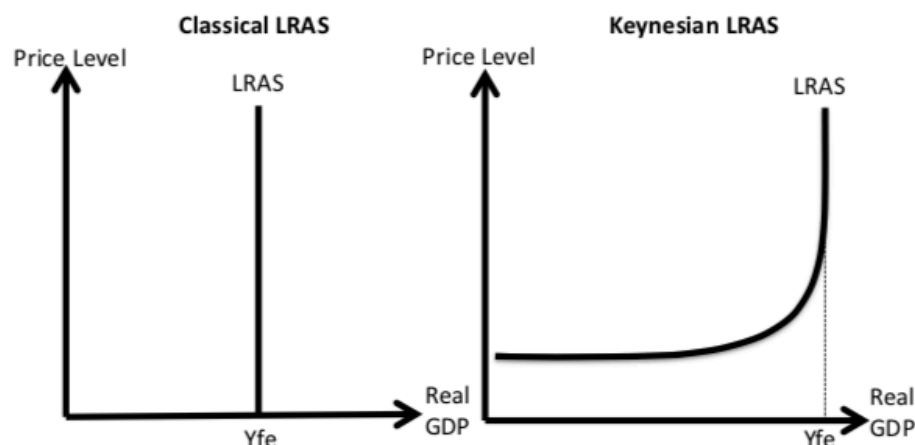




### 1.3 Classical and Keynesian Long Run Aggregate Supply (LRAS)

- **Classical LRAS** – The maximum level of output an economy can produce using all factors of production at sustainable levels; The productive potential of the economy
- **Keynesian LRAS** – The total amount of goods and services that producers are willing and able to produce at a given price level in a given time period



1) The classical LRAS curve is fixed and therefore vertical at the full employment level of output ( $Y_{fe}$ ). This is because classical economists believe that there is only one long run equilibrium,  $Y_{fe}$ , which the economy will always return to in the long run.

2) The Keynesian aggregate supply curve is shaped due to the level of spare capacity available in the economy indicating that the economy can be in the long run at any level of output (Real GDP) due to the inflexibility of wages downwards. When there is a large level of spare capacity Keynesians believe that the output can increase without putting excess pressure on existing factors of production given the large amount of unemployed factors of production available in the economy. Therefore Real GDP can increase without any demand pull inflationary pressure, hence why the curve is horizontal at low levels of Real GDP. It is only when the economy approaches full capacity,  $Y_{fe}$ , that for Real GDP to increase, pressure is put on existing factors of production increasing the price of them and thus costs of production for businesses feeding through to higher prices, increasing the inflation rate. There comes a point when no spare capacity exists and thus Real GDP cannot increase without large increases in inflationary pressure, unsustainable production. This is where Keynesians agree with Classical thought and the curve becomes vertical.



### LRAS Determinants (Quantity/Quality of Factors of Production & Productive Efficiency)

1) **Labour Productivity.** Any improvements in education and adult training will improve human capital, skills and therefore labour productivity. This is an improvement in the quality of labour thus shifting LRAS to the right from LRAS1 to LRAS2.

2) **Investment.** For example firms spending on new capital, upgrading machinery, building a new factory, improving technology, engaging in research and development and/or spending on innovation. This investment improves both the quantity and the quality of the capital stock in the economy whilst also improving productive efficiency, increasing LRAS from LRAS1 to LRAS2.

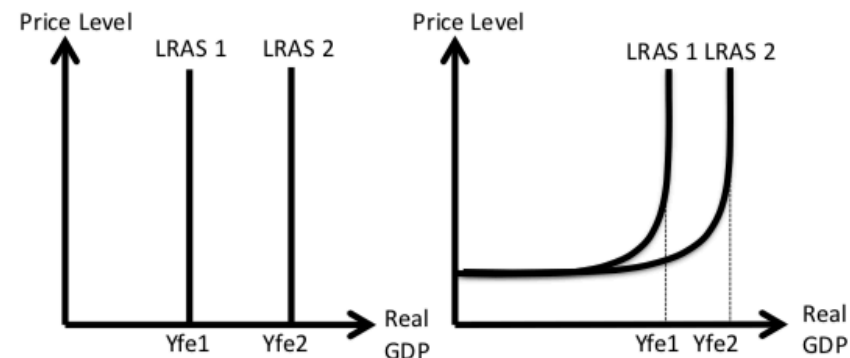
3) **Infrastructure Improvements** i) E.g. on transport infrastructure includes new roads, airports, ports, runways, train lines, rail electrification. This reduces the costs of production for firms as transporting goods and services around the country and internationally becomes quicker, easier and more efficient. This increases productive efficiency increasing LRAS from LRAS1 to LRAS2.

