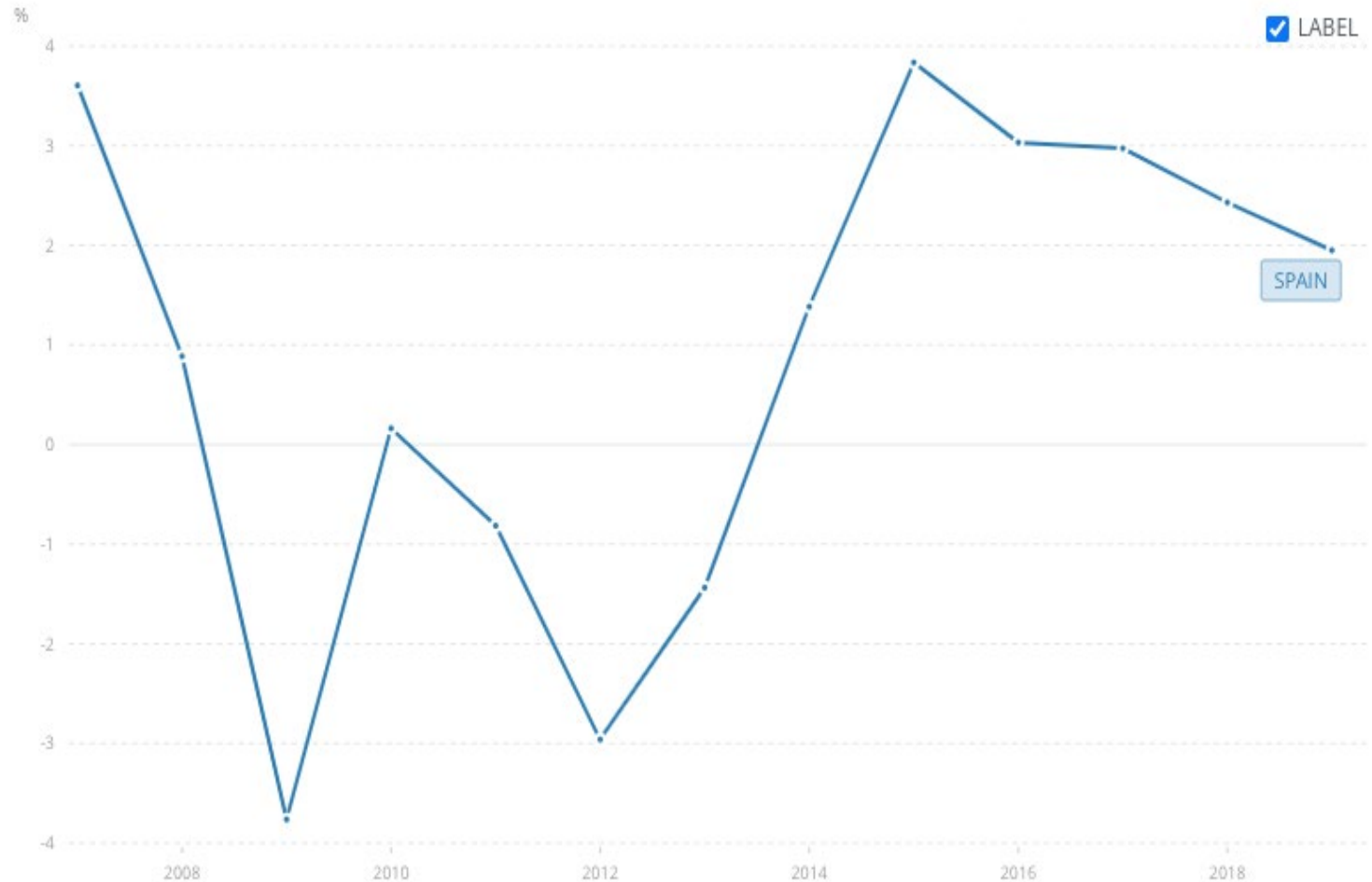
Economic growth is an increase in real GDP over a period of time and is usually expressed as a percentage change in...

- Real GDP
- Real GDP per capita

% change in real GDP =

$$\frac{\text{final value of real GDP} - \text{initial value of real GDP}}{\text{initial value of real GDP}} \times 100$$

GDP Growth Rate for Spain



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Calculating economic growth

1. Suppose an economy had real GDP per capita of of €1579 in 2017, €1611 in 2018 and €1597 in 2019.

Find the rate of economic growth...

- a) In 2017 – 2018
 - b) In 2018 – 2019
 - c) Did the economy experienced negative growth?
2. If an economy's real GDP grew by 2.2% and its population grew by 1.5% during the same year, how much did the real GDP per capita grow?

