LEVEL 2 ECONOMICS 2.1 REVISION MAT

Achievement Standard Number 90794 **Analyse inflation using economic concepts and models** **Number of Credits** 4 External

Achievement: Analyse inflation using economic concepts and models. **Merit:** Analyse inflation in depth using economic concepts and models. **Excellence:** Analyse inflation comprehensively using economic concepts and models.

TOPICS

Inflation – Key Points.

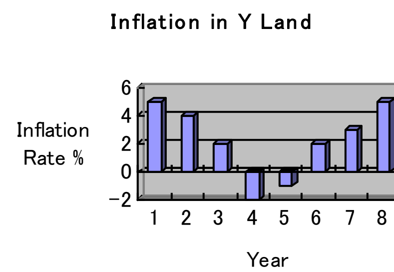
Inflation – a persistent increase in the general / average price level.

Inflation causes a decrease in the **purchasing power of money.**

Disinflation – a fall in the rate of inflation. There is still inflation but at a lower rate than before.

e.g. this year it is 4% and last year it was 6%.

Deflation - is a fall in the average price level. Deflation causes a decrease in the average price level.



Inflation occurs between years 6, 7 and 8

Disinflation occurs between years 1, 2 and 3.

Deflation occurs in years 4 and 5.

Persistent Price Rise: An increase in the average price level across a wide range of products that will lead to inflation.

Price Rise in a Particular Market: A one off price increase in only one product. Not inflation.

Hyperinflation: A period of extremely high inflation.

The Quantity Theory of Money. MV = PQ

Where: M = the money supply.

V = the velocity of money, the number of times it is used in a certain period.

P = the general price level.

Q = the output in the economy.

Functions of Money:

Medium of exchange, Standard of Value, Store of value, Means of deferred payment.

Qualities of Money:

Portable, Durable, Divisible, Acceptable, Recognisable, Stable in value, Scarce.

Assets Demand for Money: The demand for money speculative and precautionary purposes. Money that is held back in case of emergencies or to take advantage of investment opportunities.

Transactions Demand for Money: Demand for money as a means of exchange. E.g. demand for money to buy commodities and to pay wages.

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

Cost Push Inflation: Increased cost of inputs leads to a decrease in AS causing increase in the average price level (inflation).

Demand Pull Inflation: An increase in AD caused by an increase in consumption, government spending, investment or net exports leading to inflation.

Real Interest Rate: The real interest rate is the rate of interest you receive after taking into account the impact of inflation. The real interest rate shows the ***purchasing power*** of the interest you earn.

Fiscal Drag: a person's wages are increased to compensate for inflation. But because of the wage increase they have now moved into a higher tax bracket.

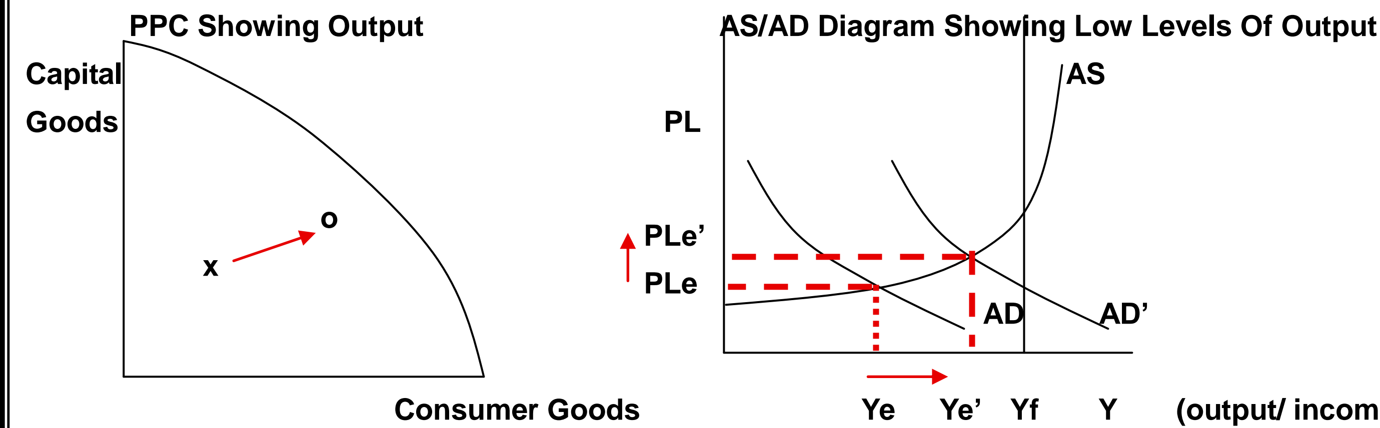
THE QUANTITY THEORY OF MONEY, INCREASE IN THE MONEY SUPPLY WITH NOT MUCH INFLATION.

