

LEVEL 2 ECONOMICS 2.3 - GROWTH REVISION MAT

Achievement Standard Number 91224 Analyse Growth using economic concepts and models Number of Credits 4 External
Achievement: Analyse economic growth using economic concepts and models. **Merit:** Analyse economic growth in depth using economic concepts and models. **Excellence:** Analyse economic growth comprehensively using economic concepts and models.

TOPICS

Growth – Key Points.

Growth in the NZ economy is usually measured using Gross Domestic Product. This is a measure of how NZ's production / income is increasing.

Real income refers to actual economic output - the number of goods and services produced by an economy. Using a circular flow model we can see that the output of an economy must equal the income of the households. This measure equates to GDP (Gross Domestic Product).

Productive Capacity This is a measure of an economy's economic potential. The potential of an economy to produce goods and services is assessed.

The output gap measures the difference between an economy's actual and potential GDP.

Net Social Welfare This attempts to measure quality of life and can look at indicators such as life expectancy, the number of doctors per person, the number of TV's or cars per person, the environment, health and education. An example of a Social Welfare measure is the Human Development Index.

The **Production Possibility Curve** or Production Possibility Frontier is an economic model which helps in our understanding of the world around us. The model shows **the maximum output combinations possible with given resources and technology. This means that for a fixed amount of resources and technology there is a physical limit on output.**

GDP
Gross Domestic Product (GDP) is the value of all goods and services produced in New Zealand over a specified time (a year). It is often referred to as total output.

Real GDP is GDP adjusted for changing prices (i.e. inflation) and so only looks at the change in output and not the influence of price changes on GDP.

RGDP/capita, which takes into account changes in the population and so is often a better measure of standard of living, as it looks at the impact of population changes on growth.

Real Income – same as Real GDP. If more commodities are being produced, then more income is being made. Income includes, workers wages / salaries, profits, return on interest etc...

Investment – the buying of capital goods.
Nominal Wages - are likely to rise in response to worker efforts to increase or maintain standards of living. Increases in nominal wages cause cost push inflation.

Business Cycle: Periods of high growth (booms) and low growth (downturns) and negative growth (recessions) that occur during the natural progression of the economy.

Consumer Goods: Final goods and services used by consumers to satisfy their needs and wants.

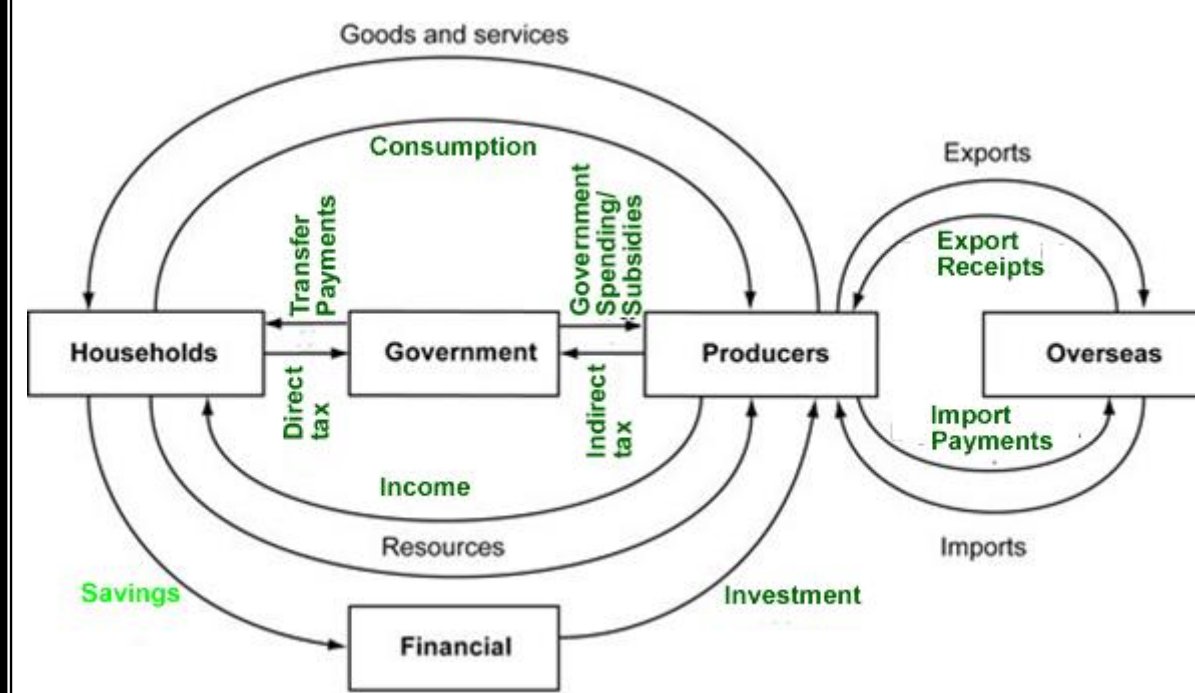
Capital Goods: Manufactured goods that are used in the production process (make or provide other goods and services).

