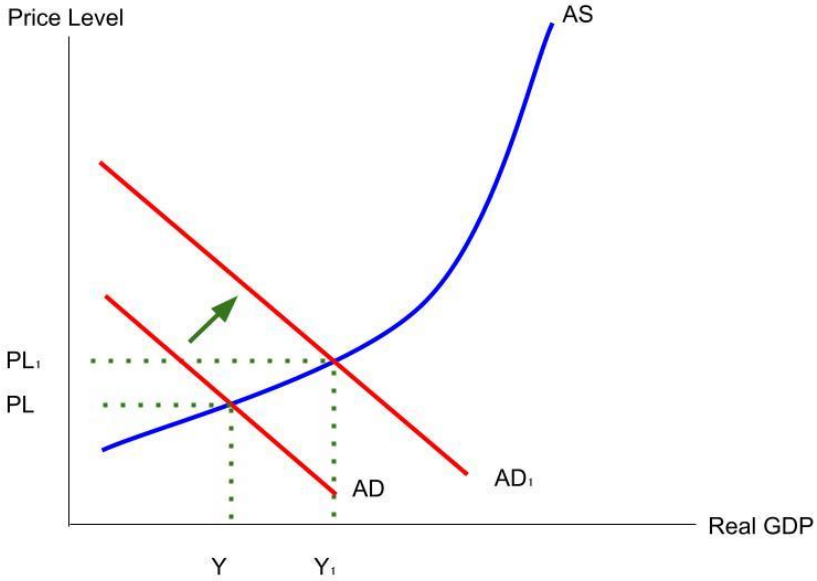
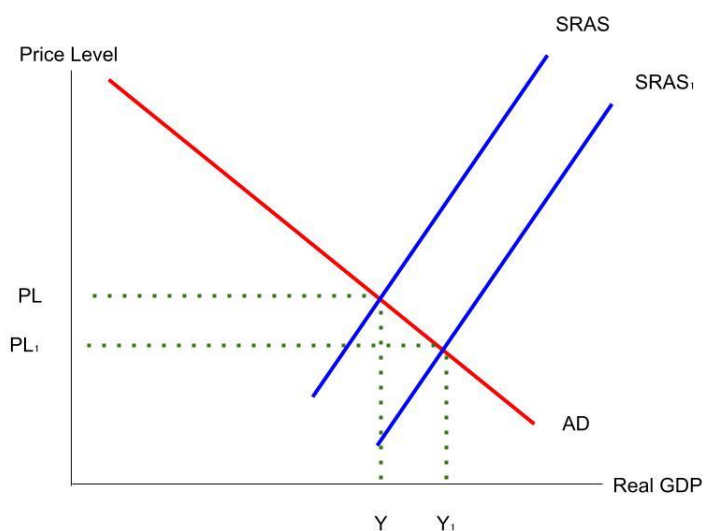


**Key diagrams for macroeconomics**

Diagram	About
 <p>The diagram illustrates the AS-AD model. The vertical axis represents the Price Level, and the horizontal axis represents Real GDP. An upward-sloping blue curve is labeled AS. Two downward-sloping red curves represent aggregate demand: the initial AD and the new AD1. A green arrow points from AD to AD1, indicating a rightward shift. The initial equilibrium is at the intersection of AD and AS, corresponding to price level PL and real GDP Y. The new equilibrium is at the intersection of AD1 and AS, corresponding to a higher price level PL1 and higher real GDP Y1. Dotted lines connect these equilibrium points to their respective values on the axes.</p>	<p><u>AS-AD: AD shift right</u></p> <p>Suppose government spending (<math>G</math>) rises. <math>G</math> is a component of aggregate demand (<math>AD</math>). So higher <math>G</math> increases <math>AD</math> - <math>AD</math> shifts right from <math>AD</math> to <math>AD_1</math>.</p> <p>This results in rising real GDP from <math>Y</math> to <math>Y_1</math> and a rising price level from <math>PL</math> to <math>PL_1</math>.</p> <p>To move to the new equilibrium, there is an extension along the aggregate supply curve.</p>

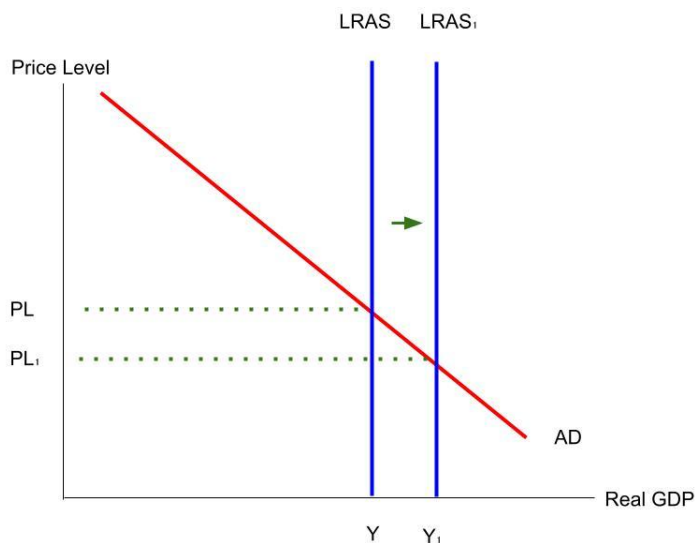


AS-AD: SRAS shift right

Suppose the prices of raw materials fall. This lowers business costs. So short-run aggregate supply shifts right from SRAS to SRAS1.

