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Exemplar Candidate Work

ECONOMICS

H460
For first teaching in 2015

H460/01 Microeconomics
Summer 2017 examination series

Version 1

Contents

Introduction

These exemplar answers have been chosen from the summer 2017 examination series.

OCR is open to a wide variety of approaches and all answers are considered on their merits. These exemplars, therefore, should not be seen as the only way to answer questions but do illustrate how the mark scheme has been applied.

Please always refer to the specification (http://www.ocr.org.uk/Images/170839-specification-accredited-a-level-gce-economics-h460.pdf) for full details of the assessment for this qualification. These exemplar answers should also be read in conjunction with the sample assessment materials and the June 2017 Examiners' Report to Centres available on the OCR website http://www.ocr.org.uk/qualifications/.

The question paper, mark scheme and any resource booklet(s) will be available on the OCR website from summer 2018. Until then, they are available on OCR Interchange (school exams officers will have a login for this).

It is important to note that approaches to question setting and marking will remain consistent. At the same time OCR reviews all its qualifications annually and may make small adjustments to improve the performance of its assessments. We will let you know of any substantive changes.

Section A

Question 1(a)(i)

What relationship does Fig. 1 suggest existed between changes in real GDP and changes in rail passenger journeys between 2004 and 2015? **[1]**

Exemplar 1 – 1 mark

It suggests that there is a positive relationship between the two and a strong correlation.

[1]

Examiner commentary

Clear answer in terms of 'positive relationship', the first bullet point of mark scheme.

Exemplar 2 – 0 marks

As real GDP fell, it was shortly followed by a very similar change in rail passenger journey. It could be said that they are somewhat directly proportional to each other.

[1]

Examiner commentary

This answer was just too vague. 'Similar' and 'direct relationship' were not enough to show a positive relationship or show understanding of as GDP increases so do rail passenger journeys.

Question 1(a)(ii)

How would an economist explain this relationship? **[2]**

Exemplar 1 – 1 mark

Real GDP causes changes in the % of rail passenger journeys due to the effect Real GDP has on income Increasing ~~income~~ real GDP leads to increasing income and thus an increase in rail passenger journeys. [2]

Examiner commentary

This answer did not say enough for 2 marks. It does get one mark for increasing income, but does not link it to 'affordability' or 'increase in consumer confidence'.

Exemplar 2 – 2 marks

As real GDP falls, consumers are going to be left with lower disposable income and therefore less people will take the train and look for a cheaper option as consumer confidence falls. [2]

Examiner commentary

Marks given for fall in GDP, lower disposable income, so demand falls as consumer confidence falls. This candidate puts the reason opposite to mark scheme (second point in guidance), but is still valid.

Question 1(b)

Identify and explain, using the stimulus material, one reason why the privatisation of the rail network has made it a more contestable market. **[2]**

Exemplar 1 – 1 mark

The privatisation of the network rail has made the market more contestable as now any firm can bid on contracts to run part of the railway making it a more contested market. [2]

Examiner commentary

This answer got 1 mark for application regarding 'bid', but would have needed to show an understanding of a characteristic of a contestable market.

Exemplar 2 – 2 marks

As the ~~RFA~~ railways are bidded for by firms, it is a contestable market as this means firms enter the market with no sunk costs or barriers to [2] entry as they can bid for use of the tracks for a fixed period of time.

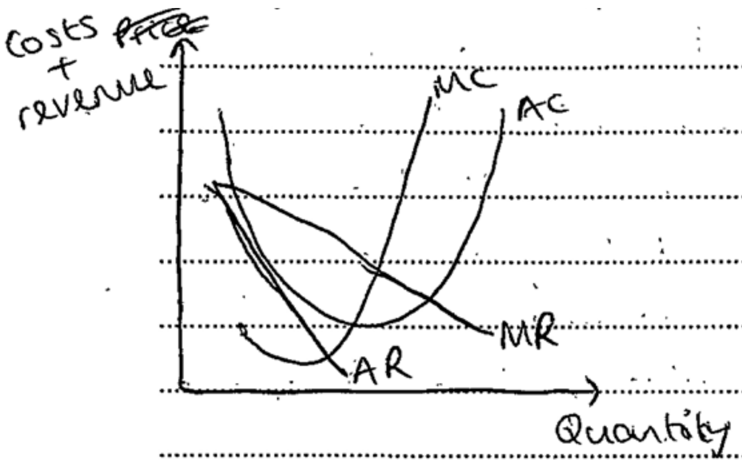
Examiner commentary

'Bidded' shows application and 'sunk cost' shows understanding of a contestable market. A clear accurate answer.

Question 1(c)

Explain, using a diagram, why the high level of fixed costs in providing the infrastructure of the railway network make it an example of a natural monopoly. **[3]**

Exemplar 1 – 0 marks

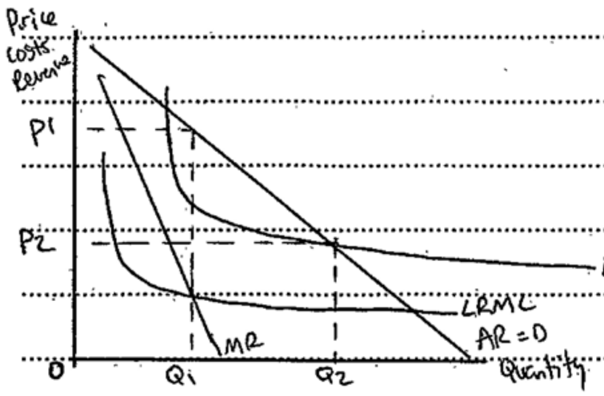


As there is a high fixed cost associated with running the railway network, it acts as a high barrier to entry for other firms. Therefore, as this cost cannot be avoided, the railway network is a natural ~~economy~~ monopoly as the high, unavoidable fixed costs mean new firms cannot enter the market. [3]

Examiner commentary

Diagram is a monopoly diagram, rather than a natural monopoly diagram, so no marks. 'High barriers to entry' not enough for the explanation, as it still relates to a monopoly.

Exemplar 2 – 3 marks



The diagram shows how the natural Monopoly has increasing economies of scale by the downward sloping LRAC curve. This is because due to lack of competition (as the monopoly owns the railway infrastructure) there is no competition to compete with. The high level of fixed costs of having to build identical infrastructure to operate is a huge barrier to entry and deterrent to new firms looking to enter the market, therefore the monopoly is the only operator and firm in the market. **[3]**

Examiner commentary

A very clear diagram showing a natural monopoly and LRMC being below LRAC. It also shows with two price levels and two quantities that there are lower AC of a single firm. The explanation covers bullet point 2 on the mark scheme in terms of increasing economies of scale mean that LRAC is constantly decreasing.

Question 1(d)(i)

What evidence is there in the stimulus material of TOCs engaging in price discrimination? **[2]**

Exemplar 1 – 0 marks

TOCs have to bid for use of the railway network on a route and this means TOCs have to pay for the right to run ~~[illegible]~~ a service. [2]

Examiner commentary

A typical incorrect answer where an understanding of price discrimination would need to be shown.