ii) Infrastructure improvements increase the quantity and quality of the capital stock of the economy for example by building new schools, hospitals, railway lines, roads, electricity infrastructure etc. This will increase LRAS and thus boost the productive potential of the economy from LRAS1 to LRAS2.

4) **Competition.** Policies that increase competition such as privatisation, deregulation and trade liberalisation will force firms to be as efficient as possible to keep costs and prices as low as possible. This competitive drive will increase productive efficiency and increase LRAS from LRAS1 to LRAS2.

5) **Immigration.** An increase in the number of immigrants of a working age will increase the size of the labour force in a country thus increasing the quantity and perhaps the quality of labour shifting LRAS to the right from LRAS1 to LRAS2.

6) **The institutional structure of the economy** such as banks and other financial intermediaries that bring together savers and borrowers perform a crucial role of accepting deposits and converting them into loans for entrepreneurs and business to fund investment (facilitating the increase in the quantity and quality of the capital stock). A strong institutional structure in an economy will ensure persistent increases in LRAS from LRAS1 to LRAS2.

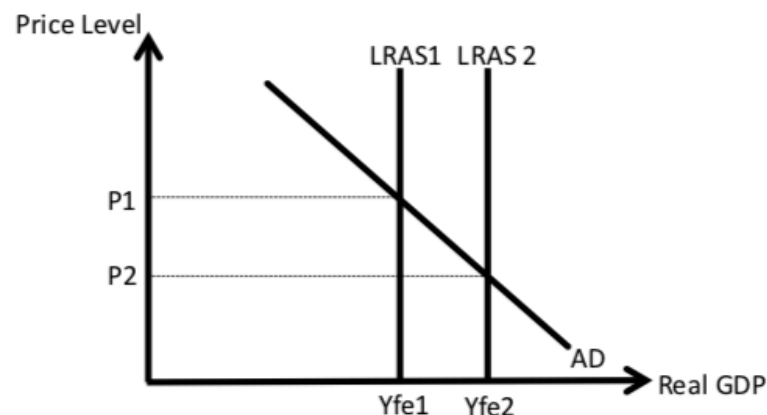




### Market Based Supply Side Policies

➤ **Market Based Supply Side Policies – Policies reducing the role of government that aim to shift LRAS to the right by increasing the economy's productive potential**

#### Market Based Supply Side Policies – Tax Reform (How they shift LRAS)



1) **Reducing the marginal rate of income tax.** Reducing income taxes increases the incentive to work harder as less income will be taxed away when earned increasing the productivity of labour. Furthermore, lower income taxes provide an incentive for the economically inactive to start working and take available jobs, entering the labour force. These factors increase both the quantity and the quality of the labour force, increasing LRAS from LRAS1 to LRAS2.

2) **Reducing corporation tax.** Reducing corporation tax increases the incentive for firms to invest. Firms have a greater level of retained profit to fund investment, which involves spending on new capital, upgrading machinery, building a new factory, improving technology, engaging in research and development and spending on innovation. This investment improves both the quantity and the quality of the capital stock in the economy whilst also improving productive efficiency, increasing LRAS from LRAS1 to LRAS2.

#### Market Based Supply Side Policies – Labour Market Reform (How they shift LRAS)

3) **Reducing the power of trade unions.** Reducing trade union power lowers long run costs of production for firms. This is because trade unions bargain for higher wages, longer worker breaks, longer worker holidays, longer maternity/paternity leave, all of which raise long run costs of production for firms. By limiting such action, efficiency in the labour market improves. This improves productive efficiency, increasing LRAS from LRAS1 to LRAS2.



