

Stage 2 Economics (from 2021) Aggregate Demand Aggregate Supply Model – Monetarist Perspective

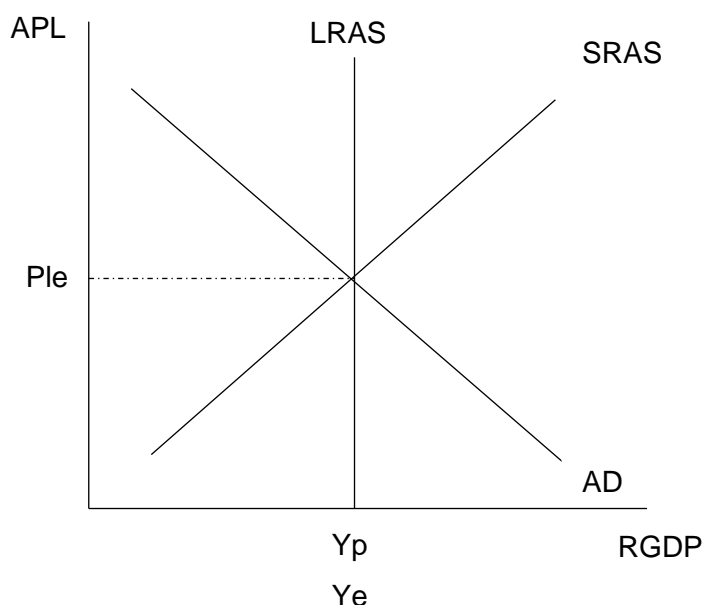
Some of this material has been sourced from: Tragakes E, (2012) Economics for the IB Diploma Second Addition Cambridge University Press

The basis of this model is in the belief that factor markets are flexible (like product markets) and will adjust to disturbances in product markets. Thus, there is a distinction between the long-run and short-run.

The short-run - (in macroeconomics) the period of time when prices of resources are constant or inflexible but product prices (average price levels) can adjust

The long run - (in macroeconomics): the period of time when the prices of all resources, including the price of labour (wages) are flexible and change with changes in the average price level

The Model



SRAS – Short-run Aggregate Supply

LRAS – Long-run Aggregate Supply

AD – Aggregate Demand

RGDP – Real Gross Domestic Product

APL – Average Price Levels

(also accepted: GPL – General Price Levels or PL – Price Levels)

Yp – Long-run Potential Level of Output

(Full Employment Level of Output: LRAS = SRAS)

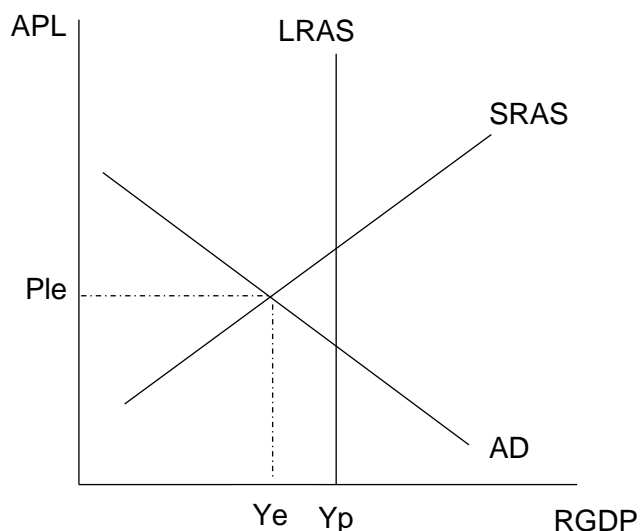
Ye – Short-run Equilibrium Level of Output

(Ye = SRAS)