Human Capital: Knowledge, skills and abilities of workers / people which come from education and training.

Savings: the part of disposable income not used for consumption.

THE CIRCULAR FLOW MODEL.

Money Flows are in Green.



Injections into the circular flow which cause an increase in GDP, AD and incomes.
 Investment increases, Increase in export receipts, Increase in consumption, decrease in income tax, increased government spending.

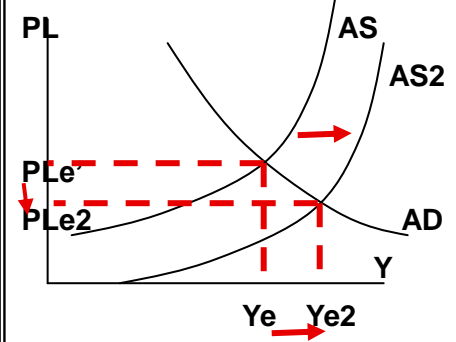
Withdrawals from the circular flow which cause a decrease in GDP, AD and incomes.
 Investment decreases, increase in import payments, decrease in consumption, increase in income tax, decreased government spending.

$$GDP = AD = Y = C + I + G \quad (X - M)$$

Gross Domestic Product Aggregate Demand Income Consumption Investment Spending Government Exports Imports (Net Exports)

AD / AS DIAGRAM AND GROWTH.

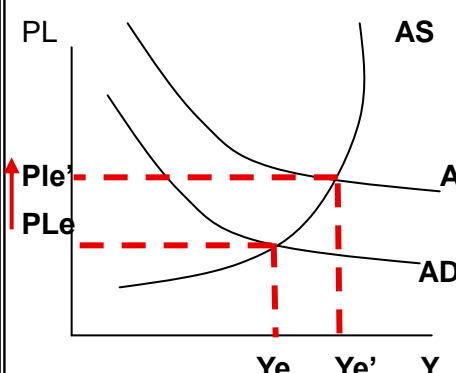
INCREASE IN AS



- Reasons for an increase in AS include...
- Decreased cost of raw materials (power, rent, resources etc.).
 - Investment leading to new capital goods (investing more) leading to an increase in productivity.
 - Investment in human capital (more training, education) leading to increase in productivity of workers.
 - Decrease in indirect tax such as GST.
 - Appreciation of exchange rate that leads to decrease in the cost of imported raw materials e.g. oil etc.

AS shifts right. more Growth and Income but less inflation.

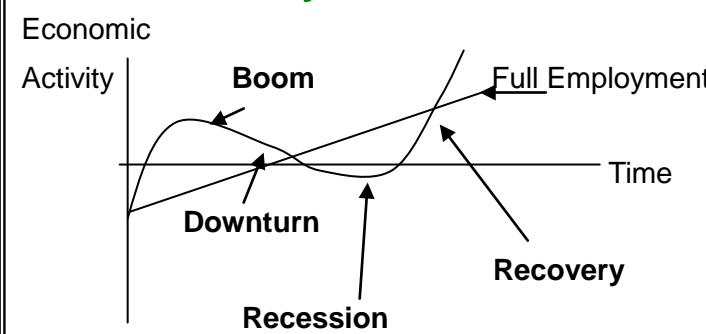
INCREASE IN AD



- Causes of an increase in AD include....
- Increased consumer spending / Decrease in savings.
 - Increased investment.
 - Increased Government spending.
 - Increased export receipts.
 - Increased income or decrease in income tax.
 - Increased transfer payments.
 - Decrease in interest rates which will lead to an increase in Investment and Consumption and less savings.
 - Increase in money supply.
 - Inflationary expectations. People expect prices to rise and so buy now.
 - Increased optimism about the future e.g. increase in house prices.

