

# Edexcel (A) Economics A-level

## A-level Paper 3: Micro and Macro Economics

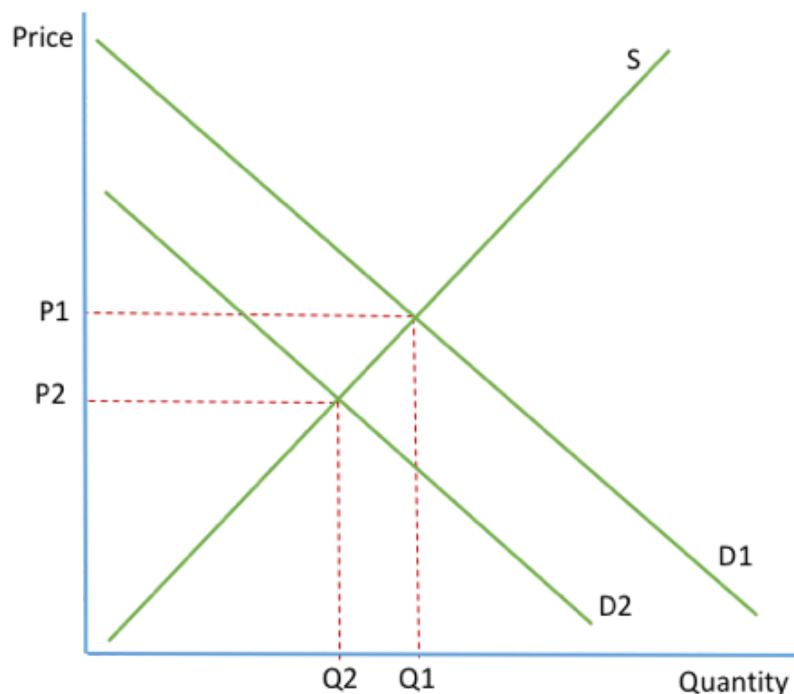
Example answers

June 2017



**1a) With reference to Figure 2, explain one likely reason for the change in the Chile peso exchange rate between 2013 and 2015. (5)**

The exchange rate fell from 0.21 US dollars to 0.15 dollars. Exchange rates are determined by demand and supply. One reason for the fall in the exchange rate is due to a fall in demand. This is because of the rise in corporation tax and labour market reforms, which reduces the attractiveness of setting up a company in Chile. As a result, there is a fall in FDI so a fall in the value of the currency from P1 to P2.

