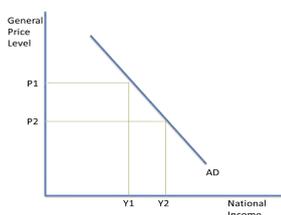


**Consumption (C)** is the total expenditure in an economy by households on goods and services, this is the most stable component. (60% of AD)

**Investment (I)** is spending by firms on capital goods, this is the most volatile component. (17.5 % of AD)

**Government spending (G)** is current spending e.g. wages and on investment goods e.g. school. (17.5% of AD)

**Exports minus imports (X - M)** is goods sold abroad - goods bought abroad. (5% of AD)



The **aggregate demand curve** shows the relationship between price level and equilibrium level of real expenditure/output/input in an economy.

The **price level** is the average level of prices in an economy. A shift along the curve is due to a change in price level. Higher prices result in fall in aggregate demand.

**Gross investment** is total spending on capital goods. **Net investment** is gross investment accounting for depreciation/capital consumption. Depreciation in the UK over the last few years is  $\frac{3}{4}$  of gross investment. Human investment is investment in human capital e.g. education. Investment in physical capital is investment in factories. Only physical investment increases AD.

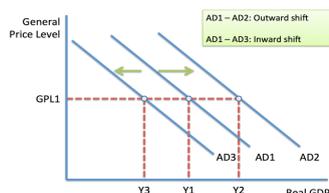
**Current expenditure** is day to day spending whilst **capital expenditure** is spending on capital goods.

**Capital** is human produced assets to aid production and economic growth.

The AD curve is downward sloping as the higher the price level the less can be afforded, considering different components:

- **Consumption is influenced by interest rates.** Inflation means more money is needed to buy the same goods and services, one way to do this is borrowing. This demand increase for borrowing funds results in interest rates rising, also higher prices are controlled by increased interest rates. This leads to a fall in consumption especially of durable goods and for mortgage holders of all types of goods.
- **Consumption is influenced by the wealth effect.** Price rises results in wealth being lower, reducing consumption.
- **Investment is influenced by interest rates.** The higher interest rates the less profitable new projects are reducing interest levels.
- **Imports can compete more at a higher price level.** This is as international goods look more affordable in comparison to British goods.

Shifts in the Aggregate Demand Curve (AD)



An aggregate demand curve shift shows a change in another variable not the price level

An outward shift shows an increase in GDP whilst a shift inwards shows the opposite

The reasons for a shift in the demand curve are:

Consumption spending changes:

- A **unemployment** fall means that there are more people with money to spend and willing to borrow money.
- The government may also reduce **interest rates**, this also increases stock wealth.
- A stock market rise and house rise will increase consumer wealth and **wealth effects**.
- A reduction in the number of **high saving 45-60 year olds** will increase the **average propensity to consume** (proportion of income spent).
- **New technology** results in more households wanting to buy these new products.
- A fall in **income tax** increases disposable income.
- Higher **real income** results in higher consumption levels.
- Also **population size** increase means more spending.
- **Credit availability** means more people can borrow and thus spend.
- **Consumer confidence** increasing means more are likely to spend.
- **Inflation rates** being high means more will demand now but also means interest rates rise.

- **Housing bubble burst**, due to prices rising to high and then a sudden collapse erodes consumer confidence, leading to less spending, fewer new houses affecting output and employment.
- **Stock market crash** cause a reduction in wealth meaning more people save and aggregate demand is lower.
- **Central bank raising interest rates** reduces consumer spending and investment, sending the economy into a recession.
- **The world economy going into recession**, hitting exports and thus a recession occurs.
- **An appreciation of the pound** suddenly reduces UK competitiveness.

Supply side shocks:

- Large **rise in world commodity prices** creating inflation and meaning the value of demand of imports rises. These costs reduce aggregate supply leading to lower output.
- An **outbreak of a trade union** leading to a rise in price level thus decreasing aggregate supply.

#### 2.5.4 Impact of economic growth

Consumers:

- Afford to **buy more** goods and services due to higher incomes leading to a **higher material living standard**
- Decreases in **unemployment** as labour is derived demand, however it may come from tech and capital advances which displace labour
- Better **housing**
- Reduced **absolute poverty**
- Increased **life expectancy**
- Better **education** system
- There is an argument that due to the **eastern paradox** it does not increase happiness
- **Increased relative poverty**
- **Negative externalities and social effects** like pollution and traffic.
- **Increasing inequality** has come with economic growth. It mainly benefits the owners of capital. It is arguable growth is **better for developing countries**
- Leads to **demand-pull inflation** increasing living costs

Firms:

- It provides opportunities for firms to **increase sales** due to rising incomes. It also provides **new** firms a place to establish themselves.
- Economic growth increases investment due to the **accelerator theory**.
- Rising **animal spirits and business confidence** increases investment and research and development.
- However, economic growth changes the **economies structure** and **changing technology may remove firms**
- **Workers demand more pay** and a wage price spiral
- **Inflation** may occur

Government:

- Government **revenues rise** from rising incomes through taxes
- There is **reduced borrowing** leading to a **budget deficit decreasing**
- The increase in the private sector normally leads to **growth in the public sector** further improving society and education e.g. health or education
- However, this **depends on the party in power** and may be spent on debt etc
- The **balance of payments will worsen** from increased imports
- Migration also may lead to **overpopulation**

The environment:

- In rich countries growth leads to less pollution and a **cleaner environment** as actors spend more to improve the environment.

