

Economics

Answers and commentaries A-level (7136)

Paper 1: Markets and market failure

Marked answers from students for questions from the June 2022 exams. Supporting commentary is provided to help you understand how marks are awarded and how students can improve performance.

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Answers and commentaries

This resource is to be used alongside the A-level Economics Paper 1 Markets and Market Failure, June 2022 question paper and inserts.

Context 1

Question 3

Extract C (lines 4–5) states that, as a result of trade union action, 'The hospital trust increased their £8.21 minimum wage to the London Living Wage of £10.75.'

With the help of a diagram, analyse how a trade union might achieve higher pay for its members.

[9 marks]

Mark scheme

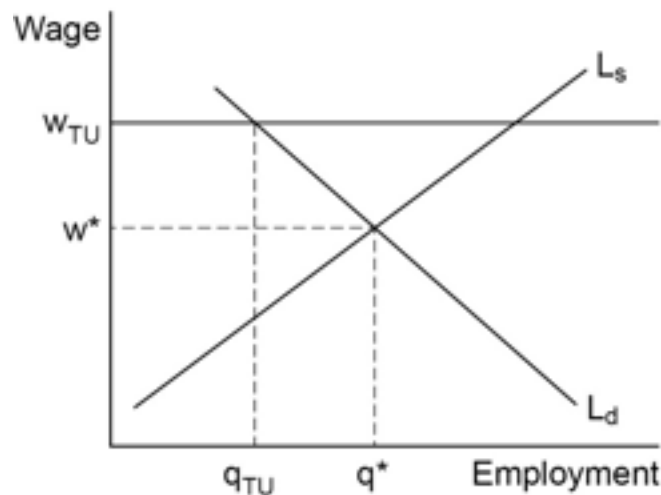
Below is the levels of response marking grid which should be used to mark the 9 mark questions.

Level of response	Response:	Max 9 marks
3	<ul style="list-style-type: none"> is well organised and develops one or more of the key issues that are relevant to the question shows sound knowledge and understanding of relevant economic terminology, concepts and principles includes good application of relevant economic principles and/or good use of data to support the response includes well-focused analysis with a clear, logical chain of reasoning includes a relevant diagram that will, at the top of this level, be accurate and used appropriately. 	7–9 marks
2	<ul style="list-style-type: none"> includes one or more issues that are relevant to the question shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present 	4–6 marks

	<ul style="list-style-type: none"> includes reasonable application of relevant economic principles and/or data to the question includes some reasonable analysis but it might not be adequately developed and may be confused in places may include a relevant diagram. 	
1	<ul style="list-style-type: none"> is very brief and/or lacks coherence shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely demonstrates very limited ability to apply relevant economic principles and/or data to the question may include some very limited analysis but the analysis lacks focus and/or becomes confused may include a relevant diagram but the diagram is not used and/or is inaccurate in some respects. 	1-3 marks

Suggested diagram

A labour market diagram is expected, showing how trade unions can negotiate for a higher wage than that prevailing in an otherwise competitive labour market. However, other appropriate diagrams should be given credit, for example a diagram showing the impact of a trade union negotiated wage in a monopsonistic labour market (such as the market for hospital workers in the UK), or a diagram showing a labour supply curve shifted to the left.



Relevant issues include:

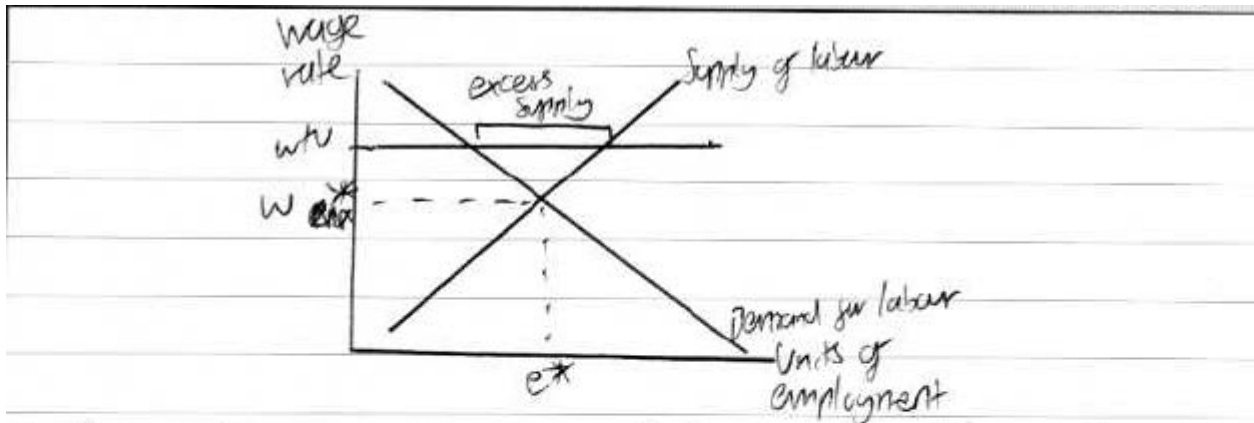
- definitions of trade union and pay
- explanation of the diagram, showing impact of higher wage and comparison with non-unionised wages. Analysis of impact on employment is not expected
- how a union may engage in collective bargaining for the benefit of its members
- explanation of types of actions taken by unions, such as strikes, work-to-rule, litigation, media campaigning, and how they can lead to higher negotiated pay settlements
- how a union may act as a monopoly supplier, or at least have some degree of monopoly power in the labour market
- use of extracts (particularly Extract C) in explaining how unions have acted to protect the interests of workers and secured higher pay.

Student responses**Response A**

A trade union is an organisation where workers come together to ~~unite~~ solve the issues of their work, whether it be to improve working conditions or bid up wages.

Through the collective bargaining power of a trade union, it ~~will~~ may act to bid up wages. ~~Through~~ Its ability to force firms to bid up wages is facilitated by enacting strikes, whereby workers refuse to go to work until they can receive higher wages. One example of a trade union is the ~~British Medical Association~~ United voices of the world.

As shown in the diagram below, a trade union can collectively bargain a higher wage effectively imposing a minimum price on the firm, forcing firms to pay at the w^u level.



As shown above, a trade union can hold up wages through its bargaining power thus causing a rise from the wage level from w^* to w_{TU} . So the trade union can effectively force firms to become wage takers thus removing their previous possible wage setting power.
~~Firms will raise~~

This is a Level 3 response

This is a relatively high value response. The response is well organised and shows sound knowledge and understanding. It includes some good application of economics to the context, though there is little use of the data to support. There is some well-focused analysis with a clear and logical chain of reasoning.

The student begins with an explanation of a trade union and its purpose. This is further developed as they analyse the collective bargaining power of the trade union. There is a brief reference to the 'UWU union' used in the extracts, but the context could have been developed further.

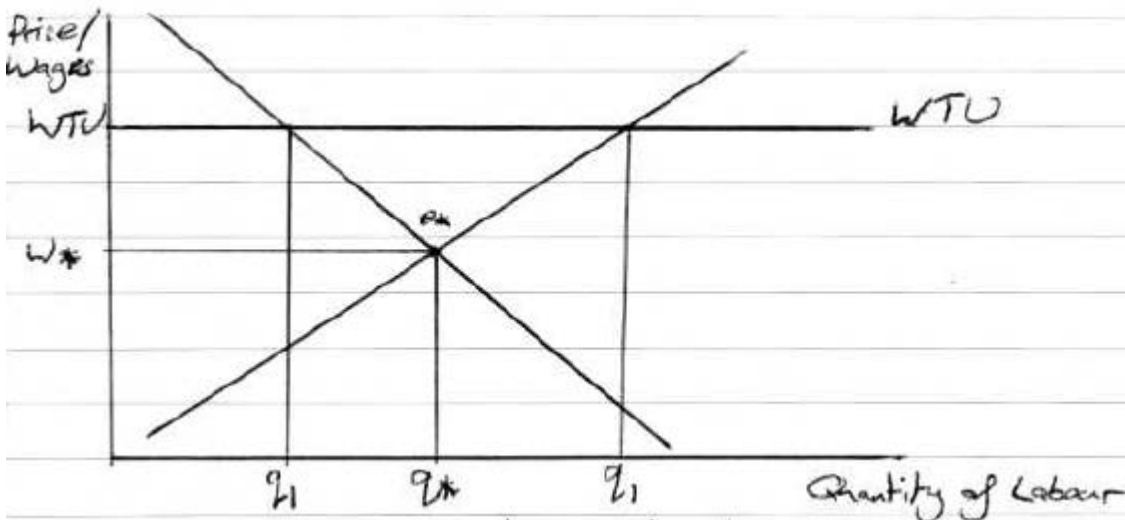
The student includes an accurately drawn labour market diagram which shows the increase in the wage. It might have shown the quantity coordinates at the higher wage, but this was not a focus of the question. The diagram is effectively integrated into the response.

Overall, this is 'just about' a Level 3 response. The student shows good understanding, but the analysis and context could have been slightly more developed.

7 marks

Response B

Trade Unions can achieve higher pay for their members as they have a lot of bargaining power when negotiating wages with firms. A trade union is an ~~group of workers in an industry~~ organisation made up of workers from a given industry who get together to negotiate better pay and working conditions for their members and the workers in that industry. They can use the collective. They can ~~therefore~~ negotiate with firms by collectively agreeing to refuse to work until firms in the industry agree to the terms they will work under. Extract C tells us that the 2019 ~~UK~~ United Voices of the World strike at St Mary's Hospital was 'confrontational and uncompromising'. It was also very successful. We are told that ~~was~~ the minimum wage at the hospital rose to the 'London Living Wage of £10.75'. The strike was successful as ~~a~~ enough of the workers took part, meaning that the hospital had not enough cleaning staff and were forced to accept the higher pay proposed by the UVW. This can be seen in the following diagram



The diagram shows how trade unions can use their bargaining power to negotiate a higher wage at W_T than that of the market equilibrium wage at W_M which would be paid ~~with an~~ without the intervention of a trade union.

This is a Level 2 response

This is a medium value response. The response includes issues that are relevant to the question. The student shows reasonable knowledge and understanding. There is reasonable application of relevant economics to the context, including good use of the data in the extracts. There is some reasonable analysis, but the diagram is very weak.

The student begins with a detailed explanation of a trade union and its purpose. This is supported by plenty of data from the extracts and leads into some reasonable analysis, which generally show good understanding of the issues posed by the question.

However, the response is spoiled by the diagram that follows. The intention is to show a labour market diagram, but none of the curves are labelled. The value of the analysis below the diagram is diminished as a result.

6 marks

Question 4

Extract B (lines 16–18) states that, ‘Gig economy defenders claim that today’s flexible labour markets offer modern workers the opportunity to move freely between jobs and this gives them more choice over their working hours.’

Assess the view that government intervention in the UK labour market is necessary to protect the interests of people who are working in the gig economy.

[25 marks]

Mark scheme

Below is the levels of response marking grid which should be used to mark the 25 mark questions.

Level of response	Response:	Max 25 marks
5	<p>Sound, focused analysis and well-supported evaluation that:</p> <ul style="list-style-type: none"> is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response includes well-focused analysis with clear, logical chains of reasoning includes supported evaluation throughout the response and in a final conclusion. 	21–25 marks
4	<p>Sound, focused analysis and some supported evaluation that:</p> <ul style="list-style-type: none"> is well organised, showing sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors includes some good application of relevant economic principles to the given context and, where appropriate, some good use of data to support the response includes some well-focused analysis with clear, logical chains of reasoning includes some reasonable, supported evaluation. 	16–20 marks

3	<p>Some reasonable analysis but generally unsupported evaluation that:</p> <ul style="list-style-type: none"> • focuses on issues that are relevant to the question, showing satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response • includes some reasonable analysis but which might not be adequately developed or becomes confused in places • includes fairly superficial evaluation; there is likely to be some attempt to make relevant judgements but these aren't well-supported by arguments and/or data. 	11–15 marks
2	<p>A fairly weak response with some understanding that:</p> <ul style="list-style-type: none"> • includes some limited knowledge and understanding of economic terminology, concepts and principles is shown but some errors are likely • includes some limited application of relevant economic principles to the given context and/or data to the question • includes some limited analysis but it may lack focus and/or become confused • includes some evaluation which is weak and unsupported. 	6–10 marks
1	<p>A very weak response that:</p> <ul style="list-style-type: none"> • includes little relevant knowledge and understanding of economic terminology, concepts and principles • includes application to the given context which is, at best, very weak • includes attempted analysis which is weak and unsupported. 	1–5 marks

Areas for discussion include:

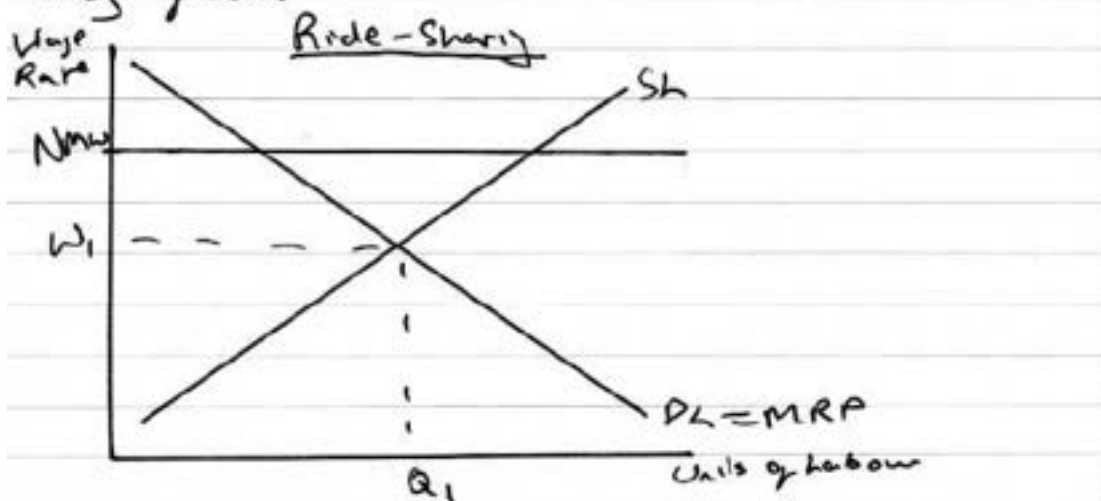
- explanation of the gig economy and the difference between terms of employment in the gig economy and standard employment
- discussion of the emerging trends that have contributed to the rise of the gig economy, such as technological progress and online commerce
- what is meant by the ‘interests of people who are working in the gig economy’
- discussion of the reasons why some roles/industries are more likely to arise in the gig economy than others
- the benefits of gig economy work to the individual, such as: flexibility over hours, ease of switching between jobs, autonomy from having no supervising manager
- the costs of gig economy work to the individual, such as lower pay and fewer non-wage benefits (for example pension, health insurance, maternity benefits)
- analysis of why wages may be lower and working conditions worse in the gig economy than in the formal sector
- benefits and costs of the gig economy to firms and the wider economy, such as greater labour mobility, lower costs of production, economic efficiency
- discussion of the impact of the pandemic on the gig economy
- discussion of possible policies, such as legislation, raising minimum wages, guaranteeing minimum hours for all roles, redefining gig economy workers as ‘employed’ rather than ‘self-employed’
- the argument that the need for government intervention is reduced by the existence and growth of trade unions representing gig economy workers
- the argument that the need for government intervention is reduced by the fact that some firms in the gig economy are improving conditions for their workers anyway
- use of examples
- market failure arguments
- government failure arguments.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student’s response to the question.