Exemplar 2 – 2 marks

figure 3 shows how consumers are charged different prices according to when they travel. This is third-degree price discrimination as at on peak (7.08am) a single ticket is £138, whereas at off peak (9.30am) a single ticket is only £51. [2]

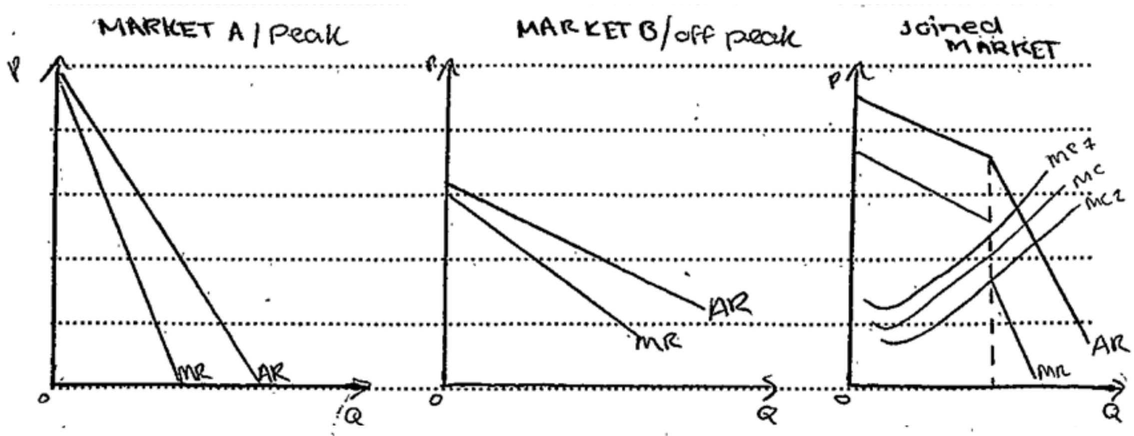
Examiner commentary

A clear answer showing knowledge of price discrimination and applies it to the stimulus. Showing different prices at different times.

Question 1(d)(ii)

Evaluate the extent to which the consumer benefits from price discrimination by a firm with monopoly power. **[8]**

Exemplar 1 – Level 1 – 3 marks



As shown in the diagram ~~A~~ Market A has a relatively Price inelastic demand curve meaning that a Sharpe increase in price would only result in a small change in demand and therefore would maximise the monopoly firms revenue. However Market B in the diagram is shown to havearelatively price Sensitive demand curve and therefore monopoly firms ~~[illegible]~~ must keep prices much lower in this market in order ~~the~~ to maximise revenue.

The reason that having high prices in Market A is beneficial to consumers is that it means that firms can cross subsidise and still offer services at a lower affordable price to price elastic market B. Everyone being offered a good or service they want at an agreed price means that monopoly firms **[8]** using price discrimination makes them allocatively efficient.

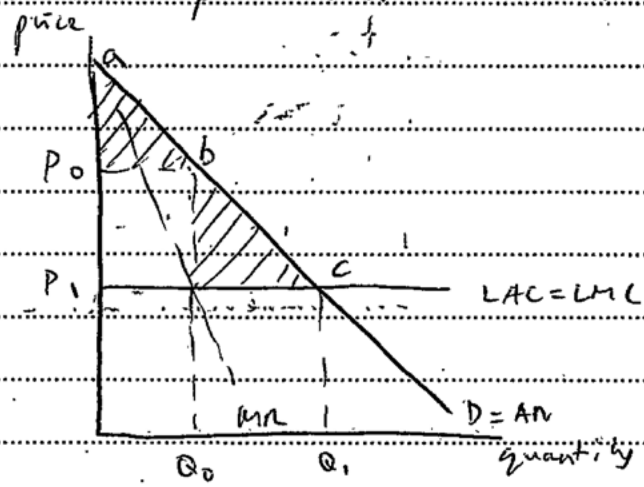
Examiner commentary

There is strong knowledge and application in this answer, for diagrams and knowledge of peak and off peak they also showed knowledge of price discrimination and monopoly, but it was should have been linked to the benefits to the consumer. This answer does go on to show reasonable analysis about benefits through cross subsidisation and lower affordable price. They could have gained more marks by developing this point in terms of greater consumer surplus. Also there should have been the evaluation of how it may not be a benefit. So strong knowledge and application, reasonable analysis, but no evaluation, so not enough for L2 and because there is strong knowledge and application it gets towards the higher end of level 1, 3 marks.

Exemplar 2 – Level 2 – 8 marks

Price discrimination occurs when a firm charges consumers different prices depending on their willingness to pay in order to ~~profit ma~~ increase profits.

One reason why the consumer may ~~benefit~~ be worse off from price discrimination is that it leads to a decrease in ~~there~~ their consumers ~~cs~~ surplus as shown in the diagram.



Initially the firm profit maximises by producing ~~when~~ Q_0 units ~~and~~ at a price of P_0, this leads to consumer surplus shown by P_0 b a but if price discrimination occurs, then the firm's ~~marg~~ demand curve becomes its marginal revenue so the quantity increases to q_1 and P_1 a c becomes the firms profits so the consumer surplus is removed reducing ~~th~~ consumer welfare.

However the ~~profit~~ extra profits gained by the ~~consumer could lea~~ firm ~~of~~ shown by the shaded region in the diagram above will lead to an increase in research and development which would ~~increase~~ lead to new products being produced and consumers [8]

1A.ii) would benefit from this increased choice, also if ~~th~~ research leads to the identifying of a new production process it could reduce average costs and hence prices, increasing consumer surplus.

Ultimately, price discrimination ~~disadvantage~~ disadvantages consumers ~~as it the gain~~ ~~if~~ ~~static effic~~ ~~proven~~ as it leads to a loss in consumer surplus however the gain in profits is larger and, if reinvested will ~~inc~~ increase consumer welfare in the long run. It crucially depends upon whether the profits are reinvested or not.

Examiner commentary

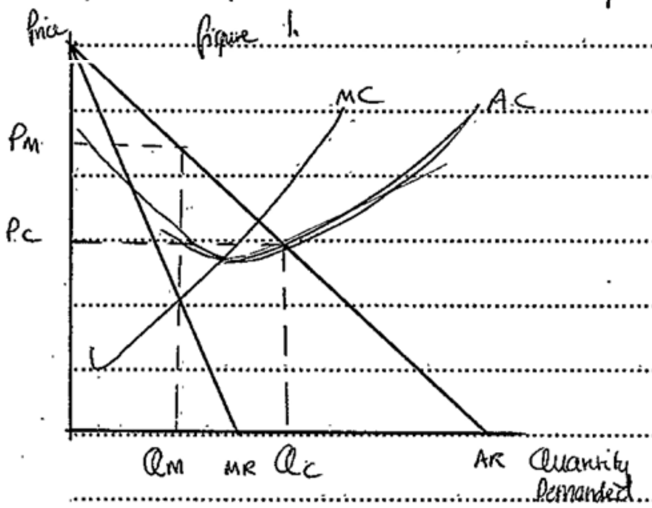
This is an excellent clear answer that is fully focused on the question set. Many candidates confused this question and focused on monopoly power rather than price discrimination. It starts an explanation of what price discrimination is, so there is reasonable knowledge in the first paragraph. In the second paragraph it starts with why price discrimination will be worse for consumers (this is acceptable for one sided analysis). A clear diagram and good use of theory is used to show strong analysis and shows good knowledge. The last paragraph on page 7 'However', becomes evaluation in terms of looking at the benefits to consumers, again with a clear chain of reasoning and further use of the diagram. There is further evaluation on the additional pages, linked to consumer surplus. The last paragraph shows a judgement in terms of it 'crucially depends upon whether the profits are re-invested or not'. So good knowledge, strong analysis, and strong evaluation. L2, 8 marks

Question 1(e)

Evaluate, using evidence from the stimulus material, the case for private sector ownership of passenger rail services. **[12]**

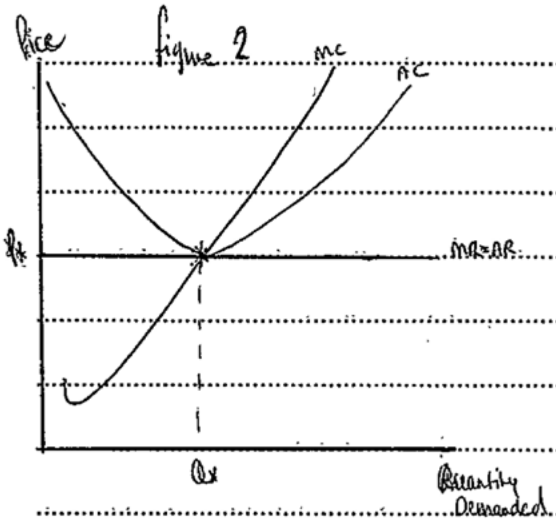
Exemplar 1 – Level 3 – 9 marks

The public ownership of the passenger rail system can be modelled as a monopolistic power within the market. One sole supplier of the rail service resulting in higher prices and less available train services compared to that of a free market. Privitsation leads to a number of private firms being allowed into the market to compete for consumers, potentially resulting in a perfectly competetive market in theory. This transition from monopoly to perfectly competetive market should not only lead to decreased prices and increased capacity but also the arrival of both productive and allocative efficiency.