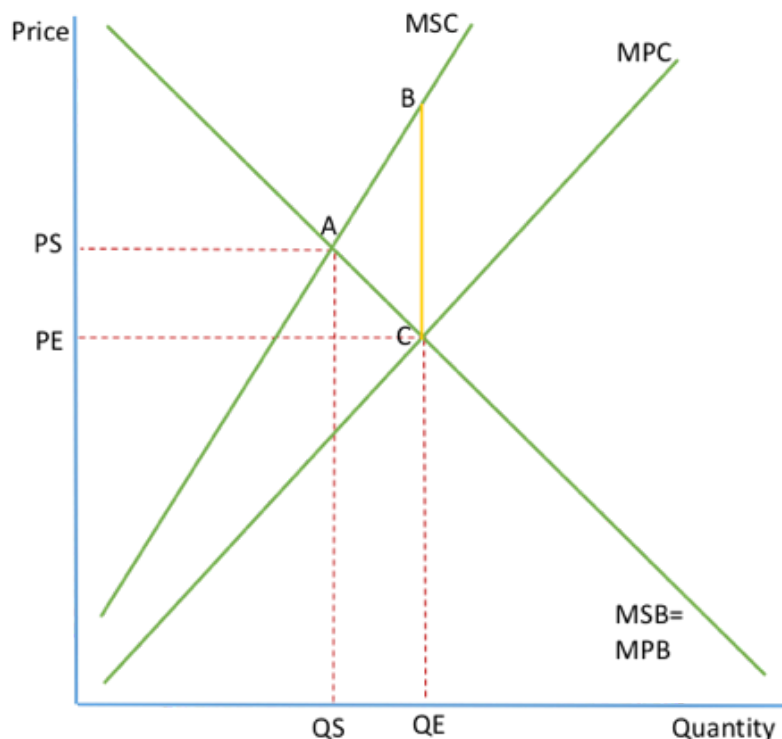


**Teacher's comments: 5/5**

**b) Examine the likely impact of externalities of copper mining on firms and communities within Chile (8)**

An externality is an impact on a third party not involved in the economic activity. In this case, there is an external cost, where the costs to society are greater than the cost to individuals. The social optimum position is where  $MSC=MSB$  at  $PSQS$  but market equilibrium is  $MPB=MPC$  at  $PEQE$ . The impact of this over production is a social welfare loss of  $ABC$  and allocative inefficiency, which means that satisfaction is not maximised. These externalities include water shortages, since mining companies use excess water to run their businesses. This means that the standard of living in Chile is lower than it should be. **Why?** Firms in the future may have no copper to mine.





The impact of this depends on the size of the externality i.e. how big the water shortages are and whether they are long term. There may also be other causes of the shortages, for example the drought. This may mean the impact of mining externalities are not significant, but it is the water shortages instead.

Alternatively, there may be positive externalities for communities since it will create jobs etc. The impact will also depend on regulation, for example it takes 506 days to get environmental approval of a mine. This intends to reduce the costs.

**Teacher's comments: 6/8**

**Apply the impact on firms and communities- not very focused**

**c) Apart from externalities, discuss the problems that Chile faces as a result of dependency on copper mining. (12)**

Chile suffers from primary product dependency. Firstly, prices fluctuate by a large amount **due to inelastic demand and supply**. This means that producers can see huge falls in their income and so many be plunged into poverty very quickly. This affects their standard of living and will have a multiplied effect throughout the community causing further job losses. Prices fell from 9000 dollars per tonne in 2011 to 5000 dollars in 2015. However, unlike farming, the mining is likely to be undertaken by vast companies who will be much less likely to suddenly fall in poverty. **A weak point**. They will be unable to cut wages or lay off workers straight away, particularly due to labour reforms which increase trade union power. This may reduce impacts of poverty.



On top of this, they may suffer from the Prebisch-Singer Hypothesis. This says that as income rises, the price of primary goods fall whilst the price of secondary goods rise. Therefore, this means that incomes from copper will continue to fall as the global economy grows. This appears to be true due to the large fall in prices, but the opposite has actually happened with most primary and secondary products, so this could just be a blip. The falling prices have led to a fall in tax revenue, which reduces the government's ability to provide services for citizens.

Moreover, problems will grow in the long term as mining becomes less productive and good quality ores run out. This will mean that copper will be unable to be such a large part of GDP. The impact will depend on whether or not Chile uses its current revenues in order to diversify its output. Mining accounts for 20% of GDP and this causes huge problems when prices fall, as seen by only 2% growth in GDP. Problems are likely to worsen long term so it is vital that action is taken to diversify the economy. Tourism and high tech products will help the economy as its transitions.

**Teacher's comments: 8/12**

**More evaluation- it is good when prices are high, and other parts of the economy are thriving so the impact is not that significant.**

**e) With reference to the information provided and your own knowledge, evaluate the microeconomic and macroeconomic impact on Chile's economy of changes in the level of investment (25)**