Student responses

Response A

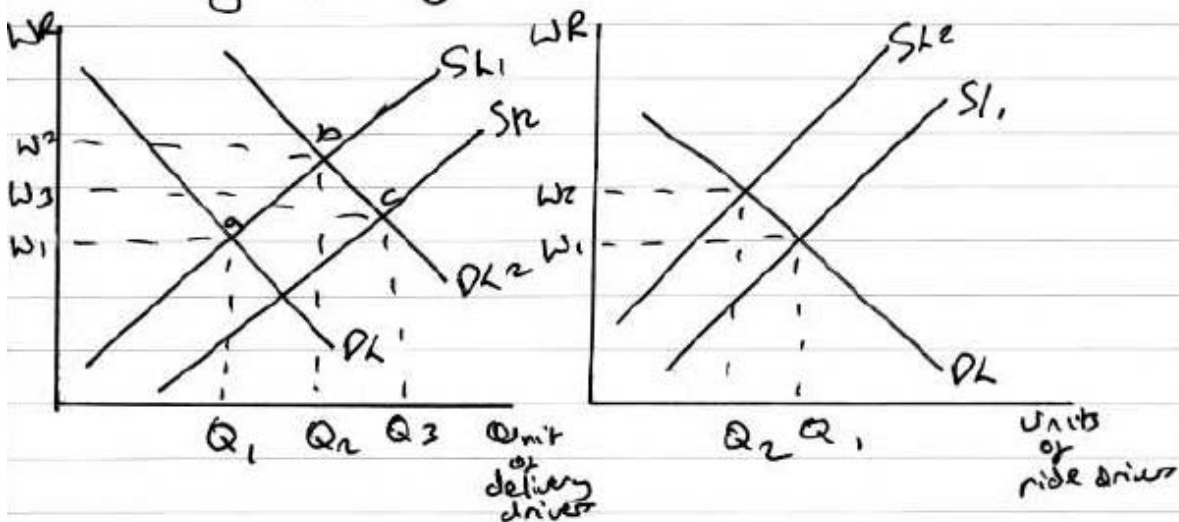
The Gig economy offers new challenges to governments as to how active they should be in labour markets in order to protect workers at the expense of efficiency or private firms. It is likely government will need to intervene to ensure that gig economy workers are not exploited by the lack of regulation and contractual protection they face.



One possible intervention the government could consider to combat the insecurity of the gig economy is to expand or instigate a minimum hourly rate to those deemed 'platform workers'. Extract A figure 1 suggests 10% of the workforce are already working for platforms like Uber and Deliveroo. On the surface these workers are self-employed but are in reality beholden to these large multinationals for their wage. The diagram drawn above shows the market for ride-sharing. The wage rate for the market is determined by the marginal revenue product of the drivers and is thereby demanded by firms like Uber and Lyft. The supply for labour is the drivers themselves offering their time and effort to Uber at higher rates for higher wages. Where these meet the market wage is set. Yet at this wage they are, as Extract B notes, earning significantly less than those doing similar work 'off platform' (say a black cab). This could normatively be ~~called~~ called inequitable and instigating a ~~national~~ ^{platform} minimum ^{hourly} wage for gig workers could ameliorate this inequity. As shown above instigating a platform 'minimum hourly wage' would lead to a higher wage as the statutory limit would stop employers from supplying their labour at lower wage rates.

However, it should be noted that instigating a minimum hourly wage or that would possibly mean eliminating some of the benefits 'looser contracts

bring workers within the economy. As the source notes the gig economy helps to bring people including those with childcare responsibilities out of economic inactivity as often the 'regular' work schedule will not fit those restraints. In addition it could be normatively argued that the inequality mentioned earlier does not exist as those taking gig economy jobs are willingly accepting poorer protections in exchange for greater flexibility.



The Gig economy should not be intervened in by the government due to the economic efficiency it brings to the labour market. Occupational and geographical immobility are a cause of labour market inefficiency. Occupational immobility in particular means that workers cannot follow the 'signal' of higher wages and enter labour markets to ration our excess demand for labour, due to a lack of skills or qualifications. As source B notes the gig economy allows workers to move freely between jobs and as

such improve labour market outcomes. As shown above, a ~~fall in the number of~~ change in consumer tastes leads to a rise in demand for delivery drivers (i.e. deliveries). This leads to a rise in the wage rate from w^1 to w^2 as workers demand higher wages from deliveries to ration out excess demand for labour at the previous equilibrium. As a result of this rise in wages ride-share drivers like those working for Bolt or others are incentivised to supply their labour in the delivery market. As new workers enter the market wages fall in the delivery market leading to a new equilibrium at c where wages are w^3 and the quantity of workers employed has risen to Q3. The occupational mobility allowed workers to move sectors and earn higher pay while also reducing firm costs.

On the other hand, this added mobility is as of now only affecting a small number of relatively low paid jobs. It follows that as more jobs go towards 'platforming' that they too will require qualifications. For example the Web MD medical platform still requires fully educated doctors. The expansion of this mobility to wider swathes of the economy are therefore unlikely - high pay and skilled jobs.

In conclusion, the government should intervene to a limited extent to protect the interests of those working in the City economy. For example creating

a new framework for platform workers. To unionise beyond having to be aligned to one group as many platform workers undoubtedly set up on several apps at once. It should also look to make a distinction of those who use platforms full time as opposed to the near 30% of the workforce who are 'seeking' platform work but are possibly only looking to supplement formal 'employed' income. Lastly supporting those in the gig economy is likely going to involve looking to mitigate the significant monopsony power many gig employers have, especially given the difficulty for gig workers to make claims or organise against their platforms.

This is a Level 5 response

This is a high value response. This is a well organised response, and the student demonstrates sound knowledge and understanding. There is good application of relevant economics to the context and very effective use of the data in the extracts to support arguments. There is well-focused analysis with clear, logical chains of reasoning. There is supported evaluation throughout the response and in the conclusion.

The student begins with a good introduction regarding the 'gig' economy, and a tentative evaluative comment suggesting it is likely that the government will need to intervene.

The student includes a labour market diagram illustrating a minimum wage for 'ride-sharing workers'. The subsequent analysis effectively combines both the diagram and data from the extracts, plus some evaluative comments, to support the argument for intervention. As a counter, they include more data and evaluation to suggest that gig economy workers '...willingly accept poorer protection in exchange for greater flexibility.' Here, they might have explicitly linked back to the question to reinforce their argument.

Next, the student includes two labour market diagrams for 'delivery drivers' and 'ride drivers'. In the analysis that follows they suggest that government intervention may not be required as the gig economy allows for more labour-market efficiency and improved mobility of labour. As before, one of the diagrams and data from the extracts are successfully integrated into the response, to help build the analysis and evaluation. The student ends this section effectively by using their own example of a 'medical platform' which maintains the context, and counters the preceding argument.

Finally, the student offers their overall judgement suggesting that '...the government should intervene to a limited extent...' They suggest how and why, and the evaluation is fully supported by the conclusion itself and the earlier analysis and data.

Overall this is a sophisticated response, it is written completely in context, and properly answers the question set.

23 marks

Response B

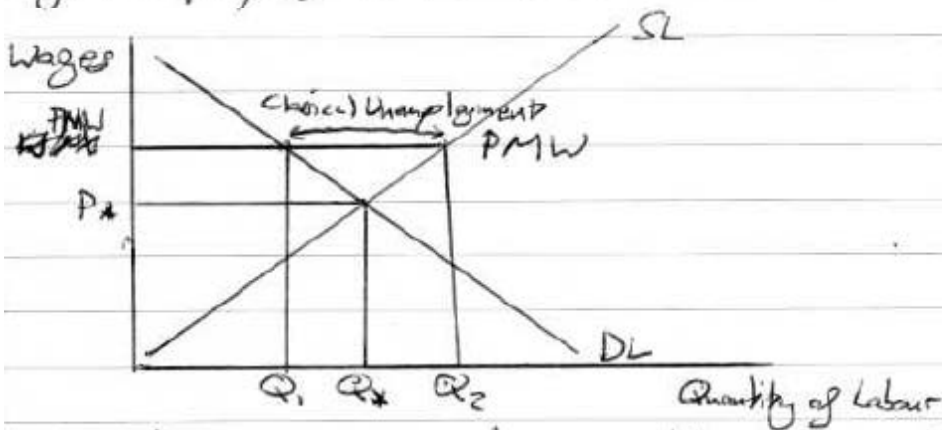
Government Failure is when the government intervenes in a market and creates a new market failure or ~~you~~ makes an existing failure worse. Market failure occurs when there is an inefficient allocation of scarce resources in a market. This essay will evaluate ~~the market~~ ~~three policies~~ and conclude that government intervention in the UK labour market is necessary to some extent.

One reason why government intervention may be necessary to protect the interests of gig economy workers is that, according to Extract B, gig workers 'face higher risk and more uncertainty about the stability of their incomes than standard workers'. This is seen in the use of zero-hour contracts, where workers have no guarantee of work and thus no guarantee of pay as they are paid for the hours they work. Intervention may be necessary here ~~in~~ in order to ensure that gig workers are paid even if their employer sees no use for them at a given time. This ~~could be achieved through a minimum wage as seen below.~~

This could be achieved through ~~proposing~~ putting a legal limit on the ~~number of~~ minimum hours a worker is contractually obligated to work for. This was seen with Uber, who is now obliged to ~~pay~~ pay their drivers a living wage and give them

paid time off work after they were taken to court. ~~It may be necessary here~~ a Intervention may be necessary here as without it, employees will be able to continue employing people under risky, uncertain contracts.

~~Another reason why intervention is necessary~~
However, the extent to which this will be successful depends on how heavily handed the intervention is. If the government enforces a minimum wage for gig workers, this could cause ~~en~~ firms to employ fewer people, as seen below.



The diagram shows how, with the implementation of a minimum wage at PMW, firms only demand labour at Q_1 , less than the free market employment at Q^* . However, ~~en~~ workers supply themselves at Q_2 , resulting in excess supply of labour and thus unemployment between Q_1 and Q_2 as firms will not employ ~~them~~ more than Q_1 workers at that wage. However, ~~en~~ firms will usually, in practice, keep the workers on as contracts cannot be dissolved ~~at~~ whenever an employer desires and so, at least in the short run, the negative impact of unemployment will be minimal!

The text in extract B also states that gig workers 'tend to earn less than employees doing similar work'. This can be seen with Deliveroo drivers who, on average, earn considerably less than delivery drivers employed on fixed contracts with restaurants. The government may need to intervene here to make sure that gig workers are paid the same as others doing the same job ~~class~~ for someone else.

In conclusion, I believe it is necessary ~~to~~ for the government to intervene to protect gig workers' interests as they face risky and unstable pay and conditions.

This is a Level 3 response

This is a medium value response. The response focuses on issues that are relevant to the question, and the student shows satisfactory knowledge and understanding. There is reasonable application of relevant economics to the context and use of the data in the extracts to support it. There is some reasonable analysis, but this is not adequately developed. There is some fairly superficial evaluation, but judgements are not well-supported by arguments or data.

The student begins with a couple of definitions. However, the first 'government failure' is a questionable choice, it's not obviously relevant and there is no further reference to it in the whole of the response. The second 'market failure' is relevant, but the student does not return to this either.

In the next paragraph the student offers the argument that government intervention is necessary. They include an appropriate prompt from the data in support, but the subsequent analysis could be more developed. There is a line of evaluation to complete the paragraph.

In the following paragraph the student suggests how this may be achieved. As before they use a prompt from the data to support, but there is very little analysis and the evaluation is quite repetitive.

The next section begins with an evaluative comment regarding the success of any government intervention. The student effectively integrates an accurately drawn labour market diagram and assesses the drawbacks of implementing a minimum wage for gig workers. They provide a counter to this at the end of the paragraph, however, given the context of zero-hours contracts already referred to, this point is weakened somewhat.

The student includes another paragraph, choosing a different prompt, but this is largely repetitive.

The student offers a concluding statement to reiterate their view that government intervention is necessary.

14 marks

Context 2

Question 7

Extract E (lines 16–17) states that, ‘Supermarkets set prices interdependently, and price wars look very likely.’

With the help of a diagram, analyse the impact on grocery consumers of interdependence between supermarkets.

[9 marks]

Mark scheme

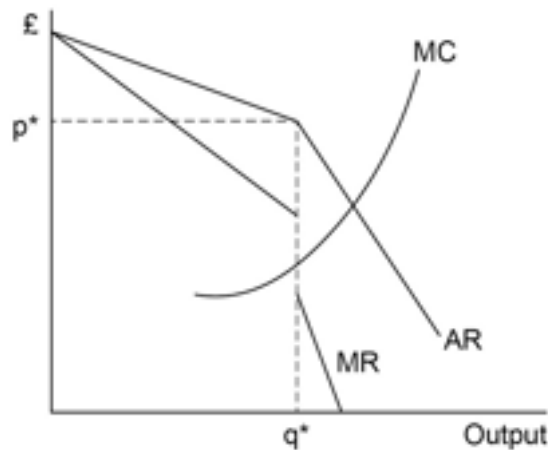
Below is the levels of response marking grid which should be used to mark the 9 mark questions.

Level of response	Response:	Max 9 marks
3	<ul style="list-style-type: none"> is well organised and develops one or more of the key issues that are relevant to the question shows sound knowledge and understanding of relevant economic terminology, concepts and principles includes good application of relevant economic principles and/or good use of data to support the response includes well-focused analysis with a clear, logical chain of reasoning includes a relevant diagram that will, at the top of this level, be accurate and used appropriately. 	7–9 marks
2	<ul style="list-style-type: none"> includes one or more issues that are relevant to the question shows reasonable knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present includes reasonable application of relevant economic principles and/or data to the question includes some reasonable analysis but it might not be adequately developed and may be confused in places may include a relevant diagram. 	4–6 marks

1	<ul style="list-style-type: none"> • is very brief and/or lacks coherence • shows some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely • demonstrates very limited ability to apply relevant economic principles and/or data to the question • may include some very limited analysis but the analysis lacks focus and/or becomes confused • may include a relevant diagram but the diagram is not used and/or is inaccurate in some respects. 	1-3 marks
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Suggested Diagram

A kinked demand curve diagram is expected, showing how interdependence in the supermarket sector may mean prices are sticky.



Notes:

- The diagram does not have to include the MR and MC curves, a kinked AR curve is sufficient.
- A different relevant, valid diagram should also be rewarded. Allow a game theory matrix.

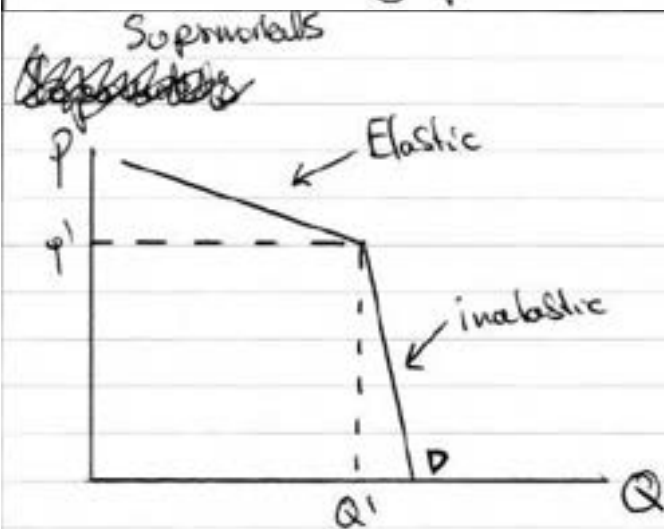
Relevant issues include:

- the meaning of interdependence and uncertainty
- supermarkets as an example of an oligopoly
- explanation of the diagram, including why the demand curve is kinked (relating to price elasticities of demand either side of p^*)
- analysis of how prices are likely to remain sticky in this model, even if the costs increase prices may not increase
- reference to 'split shops' from Extract E
- the price gap is declining between the discounters and conventional supermarkets
- interdependence leading to a price war may be reflected in traditional supermarkets' commitment to 'price match' discounters' prices
- examples of non-price competition such as greater investment in stores to attract customers
- the incentive to collude.