The diagram shows the difference between the price and output provided by a monopoly (Pm, Qm) and the price and output provided when competition is introduced to the market (Pc, Qc)

It is clear to see that when the market becomes competetive consumers benefit from both lower prices and a higher output than experienced prior previously. Also, when the market inevitably becomes perfectly competetive the firms will operate both productively and allocatively efficient shown on figure 2



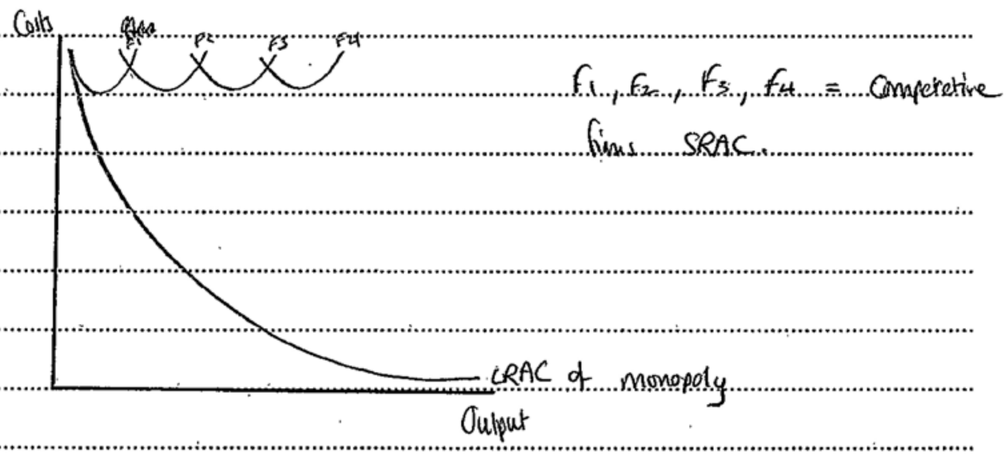
At equillibrium in this market price = mc resulting in allocative efficiency and AC = AR resulting in productive efficiency.

However, the competetive market may not be ~~per~~ perfectly competetive. ~~...~~ In reality, the firms in the industry are likely to become Oligopolies. This means that the few firms in the industry have rigid prices and therefore compete on other things such as quality of the service they provide. This is shown in the case study. Line 29 says 'Virgin and Stagecoach pledge to invest £140million to ensure a more personalised travel experience.' this shows that the oligopoly power is working to increase quality of travel as they cannot compete on price. Resulting in higher fixed costs.

[12]

1e The public run monopoly however may benefit from dynamic efficiency. ~~to~~ When one firm runs the whole market it has a greater scope for economies of scale compared to many little firms. This could result in falling long-run average cost and

Therefore lower prices for consumers.



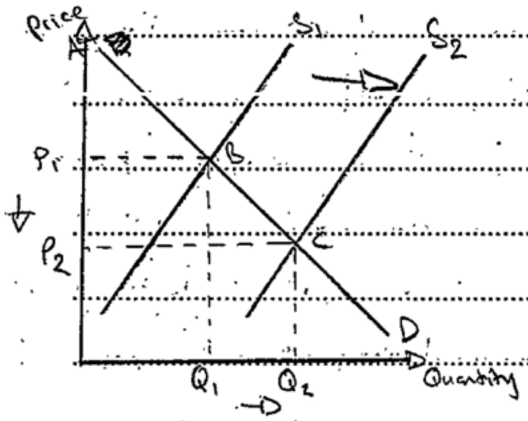
Examiner commentary

The answer is unclear in the opening few lines, but then gets knowledge for number of private firms being in the market to compete for consumers. They then go on to analyse the benefit in terms of increased efficiency and the answer has reasonable analysis in terms of lower prices and higher output. There is more knowledge shown through the diagram on page 9 and application to the case study below that. On the additional page (page 18) there is good evaluation of why a public run service may be better. This shows good use of theory, which is well linked. A judgement would have brought this answer to strong evaluation. There is good knowledge, reasonable analysis and good evaluation. The analysis could have been improved by using the data more to evidence points. This answer has enough to get into L3, but because the analysis was only reasonable (which is L2) it gets the bottom of L3. 9 marks.

Exemplar 2 – Level 3 – 12 marks

Private sector ownership means that the ~~goods~~ passenger rail services will be run by private firms, and not the government.

Some would argue that private sector ownership of the rail services is good because it incentivises firms to be ~~very~~ efficient, so that they can reduce costs and therefore be more competitive. This will mean that consumer surplus will rise. This can be shown on a diagram:



By exploiting economies of scales available to them, ~~railway~~ railway firms can increase the quantity of seats they are supplying, and subsequently drop the cost of supplying each seat. This leads to a rightward shift in supply ($S_1 \rightarrow S_2$), where quantity has increased, and ~~the~~ price has decreased. Resulting in a gain in consumer surplus of P_1BP_2C.
This ~~s~~ shows that by privatising the railways, prices for ~~custom~~ consumers will drop, and therefore it would be beneficial to privatise the railways. On top of this, the companies providing these services pay out huge sums of money to the government for the contracts. For example Stagecoach and Virgin are set to pay the government £3.3bn. This could be used for the NHS

or education. This furthers the argument that privatising the railways is beneficial to the economy.

On the contrary, by privatising the railways, the government is placing ~~a total~~ arguably the biggest ~~trans~~ transport network in the UK into private firms hands. This is risky as if these firms fail ~~or~~ ~~to meet~~ to meet their financial commitments to the government, lots of transport lines could be put at risk, and it would also be very costly to the government, if they have to step in. Also even though the railways are privatised, the government is still paying more to firms in subsidies than the firms are giving to the government, meaning that the government is still losing money despite the railways being privatised. This shows that privatising railways is a risk ~~to the gove~~ and therefore is not a good idea.

~~In conclusion~~ Privatising the railways is beneficial as ultimately it should drive down prices for consumers, however it would only be beneficial if the correct safeguards are implemented by the government to make sure that no failures occur. **[12]**

Examiner commentary

An excellent answer that gained full marks. It starts with clear knowledge of what private sector ownership means. There is further clear knowledge in terms of efficiency and links this to consumer surplus. The diagram is clear and well analysed so is good analysis. The question asks candidates to use evidence from the stimulus and this is done at the bottom of page 8 and top of page 9 and is linked to the analysis, so it is now strong analysis with application. The structure of this answer is very clear. The case for is presented then the case against, starting with 'on the contrary'. This paragraph has a clear chain of reasoning and is good evaluation. The last paragraph shows clear judgement of the case for and justifies it in terms of 'only beneficial if the correct safeguards are implemented by the government' There is good knowledge and application, strong analysis, and strong evaluation, so L3, 12 marks. (It is worth noting that if the question asks for evidence from the stimulus then evidence is required for top marks)

Section B

Question 2

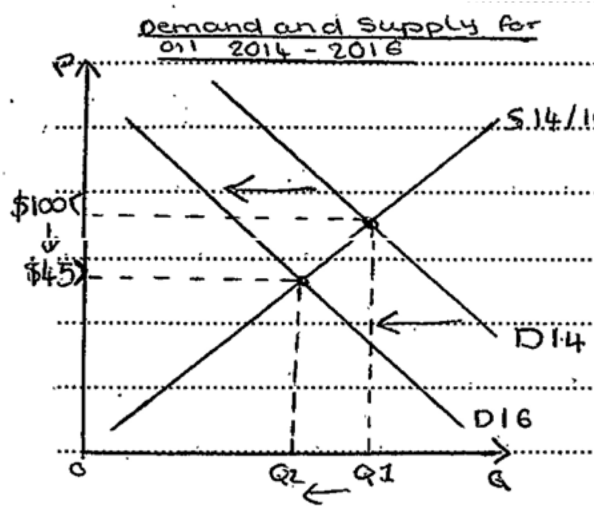
The world price of oil fell from over $100 a barrel during 2014 to below $45 a barrel in 2016.