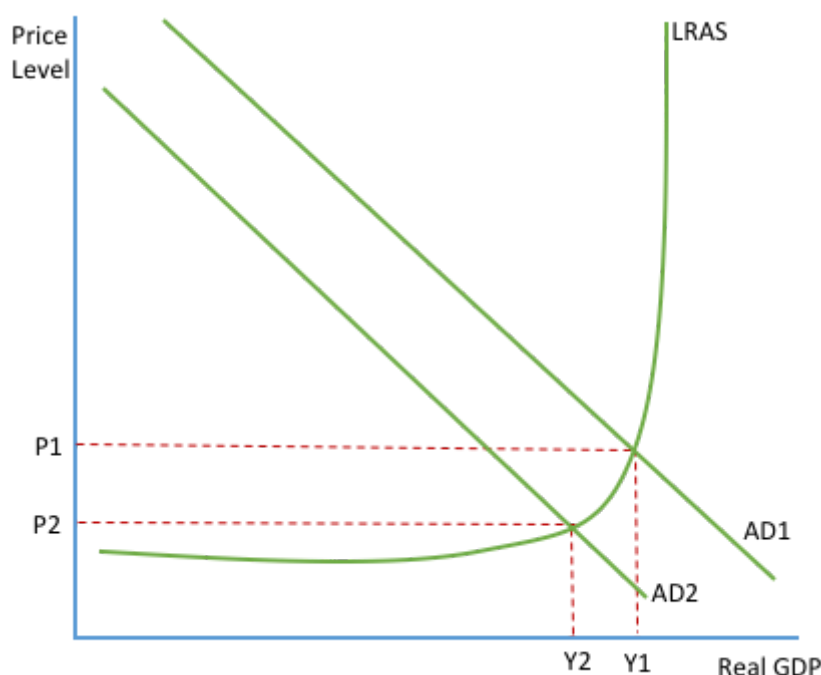
Investment is spending which creates capital goods. At a microeconomic level, higher levels of investment will improve dynamic efficiency. This can occur in two main ways: through innovative products or through new production techniques. Innovative products are new products and so this will improve consumer welfare since they will have a greater range of choice and more products to choose from. New production techniques will lead to a fall in business costs and so this will improve their profit margin. Lower costs may be passed onto consumers in the form of lower prices, which will improve consumer surplus. Some investment into research and development may provide neither new goods or new production techniques, and so simply represents a waste of resources. Business investment may simply be in new machinery and so this will do nothing in terms of innovation, although it will help to improve productivity. In Chile, the issue is actually a fall in investment due to lower confidence and higher taxes. This will mean that consumers and firms do not benefit from these gains. There will be a depreciation of capital stock, which could push prices up.

Moreover, the fall in dynamic efficiency could reduce international competitiveness. Other countries will be developing new production techniques and new products, which will bring down their costs. This will mean prices in Chile will rise in relation to other products and so they will see a fall in exports. This will hit certain industries harder than others, for example high tech products may be badly affected since they can be bought and made cheaply from China whilst mining is already seeing falling prices. International competitiveness will be worsened by the labour market reforms, which will push up wages and reduce labour market flexibility. The fall in competitiveness will lead to a fall in exports, reducing business profits, and therefore will lead to a worsening of the current account. However, since the peso is falling, this may not be the case. A fall in the currency makes



exports cheap and imports dear, and this may counteract the effects of the fall in investment. This boosted industries such as wine and salmon and so improves profits in that area as well as improving the current balance. The Marshall Lerner condition appears to hold since the economy has been growing due to falling peso. If investment continues to fall, competitiveness is likely to fall further and so it may only be in the long term that the current balance is negatively affected. It will also depend on the level of investment in other countries: if they are low then competitiveness may not fall at all.

On top of this, a fall in investment will lead to a fall in AD. Investment is one component of AD and so a fall in investment will lead to a fall in AD from AD1 to AD2, causing prices to fall from P1 to P2 and GDP to fall from Y1 to Y2. This is positive to an extent since the country is experiencing 5% inflation and so this could help to combat it. However, it is likely to limit growth and so this could have negative impacts on the living standards within the country, causing a fall in incomes for individuals. The impact will depend on the multiplier: the bigger the multiplier, the greater the fall. On top of this, it will depend on where the economy is producing. Extract A says that there may not be “enough spare capacity” in the economy. This will mean the economy is producing on the inelastic section of the LRAS curve and so the fall in AD may only impact price. It will also depend on what’s happening to the other sections of AD, such as trade balance.