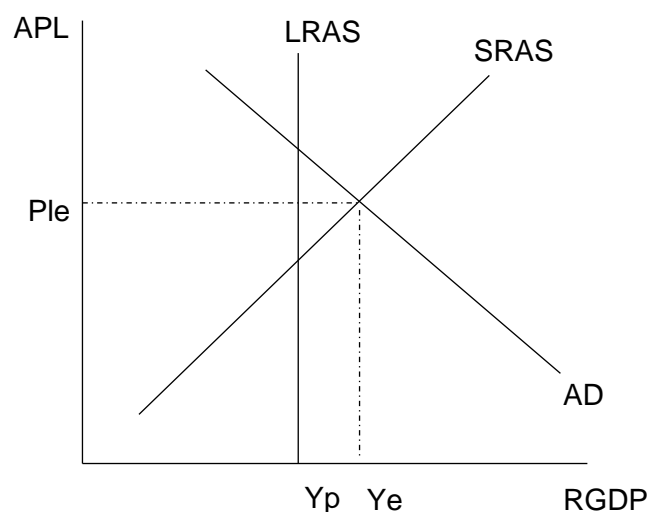
Ple – Short-run Level of Average Prices

Alternate Short-run Positions

Deflationary Gap Situation where $Y_e < Y_p$

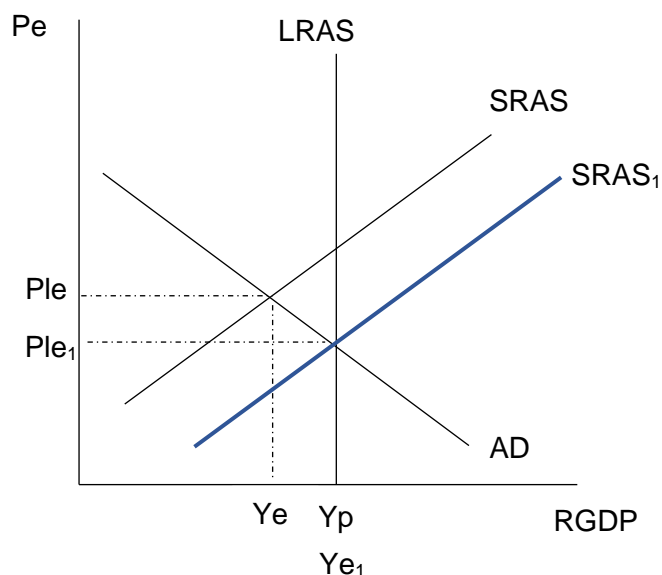


Inflationary Gap Situation where $Y_e > Y_p$



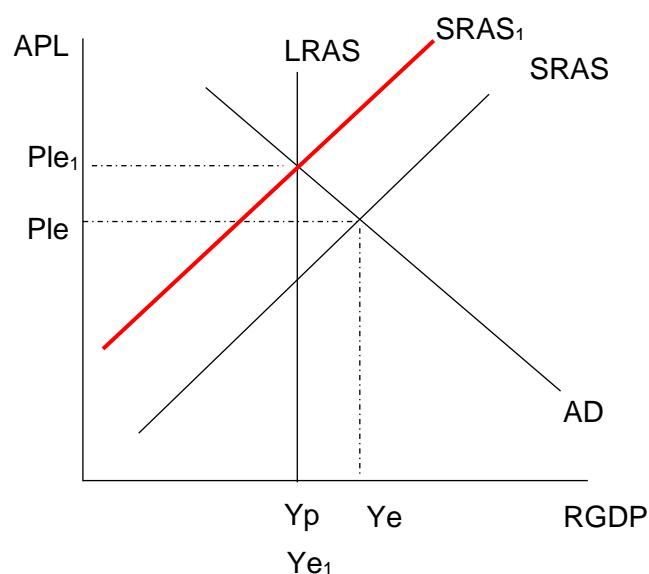
Short-run to Long-run Change

Deflationary Gap



In short-run $Y_e < Y_p$ and average price levels have fallen as has output. Firms are motivated to supply less as profit margins fall as product prices fall whilst factor costs remain fixed high. In Long-run Factor market responds to falling demand for resources and factor costs decrease. This results in a decrease in the Cost of Production and the SRAS increases to SRAS₁ (where $Y_e = Y_p$.)

Inflationary Gap



In short-run $Y_e > Y_p$ and average price levels have risen as has output. Firms are motivated to supply more as profit margins rise as product prices rise whilst factor costs remain fixed lower. In Long-run Factor market responds to increasing demand for resources and factor costs increase. This results in an increase in the Cost of Production and the SRAS decreases to SRAS₁ (where $Y_e = Y_p$.)