AD shift right leading to increased growth but with more inflation.

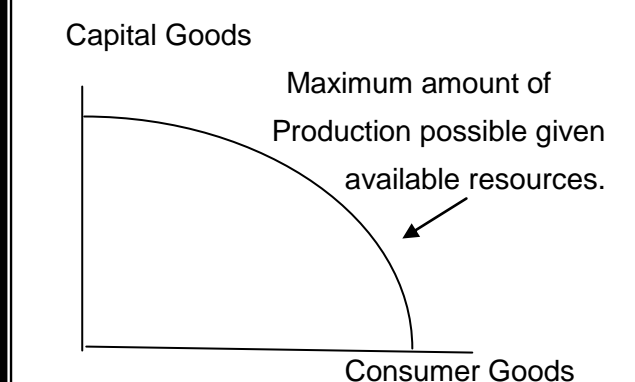
The Business Cycle and Growth.



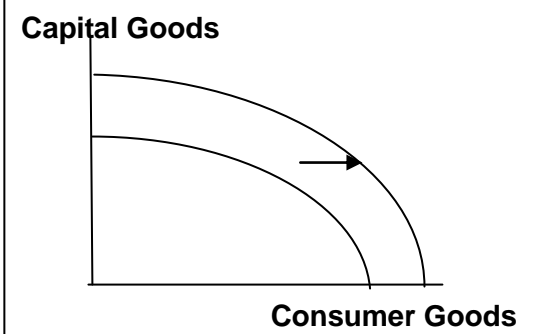
A Boom is a period of high economic growth in an economy. This is measured by a percentage increase in Real GDP. During a Boom the economy is producing close to or on the PPF and is near full employment.
A recession occurs if there are two quarters (6 months) of negative growth. In a recession the economy is producing inside the PPF and there is a lot of unemployment.

PRODUCTION POSSIBILITY FRONTIER (CURVE) AND ECONOMIC GROWTH

A PPF shows the maximum amount of goods and services that can be produced in an economy given a fixed amount of resources and a fixed level of technology.

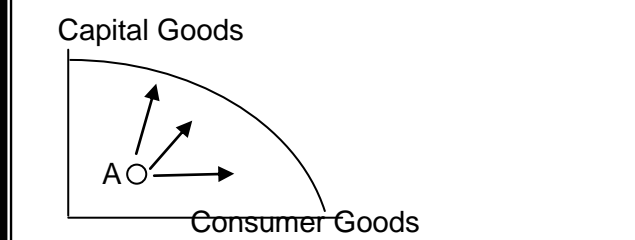


Impact of New Resources Discovered or New Technology which Increases Productive Capacity For All Goods and Services.



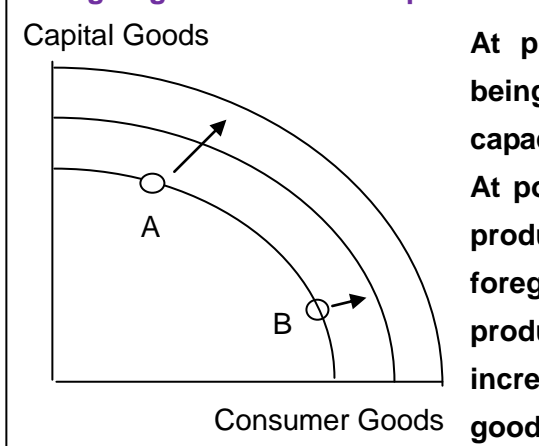
The discovery of new resources or increased immigration will add to a country's productive capacity new technology which increases productivity will also increase a country's productive capacity causing the PPF to shift right.

An increase in Production / Increase in employment.