This results in rising real GDP ( $Y$  to  $Y_1$ ) and falling price level ( $PL$  to  $PL_1$ ).

To move to the new equilibrium, there is an extension along the AD curve.

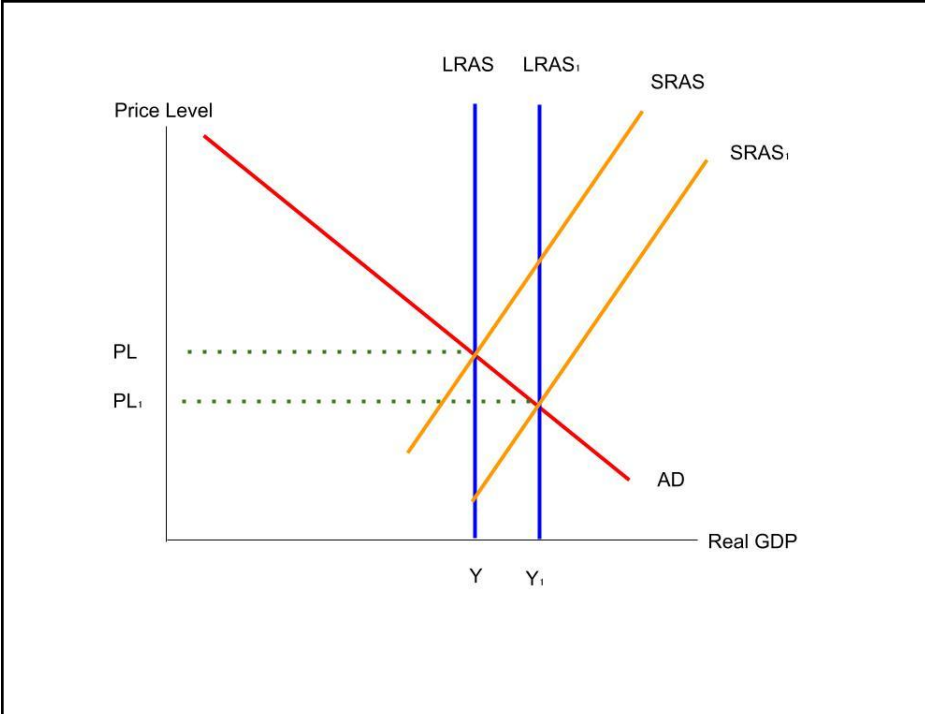


AS-AD: LRAS shift right

An improvement in productivity shifts long-run aggregate supply (LRAS) right from LRAS to LRAS1.

This raises real GDP (from  $Y$  to  $Y_1$ ) and lowers the price level from  $PL$  to  $PL_1$ .

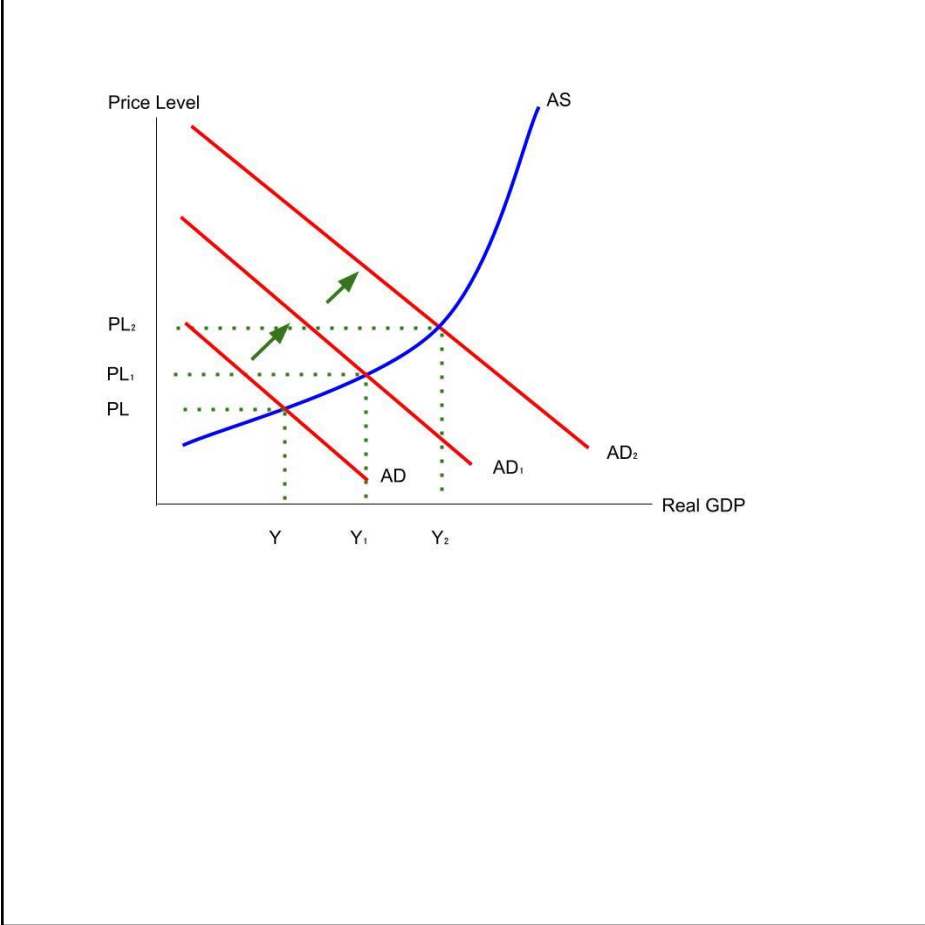
To move to the new equilibrium, there is an extension along the AD curve.



