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**Business Analysis 12.1**

What do you think will determine the level of national income in a country?

- Demand levels (e.g. depending on consumption, government spending and export spending).
- Supply levels depending on e.g. technology, the working population and natural resources.

**Data Analysis 12.1**

1. China's GDP per person has been growing at 10 per cent a year at various points in the last few years. If someone were to be earning £10,000 a year now, how much would they earn in five years' time at this growth rate?

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>£11,000.0</td>
</tr>
<tr>
<td>2</td>
<td>£12,100.0</td>
</tr>
<tr>
<td>3</td>
<td>£13,310.0</td>
</tr>
<tr>
<td>4</td>
<td>£14,641.0</td>
</tr>
<tr>
<td>5</td>
<td>£16,105.1</td>
</tr>
</tbody>
</table>

2. In the USA, the growth rate is nearer 2 per cent a year. If someone were to earn £10,000 a year now, how much would they earn in five years' time at this growth rate?

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>£10,200.0</td>
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<tr>
<td>2</td>
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<tr>
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<tr>
<td>5</td>
<td>£11,040.8</td>
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</tbody>
</table>

3. If GDP growth is 5 percent and population growth is 7 percent, is GDP per person rising or falling?

GDP per person is falling because the growth in income is not keeping pace with population growth.

4. If GDP growth is 3 per cent and inflation is 4 per cent, is real GDP growing or not? Explain your reasoning.

Real GDP is falling because nominal is not growing at the same rate as prices. If you were earning 3% more but prices went up by 4% you could not buy as much; in real terms you are worse off.
1. How would you measure the standard of living in a country?

Could use:
- Real GDP per person
- OR Combination of measure such as life expectancy, literacy rates, environmental measures, quality of life measures

2. If you were in power what would you do to increase your country’s happiness levels?
Over to you!

How might a significant increase in aggregate demand affect a business’s workforce and operational planning?

- May lead to more demand and therefore need to consider recruitment and training issues.
- May have to consider production levels, stock levels and distribution.

1. Discuss what might determine the level of exports from Japan.

Answers might include:
- Incomes overseas
- Quality of production
- Relative prices
- Trade barriers

2. Why might export growth be more desirable than government led growth?

Answers might include:
- Does not require government to raise funds (with potential consequences of this)
- Enables government funds to be used elsewhere
- Does not rely on the government to pick winners- something it may not be good at

1. What is the level of consumption in this economy?

\[ C = 10 + 0.8Y_d \]
\[ Y_d = £500 \text{ million} \]

\[ C = 10 + 0.8 \times 500 = £410 \text{ million} \]
2. What is the level of saving (given that household income is used for either consumption or saving)?

If income is £500 million and consumption is £410 million then savings are £90 million.

3. How much is saved out of each extra pound? (This is called the ‘marginal propensity to save’.)

If 0.8 is spent out of each pound then 0.2 is saved.

4. How much would be spent if income were zero? (This is called ‘dis-saving’.)

If Y = 0 then C = 10 so dissaving is £10 million.

5. What do you think the equation would be for the savings function?

\[ S = -10 + 0.2 Y_d \]

Think About It 12.2

Which of the following might increase the level of consumption in the economy?

A: A rise in house prices:
   True; it increases wealth of households

B: A decrease in interest rates:
   True; it makes it cheaper to borrow and may encourage spending

C: A rise in taxes on expenditure:
   False; will deter spending

D: A rise in taxes on income:
   False; reduces disposable income and is likely to reduce spending

Business Analysis 12.4

Discuss the factors that SSI would have considered before investing in the Redcar plant.

Answers might include:
- Initial cost
- Likely running costs
- Likely revenues
- Risks of changes in the market
- Labour market conditions
- Possible government policy changes
What do you think determines the total planned spending by a government and the spending on different areas?

With reference to figure 12.11, if you were the UK government how would you redistribute your spending? Why?