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Short-term and long-term growth

Type of Growth	AD-AS Model	PPC Model
Short-term	Increase in AD Increase in SRAS (New classical model)	Increase in actual output
Long-term	Increase in LRAS or Keynesian AS	Increase in production possibilities (capacity)

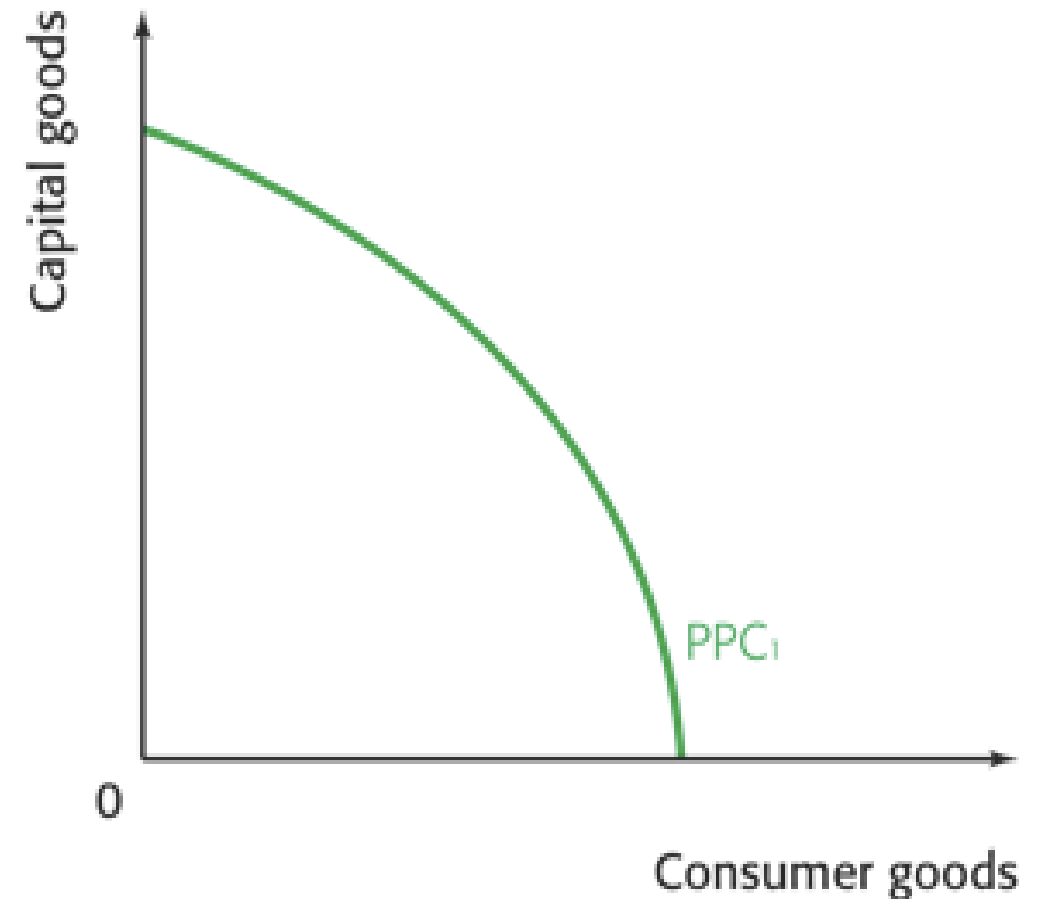
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Economic Growth

Economic growth refers to an increase in real GDP over a period of time.

Production Possibilities Curve (PPC) shows the combination of maximum output that can be produced by an economy with fixed resources and technology provided there is

- maximum employment of resources
- productive efficiency



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Economic growth is caused by:

- Reductions in unemployment
- Increase in productive efficiency

 **How would this be illustrated in a PPC diagram?**



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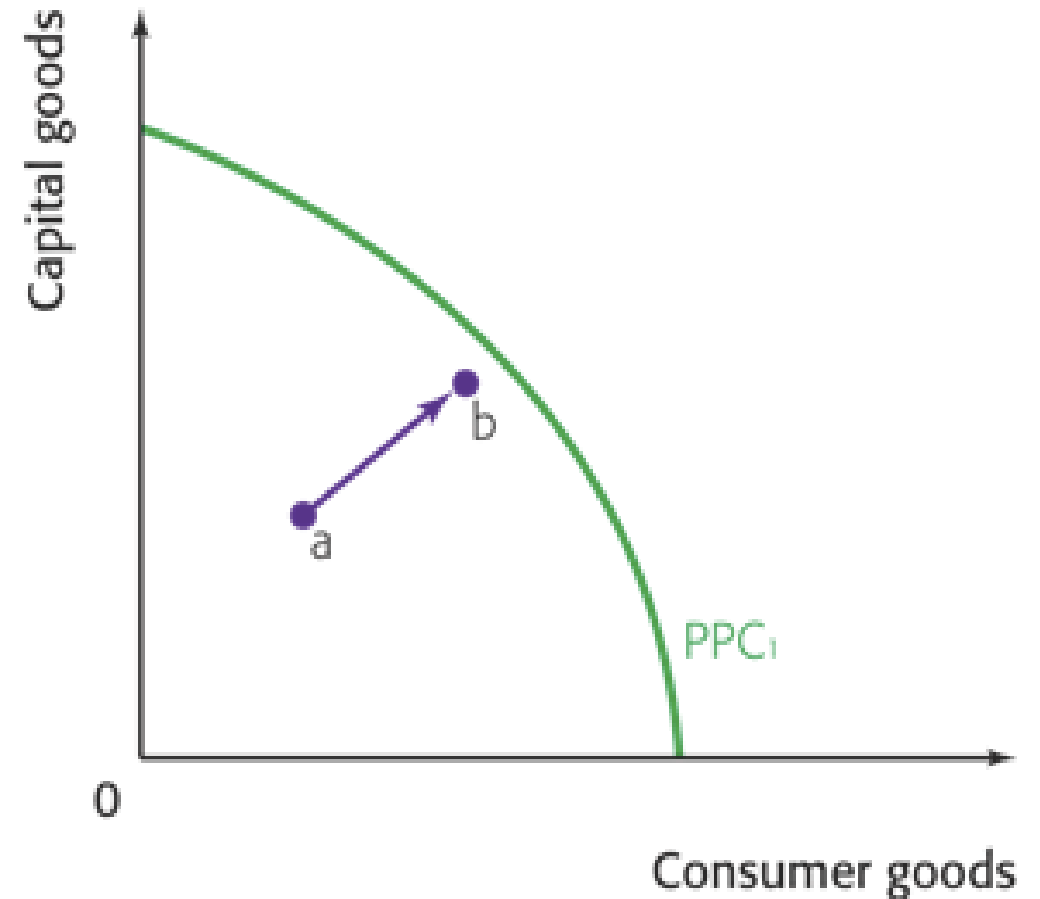
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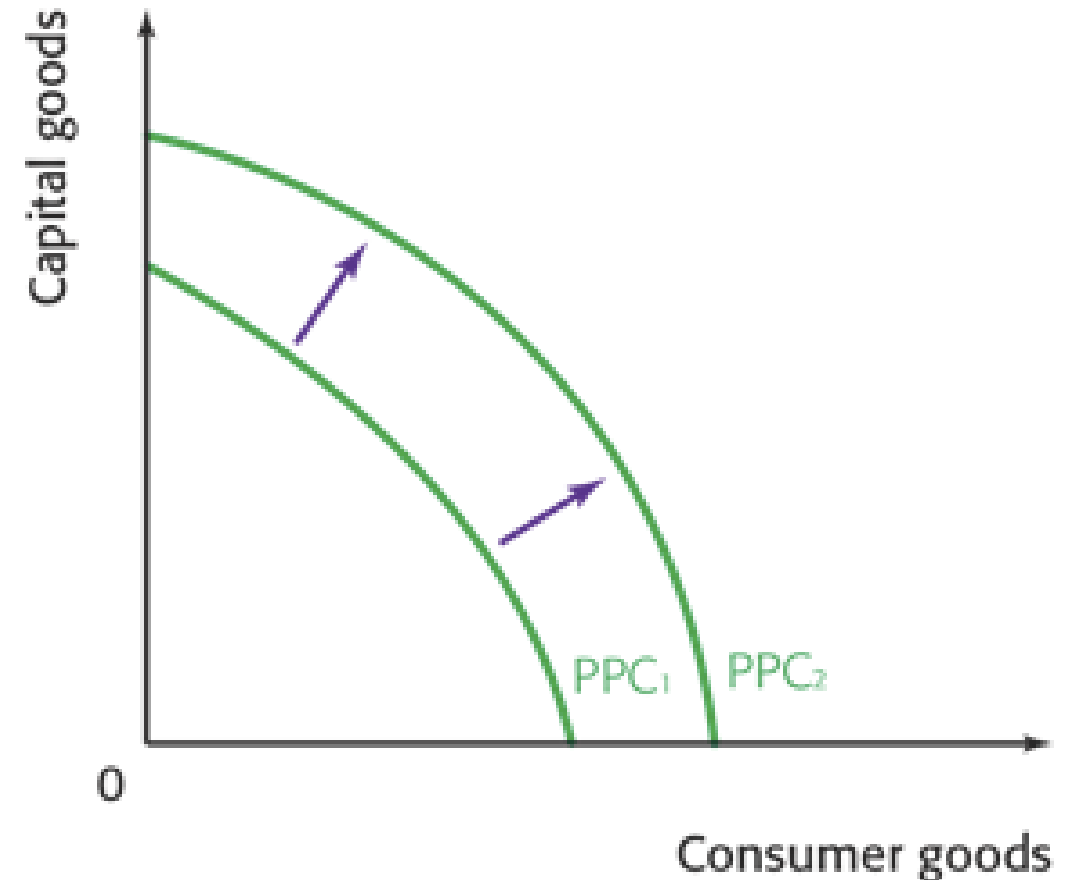
Economic Growth