**AS-AD: SRAS and LRAS shift right**

An increase in productivity will shift the LRAS as above. It may also mean lower business costs, shifting the SRAS to the right as well.

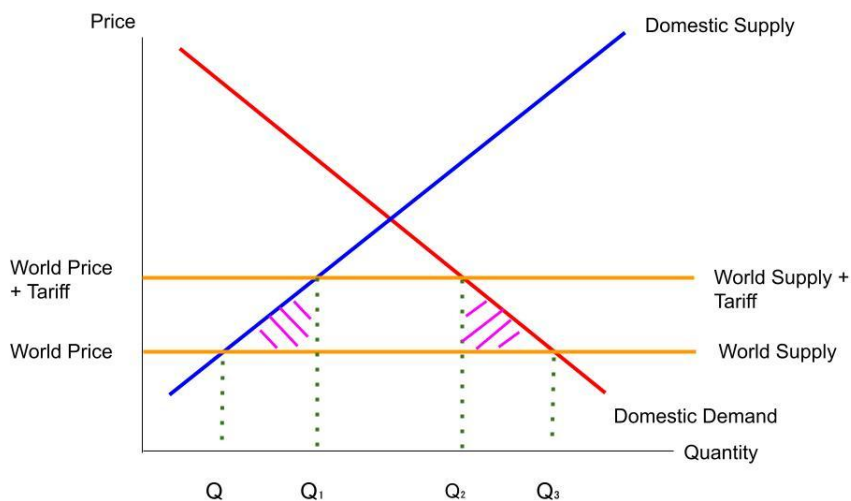
This combines the two previous diagrams.



**AS-AD: AD shift right plus multiplier**

Adding to the “AD shift right diagram”, the multiplier effect causes a second shift right in aggregate demand from AD1 to AD2.

Higher government spending on construction materials makes the suppliers richer. This raises incomes of the suppliers’ workers, so those workers spend more in local shops.



## Tariff

World supply is assumed to be perfectly elastic.

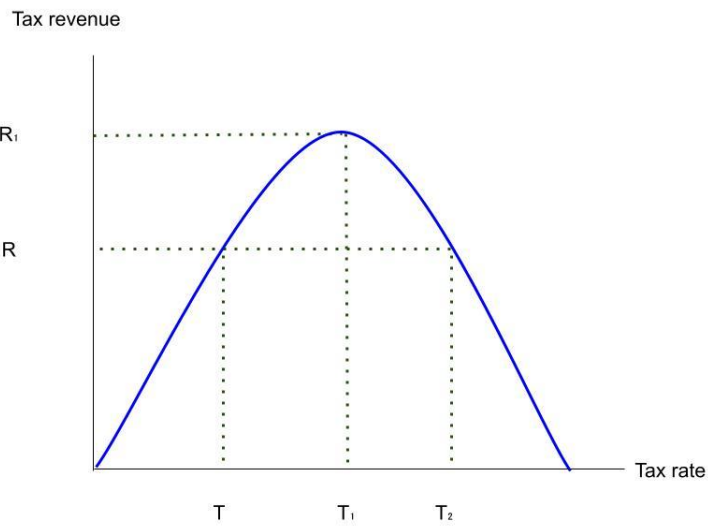
A tariff increases the cost of foreign producers supplying to the domestic economy. So the world supply line shifts upwards.

This decreases imports from  $(Q_3 - Q)$  to  $(Q_2 - Q_1)$ .

But there is a welfare loss from the tariff, as shown by the two shaded areas.