Student responses

Response A

Q7. Interdependence between Supermarkets refers to each individual firm taking into account their competitors when setting prices. The interdependence of Supermarkets when setting prices causes higher than more "sticky" prices.



The interdependence of Supermarkets will find equilibrium at Q' , at this point if firm were to increase its price, other firms would keep the same price as the demand curve is elastic and consumers will simply switch to another firm. However if firms drop prices, other firms will follow as this will make their consumers join the other firm as it has a lower price. This may not happen "price wars look very likely", price wars will occur if a firm drops prices, causing other to do the same and fight for market share.

The interdependence of Supermarkets will lead to price wars if firms drop prices to try and gain market share. This could mean that consumers get lower prices of goods or if Supermarkets collude, higher prices.

This is a Level 3 response

This is a relatively high value response. The response is fairly well organised and includes some sound knowledge and understanding. There is some good application of relevant economics, including a simple but appropriate diagram, and good use of the data in the extracts. There is some well-focused analysis with a clear, logical chain of reasoning.

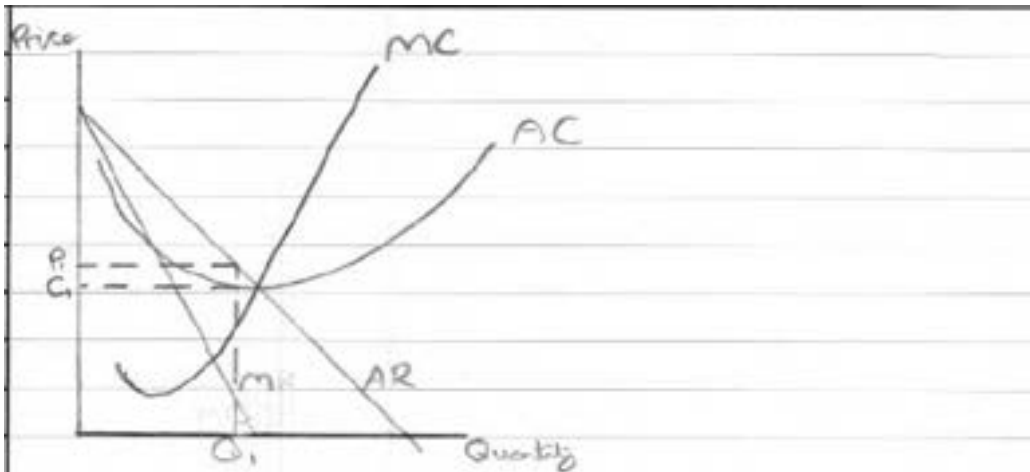
The student begins with a partial explanation of 'interdependence'. This followed by an accurately drawn, kinked-demand curve model which identifies the elastic and inelastic portions of the curve.

In the subsequent analysis, the student develops the theory of the kinked-demand curve model and its implications for firms' behaviour. However, they might have referred to the 'assumptions' behind the model given the uncertainty such firms face.

The student links back to the question and states the impact on grocery consumers of interdependence between supermarkets. There is a final point regarding the impact of collusions on consumers, however, this remains undeveloped.

7 marks**Response B**

Interdependence is when firms in a market are reliant on other firms during decision making processes such as setting a price for a product. This is common in oligopolies, and Figure 4 shows that the supermarket sector has a three firm concentration ratio of around 65%, suggesting the market is an oligopoly. Firms in oligopolies have some price setting power, but price wars are still a possibility due to the smaller large firms experiencing economies of scale, and using that to their advantage.



As a result of interdependence, and a threat of price wars, firms won't produce at the profit maximising point ($MC=MR$) but won't produce where their costs are lowest. They may sell at price P_1 and output Q_1 where costs equal C_1 . At this point, they are still making supernormal profits but can reduce prices to only make normal profits if needed in the event of a price war or ~~the~~ when under threat of competition.

This is a Level 2 response

This is a medium value response. The response includes some issues that are relevant to the question. The student demonstrates sound knowledge and understanding. However, there is only reasonable application and analysis of relevant economics, as the response is not entirely focused on the question set. There is some use of the data in the extracts and a relevant diagram.

The student begins with a sound introduction that explains interdependence, suggests how firms in an oligopoly market structure might behave, and makes effective use of the data in the extracts to support it.

Next, they include a diagram that shows a suggested level of output and price for a firm that is affected by interdependence. This is not the expected diagram; however, it is valid, and the subsequent analysis effectively integrates it into the response.

Unfortunately, the student loses focus of the question here. The response is directed solely towards the impact on firms, rather than the impact on grocery consumers. Whilst they show good understanding of the theory, they do not actually answer the question set.

5 marks

Question 8

Extract E (lines 17–19) states that, ‘the price gap between discounters and conventional supermarkets is now about 10–12%, against more than 20% a few years ago.’

Evaluate the view that the supermarket sector is serving customers' interests well.

[25 marks]

Mark scheme

Use the [level of response table on page 9](#).

Areas for discussion include:

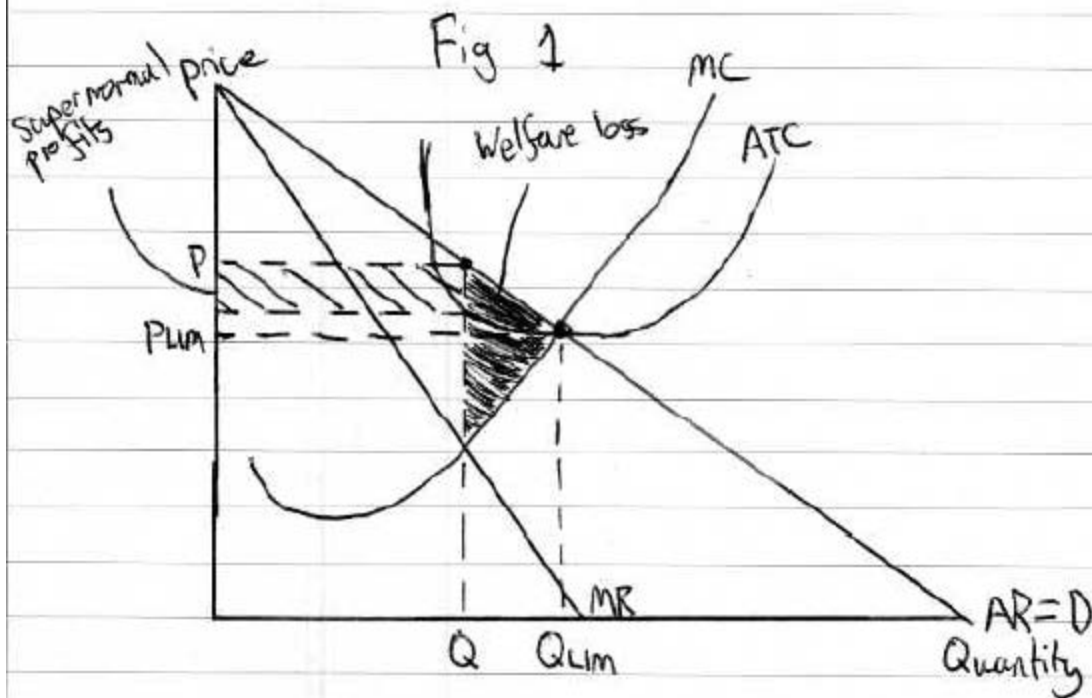
- explanation of what ‘customers' interests’ means in this context (to include low prices, high quality, customer experience/service, choice, convenience)
- discussion of differences between discounters (eg Aldi and Lidl), traditional stores (eg Tesco) and online retailers (eg Ocado)
- discussion of how the supermarket sector has evolved in recent years
- analysis of the market structure in the supermarket sector (with elements of oligopoly and localised monopolies)
- the impact of competition and profitability on innovation
- assessment of trends in prices and profits
- impact of the pandemic on shopping habits, with a significant move towards online shopping, and whether shoppers are likely to change back to physical stores
- the role of the CMA in ensuring competition and positive outcomes for customers
- discussion of the proposed merger between Asda and Sainsbury's and why the CMA decided to oppose it
- the particular problems of local monopolies in the supermarket sector
- the CMA investigation into Tesco's abuse of restrictive property arrangements in order to retain local monopoly power
- use of examples
- market failure arguments
- government failure arguments.

Student responses

Response A

8. Proce 'Serving consumers' interests well' consists on providing a range of choice and low prices to consumers, in order to maximise their utility. The increased contestability and competition has ensured consumer interests are well served.

Tesco, by UK definition, is a monopoly as it has >25% market share. Monopolies have price setting power due to their strong customer loyalty and can often abuse this for increased profits at the expense of consumer welfare.



As can be seen in fig 1, monopolies will charge a

price of P as this is the profit maximising point. ($MC = MR$). This ~~is~~ ~~generat~~ generates supernormal profit at the ~~point~~ expense of a ~~welfare loss~~ deadweight welfare loss, shown by the shaded area. This occurs as the price $> MC$, i.e. it is not allocatively efficient. More people could receive these products and at a lower price, clearly showing consumers interests are not protected. This is ~~is~~ proved to have occurred in extract E: "traditional supermarkets defended profit margins". Furthermore monopolies are productively inefficient as they have little incentive to cut costs. This is shown in fig 1 as ATC is not at its

minimum point. at the equilibrium. However, these profit margins may be beneficial for ~~super~~ dynamic efficiency as firms, like Tesco, have profits to reinvest, serving consumers well through a wider range of products. Monopolies will also benefit from economies of scale, where large firms see significant cost cuts, benefitting consumers through potentially lower prices.

The entrants of Aldi and Lidl into the market have shown its contestability, suggesting the drawbacks of a ~~monopolistic~~ monopoly structure may be removed. The new entrants have made significant growth from "4% to 14% in a decade", highlighting the threat of predatory pricing to ~~other~~ steal market share. Supermarkets are now very aware of this and will likely "put up a tougher fight" by changing entry limit pricing. This reduces supernormal profits to normal to prevent signalling for new entrants to the market. At this entry limit point, it can be seen that prices have fallen to P_{cm} from P (fig 1) and consumers have reacted by consuming larger quantities of Q_{cm} . This removes the dead weight welfare loss and is allocatively efficient as $price = mc$. Clearly this benefits consumers through lower prices. However, the conditions of a contestable market may now be reduced, since lockdown has significantly increased the barriers to entry of the market through the need for "home delivery infrastructure". This is a vast cost, ~~to~~ deterring new entrants to the market, returning price setting power to monopolies who can abuse this power once again.

In conclusion, supermarkets are now serving consumers interests well. Previously, they had been dominated by monopoly firms such as Tesco, ~~however~~ which focused on profit maximising. However the entry of new, price competing competitors has assured low prices, ~~and~~ high efficiencies and greater choice in the market, clearly benefiting consumers.

This is a Level 5 response

This is a high value response. The response is well organised, and the student demonstrates sound knowledge and understanding. There is good application of relevant economics to the context, and good use of the data in the extracts to support. It includes well-focused analysis, with clear logical chains of reasoning, and supported evaluation throughout and in the conclusion.

The student begins with an explanation of what it means to ‘...serve consumers’ interests well’, showing that they are clearly focused on the question. They also offer an initial supported judgement.

The student explains why the supermarket industry may not be operating in customers’ interests. They refer to Tesco as an example of a monopoly firm operating in the supermarket industry. They quote Tesco’s market share but might have explicitly referenced the extracts. They include a detailed drawing of the model of monopoly, which is used extremely well. This is a complex diagram showing two different prices and levels of output, and an area representing the deadweight welfare loss. The subsequent analysis is well focused and very effectively integrates the diagram into the response. This supports the evaluation that follows, which is further supported by an appropriate quote from the extracts.

The student concludes this section with more evaluation and analysis as they offer a ‘however’ point and suggest that monopolies may be beneficial to consumers.

In the next section, the student refers to the apparent contestability of the market with the arrival of Aldi and Lidl. They include more detailed analysis, relevant prompts from the data in the extracts, and they also successfully make more use of the diagram. This shows how a well-drawn and appropriate diagram can support several arguments. As before, this is followed by some evaluation to support this argument, plus further analysis, use of the data in the extracts, and evaluation relating to a ‘however’ point.

The student concludes with their final, supported judgement.

23 marks

Response B

Customers' ~~interests~~ interests can be very important to firms in the supermarket sector as they are ~~send~~ send signals regarding the threat of competition and the effectiveness of strategies. Therefore, it may be argued that firms in this sector should always try to serve customers' interests well. ~~Extract~~

Extract E tells us that the four big supermarkets have 'well established home delivery infrastructures' and were able to expand online delivery dramatically during the pandemic. The pandemic caused chaos in supermarkets, with people rushing to bulk buy resulting in shortages of stock and large ~~attract~~ queues. ~~A~~ This meant that everyday trips to a supermarket became difficult and time consuming. Therefore, firms such as the big four' ~~has~~ moved a large amount of sales from physical stores to online retail. This was much more convenient to consumers as it helped create more time for other interests by reducing the stress and time to shop. This shows how the supermarket sector ~~is~~ serves ~~to~~ customers' interests well. However, it can be argued that ~~firms~~ firms were acting with their own interests in mind, not consumers'.

Extract F tells us that Tesco engaged in illegal activity to try and reduce competition. In 2020, Tesco ~~had~~ had been preventing landlords from letting property to other supermarkets. This means that they were taking opportunities ~~away~~ away from potential competitors in order to reduce competition. When there is reduced competition,

firms have little incentive to reduce costs and sell at the lowest point ~~of~~ of their average costs. This makes them productively inefficient. Furthermore, this means they are charging ~~at~~ high prices with the intention of making supernormal profits. During 2020, consumers ~~had less disposable income~~ were earning lower wages on average, meaning higher prices would just worsen their financial situation during the pandemic. This shows ~~that~~ the supermarket sector is not serving ~~at~~ customers' interests well. ~~How~~ However, consumers who weren't at work during the pandemic had lower costs as they weren't commuting to work meaning ~~that~~ ~~they weren't~~ firms weren't necessarily not serving customers' interests well.

Furthermore, in 2019 there was ~~an~~ an attempted merger between Asda and Sainsbury's, two of the three largest firms in the market. This merger would have led to a combined market share of 33% meaning the new firm could have experienced monopoly power. Firms with monopoly power can experience price setting power meaning they can charge higher prices without having too many customers. Also, local monopolies may have been created as a result of the merger. This means that consumers would have a restricted choice and would be forced into paying the higher prices charged by the new firm. If this happened, this would reduce consumer welfare, which could be seen as evidence showing that the supermarket sector does not serve customers' ~~interest~~ ~~interest~~ interests ~~at~~ well. However, the merger would have led to cost savings of

\$1 billion per year which we promised to be passed onto consumers. This would increase consumer welfare. Continued on page 9

Overall, I believe that the supermarket sector is not serving customers' interests well as Extract F ~~lets~~ shows how multiple firms have acted with private benefits in mind over costs to consumers.

This is a Level 3 response

This is a medium value response. The response focuses on issues that are relevant to the question, and the student demonstrates some satisfactory knowledge and understanding. There is some reasonable application of relevant economics, and some use of the data in the extracts to support. There is some reasonable analysis, but it is not adequately developed. There is some fairly superficial evaluation.

The student begins with a reference to 'customers' interests'. They do not state what these are but suggest that they are important to firms and conclude that firms should always try to serve customers' interests well.

The student starts the next paragraph with some data from the extracts regarding home delivery infrastructure. However, what follows describes the experience of shopping during the pandemic and includes little, if any, economic theory. There is a 'however' point, but this is completely unsupported.