Increases in Potential Output

Economic growth can also be seen as an increase in **production possibilities** (potential output) caused by increases in quantity or quality of resources.

Example:

- Population growth (quantity of labour)
- Higher educated labour force (quality of labour)



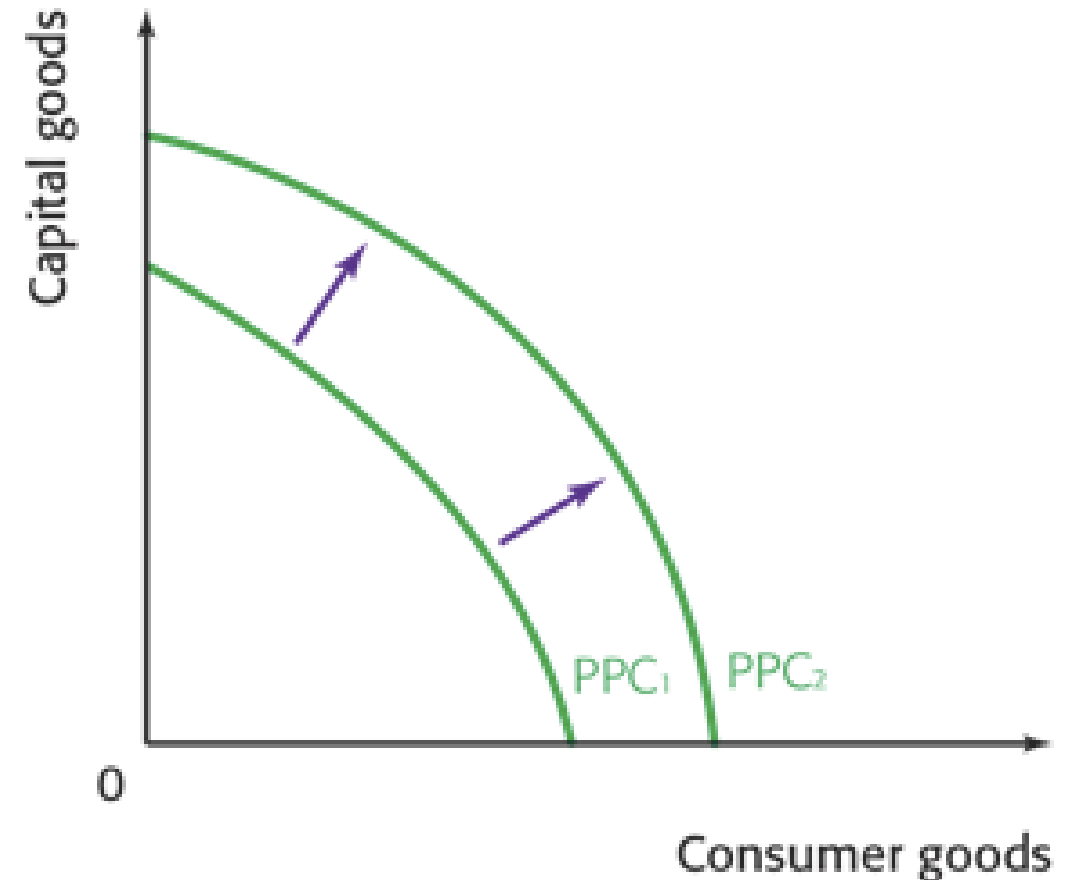
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As its **PPC** increases, an economy must ensure unemployment and inefficiencies are reduced to ensure **actual output** continues to grow.