The tariff leads to higher domestic producer surplus and government tariff revenue. But this is outweighed by the fall in domestic consumer surplus.

In the exam, you can also use this diagram to show changes in domestic producer surplus or domestic consumer surplus, depending on the point you want to make.

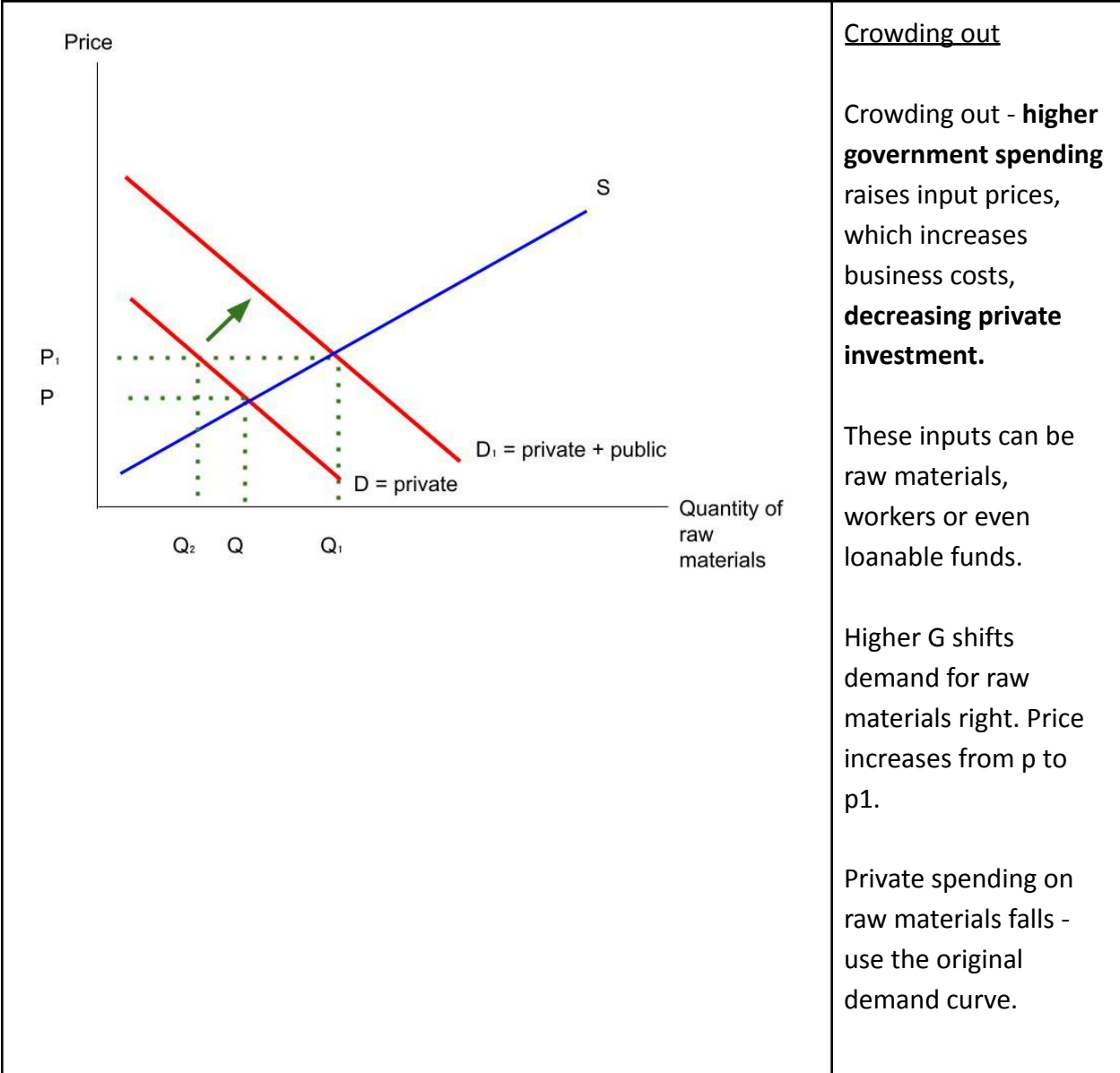


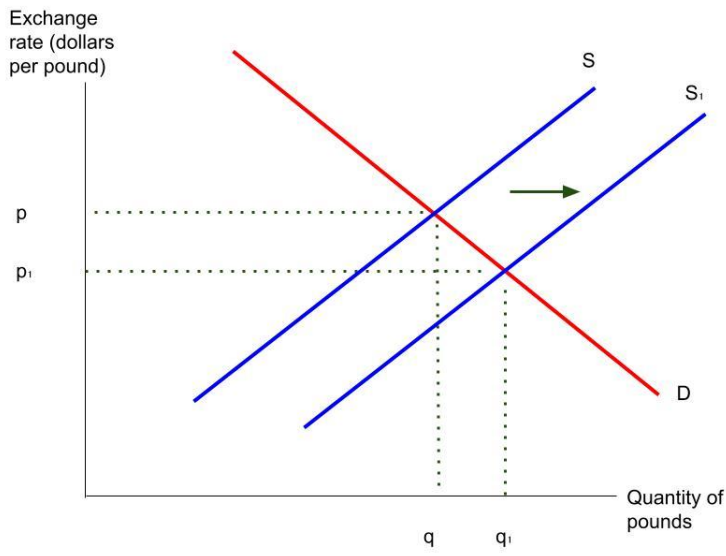
### Laffer curve

An increase in tax rate, for example income tax rates, has two effects:

1. Higher tax revenue, assuming that incomes remain the same.
2. Reduced incentives. For example higher income taxes mean less incentive to work. So pre-tax incomes fall.

At low tax rates, an increase in tax rates raises revenue. But at higher tax rates, an increase in tax rate may reduce tax revenue.

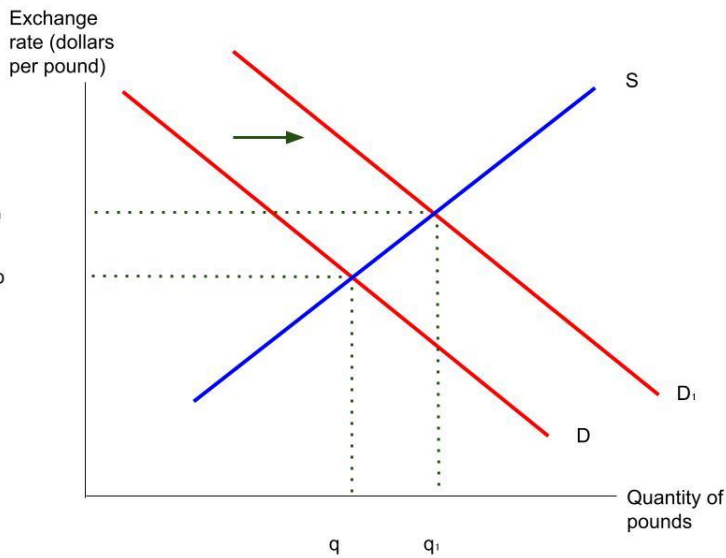




### Currency market - shift in supply

Suppose there's an increase in supply of pounds (more pounds being sold). This could be because of an increase in interest rates abroad. So there are greater hot money outflows - people sell their pounds to buy foreign currency to spend on assets abroad.

This shifts pound supply right from  $S$  to  $S_1$ . So the pound depreciates, with the exchange rate falling from  $p$  to  $p_1$ .