A cut in tax or an increase in personal allowance increases retained profits/disposable income, will increase disposable income thus increasing the marginal propensity to consume/invest thus increasing consumption and AD thus stimulating economic growth.

**The income tax burden = tax paid/income**

A rise in spending due to decreased taxes or increased government spending leads to a multiplier effect not just an AD shift, depending on the extent of leakages (due to MPC). The more spare capacity and smaller the leakages the larger this shift will be.

Drawbacks of fiscal policy:

- **Smaller government tax revenue** in the short term leading to less spending funds.
- Unwanted **inflationary pressure**

Strengths and weakness of demand side policy:

- **Expectations (forward guidance)**, do people expect the rates to go lower and there to be inflation.
- **Confidence** in the economy will change the effect of AD.
- **The magnitude of the change** is vital in the extent of the effect.
- **Speed of adjustment**, due to lack of demand due to a long term depression in the economy, Keynesians argue the demand problems leave an economy in short run equilibrium for years. This is as there are supply side problems making demand side policies for increasing economic growth useless.
- **Conflicting policies**, in high unemployment some argue fiscal and monetary expansionary policies are needed however classical economists may argue only monetary policy should be expansionary due to fiscal policy creating rising national debt while having limited impact on AD creating inflation (contracted by monetary policy) and growth decreases in the long term when you have to save.
- **National debt**, in a recession expansionary fiscal policy may be used to increase AD. However the opportunity cost of the fall of a debt may be larger, as the government must print money to pay it off, fuelling inflation or increased borrowing from the financial market in the long term.
- **The rate of interest**, this should be cut in the short term to stimulate AD, however if it goes too low the effectiveness is thus limited.
- **Quantitative easing**, some argue that instead of boosting AD it mainly pushes up asset prices instead of creating new consumption, resulting in increased borrowing to buy these already existent but now more expensive capital.
- **Size of the multiplier**, economists say that the multiplier is at zero in the short term as government spending crowds out private sector spending. This results in tax cuts due to government borrowing just resulting in less private sector borrowing. It also means an increased budget deficit due to printing money only leads to inflation not increased output. Keynesian economists however argue spending quickly works its way through the economy.
- **Time lags**, demand side policies have time lags, such as building new infrastructure thus resulting in the policy intentions only coming into place when the economic climate has most likely changed. This results in effectiveness in the short term being pretty small.
- **Fine tuning**, demand side policies have too little precision and outcomes are unpredictable when there are so many random shocks involved in the economic system.

### 2.6.2 Supply side policies

A **supply side scheme** is a government scheme to promote market forces, cut costs and to raise the full employment level of output in the short and long run (LRAS is the main importance). These policies improve the production potential and PPF through removing bottlenecks leading to **supply side improvements**.

## The Phillips curve

This is a demonstration of the trade off between unemployment and inflation. Wages are the most important factor of production. When wages increase faster than output per worker, firms charge more thus increasing inflation. Thus the lower the rate of unemployment the higher the inflation level as workers have higher bargaining power. This creates a wage spiral as households demand higher wages as they realised otherwise their real wages will decrease. This can be demonstrated by either the SRAS AD or the short run Phillips curve.

Conflicts between policies:

- **Expansionary fiscal and monetary policy** will **increase AD, raising growth and reducing unemployment**. This increases **inflation and the current account deficit**. The reverse is true for contractionary.
- **Interest rate cuts** will increase AD, **growth from investment** and thus **unemployment** in the short run whilst **decreasing the deficit**. This however may lead to **high inflation**. This also **increases competitiveness** and **redistributes income** benefiting the young with mortgages. Quantitative easing whilst increasing **wealth inequality** helps to increase asset prices.
- **Supply side policies** increase the PPF and **reduce inflationary pressure**, however this results in **increasing inequality** through policies.
- **Fiscal deficit reduction** leads to a **increase in unemployment** and **lower growth** in the short run, however higher taxes **reduce inequality**.
- **Environmental policies** lead to a **lower LRAS** and **lower growth** through tighter regulation. This can also create **more efficiency** e.g. recycling waste and in the long run this **increases AS** through more innovative tech.

## Quantitative skills

**Index number**- An indicator showing the relative value of one number to another from a base of 100. It is often used to present an average of a number of statistics. Index number is 100 times the ratio to the base value with no units.

**Base period**- The period, such as a year or a month, in which all other values in the series are compared.

In Britain, the most well known indices are the retail price index (RPI) and the consumer price index (CPI).

**Index number equation = (new figure/base figure) x 100**

Index numbers benefits:

- Allows **easier identification of trends** and forecasts (used for simplification of data representation). Not at outright levels.
- **Easier to calculate** percentage change.
- **Easier to compare** data.
- **Presentation of data** is straight forward.

Average motor insurance premiums paid in the United Kingdom

Year	Insurance premium (£s)	Index of car insurance premiums, 2014=100
2013	412	$(412/385)100 = 107.0$
2014	385	100.0
2015	388	$(388/385)100 = 100.8$
2016	429	$(429/385)100 = 111.4$

There is a difference between the percentage point and percentage change, also does not represent nominal values.

**Nominal values** are current values and have not been adjusted for inflation.

**Real or constant values** are values that have been adjusted for inflation.

**Real value equation = (base year index/current year index) \* current year price**

Calculating real values:

	Price index	Shopping expenditure (current)	Real price
Year 1	100	500	500
Year 2	120	580	$100/120 * 580 = 483$
Year 3	140	620	$100/140 * 620 = 443$

**Rate of change = (New value - Old value / Old value) \* 100**