MV = PQ (Q can also be represented by Y which equal output or national income).

This states that any increase in the Money supply will have an impact on the price level or level of output assuming velocity remains constant.

An increase in M that does not lead to much inflation.

If the economy is producing well below full employment then it will be able to easily expand.



An increase in the money supply will lead to a decrease in interest rates which will lead to an increase in consumption and investment thereby leading to an increase in Aggregate Demand.

Because the economy is not near full employment there are a lot of unemployed resources and so Q (output) is able to increase more easily. This means that P does not increase as much leading to less inflation.

So if M↑ V = P Q↑ so does not change so much (no inflation).

In the equation MV = PQ if V decreases then an increase in the money supply will not necessarily lead to an increase in P.

So if M↑ V↓ = P Q so does not change so much (no inflation).

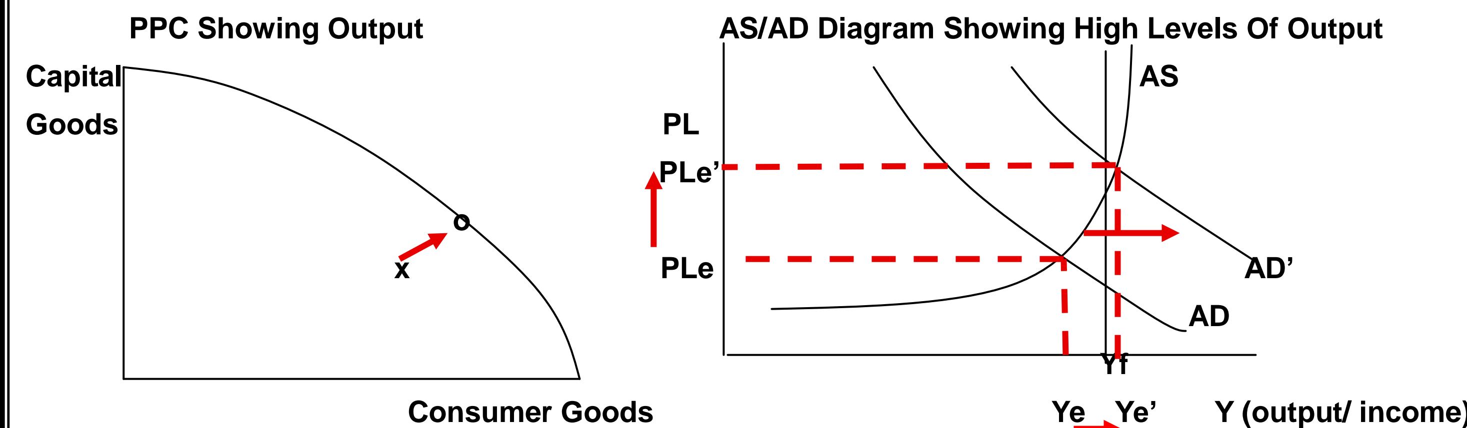
THE QUANTITY THEORY OF MONEY INCEASE IN THE MONEY SUPPLY WITH A LOT OF INFLATION.

MV = PQ (Q can also be represented by Y which equals output or national income).

This states that any increase in the Money supply will have an impact on the price level or level of output assuming velocity remains constant.

An increase in M that leads to a lot of inflation.

If the economy is producing close to or at full employment then it will **not** be able to easily expand.



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Because the economy is not near full employment there are a lot of unemployed resources and so Q (output) is able to increase more easily. This means the P is does not increase as much leading to less inflation.

So if M↑ V = P↑ Q↑ so output does not change much so P will increase (inflation).

Example of a Merit / Excellence type question: Explain how a decrease in the interest rate can lead to inflation.

With a decrease in the interest rate consumers will be willing to borrow more and they will also save less. This will increase consumption, leading to an increase in Aggregate Demand causing demand pull inflation. Producers are also more likely to invest with a lower interest rate and this increase in investment with also cause AD to increase to AD2. With the increase in AD there will be pressure on prices to increase from PLe1 to PLe2 and so there will be inflation.

CAUSES OF INFLATION.

COST PUSH INFLATION

PL, AS', AS, PLe', PLe, AD, Y, Ye' Ye

Causes of Cost Push Inflation Include.

- Increased cost of raw materials (power, rent, resources etc.).
- Increased nominal wages.
- Not replacing capital goods (not investing enough) leading to a reduction in productivity.
- Falling productivity of workers.
- Increase in indirect tax.
- Depreciation of exchange rate that leads to increased cost of imported raw materials e.g. oil etc.