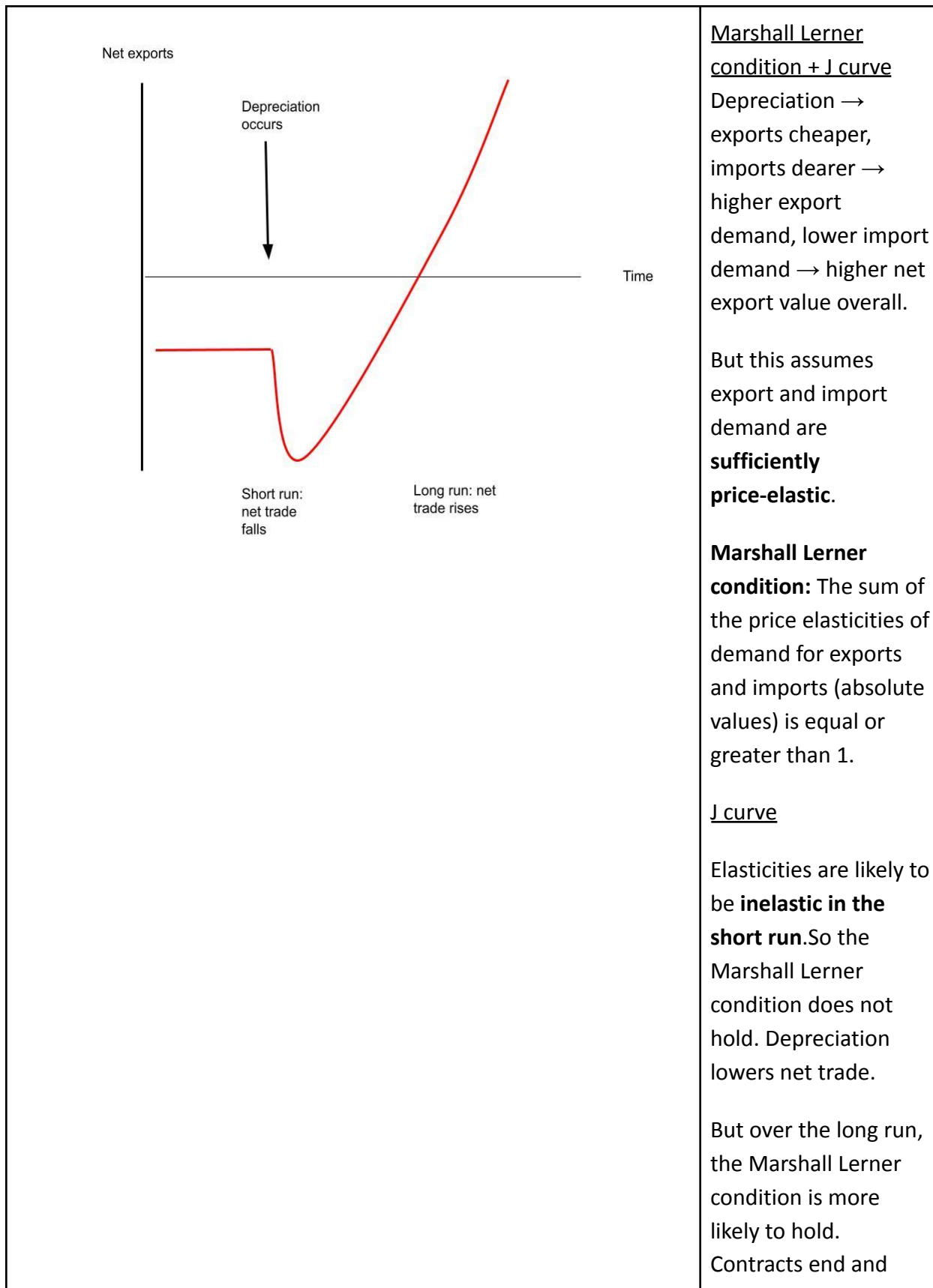


Currency market -  
shift in demand

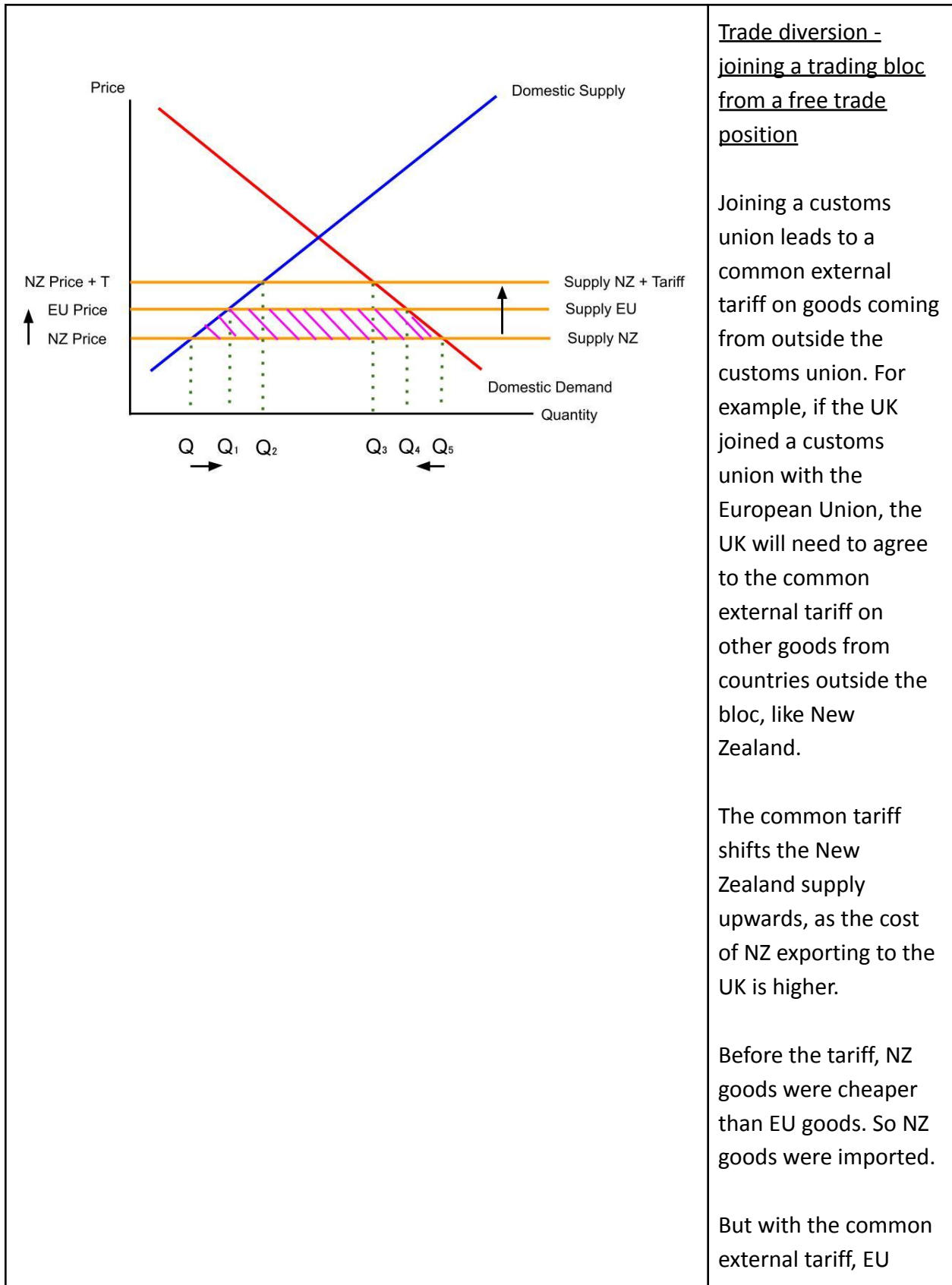
Suppose there's an increase in demand for pounds due to increased export demand (e.g. due to lower inflation in the UK relative to other countries.)