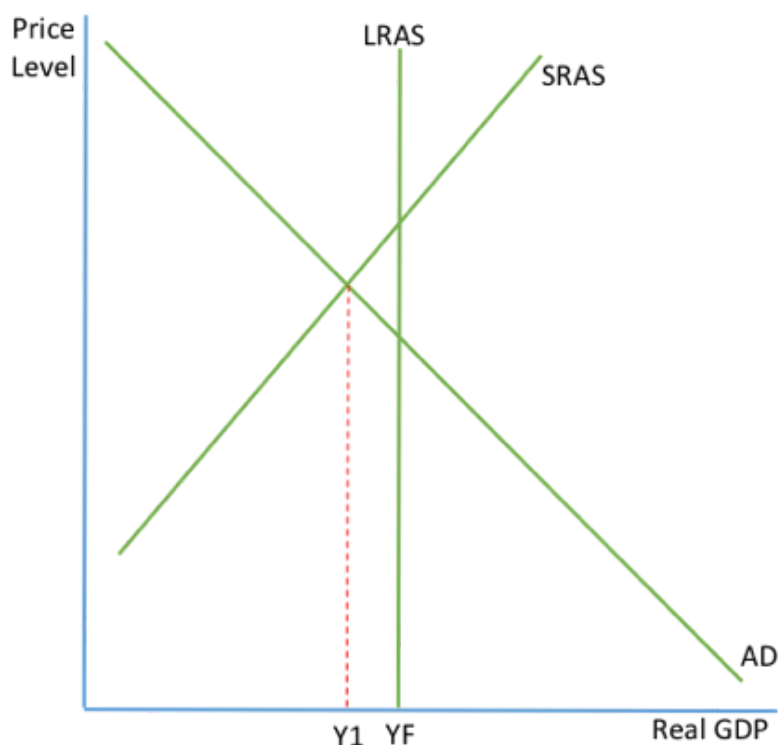


Overall, falling investment in Chile is likely to limit productivity and growth in the long term due to its impact on dynamic efficiency and competitiveness. However, in the short term, it may combat inflation, although it is cost push rather than demand pull inflation. The effects will mainly be negative since long term growth will be limited.



**2a) With reference to Extract D (line 18), explain the meaning of the term ‘output gap’. Use an aggregate demand and aggregate supply diagram in your answer. (5)**

An output gap is where the economy is producing above or below the level of full output,  $Y_F$ . The short term equilibrium is where  $AD=AS$  at  $Y_1$  but the long term equilibrium is where  $LRAS=AD$  at  $Y_F$ . This is a negative output gap, where the economy produces below equilibrium. Extract D refers to a lack of output due to low productivity, labour immobility and underemployment.



**Teacher's comments: 5/5**

**b) With reference to Figures 4 and 5 and your own knowledge, examine the relationship between the national debt as a proportion of GDP and the fiscal deficit. (8)**

National debt is the total of debt of the government, the cumulative total of all fiscal deficits. Fiscal deficits are the difference between the amount spent each year and the amount raised in tax. A deficit means more is spent than raised. A rise in the deficit leads to a rise in the national debt as a percentage of GDP in general. This assumes that the fiscal deficit rises by more than GDP. The forecast from 2015 shows a falling national debt as a percentage of GDP as the fiscal deficit grows. This will assume that the economy grows by a certain percentage, which will be larger than the fiscal deficit still remaining. National debt as a percentage of GDP rose from 2008, as the deficit grew massively, peaking at almost £160m deficit in 2009. The deficit fell since then but national debt continued to rise.