Evaluate, using an appropriate diagram(s), the usefulness of the free market forces of demand and supply in analysing commodity markets, such as oil. **[25]**

Exemplar 1 – Level 2 – 6 marks

PLAN: intro – Free market forces – commod flucs
Paragraph one – explain with D&S what has happend and suggest why?
paragraph two – comods fluctuate – fixed prices may be more faire.
Evaluation – usefulness depends on how many buyers + sellers, and power of these buyers and sellers. If inequal power seller/buyer may be exploited so market forces aren't working correctly. (with e.g.)

Free market forces are usefull tools in allocating resources such as oil efficiently. However a problem with free market forces is that they allow constant fluctuations in the price of commodities such as oil.



This diagram shows what is likely to have happened in the market for oil that has caused a fall in the price of oil from over $100 in 2014 to less than $45 in 2016. A decrease in the demand for oil has shifted the oil demand curve left. When a curve is shifted there is a new equillibrium price and as stated the equllibrium price has fallen from over $100 to less than $45. This model works in allocating resources ~~for~~ such as oil efficiently because the price is always at the level that consumers demand and that suppliers/producers are willing to sell it for.

However free market forces can be seen as unfair, esspecialy in allocating commodities such as oil that are constantly fluctuating in price. In order to protect the needs of the supplier, who in this circumstance is likely to have ~~a~~ revenue at less than half in 2016 that they did in 2014, Prices must be fixed for time periods. This would mean business buying the commodities would know what to expect and agree upon a price and the Supplier would not loose out on huge amounts of revenue. In this case the free market may not be as fair a System as the ~~Baage~~ ~~prod~~ buyer and seller agreeing on a ~~[illegible]~~ annual fixed price.

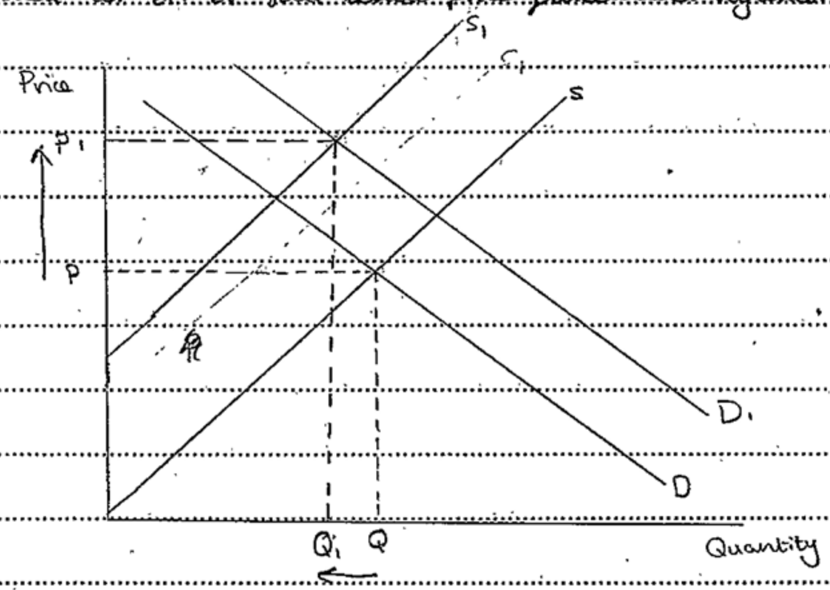
Overall the usefulness of free market forces in analysing commodity markets depends upon wether it truly is a free market or wether firms dealing with buying and selling commodity create fixed price deals in order to negate the risk of price fluctuations.

Examiner commentary

The diagram shows knowledge and application because it is in terms of oil. There is also reasonable analysis of the diagram below it. The next paragraph talks of market forces being unfair, which is not answering the question set. The last paragraph could have been improved by developing the argument and the evaluation, i.e. by showing sufficient cause and effect in the analysis or evaluation. So reasonable knowledge and application, reasonable analysis and limited evaluation. This is borderline L1/L2 so just gets into the bottom of L2. 6 Marks

Exemplar 2 – Level 5 – 22 marks

Demand is the quantity of a good or service that consumers are willing and able to buy at any possible price in a given period ~~on~~ and Supply is the quantity of a good or service that firms are willing to supply to the market at a given price. A commodity is an essential good such as oil or food whose price fluctuates regularly.



S is the supply ~~of~~ curve for oil showing how much firms are willing to supply at each given price ~~is~~ – at a price of P the firms are willing to supply at quantity of Q ~~and at a pric~~ because the marginal revenue they receive is greater than the marginal cost. Also at a market price of P the consumers ~~demand~~ (companies that buy in the oil) demand Q because the benefit of consuming the additional unit exceeds the cost (or opportunity cost). Therefore ~~at~~ PQ is the market equilibrium. However if between 2014 and 2016 the price of oil falls then consumers are going to demand more ~~consuming the good~~ ~~s~~ and demand will shift to D_1 from D. At the same time a fall in price of oil makes it less profitable for the oil companies to extract it and ~~they~~ due to very high fixed costs will start to experience falling profits. Therefore supply falls and shifts from S to S_1. The new equilibrium point depends on by how much the demand and supply curves shift and in the diagram the quantity of oil falls to Q₁ and the price rises to P₁.

Things such as government restrictions on the amount of oil extracted or ~~if~~ oil reserves running out would cause supply to fall to S₁ and demand may rise to D₁ if economic growth is strong and therefore more oil is needed for increased output ~~of~~ of all kinds of goods and services, especially in manufacturing. Therefore the forces of demand and supply can show why prices fluctuate so much. If demand rises to D₁ and supply falls to S₁ for the above ~~following~~ reasons the price of oil rises ~~to~~ from P to P₁ showing why prices of commodities are so volatile.

The ~~use~~ ~~effect~~ usefulness and effects of demand and supply in commodity markets depends on the elasticity of demand and supply. ~~It~~ The price elasticity of demand for oil is likely to be inelastic because eventhough there are alternative energy sources such as wind and solar, they have yet to generate enough power to completely substitute oil. Also oil is a necessity ~~to~~ for many economies. ~~There~~ Therefore if there is a change in the price of oil demand will not ~~res~~ be responsive and will only change slightly. Therefore it may be more difficult to a analyse this commodity market using demand and supply because the elasticity of the product has to be taken into account and this will change as ~~our~~ the world ~~be~~ becomes more regulated and consumer preferences change towards more green energy sources.

Furthermore demand and supply are very useful because ~~the~~ they show by how much and if at all consumer and producer surplus change as prices fluctuate. ~~In the diagram~~ ~~for example~~ ~~A~~ If you know that producer surplus has increased

you know that the oil firms were willing to supply more oil at that price and if consumer surplus has increased you know that consumers are willing to pay more for the oil. This can be used ~~to~~ ~~as~~ by regulatory firms who analyse the commodity markets to decide on the best market price at a particular time.
However the extent to which the free forces of demand and supply can be used depends on the level of intervention by governments and ~~world trade~~ international organisations such as the WTO.
Governments may subsidise the production of ~~oil~~ e green energy which will ~~not~~ stop demand and supply acting completely freely and effect the oil industry. Buffer stock schemes may also be operated by governments which will affect how much oil is available on the open market and make it difficult to analyse supply.