Then demand for pounds shifts right from  $D$  to  $D_1$ . So the pound appreciates, with the exchange rate rising from  $p$  to  $p_1$ .

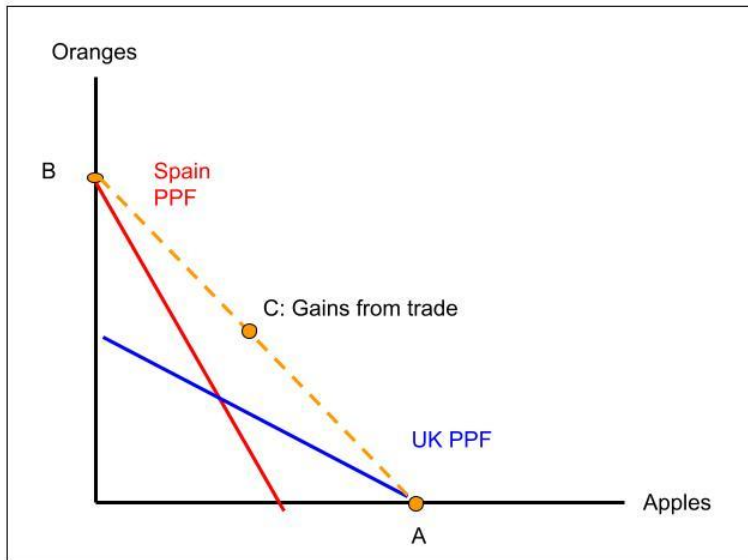




	<p>consumers have more time to respond. A depreciation improves net trade over time.</p>
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	<p>goods are now cheaper to import.</p> <p>The common external tariff leads to a welfare loss shown by the shaded area.</p>
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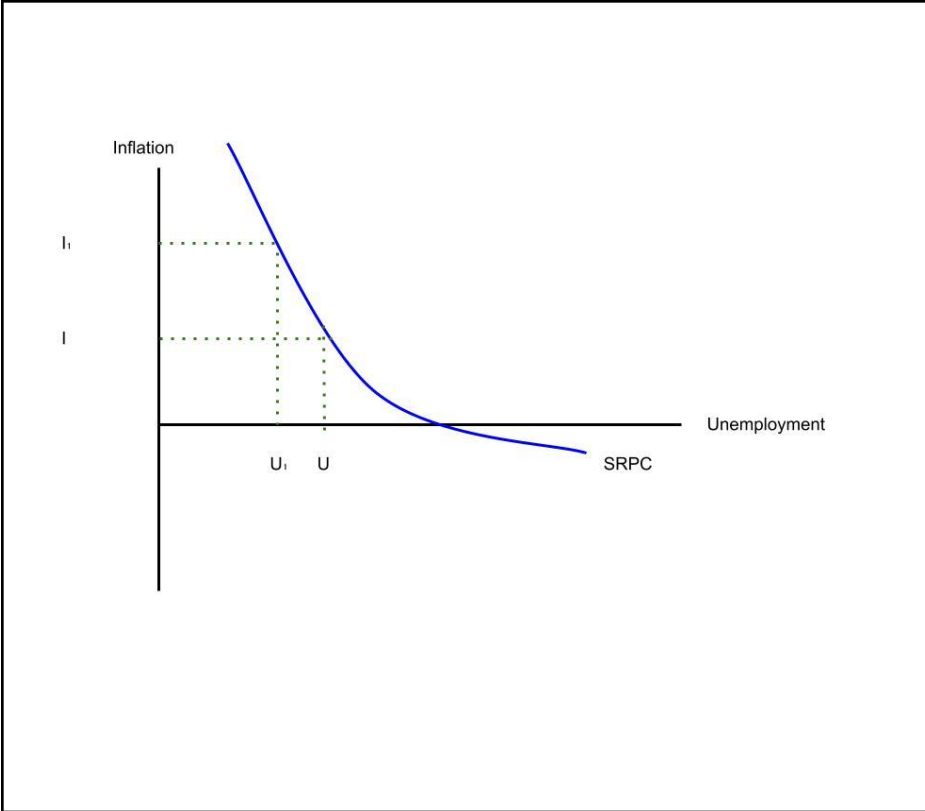
Comparative advantage - PPFs

**Comparative advantage (CPA)** - one country can produce a good with a lower opportunity cost relative to another country.