In the following paragraph the student offers an argument to suggest the supermarkets are not serving customers' interests well. They include a prompt from the data in the extracts to support it. There is some reasonable analysis and a line of evaluation to reiterate their point. A weak 'however' point concludes the paragraph.

In the third paragraph the student offers a further argument against the supermarkets. As before they use some data to support and there is some reasonable analysis. This time the evaluation relating to the 'however' point is supported by the data, although it would have been better for the extract to be explicitly referenced. In terms of content and structure this is the best of the three paragraphs.

In the conclusion the student's overall judgement counters their initial thoughts contained in the introduction. There is a reference to one of the extracts but the final sentence lacks clarity.

13 marks

Essay 1

Question 9

The government has promised that everyone will be able to access superfast broadband by 2025. As more people have switched to studying and working remotely, good Internet connections have become more important. Low-income households have difficult choices to make between high-speed Internet and essential items such as food, heating and clothing.

Explain how the price mechanism allocates resources in a market economy.

[15 marks]

Mark scheme

Below is the levels of response marking grid which should be used to mark the 15 mark questions.

Level of response	Response:	Max 15 marks
3	<p>A good response provides an answer that:</p> <ul style="list-style-type: none"> • is well organised and develops a selection of the key issues that are relevant to the question • shows sound knowledge and understanding of economic terminology, concepts and principles with few, if any, errors • includes good application of relevant economic principles to the given context and, where appropriate, good use of data to support the response • includes well-focused analysis with clear, logical chains of reasoning. 	11–15 marks
2	<p>A reasonable response provides an answer that:</p> <ul style="list-style-type: none"> • focuses on issues that are relevant to the question • shows satisfactory knowledge and understanding of economic terminology, concepts and principles but some weaknesses may be present • includes reasonable application of relevant economic principles to the given context and, where appropriate, some use of data to support the response 	6–10 marks

	<ul style="list-style-type: none"> includes some reasonable analysis but which might not be adequately developed or becomes confused in places. 	
1	<p>A weak response provides an answer that:</p> <ul style="list-style-type: none"> has identified one or more relevant issues has some limited knowledge and understanding of economic terminology, concepts and principles but some errors are likely has very limited application of relevant economic principles to the given context and/or data to the question might have some limited analysis but it may lack focus and/or become confused. 	1–5 marks

Areas for discussion include:

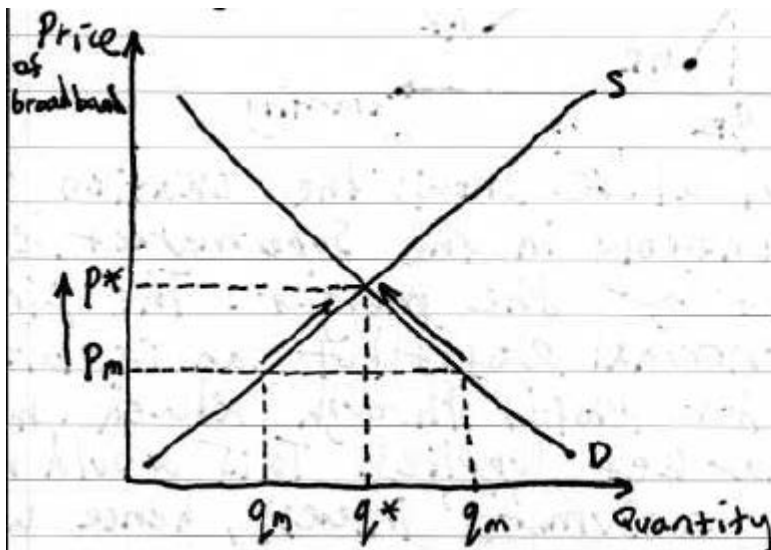
- definition of price mechanism, resource allocation and market economy
- explanation of the way in which demand and supply functions interact in equilibrium to determine price and quantity
- explanation of the rationing function of prices in allocating resources and coordinating the decisions of buyers and sellers in a market economy
- explanation of the signalling function of prices in allocating resources and coordinating the decisions of buyers and sellers in a market economy
- explanation of the incentives function of prices in allocating resources and coordinating the decisions of buyers and sellers in a market economy
- the role of prices in product and factor markets
- the interaction between markets
- use of examples.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student’s response to the question.

Student responses

Response A

The price mechanism refers to the uncoordinated forces of supply and demand which work to allocate resources effectively through rationing, signalling, and incentivising.



The diagram above demonstrates the results of rationing as a function to reduce the shortage of a product, such as Superfast broadband, by rationing excess demand. Firstly, firms notice excess demand for the product and raise the price of the good. This increase in price rations demand since only those willing and able to purchase the product will. This continues until the shortage is removed and supply meets demand for Superfast broadband, correctly allocating resources in the market economy.

Incentivising works by creating incentives to produce or purchase a good. An increase in price signals to producers that demand for a good is high, incentivising the production of the good since there is a larger profit motive as output is more profitable. This helps reduce the shortage of a good, allocating resources perfectly to the point of consumption in the ~~economic market~~ market economy.

Signalling works the same way^{as incentives,} as signals may be sent to consumers, if prices are high for example, that producers cannot supply a good, meaning consumers will no longer buy a good, allocating resources to equilibrium where market clearing occurs.

This is a Level 3 response

This is a high value response. The response is well organised and develops a selection of key issues. The student demonstrates sound knowledge and understanding, and there is good application of relevant economics to the given context. They include well-focused analysis with clear, logical chains of reasoning.

The student begins with a clear definition of the price mechanism and a reference to the three functions of price. Each of the functions is developed later to a greater or lesser extent.

Immediately after the introduction the student includes a clear and accurately drawn diagram. The diagram, which initially shows disequilibrium and excess demand in the broadband market, is then effectively integrated into the subsequent analysis.

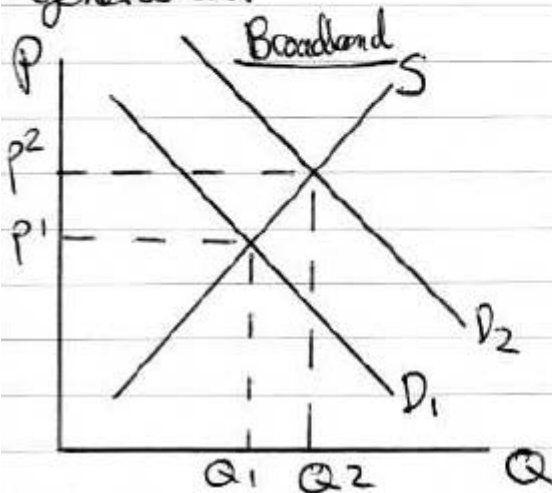
The student considers the rationing function of price and clearly analyses how the shortage leads to a rise in price to allocate resources to those who are willing and able to purchase the goods at that price. In the same way, the student discusses the incentive and then signalling functions of price. The explanation of the signalling function lacked clarity initially, but generally showed good understanding.

To improve the response and achieve a higher mark, the student might have referred to a surplus in a market and the subsequent reduction in price.

12 marks

Response B

Q9. The price mechanism is a mechanism that takes place in a free market*. Free market, no intervention by the government. It best allocates resources where the most utility is generated.



If demand increases through "more people switching to studying and working remotely", this puts upward pressure on price to p^2 . This rationed broadband to those willing and able to pay for ~~the~~ it. The higher price signals to other producers that there is a shortage. The higher ~~price~~ profit margins incentivise producers to allocate more resources to broadband. As long as consumers spend their income in terms of maximising utility, ~~the main benefit is being created~~ society scarce resources are being allocated efficiently in a market economy.

However, this may not be efficient as broadband is arguably a necessity and the pricing mechanism increases the price from p^1 to p^2 , the price should

* Using signalling, incentivising and rationing.

Stay the same or be lower due to giving off positive externalities such as 'not spreading infectious diseases like COVID-19'. However the free market (market economy) does not take into account these externalities. Higher prices for merit goods like broadband are inefficient and regressive.

This is a Level 2 response

This is a medium value response. The response only includes one issue that is relevant to the question; in places the student has not answered the question set. They demonstrate some good knowledge and understanding, there is reasonable application of relevant economics to the context, and there is some reasonable analysis.

The student begins with some fragmented points about the price mechanism. They then effectively use a clear and accurately drawn diagram to support the subsequent analysis. The student uses relevant terminology appropriately and refers to all three functions of price following an increase in demand for broadband. They use the question stem as a prompt for their issue. However, the analysis could have been developed further. For example, there might have been a reference to excess demand.

The student then goes on to evaluate this point and consider the downsides of the price mechanism. This is not relevant to the question set. There are no evaluation (AO4) marks available for this question, it is a matter of explaining how the price mechanism works, not judging how well it works.

A second issue might have considered how the price mechanism works following an increase in supply.

9 marks

Question 10

The government has promised that everyone will be able to access superfast broadband by 2025. As more people have switched to studying and working remotely, good Internet connections have become more important. Low-income households have difficult choices to make between high-speed Internet and essential items such as food, heating and clothing.

Assess the view that high-speed Internet connection is a necessity for modern life and should be provided by the government, free of charge, to all households.

[25 marks]

Mark scheme

Use the [level of response table on page 9](#).

Areas for discussion include:

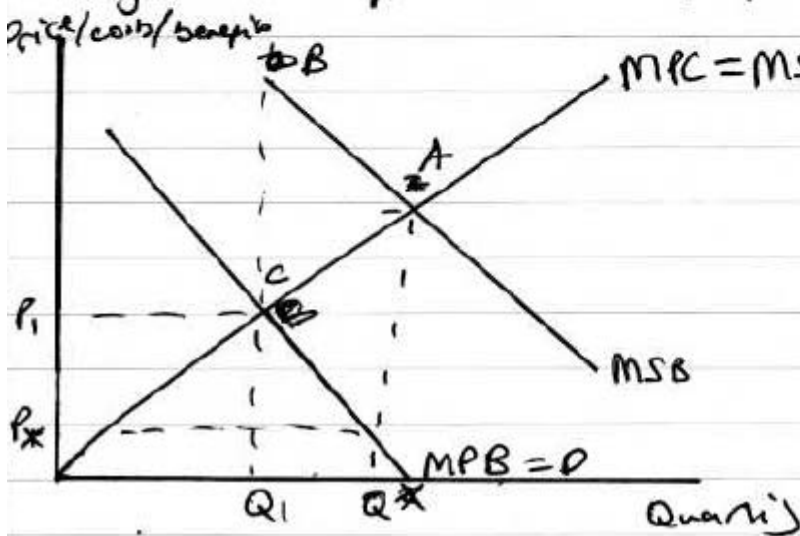
- the importance of high-speed Internet connection for households (and firms) in the modern economy
- the uses of high-speed Internet (including homeworking, remote school working, gaming, streaming, online retail, smart home applications)
- how Internet is currently provided via private sector communications firms
- whether there is evidence of market failure and the nature of this market failure
- arguments for free provision by the government of high-speed Internet connection
 - it can be considered a merit good
 - the positive externalities from high-speed Internet connection
 - inadequate access creates inequalities in education, employability, access to services
 - public provision may be possible at lower cost than private provision due to economies of scale
 - the benefits of a natural monopoly
- arguments against free provision
 - negative externalities from Internet use (some aspects of Internet use are actually harmful or productivity-reducing)
 - already the majority of households are accessing the market without too many problems, and free Internet would be a blunt policy tool if it was not means-tested
 - burden on the taxpayer
 - alternative policies might be more efficient
 - the absence of a market price means that opportunity cost of providing the service is not fully considered
 - private sector efficiencies driven by the profit motive
- discussion of alternative policies
 - subsidies
 - price caps
 - free wifi in public places such as libraries and schools
 - means-tested free Internet for low-income households
- market failure arguments
- government failure arguments.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

Student responses

Response A

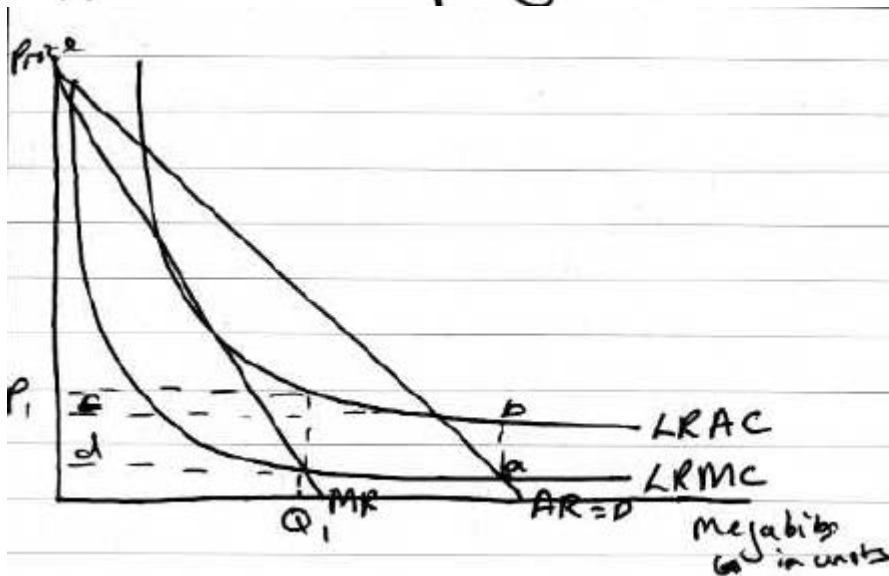
High Speed internet connections could be argued to be a merit good. A merit good is a good where there are positive externalities in consumption. A merit good can be a cause of market failure and the government could in a bid to ameliorate this market failure seek to provide free of charge to all households but this would be a costly and inefficient use of public funds



High speed internet could be provided free of charge by the government free of charge due to the positive externalities universal coverage would cause. A positive externality in consumption refers to the third party effects created by the consumption of a good or service. In the case of high speed internet, it enables remote working so learning which bring income or redistribute income from urban centers like London to areas with less economic activity as workers can move to less expensive areas. This supports the local economy and ameliorates the untenable housing prices in urban

urban centers. Hence the marginal social benefit, as shown above, is greater than the marginal private benefit or demand meaning superfast internet is over priced and under consumed at equilibrium ~~A~~ leading to a deadweight welfare loss equivalent to 'A' 'B' 'C'. If the state were to provide superfast internet for free this would effectively be a maximum price at 0 leading to a greater quantity consumed, beneficial to society, and a reduction of the inequitable outcomes for low-income households that often have to decide between basic necessities.

Note however, according to the diagram above the socially optimal price is not zero, it is significantly lower than P' where the free market would operate but not ~~the~~. In addition when the state embarks on such a large mission there is a risk that in investing so much in the space of superfast internet, they will 'crowd out' private investment. Many private firms like BT and Sky that already connect millions of households. The investment funds could instead be used to support firms already in the industry as opposed to displacing them.



It could be argued that the industry for Superfast internet is a natural monopoly and therefore suitable state provision on a national scale. A Natural Monopoly refers to a market within which there is incredible potential for economies of scale therefore in order to minimise costs greater quantity is required. In the superfast internet industry great cost is incurred in laying fiberoptic and other infrastructure and in order to spread these costs a national provider may be desirable. This may also support the claim that provision by the government would also lead to a more allocatively efficient outcome as they (not beholden to shareholders) would be able to produce at equilibrium a ^{natural} monopoly.

However, in my view, the ~~monopoly~~ ^{monopoly} would be better off in private hands with some prudent regulation. Public firms often suffer from managerial bloat whereby the lack of proper incentive leads to bloating wage bills.

and a lack of productive efficiency. Meanwhile if government were to only subsidise natural private monopolies to the allocatively efficient point A (where $P=MC$) the private firm nonetheless beholden to shareholders would maximise economies of scale and remain productively efficient.