1. Will the following increase or decrease the size of the multiplier?

A: Higher income tax rates. Decrease as less is spent out of each pound.
B: More spending out of each pound on overseas goods. Decrease as less is spent domestically.
C: Higher interest rates. Decrease as likely to save more and spend less.
D: A higher marginal propensity to consume. Increase as more is spent domestically.

2. Which of the following are likely to increase aggregate demand?

A: Lower interest rates. Yes –reduce savings and increase borrowing.
B: Higher taxes on company profits. No- will deter investment.
C: A stronger value of the currency. No- will reduce exports as they become more expensive.
D: Greater business confidence in the future of the economy. Yes –will increase investment.

1. What do you think determines how many people are willing and able to work at each wage level?

Answers might include:
Depends on:
- Size of labour force
- Tax rates when you work
- Benefits if you don't work
- Availability of information and training

2. If one business produces more, what impact does this have on the aggregate supply in the economy?

More output increases the supply in the economy.
3. What do you think influences the number of businesses that start up in an economy each year?

Answers might include:
- Government policy e.g. regulations and laws about start ups
- Business environment
- Cost of borrowing
- Business confidence
- Culture e.g. is failure acceptable

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Think About It 12.5

Do you think that aggregate supply in your economy is likely to be price elastic or inelastic at the moment? Explain your reasoning.

Over to you- depends on where you think your economy is; is it at/near full employment? If so it is likely to be price inelastic.

Data Analysis 12.3

1. If a 2 per cent price increase led to a 6 per cent increase in the quantity supplied, what is the price elasticity of supply? Is supply price elastic or inelastic? Explain your answer.

Price elasticity of supply = 6/2 = 3

2. If the price elasticity of supply was +0.6, what would be the effect on the quantity supplied of a 3 per cent increase in prices?

Effect on quantity supplied would be 0.6 *3 = 1.8% increase

3. Explain why aggregate supply might be price elastic or inelastic.

Answers might include:
Depends on the ability of firms to produce more given a price change e.g. are there unused resources or is the economy at full employment?

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Think About It 12.6

1. What is the effect on the equilibrium price and output in an economy of:

A: a shift to the right of aggregate demand? Higher price and higher quantity
B: a shift to the right of aggregate supply? Lower price and higher quantity
C: a shift to the left of aggregate demand? Lower price and lower quantity
D: a shift to the left of aggregate supply? Higher price and lower quantity

2. What is the likely effect on the equilibrium price and quantity in the economy of the following? Explain your answers.
Answers might include:

- Higher levels of productivity in the economy: Shifts AS to the right reducing the price and increasing quantity.
- Lower incomes in export markets: Reduce exports and therefore AD; lower price and output.
- Cheaper borrowing for households: Increases spending and AD; higher prices and output.
- Higher income tax rates: Reduces spending and AD; reduces price and output.
- A better trained workforce: Increases AS and reduces price and increases output.
- Lower interest rates: Increases borrowing and spending; increases AD and raises price and output.
- An increase in oil prices: Increases costs and shifts AS inwards; increases price and reduces output.

Suggested Answers to Short Answer Questions

1. An increase in spending in the economy addition to consumption; investment, government spending and exports.
2. Occurs when income of households is not spent on final goods and services in this economy; savings, imports and taxation revenue.
3. Total planned expenditure of final goods and services in an economy; C+I+G+X-M; GDP measures the income generated in an economy in a given time period; GNP measures the income generated by the citizens of an economy anywhere in the world.
4. Total planned output in an economy at different prices.
5. Low interest rates; greater optimism about the economy and the future profits from projects.
6. Income per person in an economy adjusted for inflation.
7. Shows how an increase in aggregate demand can lead to a bigger increase in national income due to successive rounds of spending.
8. Leads to an increase in prices.
9. An increase in investment, exports, government spending or consumption.
10. An improvement in technology, increase in the working population.