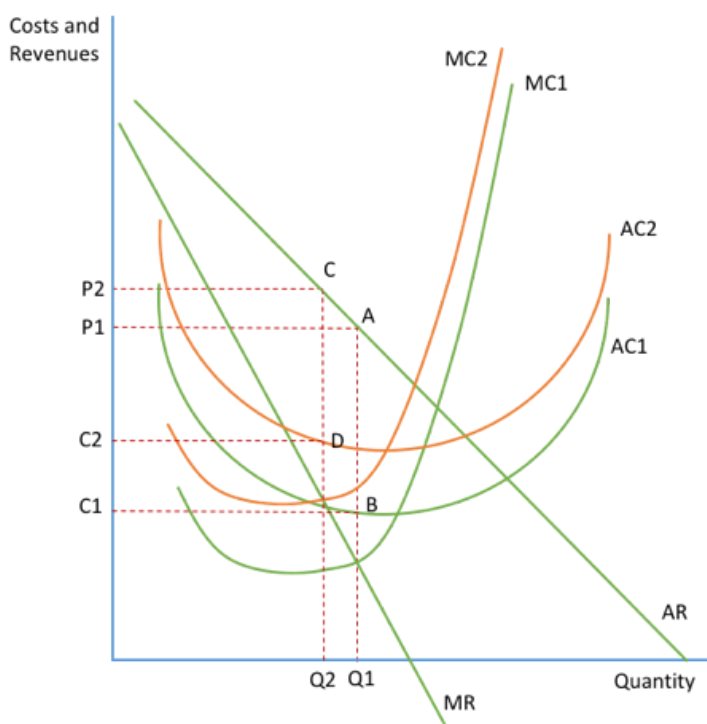
**Teacher's comments: 6/8**

**Stress the importance of GDP growth and the odd inverse relationship from 2015**



**c) Discuss the likely impact of the National Living Wage on the profitability of firms. Use a cost and revenue diagram in your answer. (12)**

The National minimum wage is a wage which firms cannot pay their workers less than. A rise in the national minimum wage will lead to a rise in both average and variable cost for firms. Employing each extra worker will lead to them having to pay more. This means that MC will rise from MC1 to MC2 whilst AC will rise from AC1 to AC2. They will produce where  $MC_1 = MR$  at  $Q_1$  and initially they made  $P_1ABC_1$  profit. The NMW will mean that they produce where  $MC_2 = MR$  at  $Q_2$  and make  $P_2CDC_2$  profit. Therefore, there will be a fall in profitability of the firm. Some firms may be forced to go out of business as they cannot afford to pay their staff this much. There may be a wage spiral and this will push costs up even higher as the rise in the wages of all workers will rise.



Firstly, it will depend on the number of workers employed on the minimum wage. If a firm employs a large number of low skilled workers then the minimum wage will have a significant impact on costs whilst if they mainly employ high skilled workers, there will be little difference as these workers will depend on where wages are normally set in the industry. Even if workers are low skilled, there will be no difference if wages are already set above the minimum wage.

It may reduce firms' exporting abilities since their products will be less competitive overseas, particularly competing with low cost labour such as China. Therefore, those who export will be more affected as they will see a bigger impact on revenues. In the UK, all firms see the same increase in costs and so the impact will be less significant as prices will rise by a similar amount.

**Teacher's comments: 9/12**

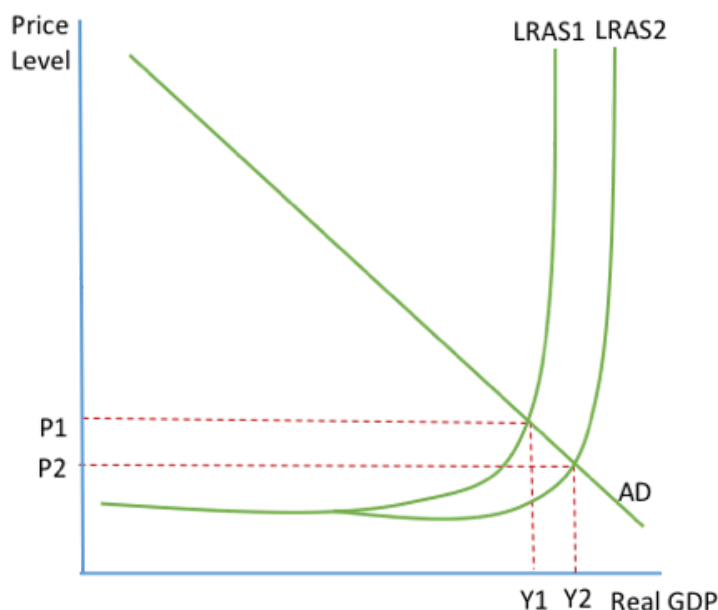
**The question is about the National Living Wage- not the minimum wage- so the answer should be more focused on this i.e. depends on the age of workers. Could do with some more evaluation**



