Aggregate Supply

**Explain why the elasticity of the aggregate supply curve for an economy varies between infinity and zero (12)**

**Are supply-side policies likely to be more effective than demand-side policies in reducing unemployment? (13)**

Aggregate supply (AS) measures the output of goods and services than an economy can supply at a given price level in a given time period. The output potential of the economy depends on (a) the stock of factor inputs available (b) the productivity of factor inputs (c) the pace of technological progress. The elasticity of aggregate supply is a measure of how responsive output is to changes in demand. Supply elasticity normally depends on (a) the degree of spare capacity in the economy (b) the time period involved (c) the amount of stocks that can be used to meet changes in demand.

There is a continuing debate about the elasticity of aggregate supply. Standard Keynesian theory assumes a perfectly elastic aggregate supply curve. Changes in aggregate demand lead to changes in the equilibrium level of national output - prices are assumed to be constant in the injections and withdrawals framework. Neoclassical economists argue that aggregate supply in independent of the price level. The AS curve is assumed to be vertical in the long run - and can shift following increases in the stock and productivity of factors of production. A synthesis view shows the elasticity of aggregate supply changing at different levels of output. These views are shown in the diagrams below.

In the diagram above the short run aggregate supply curve is drawn as perfectly elastic. This assumes that output can rise to meet any change in aggregate demand - leaving the price level unchanged. In this situation, a change in nominal demand leads to the same change in real national output. This position is more likely when the economy is emerging from a deep recession and there is plenty of spare capacity available to increase production. For example there is likely to be high unemployment and under-utilisation of capital machinery.

As the economy moves into the latter stages of a recovery or into a cyclical boom, it is likely that aggregate supply will start to become more inelastic. Supply bottlenecks may start to emerge - including labour shortages and output constraints from a higher rate of capacity utilisation.
In the diagram below, the elasticity of the short run aggregate supply curve changes as output increases. Each shift in aggregate demand causes a smaller increase in real national output and a larger increase in the general price level. As the economy approaches full-capacity output in the short run, the AS curve becomes inelastic. This means that the trade-off between economic growth and inflation worsens. When AS becomes totally inelastic any change in demand leads to higher prices and no further increase in the volume of output.

**Long run aggregate supply** is assumed to be vertical - ie the output potential of the economy is independent of the price level. This is shown below. Changes in LRAS are determined by an expansion of the active labour supply and changes in the stock of capital and land inputs available in the production process. Higher labour and capital productivity and improvements in technology also affect the position of the LRAS curve. The diagram shows an outward shift in LRAS - this illustrates an increase in long run productive potential.

In this situation the aggregate demand curve has shifted out. An increase in LRAS means that the economy can raise output to meet this demand without a sharp rise in the average price level. Changes in long run aggregate supply are vital in determining an economy's sustainable rate of economic growth.
Are supply-side policies likely to be more effective than demand-side policies in reducing unemployment? (13)

Defining unemployment
The unemployed are those registered as able, available and willing to work at the going wage rate in any suitable job but who cannot find employment. Unemployment is a flow concept - i.e. there are inflows and outflows from the total. Unemployment falls when more people leave the unemployment register (when they find work) than sign on each month.

Focus on the main causes of unemployment
Unemployment has a number of causes - government policies towards unemployment are likely to be more effective when they address the underlying reasons why people remain out of work.

Cyclical unemployment and demand management
If a large proportion of unemployment is cyclical in nature, then government policy might be used to raise the level of aggregate demand for goods and services to increase the total demand for labour in the economy. There are a number of ways in which aggregate demand can be increased:

- **Increase Government Expenditure** – this "fiscal pump-priming" directly increases aggregate demand and can have a positive multiplier effect on equilibrium national income. The government could raise current expenditure or expand spending on capital projects. Spending projects might be focused on specific regions where the unemployment problem is greatest.
- **Regional Policy** grants and other incentives might be used to attract inflows of foreign direct investment into the economy
- **Reductions in direct and indirect taxation** - which increases consumers’ real disposable incomes and boosts current consumption.

Monetary policy is now in the hands of the Bank of England. The government no longer makes decisions on official interest rates and does not have a specific exchange rate target. In previous cycles, the government might have opted to reduce interest rates and/or influence the exchange rate in a downwards direction stimulate demand.

Time lags and demand management
Policies to increase aggregate demand for output take time to have their effect. There are time lags between the government opting to reflate the economy using fiscal policy and the final effect on output and employment in specific industries. Another problem with relying simply on managing aggregate demand is that the fundamental causes of unemployment may be structural rather than cyclical.

Supply-side policies to reduce frictional and structural unemployment

![UNEMPLOYED FOR OVER TWO YEARS](image_url)

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>92</td>
<td>464</td>
</tr>
<tr>
<td>93</td>
<td>650</td>
</tr>
<tr>
<td>94</td>
<td>735</td>
</tr>
<tr>
<td>95</td>
<td>670</td>
</tr>
<tr>
<td>96</td>
<td>587</td>
</tr>
<tr>
<td>97</td>
<td>500</td>
</tr>
<tr>
<td>98</td>
<td>367</td>
</tr>
<tr>
<td>99</td>
<td>309</td>
</tr>
</tbody>
</table>

**Structural unemployment** exists even when there is a mismatch between the skills of the registered unemployed and those required by employers. People made redundant in one sector of the economy cannot immediately take up jobs in other parts as they do not have the relevant skills. They are suffering from occupational immobility. Often the structurally unemployed are out of work for a long period. In the spring of 1999 over 309,000 people had been unemployed for over two years (using the ILO measure). And, as they remain out of paid work, they become less employable because of a depreciation of work skills and a loss of motivation to engage in active job search.
Policies towards structural unemployment include:

- **Welfare to Work Schemes** - offering employment subsidies for employers who take on the long term unemployed – the answer might discuss the main components of the Labour Government’s New Deal programme – designed initially to reduce long term unemployment rates among youth and older workers.

- **Greater investment in education and training programmes** to improve the human capital of the workforce. The government may encourage increased spending on worker training by the private sector through specific subsidies and partnership programmes.

Other supply side policies to increase the active labour supply include:

- Measures to **improve the flow of information** within the labour market and reduce the cost of job search. This is targeted at reducing frictional unemployment

- **Relocation grants** to help some of the unemployed move to areas where there are labour shortages. Policy might also seek to increase the supply of rented housing at an affordable price. Many of the unemployed are prevented from moving to areas of higher employment because of severe regional differences in house prices, and a shortage of rented property

- **Reforms to the tax and benefit system** to “make work pay” – for example lower starting rates of income tax and the introduction of the Working Families Tax Credit designed to improve the work incentives of lone parents

![UK Unemployment since 1980](image)

Good answers will be aware of what has happened to unemployment in the British economy over recent years and be familiar with current government policy towards unemployment. The key is to focus both on demand and supply-side approaches. The consensus is that structural unemployment is the hardest type of unemployment to eradicate. Strategies need to consider the long run effects on the labour market – in particular the need to re-skill and up-skill the unemployed to increase their employability in a changing labour market.

Geoff Riley