In conclusion the free market forces of demand and supply are very useful in analysing commodity markets because you can show how external changes such as an increase in demand for a substitute energy source decreases the demand for oil and therefore affects its price. ~~The~~ Demand and supply show why the prices of commodities are volatile because whenever D or S shifts the market equilibrium changes and so does the price. However there are some limitations because the oil market may not be completely free and governments may deliberately change the demand and supply of oil.

Examiner commentary

Reasonable knowledge shown in first paragraph and combined with the diagram also is awarded limited analysis. The next paragraph on page 11 is incorrect when saying that a fall in price will cause a shift in the demand curve. The paragraph at the bottom of page 11 is a stated point of evaluation in terms of government restrictions, so it is at this point limited evaluation. Then later in same paragraph analysis for forces of demand and supply show why prices fluctuate so much. The first paragraph on page 12 takes the answer to reasonable analysis in terms of inelastic demand. The next paragraph also clearly answers the question in terms of the usefulness of demand and supply and extends the answer in terms of producer surplus, so is now strong analysis. Bottom of page 12 also becomes reasonable evaluation in terms of 'used depends on the level of intervention'. Good evaluation is achieved on the top of page 13 in terms of government subsidies and buffer stocks. There is also judgement in the conclusion in terms of 'government may deliberately change demand and supply'

So reasonable knowledge and application, strong analysis and strong evaluation. There were some errors in understanding, so there was just enough achievement on balance for this level and hence 22 marks.

Question 3

In April 2016 the UK National Minimum Wage for those aged 25 and over was increased by over 7% from £6.70 per hour to £7.20 per hour. It is now called the National Living Wage.

Evaluate, using an appropriate diagram(s), the impact on an economy of an increase in the minimum wage. **[25]**

Exemplar 1 – Level 3 – 13 marks

An increase in the minimum wage means there is an increase in the wage equilibrium.

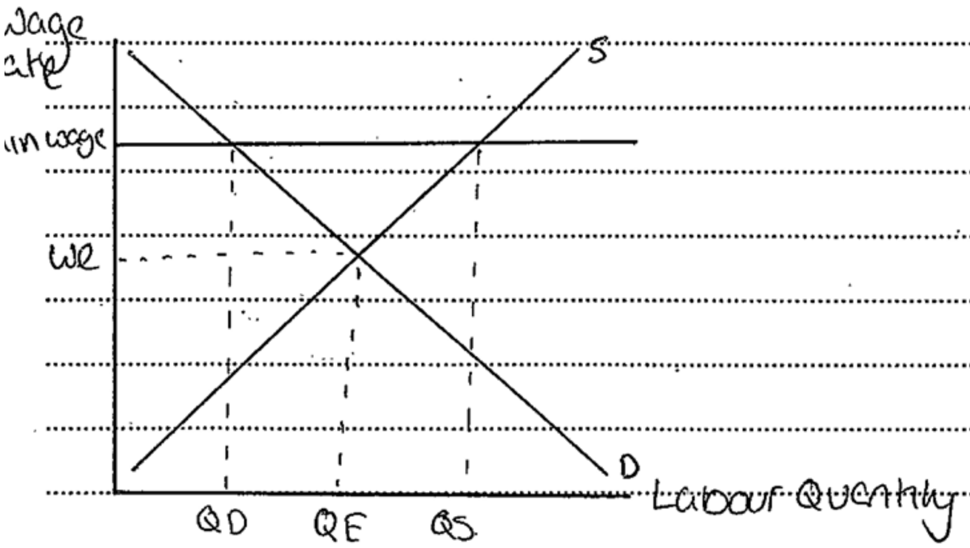


Figure 1.

Figure 1 show a minimum wage being imposed. As the wage rate rises, the quantity of workers demanded falls from QE to QD and the amount of people willing to work (quantity supplied) moves from QE to QS.

The quantity of workers demanded falls

~~as~~ because as the wage rate increases, costs for the firm also increases. ~~However,~~ ~~businesses may~~ ~~be~~ This then increase unemployment, meaning more people claim benefits. This increases government expenditure. This reduces the amount of money available for other things such as infrastructure and health services. The government may not have the funds to provide these benefits on top of existing expenditure, so have to increase government income, or reduce expenditure. This can be done by increasing taxes. This will however leave consumers with less disposable income, reducing GDP. Instead of increasing income they may try and reduce expenditure this could be done by lowering the minimum wage back or less than it was increased by, reducing income inequality and cutting benefits expenditure.

This may not occur though. If ~~the~~ markets for goods have an inelastic demand or a high demand: due to fall in wage rate and disposable income, firms will have to maintain or increase supply. If the manufacturing of these products can't be capital intensive, and need labour, firms will have to continue paying current workers/new workers the higher wage rate. This may be the case as the workers made unemployed due to the new wage, can no longer afford luxury products and have to move to a different market for substitute products.

The quantity of workers supplied supposedly increases as more people are willing to work at a higher wage rate. This will reduce unemployment and decrease government expenditure on benefits, allowing this money to be invested for example, creating more jobs. As more people work at a higher wage rate, disposable income increases, allowing people to buy more, increasing GDP. However, as firms costs go up, they may increase prices, causing inflation.

Although more people are willing to work, they may be unskilled and not have the qualifications to get these higher wages. This will increase income inequality, meaning the government will have to increase taxes on those on a higher income, increasing government income and/or increase government expenditure on benefits for those on low or no pay. If they increase taxes, people may then be reluctant to work as after tax they may have less income than they did before tax benefits.

An increase in the minimum wage is most likely to increase unemployment and increase government expenditure. ~~for~~ Employment won't increase as in the long term, it will be cheaper for a firm to become as capital intensive as possible.

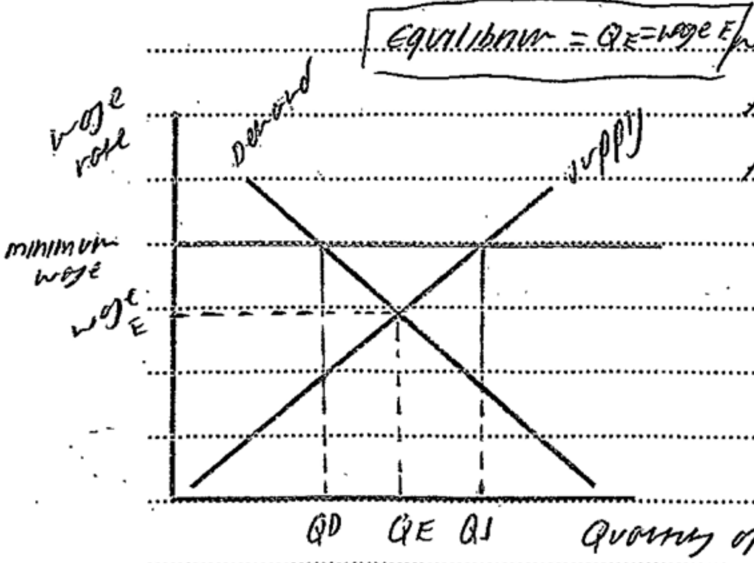
Examiner commentary

Good knowledge for increasing minimum wage and a well labelled diagram. Bottom of page 11 they say, 'minimum wage imposed' which is not answering the question. They then go on to analyse the impact in terms of unemployment and reducing government expenditure, but then the answer becomes confused, so analysis is just reasonable. The evaluation is also reasonable in terms of capital intensive. There is a further point of analysis regarding increasing income and GDP, which takes it to good analysis. The rest of the answer does not add anything more. So good knowledge and application, good analysis and reasonable evaluation, which is L3, but there are some inconsistencies so middle L3, 13 marks

Exemplar 2 – Level 5 – 24 marks

An increase in national living wage will cause many different impacts to suppliers and workers of an economy.