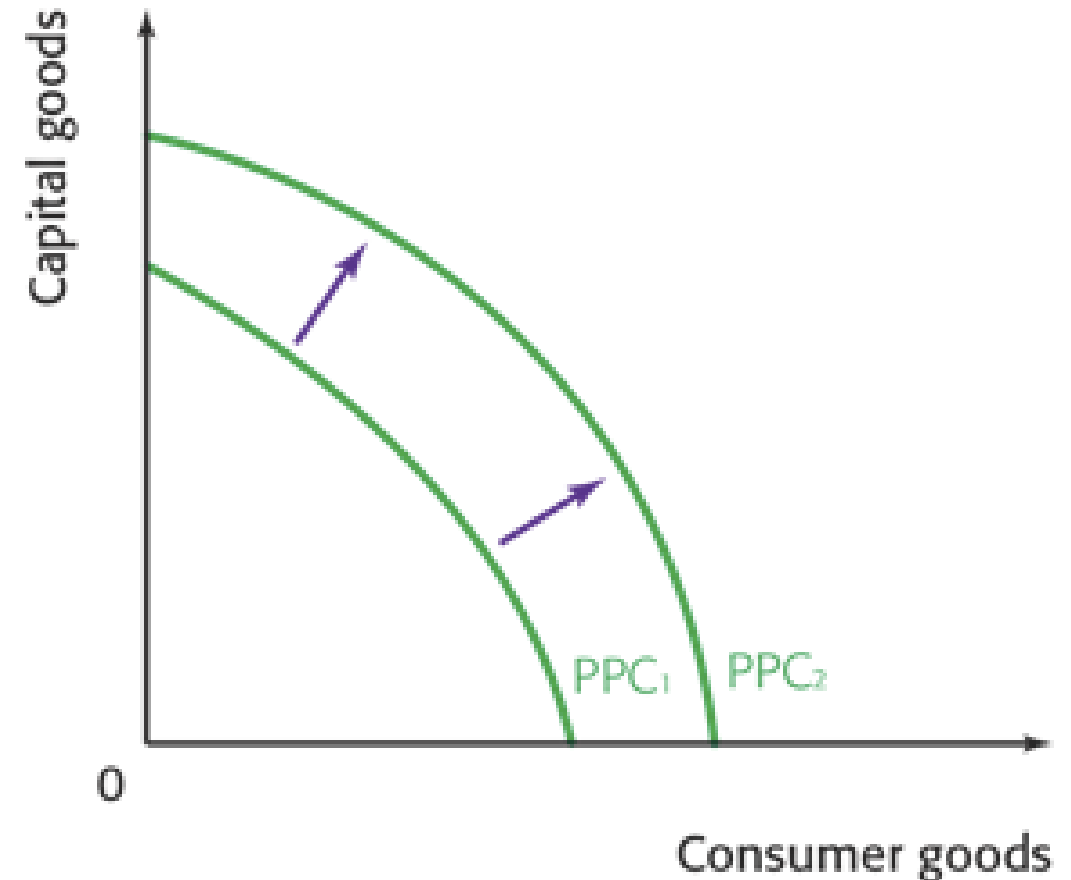
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 **What if there is negative growth?**