Increase in output: At point A there are a lot of unemployed resources. With an increase in output the economy gets closer to full employment on the PPF.

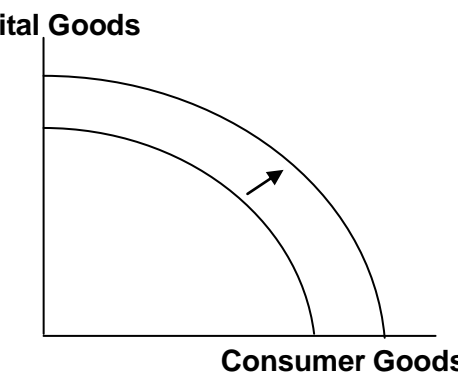
Foregoing Current Consumption for Future Growth



At point B, more consumer goods are being produced and so future productive capacity and economic growth are limited. At point A, more capital goods are being produced and so the economy is foregoing current consumption by producing more capital goods, leading to increased future growth as more capital goods are available and so productive capacity increases by more.

THE DETERMINANTS OF GROWTH - Increasing productive capacity or potential will only come about if:

- The quantity or quality of human resources (productivity) are increased by:**
 - Increases in the population through natural increases or immigration.
 - Increases in working population through changes in social attitudes to work.
 - Increased quality of human resources through education, improved management and work place practices (technological improvement).
- New Natural resources are discovered.**
- There is increased production of manufacturing resources (capital) – through investment.**
Determinants of investment include – the level of savings in the economy, business confidence, the costs of the investment, the level of expected return on the investment.



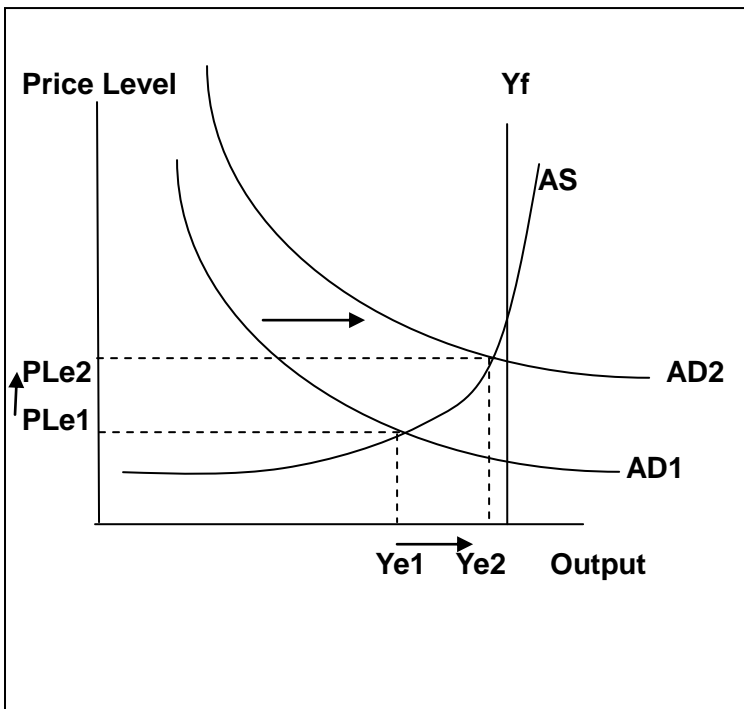
AN INCREASE IN THESE THINGS WILL CAUSE THE PPF TO SHIFT RIGHT – AN INCREASE IN PRODUCTIVE CAPACITY.

POSITIVE AND NEGATIVE EFFECTS OF ECONOMIC GROWTH

POSITIVE IMPACTS	NEGATIVE IMPACTS
Households: More employment, higher incomes, higher living standards, greater variety of goods.	Households: Jobs replaced by machines, increasing prices, increased stress, increased inequality as some groups benefit more from growth than others.
NZ Producers: Innovation increases, increased sales, revenue and profit. More profits for investment and R&D.	NZ Producers: Costs increase as demand for raw materials rise. Inflationary pressure. Competition with cheaper imports.
NZ Exporters: Increase in competitiveness as productivity increases. New products and new markets.	NZ Exporters: Export prices rise due to inflationary pressures caused by increased demand for resources and labour.
Government: decrease in transfer payments, increased tax revenue from income tax, GST and company tax.	Government: Required to control inflation pressure. More spending to combat increased crime and anti-social issues.
Technology increases resource use efficiency and sustainability.	The Environment: Increased resource depletion, pollution and waste problems. Unsustainable resource use.