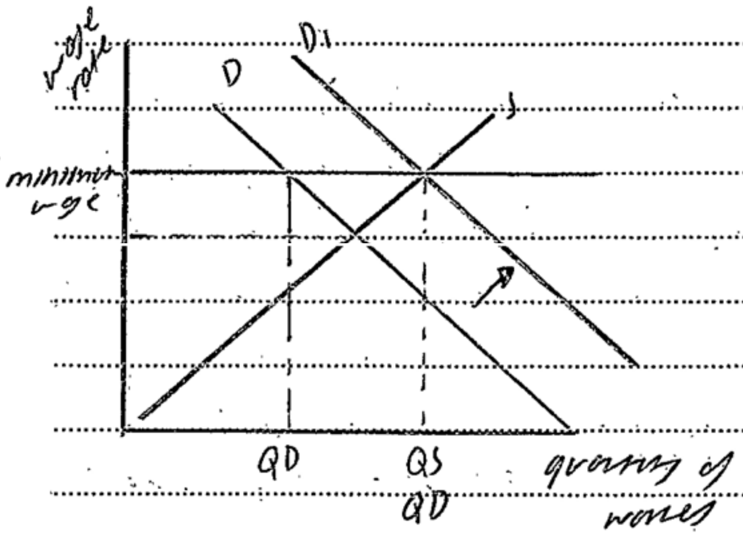
An increase in the national living wage will lead to an unemployment, this is because, businesses will not be able to afford to pay the new wage at that given wage rate. This is shown through QD being lower than QI for the ~~equilibrium of workers~~ quantity of workers



below the equilibrium level. In addition there will be an oversupply of workers. This is because more workers will want to work for that higher wage that is being offered. This is shown through the excess supply on the diagram (where QS exceeds the equilibrium amount of workers – QE).
The difference between QD and QS shows the quantity demanded of workers that are affordable to employ at the new wage rate and the amount of workers willing to work, this gap is the unemployment.

However the increase in wage wasn't necessary lead to ~~the~~ an increase in unemployment. i.e. the ~~wage~~ increase in wage might act as an incentive for workers to work harder. ~~This will increase a workers MRP~~ and become more productive. This will increase the workers marginal revenue product as they are increasing output for the same amount of input and ie is reducing unit labour costs. This ~~is shown by~~ will shift the demand curve right.

PTO — shown by the diagram.



The shifting in the demand curve through increased productivity shows that now QS = QD which is the new equilibrium level.

~~First can~~ To reiterate, firms can afford to pay this due to the increase marginal revenue product of workers (MR x MPP) increasing. i.e. what firms can produce ie e.g. physical product has increased per hour say therefore the marginal revenue the firm is getting is greater.

To conclude, an increase in wage rate to the national minimum wage will increase unemployment in a perfectly competitive market if the increase wage rate is not matched by an increase levels of productivity. This is because a firm might not be able to employ workers at that particular wage as it wouldn't be profitable for them to do so. This will lead to an increase quantity supplied of workers but a low quantity demanded resulting in unemployment. However in contrast, it may not lead to unemployment if the increased wage is matched by productivity. This is because if a workers marginal revenue product ~~the~~ ~~[illegible]~~ increases, they will be making more revenue for the firm but in proportion to their increased wage cost therefore the firm can continue to still employ them. It will also result in lower unit labour costs for the firm. It depends on the rate of productivity, as if the productivity increase is lower than the percentage wage increase there will still be unemployment. In addition it depends on the ~~[illegible]~~ time scale and size of ~~the~~ firm as ~~[illegible]~~ they might not have the resources to increase production at a given rate given their levels of capital for example.

Examiner commentary

This is an example of a strong answer. The diagram is correct and fully labelled, and they do talk of an increase in the NMW, a better diagram would have shown the increase from £6.70 to £7.20 and would have gained application marks. There is also reasonable analysis of the diagram, which then gets reasonable evaluation for also considering the disadvantages an increase in the NMW may cause. The second paragraph on page 11 goes on to show further analysis in terms of increase in MRP which is now good, page 12 shows another correct diagram, which gets a further knowledge mark. Analysis becomes strong with the explanation of the diagram. There is further knowledge of the theory (MR X MPP). The last paragraph on page 12 becomes good evaluation when it talks of unemployment occurring if not met by an increase in productivity. On page 13 there is a judgement in terms of it depends on productivity and rate of increase, so it becomes strong evaluation. There is good knowledge, strong analysis, and strong evaluation, which is L5. It gained 24 marks, if there had been the application on the first diagram or elsewhere in the answer it would have gained full marks.

Section C

Question 4

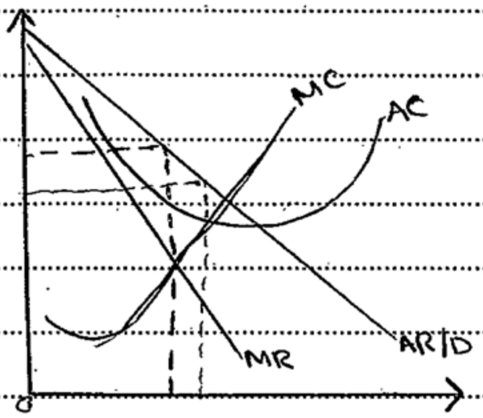
Perfect competition theory is based on a set of very unrealistic assumptions.

Evaluate the usefulness of perfect competition theory in explaining the behaviour of firms in the real world. **[25]**

Exemplar 1 – Level 2 – 6 marks

PLAN: Intro - perfect comp explanation and why it is not realistic.
Para 1 - perfect competition compared to so monopolistically competitive markets
Para 2 - fruit and veg market may be very close to perfect competition.
Evaluation - How useful depends on the market you are comparing to e.g. useful for coffee shop + hairdressers but not phone companies.

Perfect competition is a theoretical view of a market which is used as a tool to compare real markets against it, however it is based on unrealistic assumptions such as no barriers to entry, homogeneous products and uniform pricing.



A perfectly competitive market has normal profits, this is another reason that perfect competition is not useful in the real world. We assume and know the most business aim to achieve high profit, if a ~~comp~~ firm was to enter a market in which they couldn't gain sufficient profit they would be likely to leave the market. These assumptions we have about firms do not corellate with the assumptions of a perfectly competitive market and that is why perfect competition theory may be considered not useful in explaining the behaviour of firms in the real world.

However, there are some markets that still hold many of the charecteristics of a firm in a perfectly competitive market. An example of this is hairdressers. Hairdressers offer the service of a haircut, quality of haircuts are subjective to the consumer but generally the service of getting ones hair cut at any Salon tends to be a very similar process and results in ~~pleat~~ pretty much the same thing. This closeness to a homogenous product, having many firms in the market and having relatively low barries to entry means that the perfect competition model is comparable to ~~an~~ the real world. However it may not relate to this market due to the vast price range of services like this. Therefore although some markets share many similar assumtions to the theory of perfect competition, their behaviour around ~~s~~ certain aspects around things like price setting is not comparable, thus making the theory useless.

Overall the extent to which the theory of competition is applicable to the behaviour of real firms depends upon the nature of the product and how generally competitive firms are acting.

Examiner commentary

Knowledge given for assumptions and being unrealistic. Further knowledge for diagram, despite it not being fully labelled. They do go on to say why the assumptions are not useful, so limited evaluation, this point is stated rather than developed. Hairdressers is not a good example to use, but there is limited analysis for 'perfect competition is comparable to the real world'. The summary at the end adds nothing more to the answer. Good knowledge and application, limited analysis and Limited evaluation. Takes it to just above L1 and hence bottom L2 6 Marks

Exemplar 2 – Level 5 – 25 marks

A perfect competition market structure is a market structure in which there are many firms, products are homogenous and there are low barriers to entry. The usefulness of the theory is examined in this essay.

