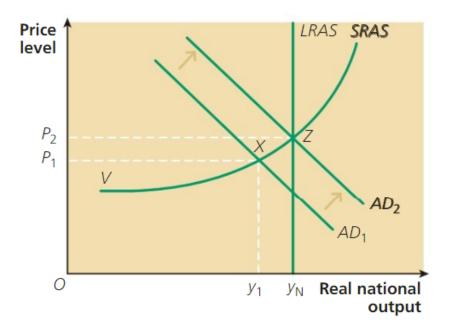
The Causes of Inflation

There are three main types of inflation: demand-pull, cost-push, and inflation caused by increases in the money supply.

Demand-pull inflation

This inflation is caused by an **outward shift** in aggregate demand. Whilst there is an increase in the price level, there is an increase in real GDP, which can be positive depending on the macroeconomic objective trying to be achieved.

As AD shifts outwards, real GDP increases from y1 to y2, with the price level increasing from p1 to p2 (inflation).



Demand-pull inflation will be caused by increases in any of the four components of aggregate demand:

- Consumption
- Investment
- Government spending
- Net exports (the value of exports minus the value of imports)

Typical factors leading to an increase in aggregate demand, and demand-pull inflation

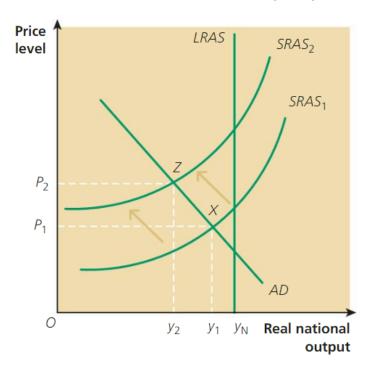
Consumption	Investment
Lower interest rates ○ Lower MPS → higher MPC ○ Cheaper mortgages, hence more income to spend on consumption ○ Cheaper costs of borrowing Lower income tax leading to higher disposable incomes Increase in consumer confidence - workers feeling more secure that their job will be safe for the foreseeable future are more likely to increase spending Increases in asset prices - as house prices or share prices rise, consumers are more likely to risk higher spending on consumption Greater levels of employment - as employment opportunities grow, workers are likely to have higher incomes as they leave unemployment	Lower interest rates Cheaper loans, hence more borrowing to fund investments Lower business rates, or corporation tax - firms will be abler to keep more of their profits, and are incentivised to increase their investment and expansion Increase in business confidence - firms feeling more confident about higher levels of economic growth in the future are likely to be more willing to invest The accelerator theory - as real GDP increases, firms are likely to invest in order to maintain their capital/output ratio
Government spending	Net exports
Greater spending on health/education, etc., or on infrastructure projects (such as HS2) Increases in welfare payments (e.g. unemployment benefits, pensions, etc.)	Increases in competitiveness of domestic goods - foreign consumers are more likely to buy exports Rising incomes in foreign markets - foreign consumers are more likely to buy exports with their higher incomes Lower interest rates - these lead to a weaker currency, more expensive import prices and cheaper export prices - this incentivises less imports and more exports over time

Cost-push inflation

This is caused by an **inwards shift of the aggregate supply curve**. Any factor that leads to increased costs for firms will potentially cause cost-push inflation.

This type of inflation sees simultaneously higher prices and falling real-GDP, and is therefore often considered a less favourable type of inflation compared to demand-pull where real GDP rises.

As AS shifts inwards, real GDP falls from y1 to y2, and the price level increases from p1 to p2.



Possible causes of cost-push inflation could be:

- **Higher wages** for employees, perhaps due to low levels of unemployment (available workers to hire) or high wage-bargaining power of existing employees
- **Higher raw material prices** perhaps due to international supply-side shocks (such as war, or disruption to existing trading routes)
- **A weak price for the currency** a depreciation in the value of a currency will lead to higher import prices, and lower export prices. The cost of imported raw materials will therefore be higher
- **Higher energy/oil prices** these increase the costs of running machines and vehicles
- **Higher business rates** taxes on business will increase costs
- **Higher rates of VAT**, or other **indirect taxes** (e.g. customs and excise duty)
- **Lower subsidies from the government** if the government stops subsiding production the costs will rise

An increase in the money supply - the quantity theory of money

Monetarists believe that inflation is often caused by increases in the supply of money, particularly when this grows at a rate that is higher than the rate of economic growth (increases in the quantity of goods produced).

The equation of exchange suggests that any increase in the money supply will lead to an increase in the price level, so long as the velocity of circulation of money and the quantity of output remain constant:

money supply (stock of money)
$$\times$$
 the velocity of circulation of money = price level \times quantity of output or:
$$MV = PQ$$

If the central bank increase the money supply (M), and the velocity of circulation of money (how many times the same money is used in an economy over a given period of time) stays the same; it means that either the price level or the quantity of output must also increase (to keep the left hand side of the equation equal to the right).

If the money supply increases, and the quantity of output remains constant, then the price level must increase - this is inflation.

The degree to which inflation is caused by increases in the supply of money will depend on the rate of growth in real GDP and output produced - if this increases some of the impact of the higher money supply will be soaked up and will ease the pressure on the rising price level.