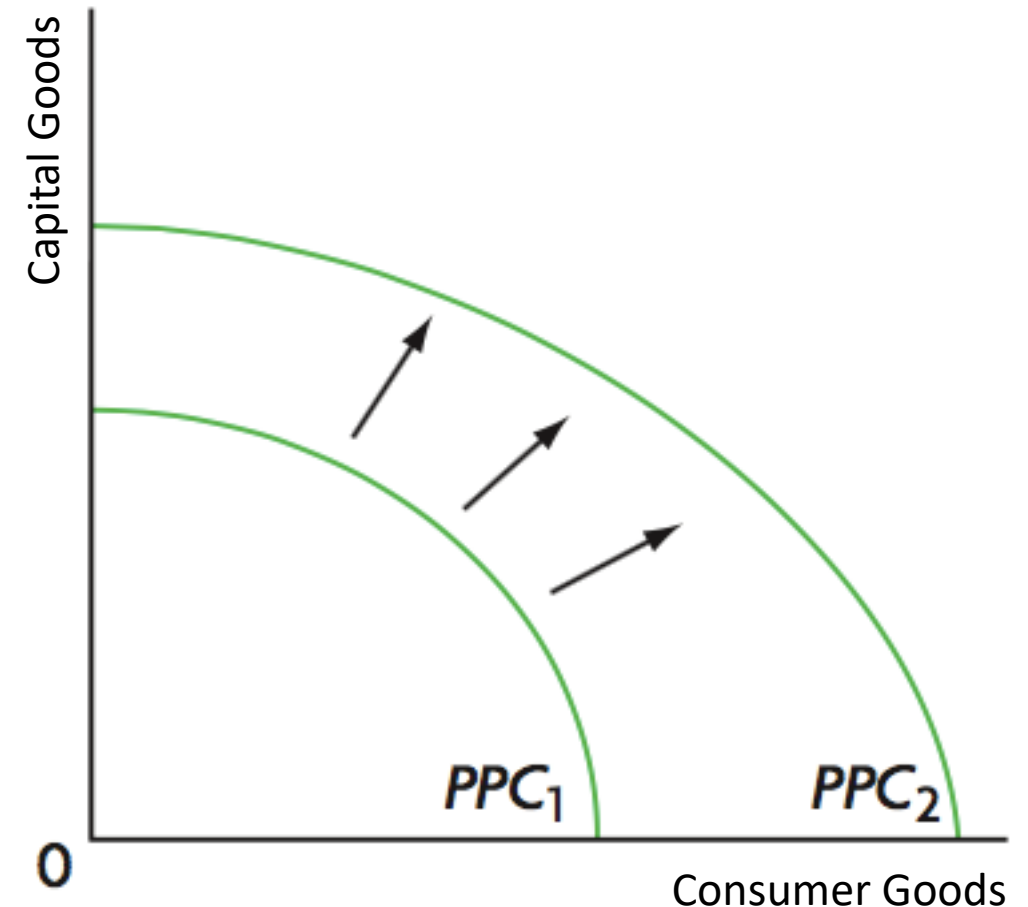
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Non-Parallel Shifts in PPC

A change favouring the production of one type of good may cause a non-parallel shift in the **PPC**.

- Mass production may favour the production of one particular good.
- Influx of unskilled workers may increase production of goods using relatively more unskilled labour.



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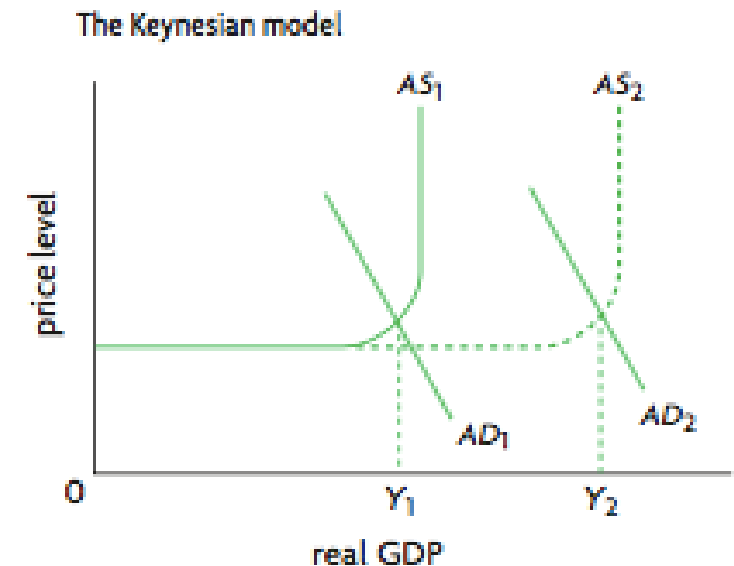
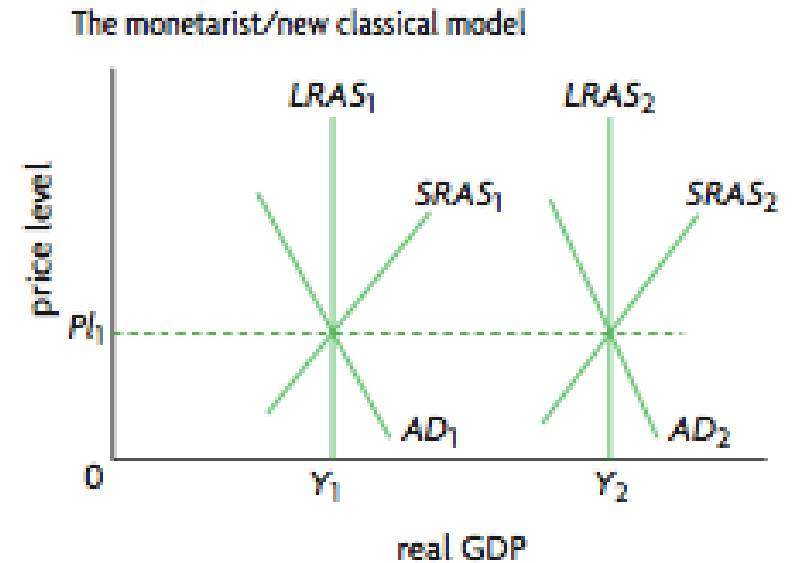
Economic Growth

LRAS and Keynesian AS Curve

Economic growth in the context of the PPC model is very closely related to economic growth in the AD/AS and Keynesian AS model.