Figure 1

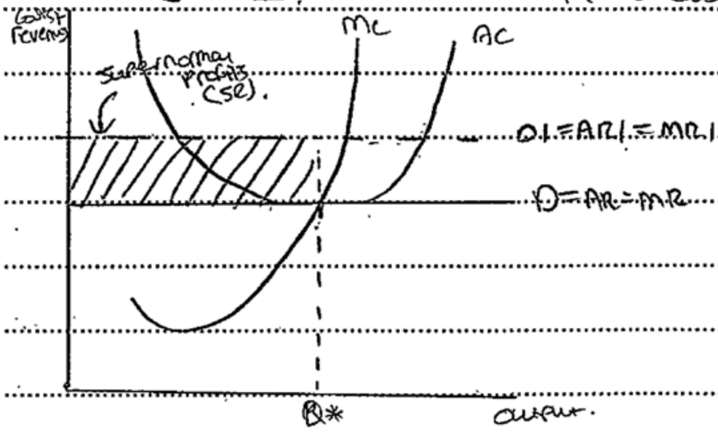


figure one shows the diagram of a perfectly competitive market. The diagram shows that there are super normal profits earned when prices increase. This is because in the short run a perfectly competitive market can earn supernormal profits only in the short run because, in the long run due to low barriers to entry and homogenous products a competitor will ~~leave the market~~ be attracted into the market, ~~firms~~ and may increase their market share by reducing prices this ultimately shifts the demand curve from D1 = AR1 = MR1 to D = MR = AR and so now only normal profit is earned. This is useful in explaining why firms in a perfectly competitive market rarely change prices in the long run as they are price takers, and so a change in price in the long run could mean consumers switch to competitors with lower prices. It can be argued that this may not be useful in the real world as there is ~~also~~ some brand loyalty within consumers, and they may not just switch because of lower prices. It also may be inconvenient for them to switch and so may be willing to pay that extra price.

Figure 2 also shows that in a perfectly competitive market firms are productively efficient as they operate on the lowest point of their average cost curve, they are also allocatively efficient as price is equal to marginal cost. This ultimately results in static efficiency. This is useful in explaining how firms make a profit with such low prices, if they are efficient, there is less wastage, and an increase in X-efficiency (incentive to cut costs) and so firms can create a greater profit margin by reducing costs rather than increasing prices. However firms within the market may not be dynamically efficient as supernormal profits are only made in the short run.

Perfect competition may not be useful in explaining the behaviour of firms as ~~many assu~~ it assumes that producers and consumers have perfect knowledge. It also is unrealistic as in the real world there is likely to be some barriers to entry and even though goods are homogeneous, they may compete on other things such as the quality of the good or customer service.

An alternative theory that may be more useful in explaining the behaviour of firms in the real world is the theory of an oligopoly. In this market structure firms compete through price and through non price factors. Barriers to entry and exit are also taken into account. Furthermore the oligopoly theory helps to explain why in some markets supernormal profits are made through collusion, and in other markets where prices are rigid and firms interdependent of each other so only normal profit is made. This is useful in the real world as the characteristics are realistic whereas in perfect competition the characteristics are unrealistic.

Overall, the perfect competition theory can be seen as useful in explaining the behaviour of firms in the real world as it can act as a benchmark in which ~~other structures~~ firms can be compared to. However may not be completely useful as assumptions are made and there are no clear examples within the real world of ~~perfe~~ a perfectly competitive market.

Examiner commentary

This is an excellent answer and one that is fully focused on the question set. There were unfortunately many candidates that saw this question as merely the advantages and disadvantages of perfect competition and hence only achieved marks in L1 or L2. It is interesting to note here that the candidate clearly underlined the important parts of the question and did some very brief pointers under each part of the question and focused their answer on that. The stem/line before the question is there to guide candidates, but is often ignored. This answer starts with a clear knowledge of what the assumptions are and immediately makes it clear what the question is about in terms of usefulness. The diagram is correctly labelled and gains another knowledge point and a further one for clear knowledge of theory (top of page 15) The answer then goes on to analyse the usefulness (again using the wording of the question) and gains good analysis. In the next paragraph they achieve strong analysis in terms of usefulness in making a profit and developing their point. The answer then starts to evaluate why perfect competition may not be useful (again using the wording of the question) (bottom page 15 and top of page 16) The next paragraph becomes good evaluation when they make a comparison between oligopoly and perfect competition to show how perfect competition is unrealistic. The last paragraph is a clear judgement in terms of 'benchmark' so now strong evaluation. There is strong knowledge throughout. So, all the criteria for L5 are present, hence 25 marks.

Question 5

Profit maximisation is an unrealistic objective and does not explain the behaviour of firms in the real world.

Evaluate the extent to which profit maximization is the most important objective influencing the activities of a firm in the real world. **[25]**

Exemplar 1 – Level 1 – 5 marks

Profit maximisation is where a firm sets out to achieve the greatest amount of profits it can achieve in a given time.

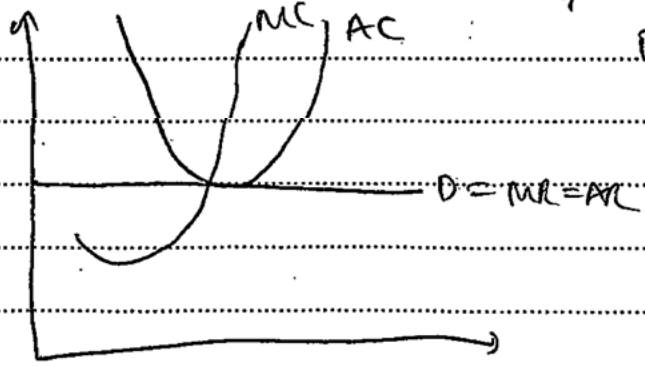
On the one hand, it can be argued that profit maximisation is the most important objective for a firm as profits are what a firm can use to maintain its operations and in order for them to grow as a business. For example, ~~if a firm sets out to~~ a firm may decide to maximise its profits in order for them to be able to pay its dividends investing by its shareholders. In addition to this, profits are needed to be able to pay its workers wages, various taxes and still have enough money after all of its various expenses for the owners to make money.

Furthermore, it can be argued that a firm would not be able to continue running if a firm did not make a profit, otherwise it is losing money. Therefore, owners would decide to pursue profit maximisation as its main focus.

However, there are many other objectives a firm may pursue. One ~~of which~~ of said reasons could be the fact that the firm is a not for profit organisation (for example a charity) meaning that it is not concerned with earning its owners a profit.

Furthermore, if a firm is struggling to survive each month, the owners may decide to move towards focusing on the survival of the business as their main priority until their situation improves. As well as this, if a firm has substantial profits, it may ~~focus~~ limit its operations for a few months to be able for the business to grow as it is focusing the majority of its funds on the business' expansion.

~~To~~ In addition, whether the firm chooses profit maximisation could be dependent on the market. If the firm is in ~~a~~ perfect competition,



it may be ~~using~~ focusing its attentions on increasing their market share. Similarly, if the firm is ~~the~~ the monopoly power on the market, it may decide to focus on ~~being the~~ increasing its market share. * see additional

To conclude, I feel that profit maximisation is the most important influencer of a business as the owners/shareholders may wish to increase their own personal gain. In addition, the firm can use their ~~prof~~ abnormal profit to expand the businesses operations in terms of its market share, its quality of service and so on. ~~But~~ This can be dependent on external factors but overall, it is the most influencing objective.

(5) As well as this, it can depend on the economic situation at that time. For example, if the economy is in a recession it may limit its profit maximisation until the economy ~~is~~ has improved.

Examiner commentary

This is a typical weaker response, where the candidate did not fully address the question set. Knowledge given for first paragraph and application for 'not for profit, analysis for 'investing for shareholders', evaluation for alternative 'survival' and again for 'depends on the economic situation'. This answer could have been improved by analysing why profit maximisation is the most important objective. Other objectives should have been considered, and the diagram needs to be labelled.