DIAGRAM:
AGGREGATE DEMAND INCREASES.

EXPLANATION FOR CHANGES DUE TO:...



INCREASE IN CONSUMPTION:
Describe: Aggregate Demand is the total demand for all goods and services produced in an economy. An increase in AD will cause an increase in output and incomes.
Explain: An increase in **CONSUMER SPENDING** caused by(things like an increase in disposable income, increase in consumer confidence, decrease in interest rates, immigration etc.) will cause AD to increase (shift right) because Consumption is a component of AD if consumption increases then AD will increase causing an increase in growth.
Relate: So AD increases from AD1 to AD2 and output increases from Ye1 to Ye2 leading to more growth.

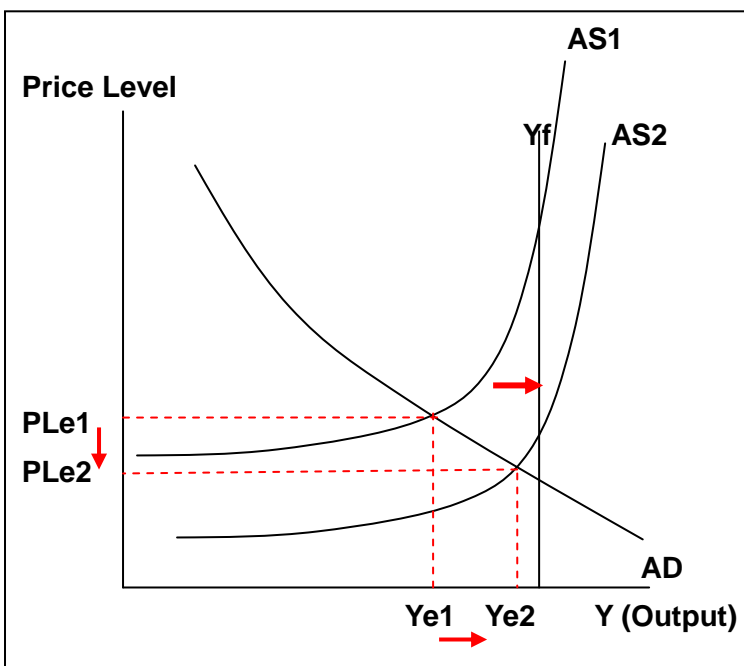
INCREASE IN INVESTMENT:
Describe: Aggregate Demand is the total demand for all goods and services produced in an economy. Investment is the buying of capital goods by firms. An increase in AD will cause an increase in output and incomes.
Explain: An increase in **INVESTMENT** caused by (things like an increase in business confidence, increased profits, decrease in interest rates etc.) will cause AD to increase (shift right) because Investment is a component of AD if investment increases then AD will increase causing an increase in output and growth.
Relate: So AD increases from AD1 to AD2 and output increases from Ye1 to Ye2 leading to more growth.

INCREASE IN GOVERNMENT SPENDING:
Describe: Aggregate Demand is the total demand for all goods and services produced in an economy. An increase in AD will cause an increase in output and incomes.
Explain: An increase in **GOVERNMENT SPENDING** caused by(things like an increase tax revenue during a boom, election spending, increase in transfer payments, infrastructure spending, public sector pay increases etc.) will cause AD to increase (shift right) because Government Spending is a component of AD if Government Spending increases then AD will increase causing an increase in output and growth..
Relate: So AD increases from AD1 to AD2 and output increases from Ye1 to Ye2 leading to more growth.

INCREASE IN NET EXPORTS:
Describe: Aggregate Demand is the total demand for all goods and services produced in an economy. An increase in AD will cause an increase in output and incomes.
 Net Exports are Export receipts – Import Payments.
Explain: An increase in **NET EXPORTS** caused by (things a depreciation of the NZ dollar, increased demand for NZ exports, fall in demand for imports etc.) will cause AD to increase (shift right) because Net Exports is a component of AD if Net Exports increase then AD will increase causing an increase in output and growth.
Relate: So AD increases from AD1 to AD2 and output increases from Ye1 to Ye2 leading to more growth.