Improved efficiency and reduced **unemployment** in economy results in

- a rightward shift of the LRAS and Keynesian AS
- an outward shift of the PPC model



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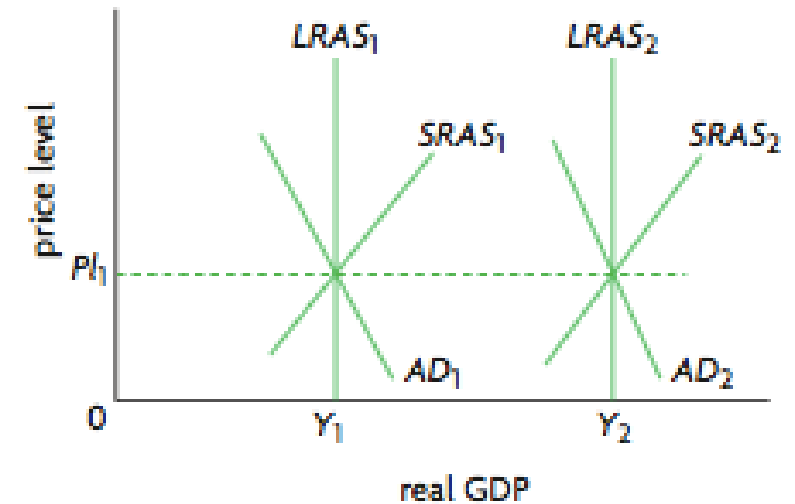
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LRAS and Keynesian AS Curve

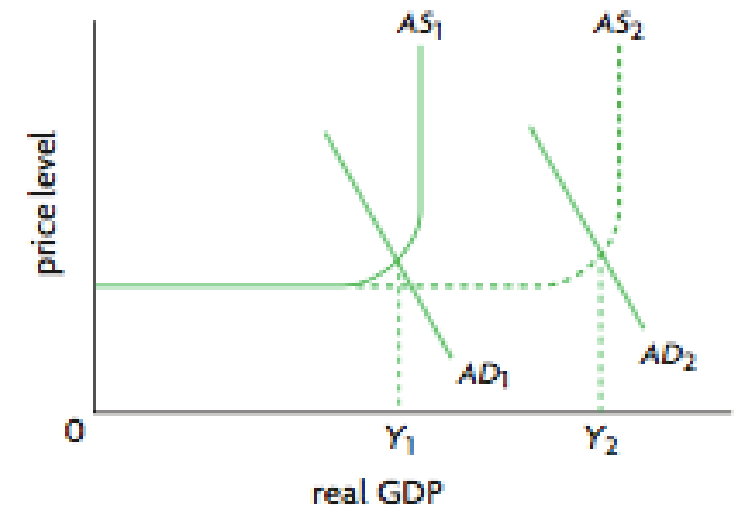
Economic growth in the context of the PPC model is very closely related to economic growth in the AD/AS and Keynesian AS model.

AD-AS model	Factors causing growth	Production possibilities model
rightward LRAS shifts (increases in potential output)	increased resource quantity	outward PPC shifts (increases in production possibilities)
	improved resource quality	
	technological change	
	improved efficiency	movement of production point closer to PPC
	only natural ← reduced unemployment → all types	
	institutional changes	not included

The monetarist/new classical model



The Keynesian model



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	improved efficiency only natural ← reduced unemployment → all types	movement of production point closer to PPC
	institutional changes	not included

	AD-AS model	PPC model
Short-term growth	<ul style="list-style-type: none">• increases in <i>AD</i>• increases in <i>SRAS</i> (less important)	<ul style="list-style-type: none">• reduction in unemployment• improvement in efficiency
Long-term growth	<ul style="list-style-type: none">• increased resource quantity• improved resource quality• technological change	
	<ul style="list-style-type: none">• improvements in efficiency• institutional changes	-