Factors Influencing Aggregate Demand

Movement Along the AD curve caused by:

Changes in the price level, leading to:

- the wealth effect
- the interest rate effect
- the international trade effect

Movement of the AD curve caused by:

Changes in consumer spending: (Consumption C)

consumer confidence, interest rates (monetary policy), wealth, personal income tax (fiscal policy), level of household debt

Changes in investment spending: (Investment I)

business confidence, interest rates (monetary policy), changes (improvement) in technology, business profits thus taxes (fiscal policy), level of business debt, legal/institutional changes

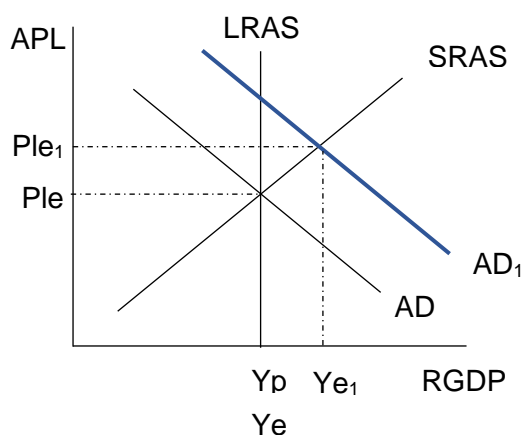
Changes in government spending: (Government Spending G)

political priorities, economic priorities: (discretionary fiscal policy)

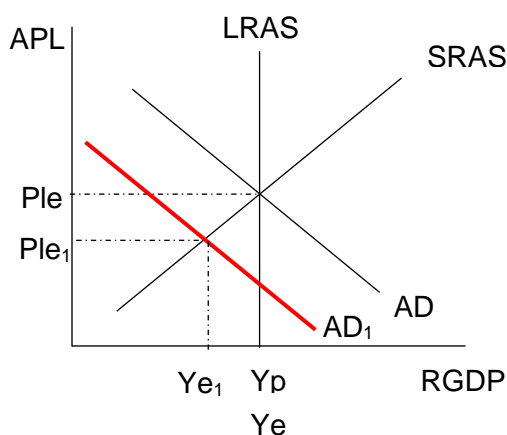
Changes in foreigners' spending: (Net Exports NX or X-M)

changes in: national income abroad, changes in exchange rates, changes in the level of trade protection

Increase in AD – in short run results in increased APL (P_e to P_{e1}) and Increased output (Y_e to Y_{e1}) as well as reductions in unemployment as demand for labour increases.



Decrease in AD – in short run results in decreased APL (P_e to P_{e1}) and Increased output (Y_e to Y_{e1}) as well as reductions in unemployment as demand for labour increases.



Factors Influencing Short-Run Aggregate Supply

Movement Along the SRAS curve caused by:

Changes in the price level, leading to:

Profit Incentives in the short-run for firms to change output as Product prices adjust (APL) but Factor costs remain fixed

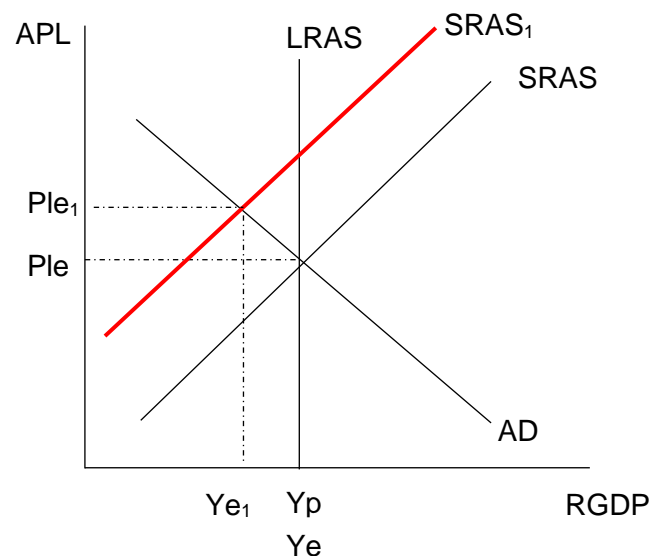
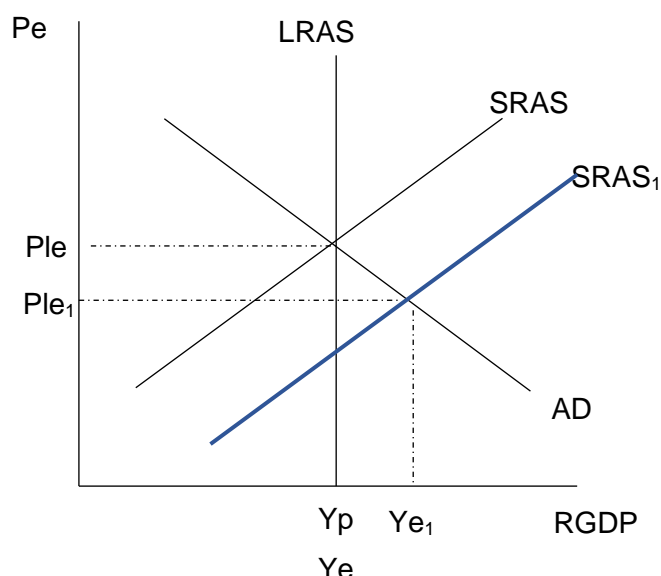
Movement of the SRAS curve caused by:

Cost of Production Changes

- Wages
- Non-labour resource prices - *price of oil, equipment, capital goods, land inputs,*
- business taxes.
- subsidies offered to businesses.
- Supply shocks – *natural disasters, human-made disasters*

Increase in SRAS (decreased cost of production) – in short run results in decreased APL (P_e to P_{e1}) and Increased output (Y_e to Y_{e1}) as well as reductions in unemployment as demand for labour increases.

Decrease in SRAS (increased cost of production) – in short run results in increased APL (P_e to P_{e1}) and Increased output (Y_e to Y_{e1}) as well as reductions in unemployment as demand for labour increases.



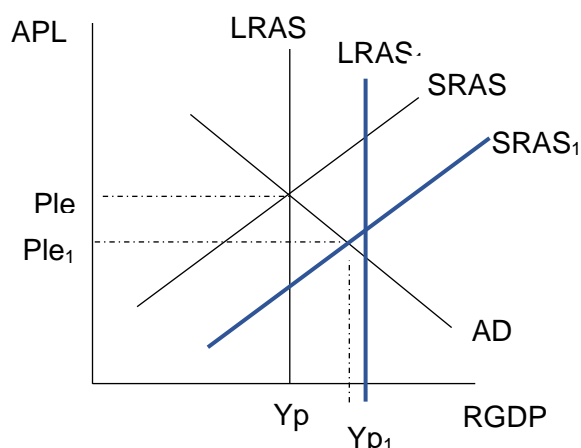
Factors Influencing Long-Run Aggregate Supply

Movement of the SRAS curve caused by:

Changes in the Quality and/or Quantity of Resources, Productivity, Technology

- Increase in the Quantity of resources
- Improvements in the Quality of resources
- Improvements in technology.
- Increases in Productivity (and productive efficiency)
- Institutional Changes – extent of privatisation, changes in competition, quality and extent of regulation

Increase in LRAS – changes in the above factors shift the LRAS to the right if they result in increased potential capacity. They also result in a decrease in the cost of production for firms so will also increase the SRAS

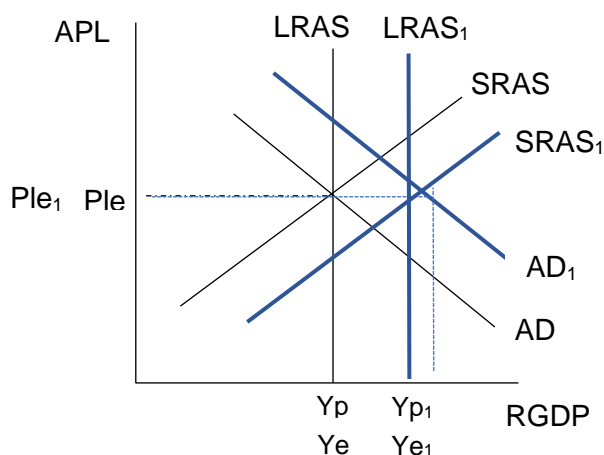


Increase in LRAS – In the absence of AD shifts it is likely that APL fall (P_e to P_{e1}) Output rises (Y_e to Y_{e1}) but a deflationary gap will emerge signalling greater output/employment potential.