In conclusion, it would be unwise for government to provide superfast broadband to all households. The primary issue here being the equity point whereby most households can afford internet connection but poorer ones cannot. This is ~~an~~ a market failure as if the social externalities were taken into account poorer households may have been able to afford access due to the lower price. Government, in lieu of providing internet connection to all households should offer tax exemptions, for example, on VAT charged on internet access in order to increase its affordability. Especially, during the ongoing cost of living crisis with inflation at ~~9.1%~~ (a 40 year high) poorer households should not have to choose between basic necessities. Paradoxically, the creation of a public provider could worsen the situation long term as private investment would be crowded out reducing ~~the~~ R&D investment by the private sector and limiting benign deflation that would make internet access more affordable for poorer households.

This is a Level 5 response

This is a high value response. The response is well-organised. The student shows sound knowledge and understanding with few weaknesses. There is good application of relevant economics, and it is written completely in the context of high-speed internet. It includes well-focused analysis with clear, logical chains of reasoning. There is supported evaluation throughout and in the conclusion.

The student effectively sets the scene for their response by suggesting that high-speed internet may be regarded as a merit good. They follow this with relevant theory to demonstrate their knowledge. However, the concluding statement of the introduction is unsupported. The student might have said, '...it could be argued that...!'

The student includes a positive externalities in consumption diagram, which appears to show a price and level of output following government intervention. This is not entirely clear, and not all coordinates are present. However, the student effectively integrates the diagram into the subsequent analysis. They include more knowledge and analysis, and very good application to the context as they describe the positive third-party effects associated with high-speed internet. The analysis goes on to identify the deadweight-welfare loss, although it lacks clarity regarding the free-market price. There is supported evaluation, as the student suggests that government provision may help to deal with inequitable outcomes.

They consider and evaluate this point further, including pointing out that the good is already provided to millions of households by private firms. They conclude that government 'support' may be more appropriate rather than 'displacing' incumbent firms.

In the next section the student discusses the natural monopoly argument. As before they successfully incorporate a complex diagram into their analysis. They demonstrate sound knowledge, and the context and examples remain completely consistent with high-speed internet. The arguments made are countered by supported evaluation. There might have been a reference to $LRAC > AR$ at point A on the diagram, however, students can only be expected to cover a selection of issues.

In the concluding paragraph the student offers their judgement. They re-emphasise the 'primary issue' and suggest a sensible and realistic alternative to government provision.

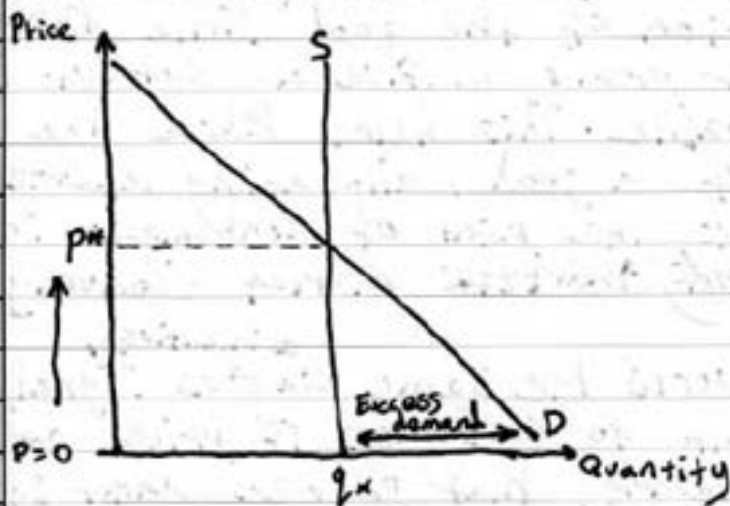
Overall this is a mature and sophisticated response that properly answers the question set.

25 marks

Response B

State provision occurs when the government supplies a good free at the point of consumption for all people. This is often used for goods which are underconsumed/underproduced or inequitably distributed, or goods which are a necessity and not provided by the free market. I believe that high-speed internet is a necessity for modern life and it should be accessible by all, that said, I do not believe the state ~~provides~~ should provide this for free to all houses as better policies such as subsidies can be used to incentivise private firms' provision of the good.

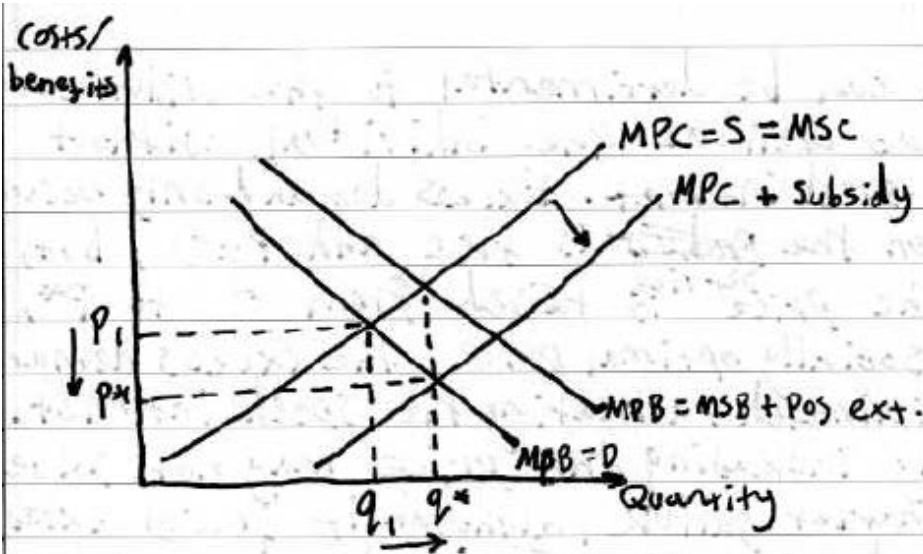
In order for a good to be effectively state provided, it must not be provided by the free market as it must be a public good, such as the NHS.



The diagram above shows how state provision of a good can create excess demand for the good. In terms of the provision of high-speed internet, this may be portrayed by large amounts of individuals without internet,

Which can be detrimental to the wider economy ~~too~~ as well as the individuals without high-speed internet. Excess demand only occurs when the ~~market~~ is free and $P=0$, but, if the price ^{service} is raised from 0 to P^* , the socially optimal price, the excess demand is eliminated, allocating the speed internet. Simply increasing the price may not solve the market failure, although it solves excess demand, since the ~~fast~~ broadband now has a cost, lower income households may not be able to afford the service, meaning it will be underconsumed, resulting in a market failure. The extent to which a slight raise in price impacts demand depends on the elasticity of the good. Since internet connection is likely to be a necessity for most, it will be price inelastic, meaning if the state provided internet at the optimal price, the good may not be underconsumed and excess demand is also eliminated.

Conversely, a subsidy would be a better policy than state provision since it will not result in excess demand and it can help with resource allocation by incentivising consumption or production of the merit good that is broadband, which has positive externalities in consumption, warranting a subsidy. Broadband may be underconsumed in the free market because of high price, which a subsidy can solve.



The subsidy shifts the Marginal Private cost down, decreasing the price of broadband and increasing the quantity, therefore consumption, solving the market failure, one caveat to this is that government failure may occur if the subsidy is not large enough to increase consumption, meaning the market failure prevails.

On balance, I would argue that subsidising the high-speed internet firms such as BT or Vodafone would be an ideal policy, and I believe state provision should not be used despite the fact that high-speed internet is a necessity. This is because state provision results in excess demand which can cause more long-run, large scale damage, whilst a subsidy doesn't have this problem.

This is a Level 3 response

This is a medium value response. The response focuses on issues that are relevant to the question. The student demonstrates some satisfactory knowledge and understanding, however, there are a few weaknesses. There is some reasonable application of relevant economics, however, the response is not always written in the context of high-speed internet. There is some reasonable analysis, but it is not adequately developed in places, and sometimes becomes confused. There is some evaluation, but it is not well supported.

The student begins with a good opening paragraph. They explain what is meant by state provision, why it might be appropriate as a means of intervention and provide their initial judgement.

The next paragraph begins with some misunderstanding and confusion regarding state provision and the NHS. This is followed by a simple, accurately drawn diagram to illustrate excess demand in a market. Subsequently, there is some reasonable analysis, but again there is some confusion, and a general lack of clarity. The student appears to suggest that charging a price may solve the problem, having earlier suggested that the market failure still exists. This weakens the evaluation.

The student goes on to discuss a subsidy as a better alternative, which is a perfectly valid issue to raise. There is some reasonable analysis, and they include a positive externalities in consumption diagram, which also shows a subsidy. This is a complex model and there is some inaccuracy with the labelling. However, the student uses the diagram to explain the outcome when a subsidy is introduced into the market. As a final point in this paragraph, the student refers to the possibility of government failure, though this is not properly justified.

There is a conclusion which includes a fairly superficial judgement initially, along with some other previously unsupported comments.

15 marks

Essay 2

Question 11

Markets fail for a variety of reasons and governments can play an important role in reducing the inefficiencies associated with such failures. However, Milton Friedman once suggested that “When government, in pursuit of good intentions, tries to rearrange the economy...the costs come in inefficiency, lack of motivation, and loss of freedom. Government should be a referee, not an active player.”

Explain the difference between complete and partial market failure.

[15 marks]

Mark scheme

Use [level of response table on page 35 and 36](#).

Areas for discussion include:

- definition of complete and partial market failure
- how complete market failure (or a missing market) may exist when the willingness of firms to supply a good or service is non-existent, despite society having a demand for it
- why complete market failure may happen if goods are non-excludable, creating the problem of free-riders and the inability to charge individuals for their consumption
- public goods, that are non-excludable and non-rival, as an example of complete market failure
- in the event of complete market failure, the government will probably have to step in with public good provision, if the good or service is to be provided
- how partial market failure may be caused by suppliers not providing as much as society would wish for, perhaps because of positive externalities or because the good is a merit good
- how partial market failure may be caused by suppliers providing too much of a good or service, perhaps because of negative externalities or because the good is a demerit good
- other types of partial market failure that exist such as: information asymmetry, monopoly power, immobilities and inequality
- use of examples.

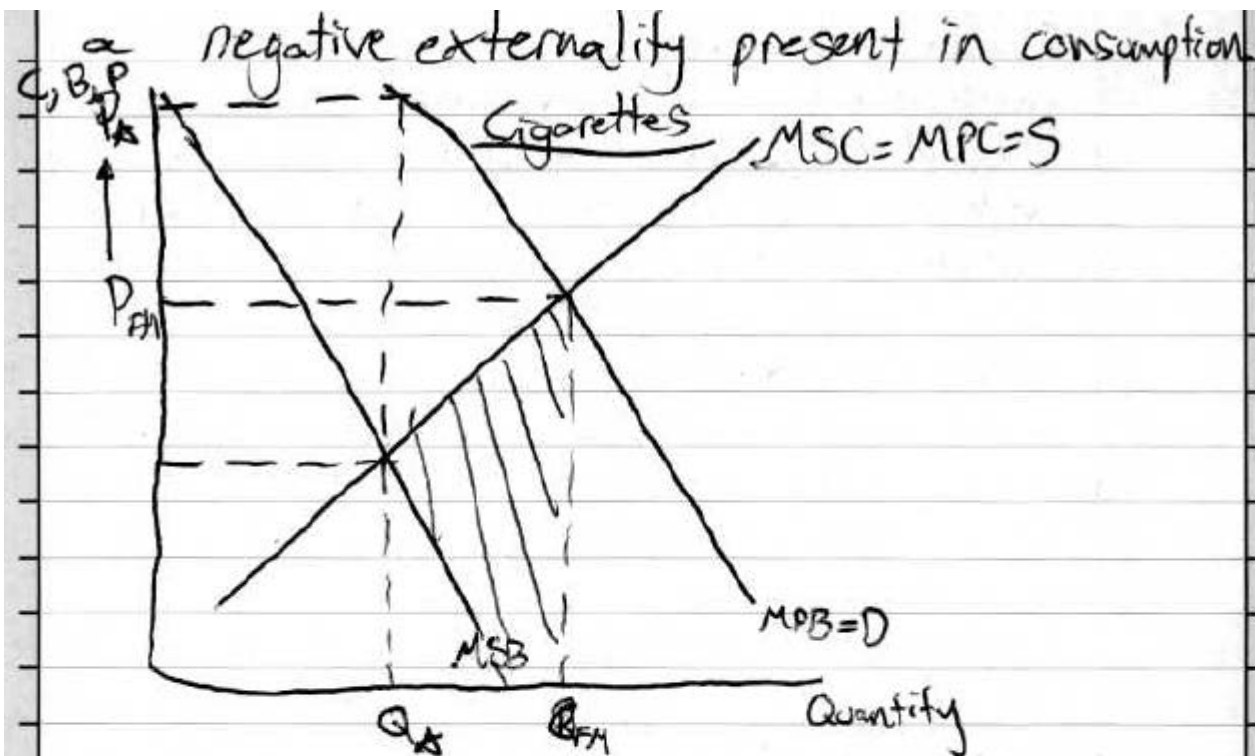
The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student’s response to the question.

Student responses

Response A

Market failure occurs when there is a misallocation of resources by the free market. Complete market failure refers to a good ~~or~~ or service where the market is missing, while a partial market failure refers to an externality in a market due to the misallocation of resources, leading to a welfare loss due to the free market. They are often caused by the type of good that the market is for.

Complete market failure exists in markets where there is no supply of the good but an existing demand. These are often public goods as they are non-rivalrous and non-excludable, thus there is no incentive for a firm to supply them. As it is non-rivalrous and non-excludable, should a firm provide the good, no one would pay for it as ~~everyone~~ it is available to everyone and the consumption of one unit does not affect the consumption by another agent of the same unit. Thus, the good is not provided because firms would make a sub normal profit and would have no incentive to enter the market. The only means of solving complete market failure is through government intervention.



These externalities are in the form of harm to hospitals, leading to an over consumption of the goods by Q_A to Q_M as the MPB is greater than the MSB , leading to a welfare loss represented by the shaded area. This represents the outcomes of a partial market failure as there is a welfare loss but the market still exists, whereas, the market would not exist for a complete market failure.

Partial market failure can occur in merit and demerit goods where an externality is present. An externality is the spillover effect on a third party not involved. An example of partial market failure is in the market for smoking, as there is cigarettes

This is a Level 3 response

This is a high value response. It is well organised and develops a selection of the key issues that are relevant to the question. The student demonstrates sound knowledge and understanding of economic theory virtually throughout the response. There is some good application of relevant economics to the context, and there is well-focused analysis with clear, logical chains of reasoning.

The student begins with three key definitions. This is a very good start; however, the definition of partial market failure is quite narrow. The student correctly refers to 'externality' but does not acknowledge that there are other types of partial market failure.

In the second paragraph the student provides a good and concise explanation of complete market failure. The student demonstrates a sound grasp of relevant economic terminology, and uses clear, logical chains of reasoning. However, it would benefit from at least one example of public goods to provide context and to bring the theory to life.