4) **Reducing/abolishing minimum wages.** This reduces long run costs of production for firms in industries such as retail, leisure, hospitality, recreation, supermarkets and domestic services. By limiting such regulation, efficiency in the labour market improves, increasing productive efficiency shifting LRAS to the right from LRAS1 to LRAS2.

5) **Reducing unemployment benefits in an economy and relaxing immigration controls.** This increases the incentive for the inactive to find work and reduce their dependency on welfare, entering the labour force whilst higher immigration of working aged people can directly increase the size of the labour force. This increases the quantity of labour in the economy, increasing LRAS from LRAS1 to LRAS2.

#### Market Based Supply Side Policies – Competition Policies (How they shift LRAS)

6) **Privatisation.** Privatisation of industries creates a profit motive whereby more firms enter the market to make profit, increasing competition. Competition and a profit maximisation objective incentivises maximum efficiency where firms aim to lower their costs of production as much as possible to charge lower prices than rivals. This increases productive efficiency, increasing LRAS from LRAS1 to LRAS2.

7) **Deregulation.** Deregulation involves reducing laws and government imposed standards in the economy e.g. environmental laws, health and safety laws, product safety laws, maternity/paternity laws, laws regarding working conditions and planning regulations. This significantly reduces long run costs of production for firms. At the same time the legal barriers to entry into a market are reduced increasing competition, incentivising maximum efficiency as firms look to remain competitive. Both factors improve productive efficiency, increasing LRAS from LRAS1 to LRAS2.

8) **Trade Liberalisation.** Trade liberalisation involves the removal of trade barriers such as tariffs and quotas, freeing up trade promoting global competition. The fierce and intense nature of global competition forces producers to do whatever they can to compete. Competition and a profit maximisation objective incentivises maximum efficiency where firms aim to lower their costs of production as much as possible to charge lower prices than rivals. This increases productive efficiency, increasing LRAS from LRAS1 to LRAS2.

As LRAS increases due to successful supply-side policies...

1) **Growth.** Potential and actual growth increases from YFE1 to YFE2. This is because with greater demand in the economy, firms respond by increasing output. This increase in output is an increase in real GDP, which is an increase in economic growth.

2) **Unemployment.** Unemployment decreases. This is because labour is a derived demand, derived from the demand for goods and services. As the demand for goods and services is high, firms will need more workers to produce extra output, thus reducing unemployment.

3) **Inflation.** Cost push inflation decreases from P1 to P2. This is because there is less pressure on and competition for factors of production reducing the rate of their price increases thus reducing the rate at which the prices of goods and services rise.

4) **Trade Position.** The trade position in the economy is likely to improve. This is because with lower inflation, exports are more competitive, increasing their demand and the revenue brought in by them.





## Chapter 5 – Balance of Payments

### 5.1 The Current Account of the Balance of Payments

- **Balance of Payments** – Record of all international transactions between one country and the rest of the world
- **Current Account** – Measures the total value of export revenue and import expenditure of trade in goods & services, investment income and current transfers

#### Demand Side Causes of a Current Account Deficit (Opposite for a Surplus)

- 1) **Strong domestic growth (higher incomes at home).** If real disposable incomes are high at home due to a boom for example, the marginal propensity to import will increase. There will be a greater 'sucking in' of imports effect, increasing demand and thus the expenditure on imports. Ceteris paribus, this will worsen the trade balance of the current account causing a current account deficit.
- 2) **Recession abroad (low incomes abroad).** If real disposable incomes fall abroad in the economies of major trading partners due to a recession for example, the demand for domestic exports will decrease, leading to a fall in the revenue generated from exports which ceteris paribus will worsen the trade balance of the current account causing a current account deficit.
- 3) **A strong exchange rate** makes exports dearer and imports cheaper. Economic theory suggests that the demand for imports and therefore the expenditure on imports will rise whereas the demand for exports and therefore the revenue generated by exports will decrease. Both effects will worsen the trade balance of the current account causing a current account deficit.