NOTE: Natural Rate of Unemployment – if there was in an increase in the natural rate this would be indicated by a movement of the LRAS to the right

Common Scenarios (these scenarios have the initial equilibrium at $Y_e=Y_p$, this is not always the case)

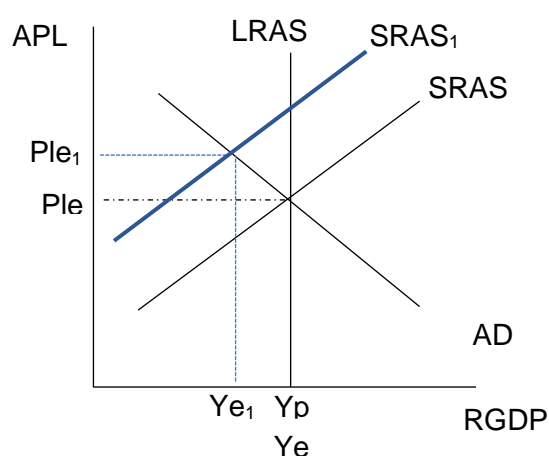
Increased Investment Spending



Investment spending is a component of AD therefore shifts AD to AD1. Investment spending also represents an increase in Physical Capital therefore will shift both the LRAS and SRAS to the right.

- Increased Output Y_e to Y_{e1}
- Average Price Levels – depends on relative change here they remain constant P_{le} to P_{le1}
- Unemployment – depends on relative change - here the economy is operating beyond full employment so a reduction in unemployment

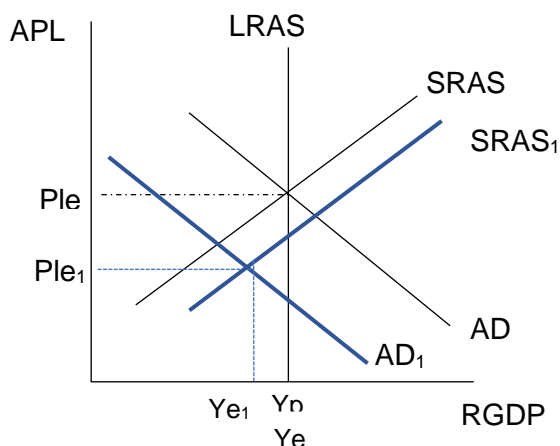
Increased Electricity Prices



Increased Electricity prices represent an increase in the cost of production for firms thus a decrease in the SRAS.

- Decreased Output Y_e to Y_{e1}
- Increased Average Price Levels P_{le} to P_{le1}
- Increased Unemployment

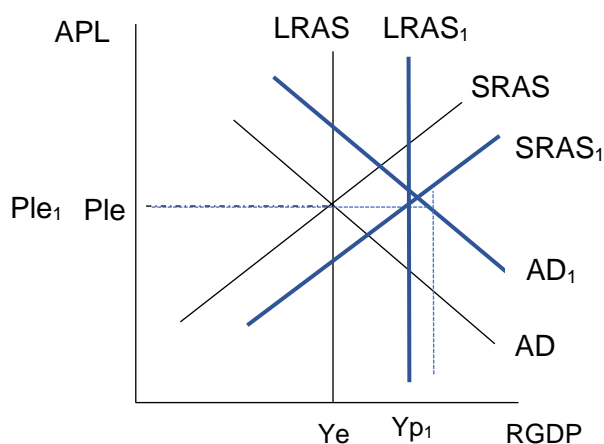
Appreciation



Appreciation will increase the price of Exports and Decrease the price of Imports thus (ceteris paribus) will decrease Exports and Increase Imports causing AD to Decrease. The decreased price of Imports will lower the cost of production by reducing input prices of imported materials thus SRAS will increase.

- Output – depends on relative change here output falls Y_e to Y_{e1}
- Decreased Average Price Levels
- Unemployment – depends on relative change here the economy is operating in deflationary gap so an increase in unemployment

Spending on Infrastructure by Government



Government spending is a component of AD therefore shifts AD to AD1. Infrastructure spending also represents an increase in Physical Capital therefore will shift both the LRAS and SRAS to the right

- Increased Output Y_e to Y_{e1}
- Average Price Levels – depends on relative change here they remain constant P_{le} to P_{le1}
- Unemployment – depends on relative change - here the economy is operating beyond full employment so a reduction in unemployment