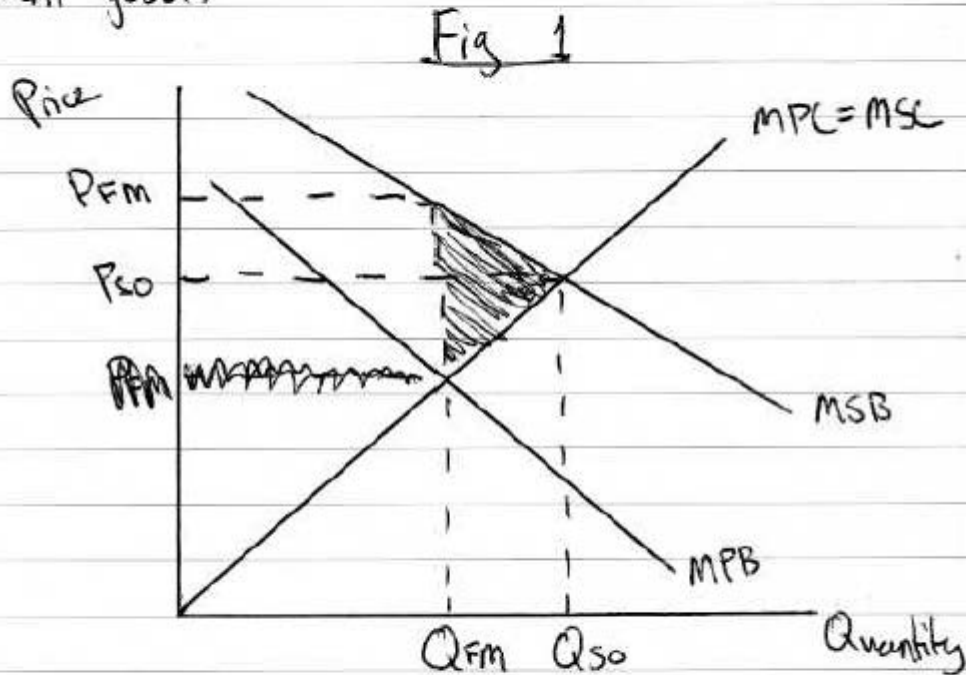
In the third paragraph the student explains what is meant by partial market failure. As before there is good analysis, but this time the student supports it with some context, choosing the cigarette market as an example. They also effectively use a good and clear negative externalities in consumption diagram to support their response (it does contain a misplaced coordinate). This demonstrates the skill of application. In this paragraph, the student extends partial market failure to include 'merit and demerit goods', though still with the original reference to 'externality'. Students would not be expected to develop all types of partial market failure but might acknowledge that there are several types.

The student includes a final sentence that effectively distinguishes between complete and partial market failure.

14 marks

Response B

11. ~~Complete~~ Partial market failure ~~can be~~ is ~~the~~ when the free market misallocates resources, i.e. outputs at a different level than is socially optimum. This happens as the free market fails to account for externalities (effects on third parties). Fig 1 shows a merit good.



A merit good is under consumed as a private consumer doesn't recognise the benefit to society when consuming the product, such as the benefit to the wider economy when consuming education. This is why ~~the~~ Q_{fm} is less than the socially optimum quantity of Q_{so} , creating a welfare loss of the shaded area.

A complete market failure occurs when the free market fails to output any quantity of a good that benefits society. This occurs in markets which are non-rivalrous, and non-excludable ~~such~~ as these conditions prevent the possibility of profit being made. Profit incentivised firms in the free market simply won't provide this good due to this lack of profit.

Examples of public goods, where the government provides the good are things like lighthouses – you can't charge for its use and you can't prevent people from using it.

Hence the difference between complete and partial market failure is that partial failure provides some of the good but not at the right level, whereas in complete failure none of the good is provided at all.

This is a Level 3 response

This is also a high-value response, though not quite as well-developed as Response A.

It is well organised and develops a selection of the key issues that are relevant to the question. The student demonstrates sound knowledge and understanding of economic theory virtually throughout the response, and there is good application of relevant economics to the context. There is some well-focused analysis with clear, logical chains of reasoning, however, the analysis could be more developed in places.

The student begins with a developed definition of partial market failure. However, they might have demonstrated a broader understanding of the various types of partial market failure.

The student demonstrates good application skills by using a positive externalities in consumption diagram to illustrate the partial market failure associated with the consumption of merit goods. The diagram is clear and largely accurate, though there is a misplaced coordinate. They also provide context using the example of education. They effectively integrate the diagram into their response which contributes to the theoretical analysis, however, this could have been more developed.

The student then provides a developed definition and some good analysis of complete market failure. They use accurate and appropriate terminology, however, this could be slightly more developed. They also provide a context for public goods using the example of a lighthouse.

The student provides a final sentence that effectively distinguishes between complete and partial market failure.

13 marks

Question 12

Markets fail for a variety of reasons and governments can play an important role in reducing the inefficiencies associated with such failures. However, Milton Friedman once suggested that “When government, in pursuit of good intentions, tries to rearrange the economy...the costs come in inefficiency, lack of motivation, and loss of freedom. Government should be a referee, not an active player.”

Evaluate the view that government failure means that government intervention in markets will rarely lead to an improvement in economic welfare.

[25 marks]

Mark scheme

Use the [level of response table on page 9](#).

Areas for discussion include:

- definition of government failure
- explanation of the term 'economic welfare' and how that might be improved
- objectives of government intervention
- types of government intervention, how they relate to specific types of market failure and why they may improve economic welfare
- causes of government failure, which include
 - o information failures leading to poorly designed policies
 - o regulatory capture by industry interests
 - o unintended consequences
 - o short timeframes for policy
 - o conflicting policy objectives
 - o red tape and bureaucracy
 - o governments may pursue their own self-interest rather than take decisions that improve general economic well-being
- impacts of government failure can include inefficiency, ineffectiveness, projects being completed over budget and after deadlines, unintended consequences
- how market failures can sometimes be resolved without government intervention, for example via improvements in technology
- how some problems which appear to be market failure can actually stem from previous government interventions
- evaluation of the strengths and weaknesses of the market economy and the role of the government
- recognising that government intervention may lead to an improvement in economic welfare, despite the flaws of such intervention caused by, for example, imperfect information
- use of examples.

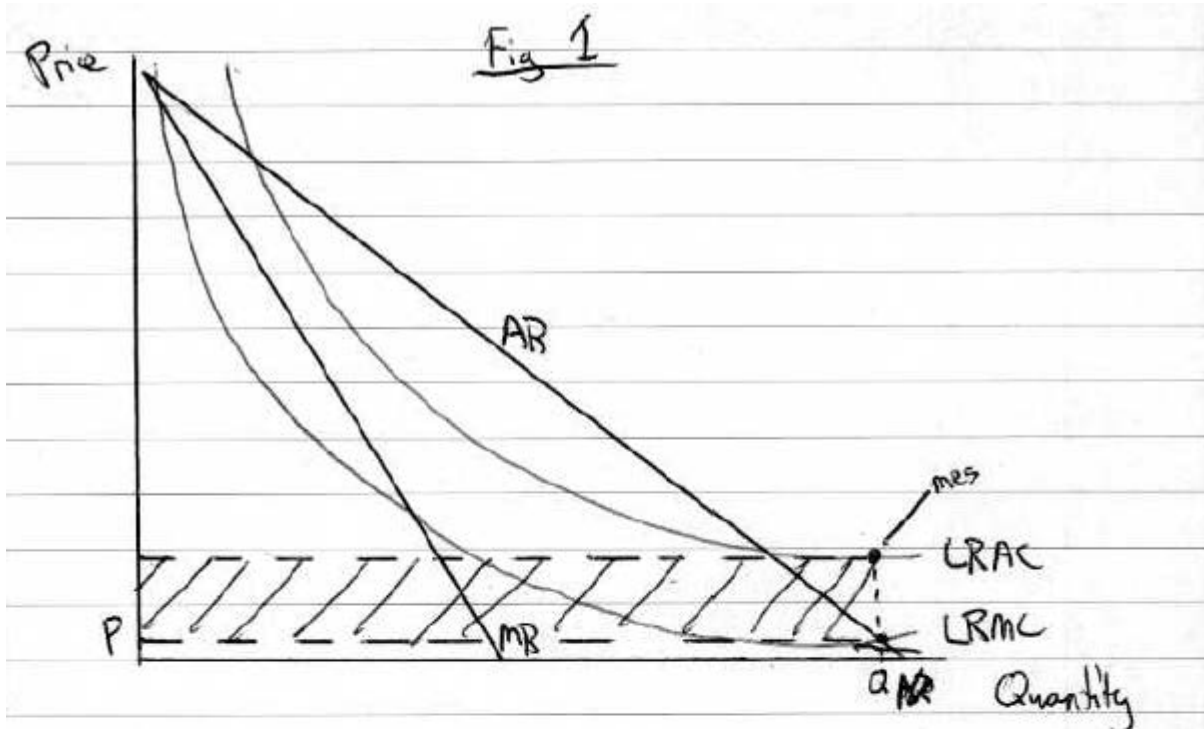
The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student’s response to the question.

Student responses

Response A

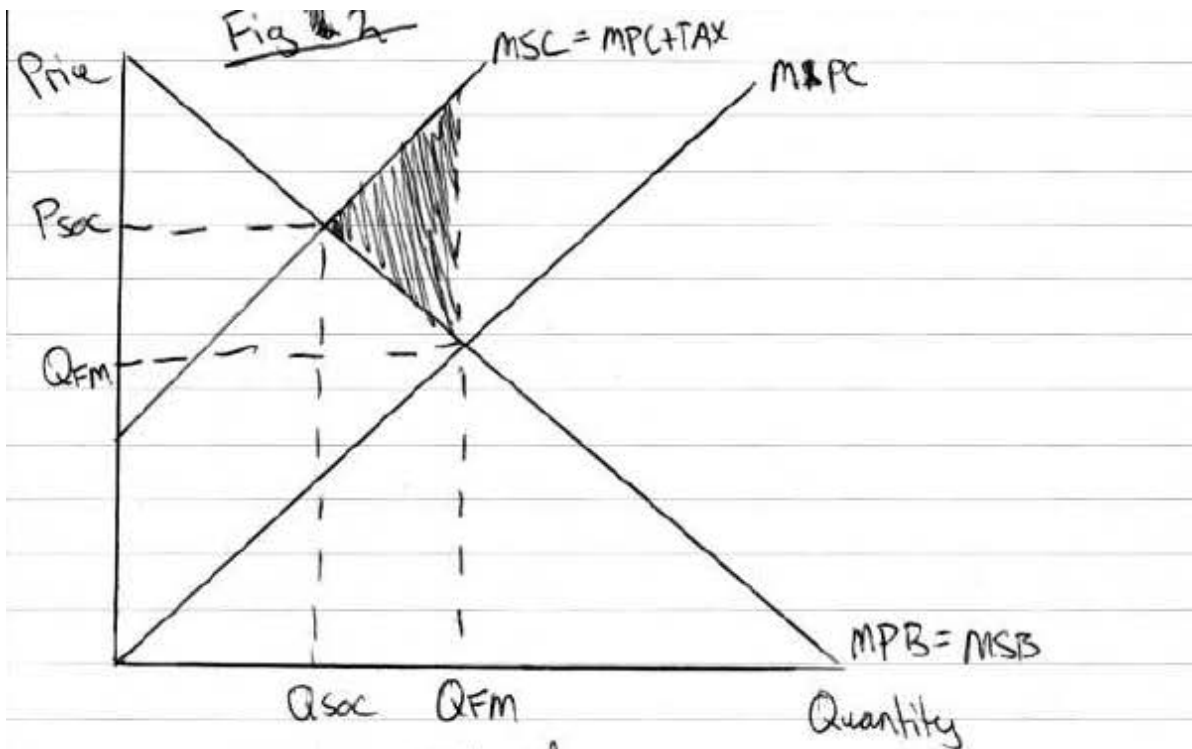
12. Government failure occurs when policies or regulation introduced by the government have negative side effects. The law of unintended consequences means that ~~if~~ government failure is unavoidable, however the benefits of the intervention clearly outweigh the costs.

Friedman's statement that the government should "not be an active player" in the economy fails to recognise the extreme benefits of a natural monopoly in a market. For markets with very high barriers to entry, such as internet service, through high fixed costs, it is only logical to have a state run monopoly. This is so that ~~a~~ economies of scale can be maximised to reduce costs, as well as maximising levels of output, ~~as the~~ ~~total~~ ~~costs~~ ~~become~~ ~~are~~ ~~such~~ ~~a~~ ~~large~~ ~~proportion~~ ~~of~~ ~~total~~ ~~costs~~, yet always reduce as output increases. This simply cannot ~~be~~ achieved by the free market as there is extreme monopoly power which will be abused for high supernormal profits by profit incentivised firms. Furthermore the allocatively efficient point of $p=mc$ ~~and~~ which is also the minimum efficient scale (lowest possible costs), is at a point where subnormal profits are made, shown by the lined box. So clearly government intervention in an industry with



high fixed costs. However, government failure can still occur in a natural monopoly due to a potential "lack of motivation" from workers, who may be less inclined to maximise productivity without the profit incentive that the free market gives. Furthermore, the subnormal profits made at the allocatively efficient point will put a burden on taxpayers, potentially having a regressive effect and enforcing poverty - clearly not improving economic welfare.

Another case for government intervention, possibly more in line with Friedman's idea of the government being a "referee", is internalising externalities. The free market fails to recognise the impacts of a product on 3rd parties due to the self-interested nature of producers and consumers. Fig 2 is of a good with a negative externality in production.



The good is ~~overconsumed~~ ^{produced} in the free market as producers fail to recognise the negative effects of their production such as pollution, hence the quantity Q_{FM} in the free market is greater than the socially optimum output of Q_{SOC} , generating a deadweight welfare loss of the shaded triangle. A tax placed on this would force producers to pay for their externality in the form of a tax payment, hence making the external cost a private cost. This shifts mpc to $mpc + TAX$, removing the initial welfare loss by reducing the overconsumption. However, government failure can definitely reduce welfare, imperfect information of the needed size of the tax can once again lead to a welfare loss. Furthermore, a tax that's too heavy handed can vastly reduce international competitiveness as domestic firms face the costs of this tax whereas foreign firms do not. This can reduce exports, drive out firms to other countries and cause producer ^{domestic} firms outsource production to cheaper countries. All of these lead to unemployment, deduced growth and poverty, clearly showing how government failure results

reductions in economic welfare. There are also costs involved in collecting and enforcing taxations, placing burdens on ~~deb~~ government debt and tax payers. ~~Further~~
~~black market~~

In conclusion there are certainly some cases for government intervention, and to say it rarely improves economic welfare is rash. The benefits of a natural monopoly can't be provided by the free market and are too vast to ignore. In regulation of markets of goods with externalities government intervention may be warranted however not always as there ~~are~~ is great scope for government failure due to the lack of perfect market information.

This is a Level 4 response

This is a reasonably high-value response. It is well organised with distinct paragraphs. The student demonstrates generally good knowledge and understanding of economic theory, however, there is a misunderstanding of government failure. The response includes some good application of relevant economics to the context, but it might have included more appropriate examples, particularly regarding the natural monopoly. The student demonstrates good analysis, but due to the incomplete understanding of government failure it is not as well-focused and supportive as it might have been. There is some reasonable evaluation. The student begins with some relevant characteristics of government failure; however, the definition is incomplete, and contains the misconception that it is 'unavoidable'.

At the start of the second paragraph the student refers to the stem to the question, and indicates they are going to counter Friedman's view. They use the state-owned natural monopoly argument to support the need for government intervention. There is some good analysis, which is developed further as the student makes effective use of a complex diagram. However, the argument might have been strengthened if the student had provided a more appropriate context. Bearing in mind that this is a Level 4 response, and with a view to suggesting one of the ways it might move into Level 5, the student might have softened their language. It was quite assertive in places. For example, the student writes, 'This simply *cannot* be provided by the free market...monopoly power *will be* abused...'. The student might have acknowledged that the service '*...may not* be provided by the free market, and there *may be* abuse of monopoly power', and then used theoretical analysis to explain why. The final part of this paragraph includes some evaluation as the student introduces the possibility of government failure. However, it is a consideration of the downsides of a state-owned monopoly, rather than a discussion of government failure, and an effective link back to the question. Whilst there is some reasonable evaluation, it could have been stronger.