#### Supply Side Causes of a Current Account Deficit (Opposite for a Surplus)

- 1) **Low labour productivity.** Low labour productivity means output per hour worked is low relative to competitor countries around the world. This increases unit labour costs, a major cost of production for firms who will reflect such costs in higher prices charged, reducing the price competitiveness of a country's exports. This will reduce the demand and thus revenue generated from exports, worsening the trade balance of the current account causing a current account deficit.
- 2) **High minimum wages.** High minimum wages relative to competitor countries, who either do not have minimum wages or whose minimum wage is much lower, will increase unit labour costs; a major cost of production for firms, who will reflect such costs in higher prices charged reducing the price competitiveness of a country's exports. This will reduce the demand and thus revenue generated from exports, worsening the trade balance of the current account causing a current account deficit.
- 3) **Poor Investment.** Poor investment implies that capital machinery is outdated, depreciating, inefficient and costly to maintain. This means that costs of production are relatively higher than competitor countries whose capital machinery is more productive, with firms reflecting higher costs in higher prices charged reducing the price competitiveness of a country's exports. Once more, non-price competitiveness of exports will fall as the final quality of goods produced is likely to be lower. These two factors will reduce the demand and thus revenue generated from exports, worsening the trade balance of the current account causing a current account deficit.



4) **Higher Relative Inflation.** If a country has higher inflation rates relative to competitor countries, the price competitiveness of exports will be lower. This will reduce the demand and thus revenue generated from exports, worsening the trade balance of the current account causing a current account deficit.

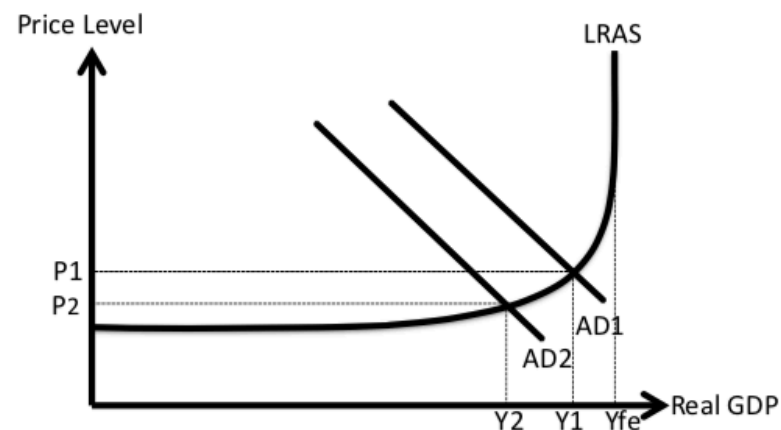
5) **Government restrictions on free trade.** If foreign governments increase or impose new trade barriers on domestic exports, such as tariffs, quotas and non-tariff barriers, it will be harder to access international markets. This will reduce the revenue generated by a country's exports worsening the trade balance of the current account causing a current account deficit.

6) **Loss of comparative advantage.** If one country loses their comparative advantage, perhaps due to skills improvements, lower wages or better access to raw materials in another country, industries will go into decline where large export revenues were previously being generated. Losing this export revenue will worsen the trade balance of the current account causing a current account deficit.

7) **Resource Depletion.** This is a strong argument in the case of developing countries in particular where extraction/mining laws and regulations do not exist or are not enforced. Self-interested, profit maximising firms will ignore the long term repercussions of their actions and continue to exploit natural resources eventually leading to depletion of the resource. Primary commodity export revenue is the major source of export revenue for these countries therefore depleting such resources will drastically reduce export revenue worsening the trade balance of the current account causing a current account deficit.

### 5.2 Consequences of a Current Account Deficit

1) A country with a current account deficit is very likely to have a trade deficit given that the trade balance accounts for a much greater share of the current account than the income balance. As a result, import expenditure on goods and services exceeds export revenue generated from goods and services which **reduces the value of (X-M) in the AD equation, causing AD to decrease from AD1 to AD2:**







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8) **Empowerment of Women.** If women are empowered with access to the same opportunities as men in society, development progress could rapidly increase. When women become active in the workforce, economic growth increases raising incomes and living standards for all. Women themselves earning income can drastically alleviate poverty and improve health and education given that women will prioritise family well being through immunisation, ensuring access to education and using appropriate kitchen and sanitation equipment. Education of women can also help control birth rates through greater understanding of contraception and can prevent the spread of disease.