DIAGRAM:
AGGREGATE SUPPLY INCREASES.

EXPLANATION FOR CHANGES DUE TO:...



COST OF PRODUCTION DECREASES
Describe: Aggregate Supply is total supply of all goods and services in an economy.
Explain: **DECREASE IN THE COST OF PRODUCTION** caused by things like...(decrease in nominal wages, electricity prices decreasing, petrol prices decreasing, interest rate decreases etc.) Firms increase their output because of reduced production costs, output increases and the price level falls due to increased efficiency. AS increases which causes an increase in output - Growth.
Relate: So AS increases from AS1 to AS2 and output increases from Ye1 to Ye2 the price level decreases from PLe1 to PLe2.

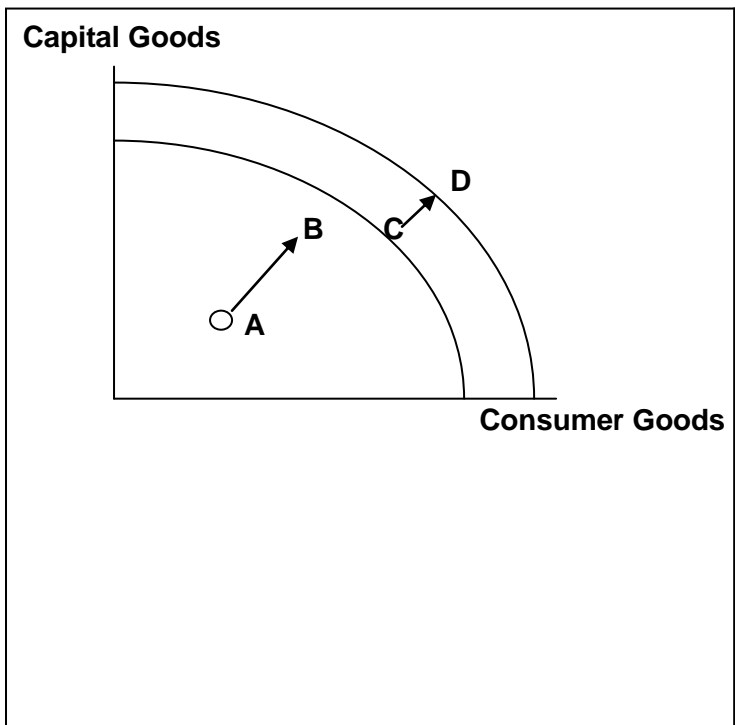
PRODUCTIVITY INCREASES
Describe: Aggregate Supply is total supply of all goods and services in an economy.
Explain: a **INCREASE IN PROUCTIVITY** caused by things like (increase in labour productivity, investment ion new capital, new technology, investment in human capital etc.) this causes efficiency and productivity to increase. AS increases which causes output to increase.
Relate: So AS increases from AS1 to AS2 and output increases from Ye1 to Ye2 the price level decreases from PLe1 to PLe2.

APPRECIATION OF THE NEW ZEALAND DOLLAR
Describe: Aggregate Supply is total supply of all goods and services in an economy.
Explain: An **APRECIATION OF THE NZ\$** caused by things like...(other countries' currencies depreciate, NZ interest rates increase, more demand for NZ\$ etc.) If the NZ\$ appreciates then the cost of imported raw materials will decrease. Firms costs of production decrease and so their output increases. AS increases which causes output to increase.
Relate: So AS increases from AS1 to AS2 and output increases from Ye1 to Ye2 the price level decreases from PLe1 to PLe2.