AS shifts left. Inflation and less Growth / Income.

DEMAND PULL INFLATION

PL, AS, Ple', PLe, AD', AD, Ye Ye' Y

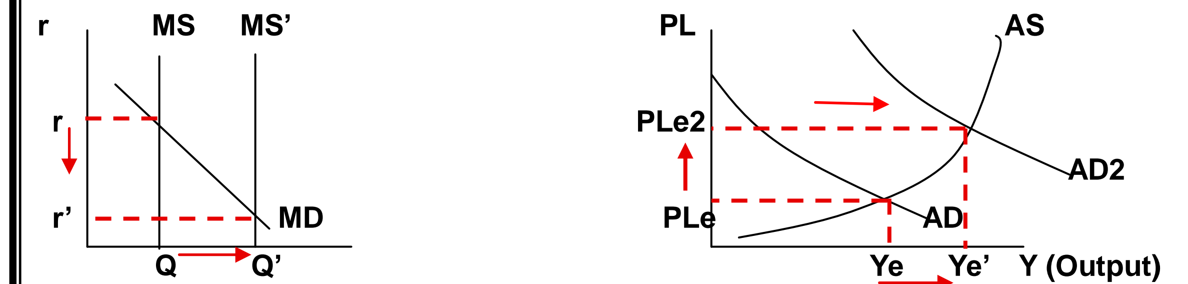
AD shift right leading to increased inflation and more growth.

Causes of Demand Pull Inflation Include.

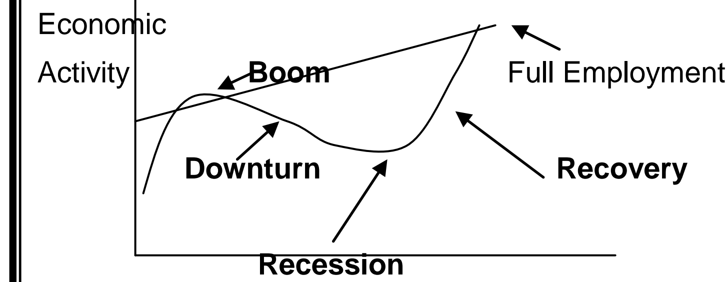
- Increased consumer spending / Decrease in savings.
- Increased investment.
- Increased Government spending.
- Increased export receipts.
- Increased income or decrease in income tax.
- Increased transfer payments.
- Decrease in interest rates which will lead to an increase in Investment and Consumption 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.

Interest rates and Inflation

A decrease in interest rates will lead to an increase in consumption and investment, a decrease in savings and so AD will shift right leading to more inflation. Eventually a fall in interest rates can lead to a shift of the AS curve to the right due to more and newer capital equipment.



The Business Cycle and Inflation.



Inflation is more likely to occur during a boom or recovery as there is pressure on resources, putting the cost of production up causing cost push inflation. This causes more employment, household incomes increase, consumption increases leading to more inflation. Businesses also invest more during this time.

The Impact of Inflation:

Households:

- It's a disincentive to save. Real interest rate falls.
- Incentive to borrow.
- People on fixed income worse off. Those with skills or with incomes that rise quickly better off.
- Fiscal drag. Incomes increase but now put into a higher tax bracket.
- Purchasing power of savings erodes. People with assets may be better off.

Firms

- Cost of production quickly increasing.
- Disincentive for investment as unsure of future.
- More likely to do speculative investment as returns are better as assets are quickly increasing in value.
- Nominal wages increase.
- Business Confidence falls.

Trade:

- exports decrease as now less competitive.
- Imports increase as now more competitive.
- Balance of payments becomes worse.
- Appreciation of exchange rate higher inflation leads to higher interest rates which lead to increase in foreign savings in NZ causing appreciation of NZ dollar.