In the next section, the student provides an argument that is 'in line' with Friedman's view. They demonstrate sound knowledge and good, well-focused analysis regarding negative externalities in production, and the imposition of an indirect tax. They effectively integrate a second accurate diagram into their response, which demonstrates good application. The student clearly identifies and analyses problems which occur because of government intervention. The flaw here is that the student concludes this is government failure, and this appears to link to their opening paragraph regarding the meaning of government failure. To improve they might have balanced the drawbacks of the intervention with the benefits, such as the reduction in pollution levels.

In the final paragraph, the student concludes that the statement in the question is 'rash', and whilst there is some justification, a more convincing understanding of government failure would have provided stronger evaluation overall.

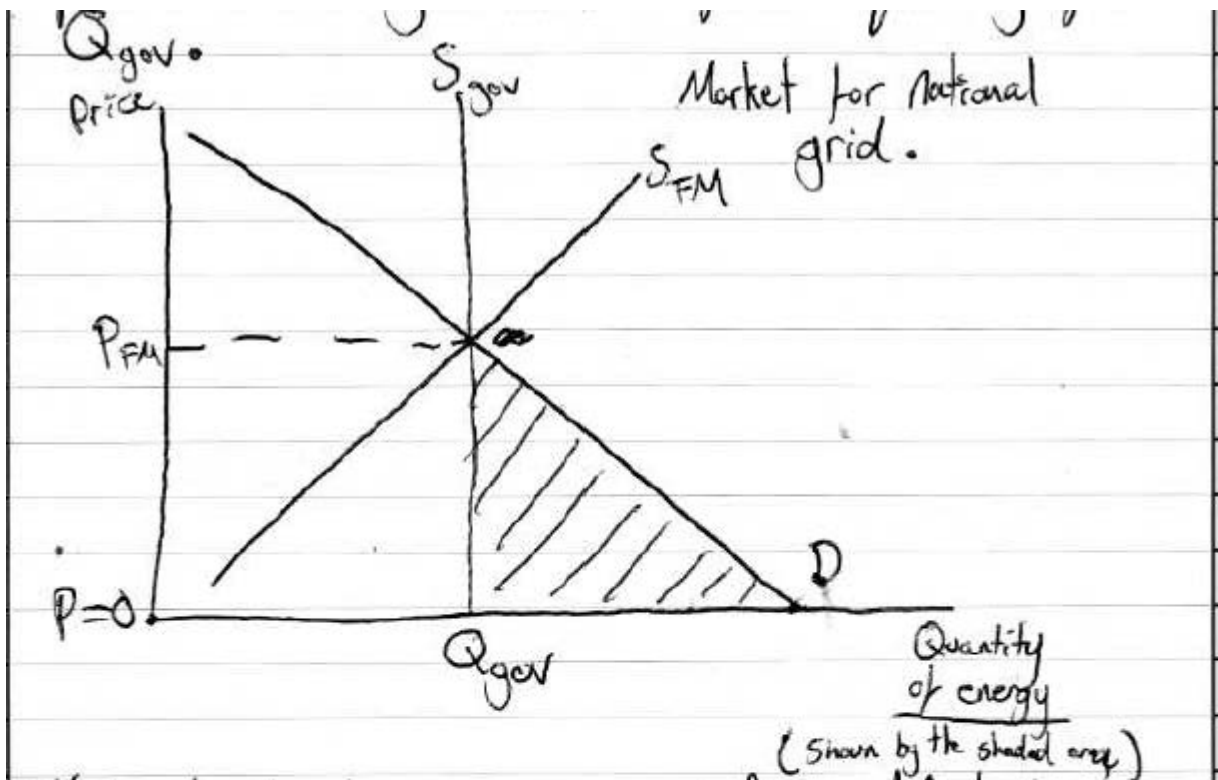
18 marks

Response B

Government failure occurs when government intervention leads to a misallocation of resources, and it causes deadweight economic welfare losses. In assessing the extent to which government ~~failure occurs~~ intervention leads to economic welfare losses, this essay will focus on the cases when government failure does and

does not occur.

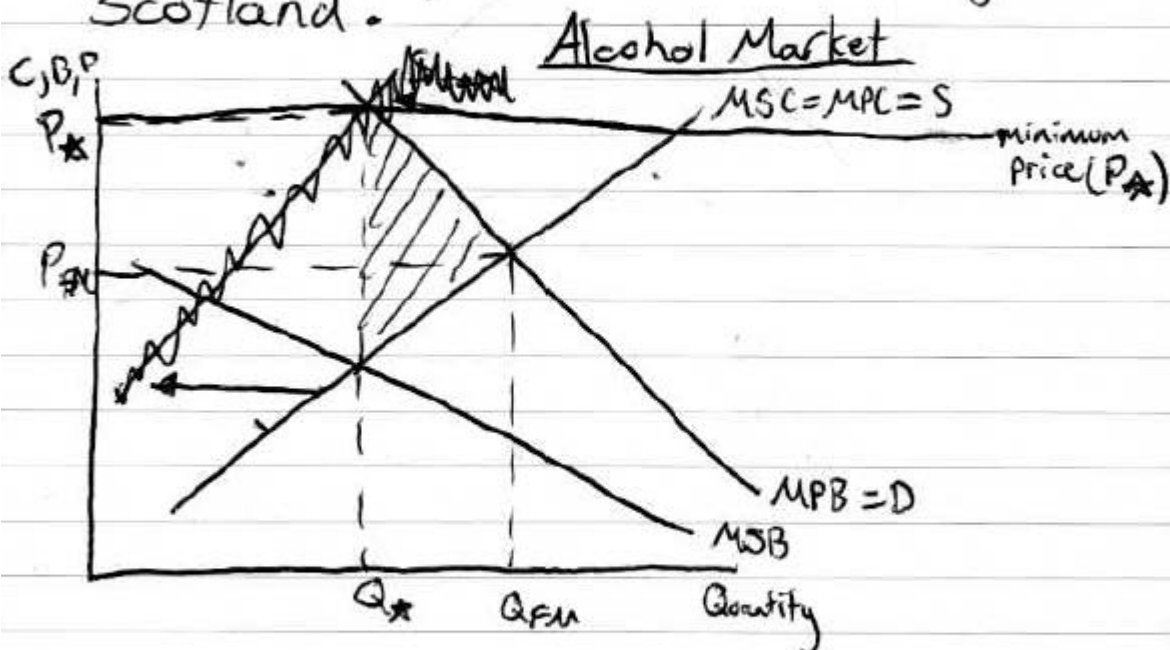
An example where government intervention causes government failure is often in markets where the good is state provided, or nationalized. If we take the national grid as an example, while the government runs the provision of the good/service, there is no ~~profit~~ little profit/motivation for the government, thus it will produce the good at a fixed quantity of



This leads to an excess demand at the price supplied by the government which is realised in the form of poor quality of maintenance and large amounts of ~~the~~ unprovided services, causing government failure and a social economic loss in welfare. However, this ~~may~~ still be less of a welfare loss than that which would've occurred by the free market provision of the good ~~as~~ it is free to the ~~free~~ consumer, providing a massive consumer surplus at the same quantity that would've been provided by the free market. The welfare loss in excess demand can often disproportionately effect the rich, such as waiting times in the NHS due to the government provision of healthcare, as the poor now don't have to pay fees to necessities like healthcare, while

The rich now have to wait in ~~lines~~ queues, which can improve inequality, however, that is a very normative view and varies in different cases.

There are cases, however, when government intervention does not lead to market failure, such as the effective minimum price set on alcoholic beverages in Scotland.



As shown, the free market in this market for alcohol leads to market failure as the negative externalities in the consumption of the good, such as, higher death rates and

health issues in the ER, lead to an over consumption of alcohol. This causes a social welfare loss represented by the shaded area. However, when the government intervenes and sets a minimum price at P_* , the quantity overconsumed is reduced to the socially optimal level at Q_* from Q_{FM} , thus ~~partially~~ improving the economic welfare. This depends on the information accessible to the government, however, as if it is not perfect, they will not achieve the socially optimal level.

On balance, government failure does ^{rarely} lead to improvements in economic welfare, however, government intervention, if used correctly, can be used to improve economic welfare in cases, such as, the minimum price on alcohol in Scotland, or in the provision of free healthcare in the UK. Thus it depends on the efficiency of the government spending and how accurate the information provision to the government is.

This is a Level 3 response

This is a medium value response. The response is well organised, it contains some satisfactory knowledge and understanding, but some weaknesses are present. There is some reasonable application of relevant economics to the context, but the examples used are not always appropriate. There is some reasonable analysis, but it is not always adequately developed, and it is confused in places. There is some fairly superficial evaluation which is not well supported by the arguments.

The student begins with an incomplete explanation of government failure, and an explanation of what they intend to do.

In the first paragraph the student indicates that they are going to consider an example of where government intervention leads to government failure. The main flaw here is that the context and example used, the 'national grid', do not match with the chosen diagram, and there is some confusion. The diagram shows that the good is provided at £0 price, which is not the case. This said, the analysis relating to the diagram is reasonable, and later in the paragraph the student uses a second example, the NHS, which fits more appropriately with their argument. The ending to this paragraph lacks clarity and does not link back to the question.

In the next paragraph, after an unclear beginning, the student uses the context of a minimum price in the market for alcohol. They include an appropriate diagram showing negative externalities in consumption, but it contains inaccuracies such as the deadweight welfare loss, and there is no indication of the excess supply that occurs due to the minimum price. On this occasion, by adding the minimum price to the diagram, the student has perhaps tried to make it show too much; it might have been clearer to use two diagrams, so that the impact of the minimum price could be simplified on a demand and supply diagram. This might have led to stronger analysis.

There is some reasonable analysis of the diagram and the effects of the minimum price, but as mentioned, there is no reference at all to the excess supply, so it is simplistic. The student does provide some evaluation by acknowledging the impact of perfect information. However, they do not effectively link back to the question, which would have made the evaluation stronger.

The conclusion lacks clarity, but it contains some relevant points, and shows a satisfactory understanding. Overall, the response would have benefited from a clearer discussion of government failure.

13 marks

Essay 3

Question 13

Data from the Organisation for Economic Co-operation and Development (OECD) suggest that countries with very different levels of pre-tax income inequality often have similar levels of post-tax income inequality.

Explain the main causes of inequality in the distribution of pre-tax incomes.

[15 marks]

Mark scheme

Use the [levels of response table on page 35 and 36](#).

Areas for discussion include:

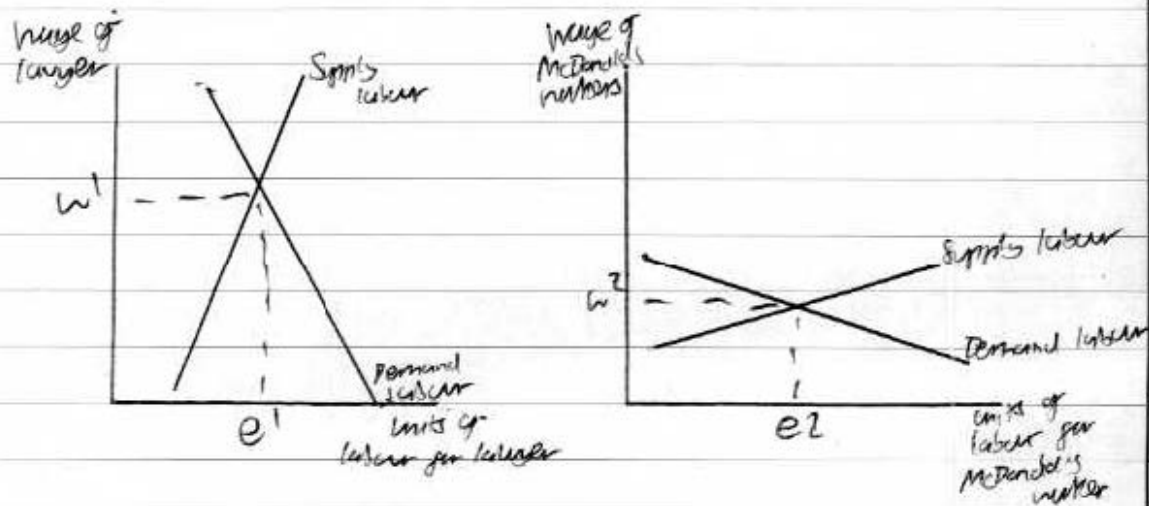
- explanation of inequality and how it can relate both to pre-tax and post-tax incomes
- how market incomes include wages, rent, interest and profit dividends
- how labour markets can lead to a wide range of wages as a result of differences in labour demand, marginal revenue product (MRP), labour supply
- how discrimination affects wages and inequality
- how wealth inequality can lead to income inequality as rent, interest and profits tend to accrue to those who are wealthy
- how inequality in income can be the result of inequalities in opportunities from an early stage, including education, health, nutrition and regional disparities
- how other labour market imperfections might lead to rising inequality o monopoly and monopsony power
 - information asymmetry
 - externalities
 - immobile factors of production
- use of examples.

The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

Student responses

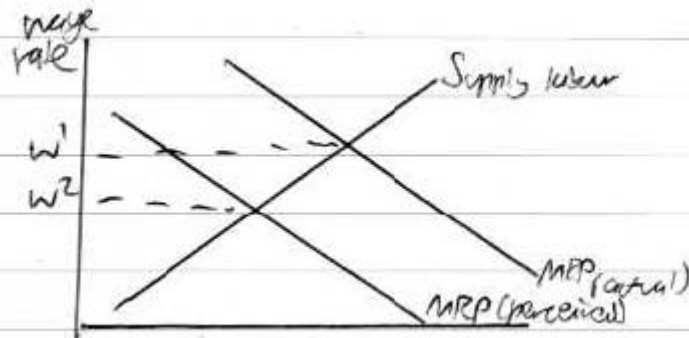
Response A

Inequality can be defined as a state where there is a disproportionately larger sum of wealth / income in the hands of the few. Pre-tax incomes are earnings before they have been taxed and an income is the yearly wage one receives for the provision of their labour. It can be measured by the Gini coefficient whereby for the UK, it is 0.34. One main cause of inequality is the differences in demand for labour. This may occur due to varying levels of education, if one's skillsets are more scarce, due to training courses for example, will make firms' demand for labour and the supply of labour more inelastic. As shown below, this will lead to relatively higher wages of w^1 than for a worker who has a relatively less skilled abilities where demand and supply of labour are far more elastic thus receiving a lower wage of w^2 .



For example, a lawyer is likely to have a higher profit given the ~~ext~~ various qualifications that have to be met and thus the lawyer is of more value to the firm as their skills are relatively more scarce. While a McDonald's workers' skills are ~~far~~ far easier to do thus their value to the firm is less so they are easily replaced, thus meaning they are paid relatively less.

Another main cause of inequality of pre-tax income may be discrimination. This may occur against different ethnicities or women as employers' may have unconscious / conscious biases surrounding who they perceive the employee to be. As shown on the diagram below, this means those discriminated against are paid a lower wage as their perceived marginal revenue product, or the revenue they can add to the firm following their employment, is lower than the in actual skillsets. Thus the wage they receive will be lower at w^2 than w^1 given the inward shift in the demand for workers who are discriminated against.



This is a Level 3 response

This is a high value response. The response is well organised and includes two well-developed issues. The student demonstrates sound knowledge and understanding throughout. There is good application of relevant economics to the context and the response includes well-focused analysis.

The student begins with explanations of inequality and pre-tax incomes, and an indication of how inequality is measured, including an approximate Gini coefficient value for the UK.

The student identifies a combination of skills, education and the demand and supply of labour as one of the determining factors, although each point could perhaps have been developed more fully. They effectively integrate two simple diagrams, using the examples of lawyers and McDonalds workers, to support their analysis and provide a logical chain of reasoning.

In the next paragraph the student discusses labour market discrimination. As before they use examples, and successfully integrate a diagram into the response to support their theoretical analysis.