To produce one (more) Apple, the UK has to give up fewer oranges compared to Spain.

So, the UK has a CPA in apples and Spain has a CPA in oranges. The UK and Spain should specialise in apples and oranges respectively under this theory.

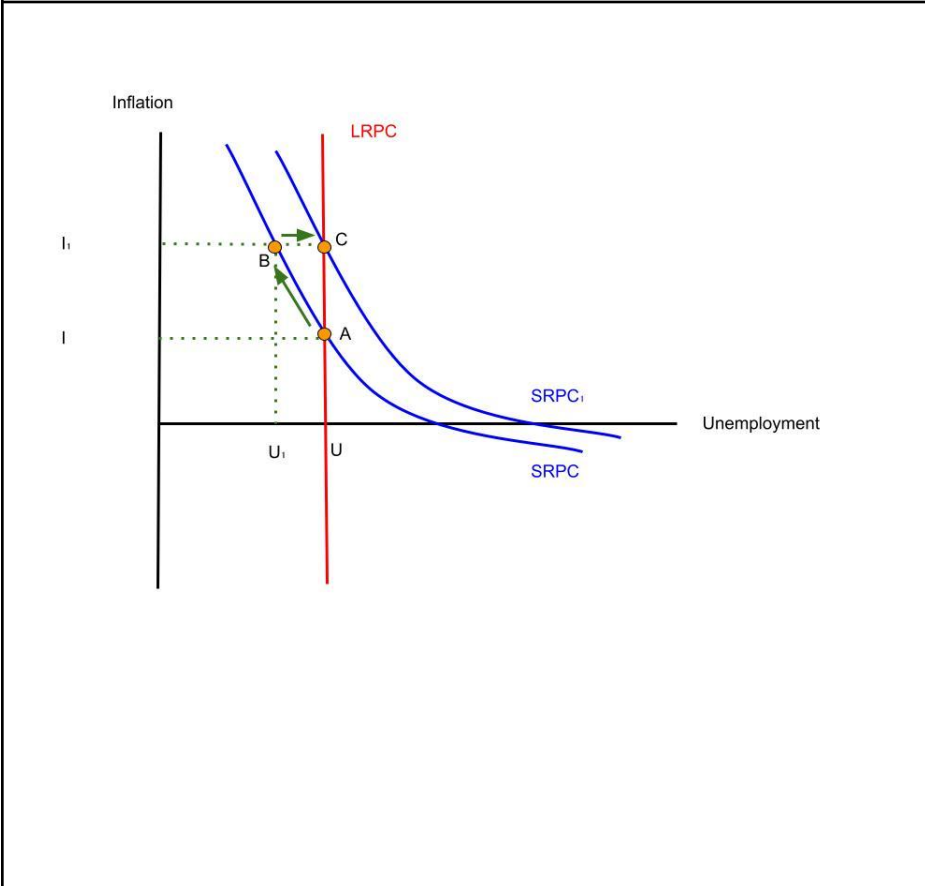
Why? **Gains from trade.** Both countries can consume beyond their domestic PPF as a result of trade. They first specialise at points A and B. Then trade goods to consume at point C.



Short run Phillips curve

Short-run Phillips curve is downward-sloping.

**Lower unemployment** (due to higher government spending, for example) → more bargaining power for workers → higher wages → higher costs for firms → **higher prices**.



Short run Phillips curve and long run Phillips curve

See the last graph to explain the move between points A and B.

At point B, workers realise their wage rises are below inflation. So workers ask for wage rises to match inflation (workers update their “inflation expectations”). This shifts the short-run

	<p>Phillips curve to the right from SRPC to SRPC1. Eventually the economy moves to point C.</p> <p>So, an increase in government spending only leads to higher inflation in the long-run.</p> <p>Another way to think of this: the SRPC and LRPC are the same as the SRAS and LRAS, except they are reflected: higher unemployment corresponds with lower real GDP.</p>
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Note this is not a full list of diagrams. You should revise all diagrams in your course and also the opposite diagrams to the ones shown (AD shifts left and right, tariff increase and decrease).

Other possible diagrams could include, but are not limited to:

- Export subsidy and quota diagrams.
- Multiple currency supply and demand shifts to show how a central bank maintains a fixed exchange rate.
- SRAS shift plus convergence to long-run equilibrium.
- Movements along various AD or AS curves.
- Automatic stabilisers - AD fall then AD shifts back inwards (or the other way around).
- Keynesian (LR)AS.
- Comparative advantage data table.