**e) With reference to the information provided and your own knowledge, evaluate the microeconomic and macroeconomic effects of a government policy of cutting public expenditure rather than raising taxes as means of reducing a fiscal deficit. (25)**

A fiscal deficit is when the government spends more than it gains in tax revenue. Therefore, a fall in spending or a rise in taxes should help to reduce the fiscal deficit.

One impact of cutting expenditure would be to increase incentives for those not in work. At a microeconomic level, lower government spending would mean that those who receive welfare benefits would see a fall in their income and so thus would have more incentive to go to work. This helps alleviate the unemployment trap, where people are better off in work than out of it. There will be positive social benefits, such as lower crime rates as unemployment tends to be associated with crime. Increased incentives will increase the size of the workforce and get more people back to work. This will mean that LRAS will shift outwards and so there will be higher growth as seen in the diagram. This will have a positive effect for consumers since it will mean higher incomes, as seen by the shift from Y1 to Y2. However, this will depend on whether there are jobs in the economy. Most people on welfare genuinely are struggling to find a job and so the fall in welfare will lead to lower incomes for them and they will still be unable to get a job. The UK government has implemented a scheme of Universal Credit in hope of improving incentives. Since the natural rate of unemployment is currently falling, this could suggest the austerity scheme has been helpful in getting people back to work and encouraging a flexible labour market. By raising taxes, it is argued that incentives are reduced as people take home less of their income and pay more in tax so will want to work less. The Laffer curve shows that tax revenues may even fall due to falling incentives. However, this is not necessarily the case as a small rise may make little difference. Indirect taxes have little impact on taxes.



On top of this, reduced expenditure may reduce labour productivity. The lower spending may mean less spending on education and so the workforce is less skilled and therefore less efficient. This means they will do their job less well and therefore are less productive. As a result, there is a rise in labour costs for firms and this will reduce their profit margins. It could also mean that consumers'





wages stagnate. Employees are paid where the marginal revenue product, the extra revenue they generate for the firm, equals to the cost of employing them, their wage. Therefore, if productivity does not rise, the wages will not rise. This has certainly been seen in the UK, as real wages have stayed the same since 2008 and labour productivity fell from 100 to 96 in 2008 to 2013. This may have coincided with the austerity policy. However, reduced education spending will only have an effect on productivity in the long run as those in education now will not enter the workforce for many years. Therefore, it can be argued that the productivity fall is due to lack of investment. Thus, it may be better to cut spending rather than raise taxes. Higher taxes will reduce business profits and thus it will reduce dynamic efficiency. Businesses will not invest in new machinery and production techniques and so workers may have become even less productive. Therefore, they may have a larger impact than cutting expenditure.

Moreover, cutting spending will reduce equality. Government money goes disproportionately to the poorest people, such as those on welfare and those on pensions. Moreover, services such as NHS and education matter most to the poorest as they cannot afford to go private. If the government were to raise taxes, they could do so progressively and thus this would reduce inequality. One in 5 in the UK is in relative poverty and thus it is important for the government to improve this situation. The effect would depend on where money was cut. For example, ending universal benefits would be good as it would take money away from those who don't need it. It would also depend on how taxes were raised, since indirect taxes tend to be regressive.

Both measures are likely to lead to a fall in AD and so reduce growth at a macro level and reduce incomes for consumers. Lower spending may mean the government can not correct market failure e.g. through subsidies. It will also mean that they cannot help to reduce poverty. The effects of cutting spending are more negative.

**Teacher's comments: 19/25**

**Depends on how big the public sector is? Where cuts are made? Government failure?**