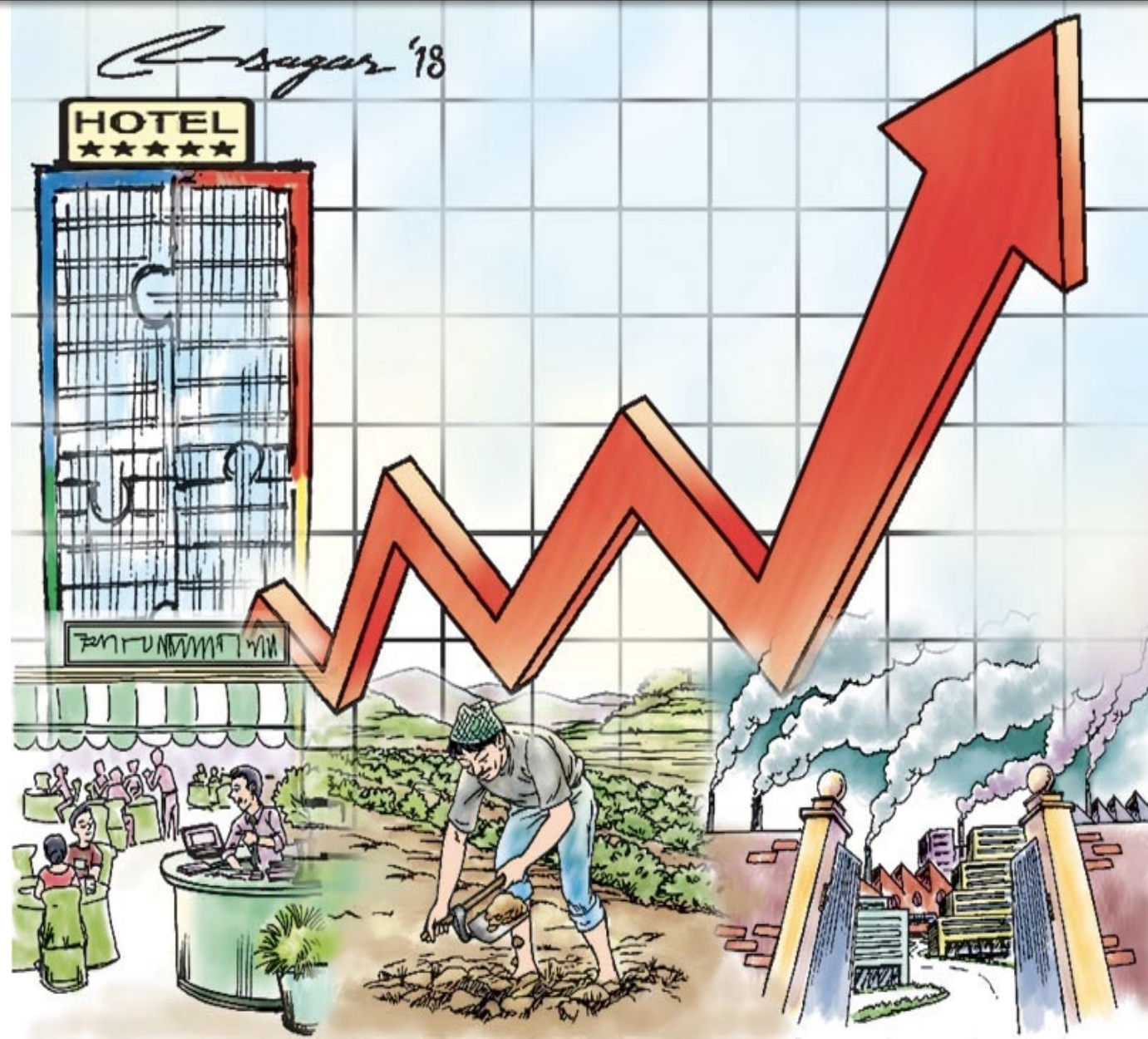
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Consequences

- Impact on living standards
- Impact on the environment
- Impact on income distribution

These consequences (whether positive or negative) are not inevitable – *it follow from the way that growth pursued.*



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Living standards

Living standards refer to levels of income, wealth and consumption of goods and services.

An increase in **real GDP per capita**, indicates a greater potential for people to improve their **standards of living**.

The positive effects are dependent on...

Distribution of income	Household spending
Government spending on merit goods	Contributions of NGOs

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Environment

Experience shows that growth often leads to unsustainable resource use.

Many governments have based their policies on the belief of '*grow now, clean up later*'.

Problems with this way of thinking includes:

- Some environmental damage is irreversible
- Justifies government inaction on environment
- Both objectives are consistent with each other
- Resource depletion may hinder future growth

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Income distribution

There is no clear relationship between growth in **GDP per capita** and income distribution.

Countries are experiencing increasing income inequalities and this has been a result of...

- Use market-based supply-side policies
- Introduction of capital intensive methods
- Low level of investments in human capital
- Neglecting infrastructure in the rural areas