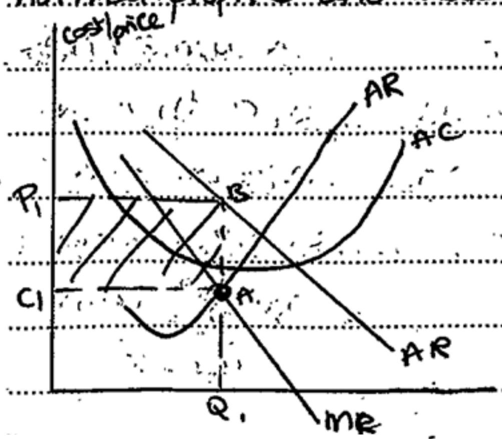
So reasonable knowledge and application; limited analysis and reasonable evaluation. Two of the three descriptors for L1 are there, evaluation is a reasonable, but not enough for L2, so top of L1.

Exemplar 2 – Level 5 – 23 marks

I aim to evaluate the extent to which profit maximisation is the most important objective of firms.

Profit maximisation is when firms produce output when MC=MR where profits are maximised.

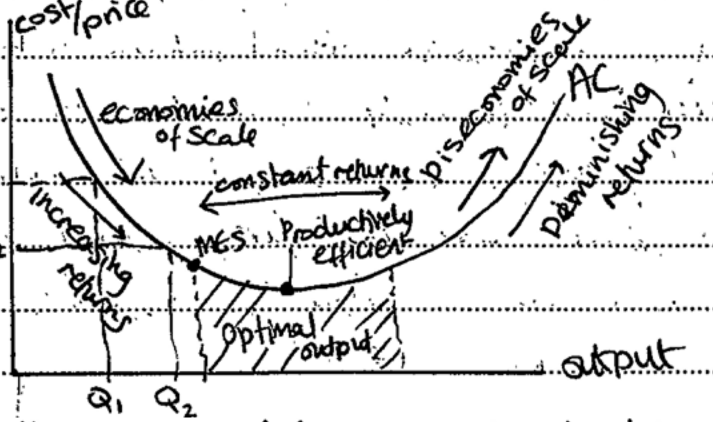
Many firms ~~am~~ profit maximise as they want ~~from~~ profit, this is because many firms have share holders who want increased gains from dividend's, this means that they sell at MC=MR so that the firm can gain super normal profits and make the share holders happy.



The diagram shows that at output ~~point~~ MC=MR, costs are at C1 and if the firm sets prices at P1, they make super normal profits from C1 A B P1. This means that the owners of the business are happy. This is important as in the begining, the firms main objective is the owner's objectives as they are the risk takers. However this depends on the type of business as some organisations may not have profit as an objective ~~as~~.

Firms may also want to profit maximise so that they can make supernormal profits that they can re-invest into the business as it may be cheaper to re-invest into the business and grow ~~fat~~ than to borrow from banks and pay high interest rates so therefore the firm wants to increase profits so in the long term they can re-invest and be dynamically efficient and stay competitive. This depends on the type of market as if it is a monopoly, it may not ~~have~~ need to re-invest as it is the dominant producer in the market so there is no incentive.

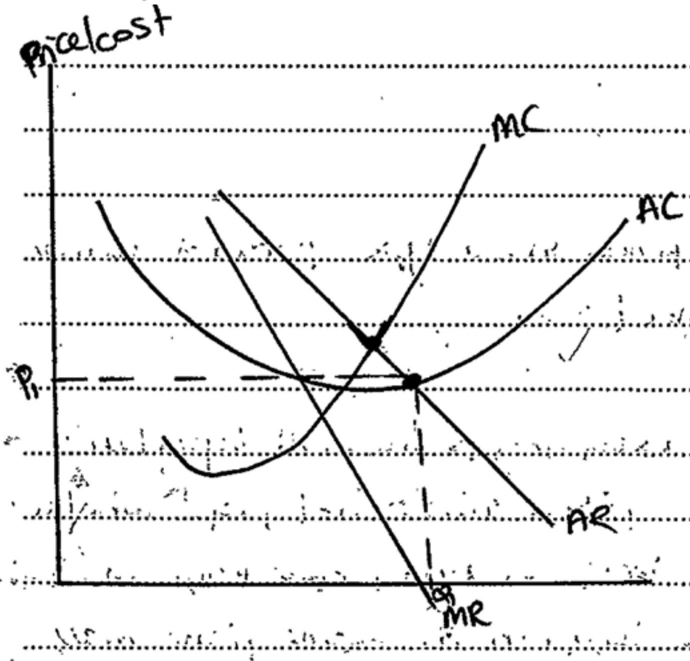
~~On the other hand~~ some firms may profit maximise as they want to benefit from economies of scale in the long run and so by aiming to obtain profits, they have incentives to lower their costs as shown in the diagram.



As output increases, from Q_1 to Q_2, costs also decrease from C_1 to C_2 and so therefore costs are lowereed for the firm and they are able to have higher profits as their ~~unit~~ average cost is lower in the long term.

On the other hand some firms may have divorce of ownership and control where shareholders want profits however, the managers may want to get personal targets such as in football, to win the trophy. An example is football clubs, the shareholders want profits, but manages want to win cups and stay on top of league tables. This means that firms may profit satisfice where they set minimum target levels to please the shareholders. This depends on the ~~fir~~ type of firm and how far the managers and shareholders are as sometimes the managers may be a shareholder e.g. Apple workers all have shares in the company so they may all have a common objective.

Another reason a firm may not profit maximise is that they may want to just survive in the market and make supernormal profit. ~~The firms may decide that they want to wait and not become~~ They may want to sell as much stock as possible without making a loss and wait to gain brand loyalty so that in the long term they may profit maximise. This is Sales maximising as firms sell all their goods to gain market share and brand loyalty as shown in the diagram



As firms sales maximise, at AR=AC, they produce output at Q_1 where they only make normal profit at P_1. ~~This~~ An example is Amazon kindle ebooks. They were sold at low prices so gained market share and brand loyalty so then prices were raised. ~~This means~~ This depends on where the firm is as if the firm is already established, and has brand loyalty, they will go straight to profit maximising.

Another reason firms may not profit maximise is because they may have other primary objectives such as raising money for charities and not-~~for~~ profit organisations such as The honest company. These firms aim to keep revenue maximising and reinvest ~~the~~ any profits back into the company and so therefore their main objectives aren't to obtain and maximise profits as more to raise revenue and awareness so therefore they don't profit maximise as any profit they do make gets re-invested and so is considered a cost as they do not personally benefits they become more dynamically efficient and raise awareness. Many firms have other main objectives such as survival and therefore don't aim to get

5 Profit. This all depends on the type of organisation and their primary objectives.

Overall profit maximising is the most important objective as most firms aim to get profit whether in the short run or long run. ~~the~~ Profit maximising may occur in the long run as some firms may try to gain market share or revenue first then move onto profit maximising where they can also benefit from economies of scale. Most firms aim to obtain profits as it benefits the owners and workers. However it all depends on the types of firms in the market as a lot of firm's may enter the market as not-for-profits.

Examiner commentary

The answer starts by showing clear knowledge of profit maximising being where MC=MR, it then analyses a reason why firms seek to profit maximise (profit for shareholders). The diagram does get knowledge, but there is an incorrect identification of the profit line. There is further analysis in terms of the owners being risk takers and again in the next paragraph in terms of re-investing profits and it being cheaper than getting a loan, this takes it to good analysis. Evaluation starts during the bottom of the first paragraph on page 15 in terms of it depends upon the type of firm, but this is only limited, because it is a stated point at this stage. On page 16 the evaluation becomes good in terms of 'divorce of ownership and control' and 'profit satisfice to please shareholders' There is also good application to the real world, 'football' and 'Apple' and then 'Amazon'. For strong evaluation there needs to be a judgement, and this is on the additional pages when the answer talks in terms of it depends on short run and long run and is justified in terms of increasing market share first then profit maximising in the long run. There is strong knowledge and application, good analysis, and strong evaluation, which is level 5. The mark of 23 is due to the analysis only being good so middle of the level.

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