DIAGRAM: DEMAND PULL INFLATION
AGGREGATE DEMAND INCREASES. **EXPLANATION FOR CHANGES DUE TO:…**

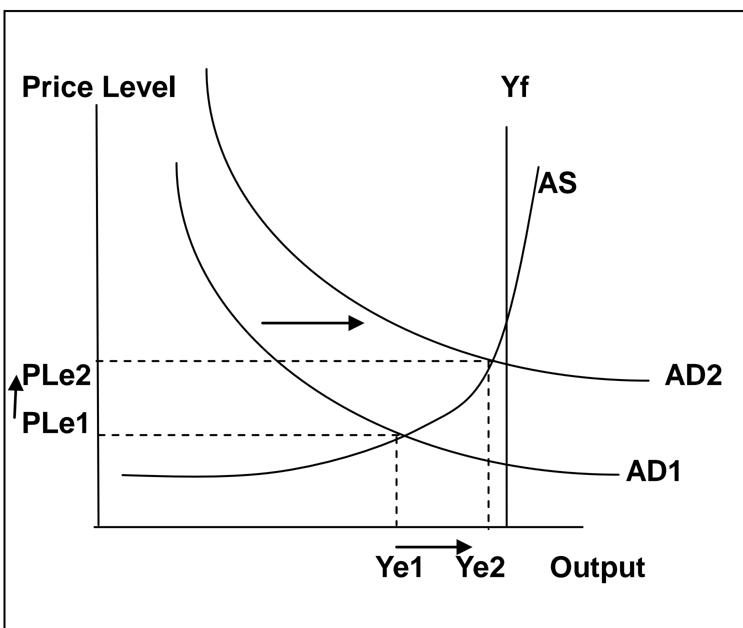
Diagram	INCREASE IN CONSUMPTION:	INCREASE IN INVESTMENT:	INCREASE IN GOVERNMENT SPENDING:	INCREASE IN NET EXPORTS:
 	**Describe:** Aggregate Demand is the total demand for all goods and services produced in an economy. Demand Pull Inflation is caused by an increase in AD. **Explain:** An increase in **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 demand pull inflation. **Relate:** So AD increases from AD1 to AD2 and the average price level increases from PLe1 to PLe2	**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. Demand Pull Inflation is caused by an increase in AD. **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 demand pull inflation. **Relate:** So AD increases from AD1 to AD2 and the average price level increases from PLe1 to PLe2	**Describe:** Aggregate Demand is the total demand for all goods and services produced in an economy. Demand Pull Inflation is caused by an increase in AD. **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 demand pull inflation. **Relate:** So AD increases from AD1 to AD2 and the average price level increases from PLe1 to PLe2	**Describe:** Aggregate Demand is the total demand for all goods and services produced in an economy. Demand Pull Inflation is caused by an increase in AD. 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 demand pull inflation. **Relate:** So AD increases from AD1 to AD2 and the average price level increases from PLe1 to PLe2