13 marks

Response B

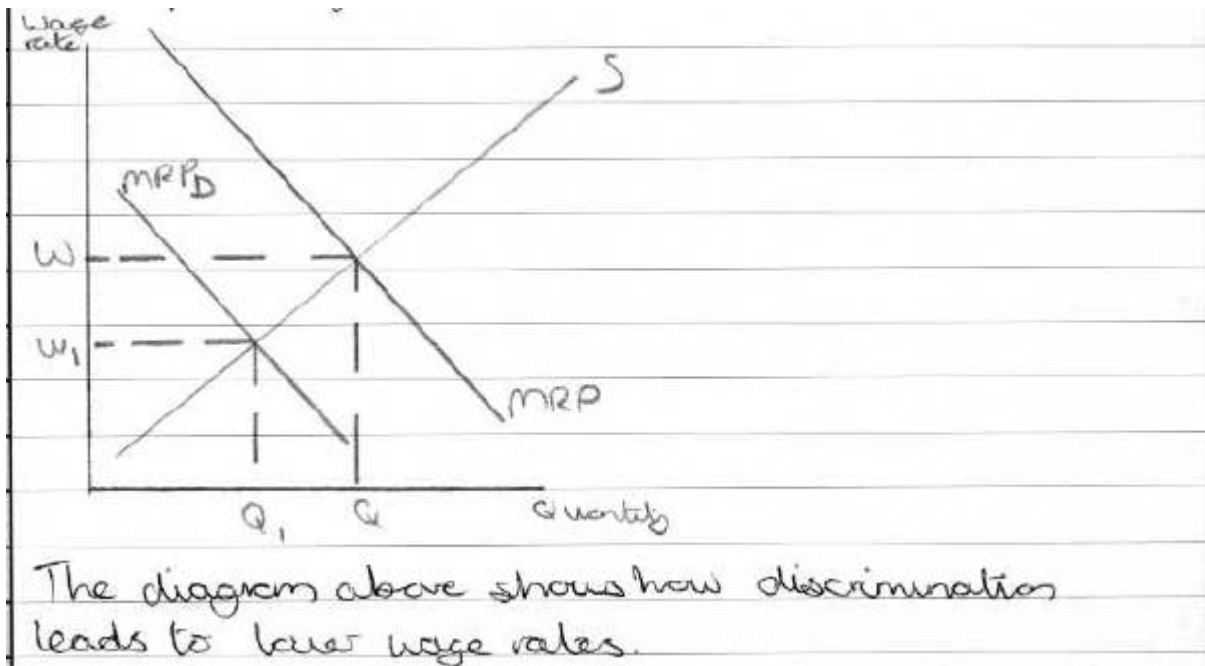
Inequality is when some people are treated different to others, meaning they may earn lower wages. There is a large difference in wages between non-skilled workers and skilled workers.

This is because there is a larger supply of non-skilled workers than skilled workers meaning the supply is more elastic for non-skilled workers. When the supply of labour is more elastic, the wage rate is lower. This is because a worker is easy to replace when there are no

qualifications required to do the job. The supply of skilled workers is more limited (than the supply of non-skilled workers) meaning skilled workers can demand a higher wage.

A large supply of non-skilled workers coupled with a restricted supply of skilled workers leads to large differences in pre-tax incomes and therefore inequality.

One other cause of inequality may be discrimination. Discrimination is when one race or group of people is treated different to everyone else. Firms who discriminate value the discriminated workers less than they value other workers. This means that the marginal revenue product for discriminated workers (MRP_D) is less than the marginal revenue product for other workers (MRP).



This is a Level 2 response

This is a medium value response. The response is well organised and focuses on two relevant factors. The student demonstrates satisfactory knowledge of the theory and there is some reasonable application of relevant economics to the context. There is some reasonable analysis, but it could be more developed in places, and there is a small amount of confusion.

In the first paragraph the student offers a vague explanation of inequality, which demonstrates some understanding. This leads into a discussion of the difference in wages between skilled and unskilled workers. The analysis focuses on the supply of labour and there is a brief reference to elasticity. However, whilst there is a general understanding of the issues, some of the explanation relates to the demand for labour and this is not acknowledged. In addition, the student does not use any examples to support their theory.

In the second paragraph the student identifies discrimination as a cause of inequality and provides an example. They include a relevant diagram which is successfully integrated into their response, and the accompanying analysis is reasonable.

10 marks

Question 14

Data from the Organisation for Economic Co-operation and Development (OECD) suggest that countries with very different levels of pre-tax income inequality often have similar levels of post-tax income inequality.

Evaluate whether the best way to reduce inequality in disposable income is to reduce differences in pre-tax incomes rather than through taxes and welfare benefits.

[25 marks]

Mark scheme

Use the [level of response table on page 9](#).

Areas for discussion include:

- definition of disposable income, pre-tax income
- explanation of why incomes differ in a market economy, for example through differences in supply and demand for labour in different labour markets
- understanding that incomes can include not solely wages, but also other sources of income such as rent, interest and dividends
- advantages and disadvantages of policies that can be used to reduce inequality in pre-tax incomes
 - improving social mobility
 - ensuring equal opportunities in terms of education, health, labour market access and other determinants of incomes
 - minimum wages and maximum wages
 - tackling labour market monopsony power to prevent exploitation of workers
 - tackling product market monopoly power to prevent excessive dividends from large firms
- advantages and disadvantages of policies that can be used to redistribute income after incomes have been received such as income tax, national insurance and the provision of welfare benefits
- evaluation of policy impacts on government finances, social mobility, incentives to work and take risks, social capital
- discussion of how inequalities in the distribution of wealth can lead to inequalities in the distribution of income, and therefore policies to reduce wealth inequality may help reduce inequalities in income
- considering the extent to which inequality is undesirable and whether the government should intervene
- an assessment of the relative merits of policies to reduce inequality in pre-tax incomes compared to using the tax-benefit system to reduce inequality in disposable income.

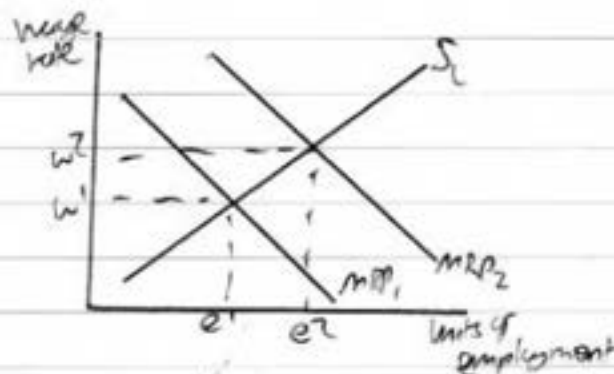
The use of relevant diagrams to support the analysis should be taken into account when assessing the quality of the student's response to the question.

Student responses

Response A

Inequality is where a disproportionate amount of wealth/income is concentrated in the hands of the few and can be measured using the Gini coefficient which measures the cumulative % of income over the cumulative % of population. Inequality of disposable income, income after tax receipts, is certainly a problem given its effects socially and given it is deemed inevitable, it needs to be addressed even though it is deemed a normative concept. While the tax and benefit system certainly play a role in reducing inequality, they do not address the cause but rather the symptoms which is why, through supply side policies, the best way to reduce inequality ~~difference in pre-tax income~~ is to reduce differences in pre-tax incomes.

The best way to reduce inequality is to reduce differences in pre-tax incomes as this is the most likely cause of inequality. Through reducing ~~pre-tax~~ differences in pre-tax incomes, it will only serve to reduce inequality in disposable incomes given the fact that ~~due to the UK's progressive tax system~~, pre-tax incomes directly affect disposable income. Through supply side policies like ~~increasing~~ increased spending on training courses available to those on low incomes, this will ~~increase~~ increase their skillset thus making them more valuable to firms as the revenue received by a firm following their employment will increase to MRP_2 thus increasing their wage from w' to w .



As shown above, through reducing the difference in pre-tax incomes by raising low-incomeers' possibility of a higher wage, this will only serve to reduce inequality in disposable income. However, since this will only likely occur if the training courses increase their wage sufficiently to combat a possible loss of benefits that low incomeers receive. But similarly, these training courses may not be utilized by low income earners given a lack of information over their provision. Nevertheless, through implying workers' pre-tax incomes using supply side policies, this will only serve to reduce inequality in disposable income as lower income earners can receive higher wages.

Despite this, the tax and benefits system are useful to reduce inequality in disposable income. The UK has a progressive tax system whereby up until $\pounds 12,500$, there is a tax free allowance and as one pays a higher proportion of tax as more income is earned, this effectively serves to lower the gap between different disposable incomes.

Similarly, in conjunction with progressive taxes, means tested benefits such that one's income has to be significantly low to qualify, help

reduce inequality in disposable income through schemes such as the job seekers' allowance. These benefits provide income for low earners thus reducing inequality between disposable incomes by making the poorest better off.

However, as it is the case that OECD suggests countries with very different levels of pre-tax income inequality often have similar levels of post-tax income inequality, the tax/benefit system seem to have had little effect. This may be likely occur given the combination of benefits and taxes may cause the poverty trap, whereby one does not want to increase their income as they will be worse off as they may lose benefits and enter a higher tax band. Thus it can be seen that the tax/benefit system may distort the incentives of workers to improve their income, only serving to increase inequality in disposable income.

To conclude, the best way to reduce inequality in disposable incomes is to reduce differences in pre-tax incomes and through improving ^{low income} workers' skills, they will be able to receive a higher wage thus feeding through to reducing the gap in inequality of disposable income. The tax/benefit system certainly have a role in reducing the disposable income gap for low income workers, yet ~~it is a temporary solution~~ does not address the cause which is difference in incomes from employment and rather addresses the symptom by alleviating the lowest income earners through providing a tax free allowance and benefits.

This is a Level 5 response

This is a high value response. The response is well organised. The student demonstrates sound knowledge and there is good application of relevant economics to the context. The response includes well-focused analysis with clear and logical chains of reasoning. There is supported evaluation throughout, which directly answers the question set.

The student's opening paragraph is strong. They begin with an explanation of inequality and draw a distinction between disposable income and pre-tax incomes. This clearly addresses the issues posed by the question and is an acknowledgement that it is more than merely a 'best way to reduce inequality' question.

The first issue focuses on reducing differences in pre-tax incomes, via increased spending on training courses for those on low incomes. The student includes well-focused analysis, and they successfully integrate a relevant labour market diagram into their response. There is reasoned evaluation as they consider the downsides of the 'policy' and offer a concluding statement that effectively links back to the question. Whilst the student has demonstrated all the necessary assessment objectives in this paragraph, it might have been stronger overall if they had, for example, considered the impact of education in general rather than training courses.

In subsequent paragraphs the student focuses on the tax and benefits system and shows a keen awareness of how this works in the UK. They provide well-focused analysis of the benefits and drawbacks, particularly regarding the poverty trap. As before, these paragraphs include reasoned evaluation and a concluding statement that links back to the question.

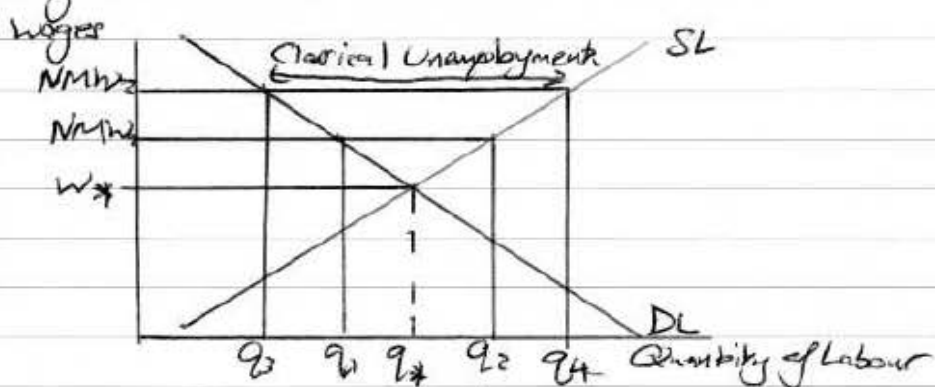
In the final paragraph the student offers a measured and sensible judgement. To improve the response, and take it closer to full marks, the student might have included more theoretical analysis regarding reducing pre-tax incomes. This said, it is a well-written and sophisticated response.

22 marks

Response B

I believe that a reduction in inequality in disposable income should ~~not~~ ^{not be} achieved by reducing differences in pre-tax incomes, rather than ~~through~~ taxes and benefits.

Reducing the ~~diff~~ difference in pre-tax incomes would reduce inequality of disposable incomes as firms would be forced to raise wages in accordance with a minimum wage, a legal base wage which must be paid to everyone in work ~~to~~ over the age of 23. A ~~small~~ rise in minimum wage would mean that the lower means income earners would receive higher pay and thus take home more money after tax, with this being their disposable income after paying for living costs. This can be seen in the diagram below.



The diagram shows that, when National minimum wage increases from NMW_1 to NMW_2 , the ~~amount~~ ^{minimum} pay increases for every worker at that wage. This means that, as I previously explained they take home more disposable income as their employers must legally pay that wage to all employees. This policy would not impact the top earners as they already earn more than this and thus the difference in disposable income

would decrease on average, reducing inequality. However, the diagram shows that, due to excess supply in the labour market, and a decrease in demand, firms would employ fewer workers, creating bits of classical unemployment, the size of Q_3 to Q_4 . Although this may not occur in the short run due to contracts with workers, in the long run unemployment would increase as the cost of labour rises, minimising the amount of profit made. Also, unemployed people are not helped by this policy as they have no wages to rise.

As such, increasing welfare benefits would be a good policy as it ensures that those who are unemployed and have the lowest incomes would have more disposable income. ~~A selective~~ Also, a progressive tax system would limit the disposable income of the highest earners as, the more they earn, the greater the proportion of their income would they pay in tax. I believe that a universal benefit system would be most effective, ~~and paid for~~ using a progressive tax system as it means that everyone who needs the benefits receives it. In a more selective system, there are factors like pride and time which may ~~prevent~~ prevent someone from receiving benefits or they may not want to be seen to be on benefits. However, this is not an issue if everyone, irrelevant of need, receives it as no single person is more of a burden on the state and will receive the money without having to register. ~~That~~ Although it will be expensive, it will be funded by taxes, reducing the disposable income of the top earners and increasing it for the bottom earners, ~~as~~ as this is a £12,750 tax-free

allowance on income.

To conclude, I believe that a progressive tax system and universal benefits would be a better way of reducing inequality in disposable income than reducing the difference in pre-tax income as it helps ~~the~~ the most needy more effectively.

This is a Level 3 response

This is a medium value response. The student demonstrates satisfactory knowledge and understanding but there are some weaknesses. There is reasonable application of relevant economics to the context and there is some reasonable analysis, but this could be more adequately developed in places. There is some fairly superficial evaluation, and the final judgement is not well supported.

The student's initial sentence lacks clarity. It appears that they may have revisited it and made a change, and consequently their response has a weak start.

The student then discusses a rise in the minimum wage as a means of reducing differences in both pre-tax and disposable incomes. There is an inaccurate definition of disposable income, however, the student effectively integrates a clearly drawn and accurate minimum wage diagram. The subsequent analysis is reasonable and considers some benefits and drawbacks of this policy. Whilst there are some evaluative comments, the student does not offer an overall evaluation of the policy nor a link back to the question.

The following paragraph is less organised. The student initially refers to welfare benefits, then to progressive taxation, then to a universal benefits system. They make some evaluative comments, but these tend to be based on assertion rather than supported by analysis. There is a link to the tax-free allowance, but this lacks clarity.

The overall judgement is not well supported, and basically repeats some of what the student has written in the preceding paragraph.

14 marks

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