### Barrier to Development – Income Inequality

i) Income inequality can **reduce the amount of savings and thus investment**. This is because the poor have a higher marginal propensity to consume income earned to maintain the living standards of their family. Given their low incomes, this leaves very little income for saving and thus a lack of funds for financial institutions to lend for business investment purposes.

ii) The rich tend to save their money abroad due to higher rates of interest and more stable foreign currency providing a more lucrative return than saving domestically. This outward flow of money is known as **capital flight** reducing the chance of these funds being used to promote development outcomes domestically.

iii) The **rich tend to dominate both politics and the economy** whereby policy decisions focus more on improving their own positions and wealth rather than improving the outcomes of those in extreme poverty. In this sense development progress can stagnate and income inequality worsens over time.

## 9.5 Microfinance and Development

➤ **Microfinance or Microcredit – The provision of loans at low interest to small scale entrepreneurs in a developing country**

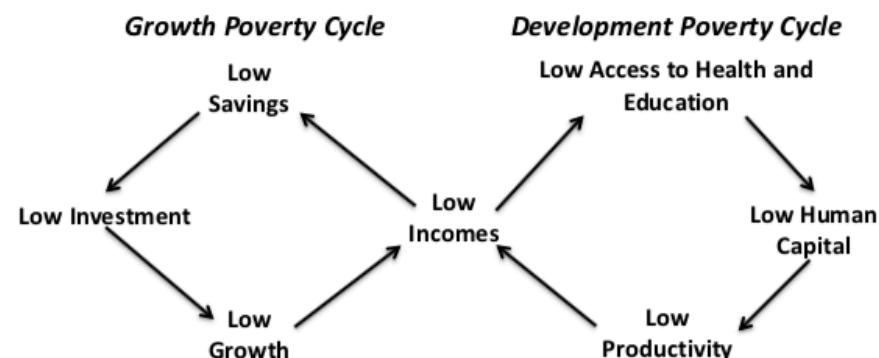
### Microfinance and Development Pros

1) Microfinance can **break the growth and development poverty cycles** in developing countries by increasing investment and also increasing profits and therefore incomes of small scale entrepreneurs; income which can then be used to increase both material and non-material living standards with the ability to access health and education.

The poverty cycles below show how microfinance can fill the savings gap in developing countries, providing a means to gain finance for small businesses to grow and become more productive by buying capital machinery. Profitability therefore increases which increases incomes allowing families to access better standards of education and healthcare, increasing development.



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2) Microfinance can **alleviate poverty and create jobs for others**. This is because as profits and incomes rise for individual entrepreneurs, the need to hire more workers increases, a derived demand from the growth of their business. Therefore not only is income rising and poverty alleviated for the entrepreneur and their family but as jobs are given to others in the community, other family livelihoods improve and widespread poverty can be alleviated.

3) Microfinance provides a **means to access finance** where official lenders may reject riskier small scale entrepreneurs allowing a road side stall for example to increase in size and use more capital machinery to boost productivity. Crucially however such loans are given **at low interest**, which can be paid back over a longer period of time. As a consequence, individuals can spend the money on capital (longer term investment) knowing that breathing space exists before a return needs to be made allowing for maximum profit and income growth without the pressure of having to pay back debts within a short space of time.

4) Microfinance schemes can **empower women**. This is because many small scale business ventures are fronted by women who need finance to grow and develop their business. Consequently by receiving these funds for business investment, women make profits and earn incomes becoming leaders in their community inspiring more women to do the same. Furthermore adding a second income into a family can rapidly improve the living standards of the whole family where improvements in schooling and health outcomes accelerate.

### Microfinance and Development Cons/Evaluation

1) The presumption of microfinance schemes is that every business venture will be successful but this is certainly not the case. No matter how impressive the entrepreneur might be, **running a successful business is difficult and full of risk**. As a consequence if businesses do fail, individuals with very low incomes will have debts to repay which they cannot afford trapping themselves and their families in poverty.