DIAGRAM: COST PUSH INFLATION
AGGREGATE SUPPLY DECREASES. **EXPLANATION FOR CHANGES DUE TO:…**

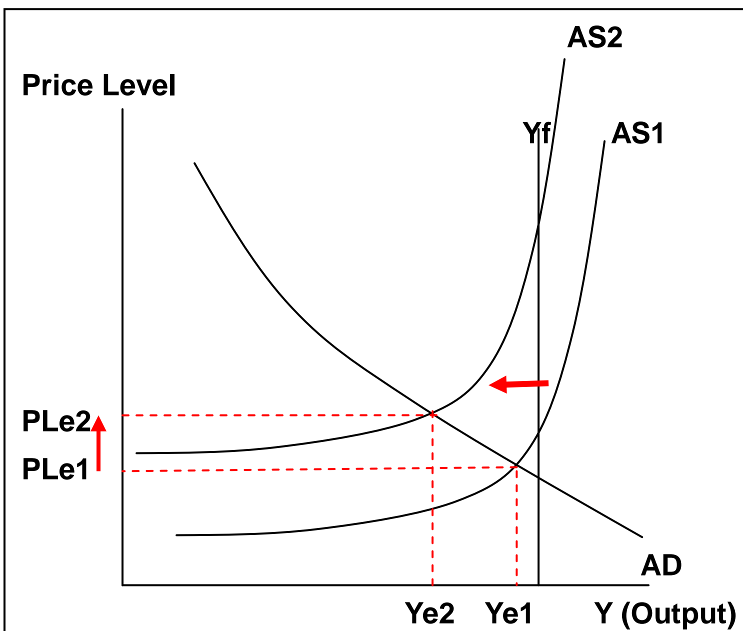
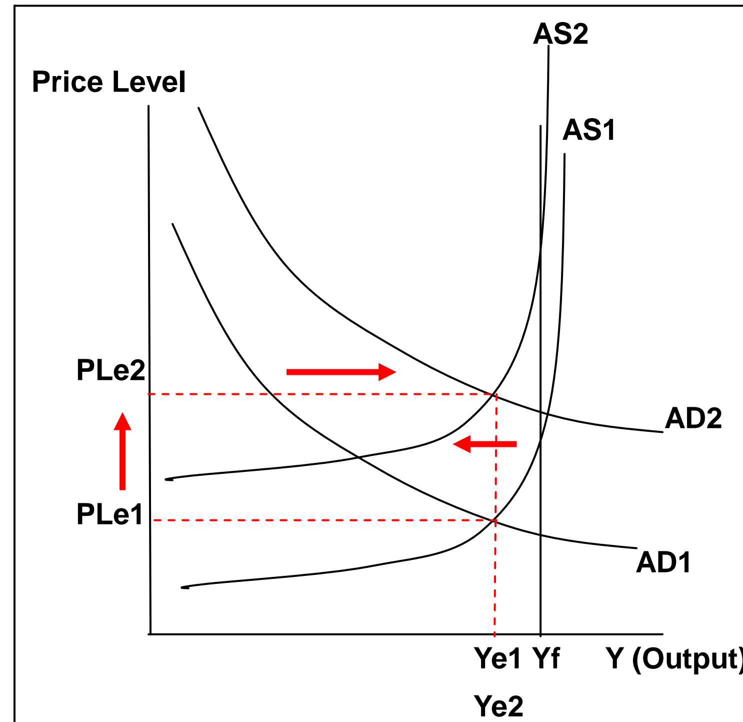
Diagram	COST OF PRODUCTION INCREASES	PLANED OUTPUT DECREASES	PRODUCTIVITY DECREASES	DECPRECIATION OF THE NEW ZEALAND DOLLAR
 	**Describe:** Aggregate Supply is total supply of all goods and services in an economy. Cost Push Inflation is an increase in the price level caused by a decrease in AS. **Explain:** **INCREASE IN THE COST OF PRODUCTION** caused by things like…(increase in nominal wages, electricity prices increasing, petrol prices increasing, interest rate increases etc.) Firms increase their prices to cover the increased costs of production and maintain profit margins. AS decreases which causes cost push inflation. **Relate:** So AS decreases from AS1 to AS2 and the price level increases from PLe1 to PLe2.	**Describe:** Aggregate Supply is total supply of all goods and services in an economy. Cost Push Inflation is an increase in the price level caused by a decrease in AS. **Explain:** An **DECREASE IN PLANNED OUTPUT** caused by things like…(a decrease in business confidence, decrease in business forecasts, shortage of resources, rise in company tax etc.) AS decreases which causes cost push inflation. **Relate:** So AS decreases from AS1 to AS2 and the price level increases from PLe1 to PLe2.	**Describe:** Aggregate Supply is total supply of all goods and services in an economy. Cost Push Inflation is an increase in the price level caused by a decrease in AS. **Explain:** a **DECREASE IN PROUCTIVITY** caused by things like…(fall in labour productivity, machinery becomes older and not replaced etc.) this causes efficiency and productivity to decrease. AS decreases which causes cost push inflation. **Relate:** So AS decreases from AS1 to AS2 and the price level increases from PLe1 to PLe2.	**Describe:** Aggregate Supply is total supply of all goods and services in an economy. Cost Push Inflation is an increase in the price level caused by a decrease in AS. **Explain:** A **DEPRECIATION OF THE NZ$** caused by things like…(other countries' currencies appreciate, NZ interest rates decrease, less demand for NZ$ etc.) If the NZ$ depreciates then the cost of imported raw materials will increase. Firms increase their prices to cover the increased costs of production and maintain profit margins. AS decreases which causes cost push inflation. **Relate:** So AS decreases from AS1 to AS2 and the price level increases from PLe1 to PLe2.

DIAGRAM: COST PUSH INFLATION AND DEMAND PULL INFLATION
AGGREGATE SUPPLY DECREASES AND
AGGREGATE DEMAND INCREASES. **EXPLANATION FOR CHANGES DUE TO:…**

Diagram	AD AND AS CHANGE
 	**Describe:** Aggregate Supply is total supply of all goods and services in an economy. Cost Push Inflation is an increase in the price level caused by a decrease in AS. Aggregate Demand is the total demand for all goods and services produced in an economy. Demand Pull Inflation is caused by an increase in AD. **Explain:** **INCREASE NOMINAL WAGES, INCREASE IN INTERETS RATES, NZ$ DEPRECIATES** If nominal wages increase then firms costs increase- firms increase their prices to cover the increased costs of production and maintain profit margins. AS decreases which causes cost push inflation. But consumer spending may also increase due to the increase in wages this will cause AD to increase (shift right) because Consumption is a component of AD if consumption increases then AD will increase causing demand pull inflation. **Relate:** So AS decreases from AS1 to AS2 and AD increases from AD1 to AD2 and the price level increases a lot by the combined rise in the price level from PLe1 to PLe2.