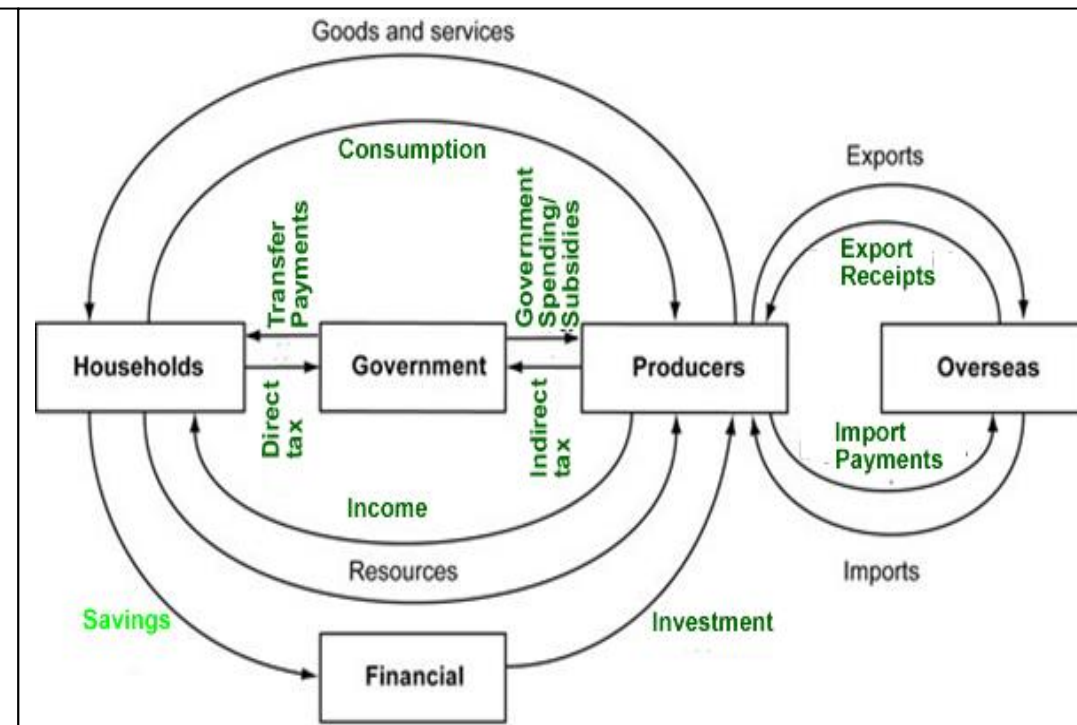
DIAGRAM: CHANGES TO THE PPF
PPF SHIFTING OUTWARD vs INCREASE IN PRODUCTION. EXPLANATION:...

DIAGRAM: CHANGES IN THE CIRCULAR FLOW

EXAMPLE: IMPACT OF AN INJECTION OF MONEY INTO THE CIRCULAR FLOW e.g. INVESTMENT



PPF Shift vs Increase in Production
Describe: The PPF is a diagram that shows the productive capacity of an economy given a fixed amount of resources and technology. A shift of the PPF shows an increase in productive capacity. A movement from inside the PPF shows an increase in output or employment.
Explain: A shift of the PPF can be caused by an increase in resources, new technology causing productivity to increase, new capital, investment in human capital, immigration etc. This will cause an increase in productive capacity and so shift the curve outward.
 A movement from inside the curve to a point closer to the PPF shows an increase in output and resource use which leads to a decrease in unemployment.
Relate: For a shift of the PPF curve it will shift from C to D showing an increase in productive capacity. For an increase in output there will be a movement inside the curve from A to B, to a point closer to the PPF showing a decrease in unemployment.



Define: The circular flow is a model that shows the flow of money, resources and commodities in an economy.
Injection of money into the circular flow is when money is put into the economy.
Investment is the buying of capital goods by firms.
Explain: An injection of money into the circular flow from an increase in **INVESTMENT (OR, export receipts, increased consumption, increased government spending)** will cause the amount of money in the economy to increase. This will cause an increase in production and profits as more capital goods are brought, this will cause the demand for resources such as labour to increase, causing an increase in employment and household incomes. As household incomes increase there will be an increase in consumption. With an increase in income, sales and profits the government will receive more revenue from both direct and indirect taxes. This will cause an increase in output, growth and incomes in the economy.
Relate: So the money flow for investment will increase as producers borrow more from the financial sector to buy capital goods. This will cause the economy to grow as the impact of the increased investment flows onto other areas of the economy.