

Paper 1 2019 - AQA Economics

Question 1 :
$$\frac{(127 - 110) \div 110 \times 100}{= 15.5\% \text{ (1dp)}} = 15.45\% \quad 2/2$$

Question 2 :

An expansion in the global sand market refers to a huge increase in demand for sand, creating upward pressure on prices. This expansion is clearly shown in the data, showing between 2010 and 2015, global demand rose from 180 million tonnes to 244 million, a roughly 36% increase, also predicted to expand to 400 million by 2025.

The data also shows this expansion is leading to prices rising in real terms; ✓
The price of construction sand is increasing at a faster rate than inflation.
The data shows the nominal price for sand rising from 100 in 2010 to 127 in 2018, showing a 27% increase. During that period, CPI only increased from 100 to 114, a 14% increase. Because the nominal price of sand exceeds the rise in general inflation, we can see that construction sand prices have increased by around 13% in real terms. ✓✓

4/4

Question 3

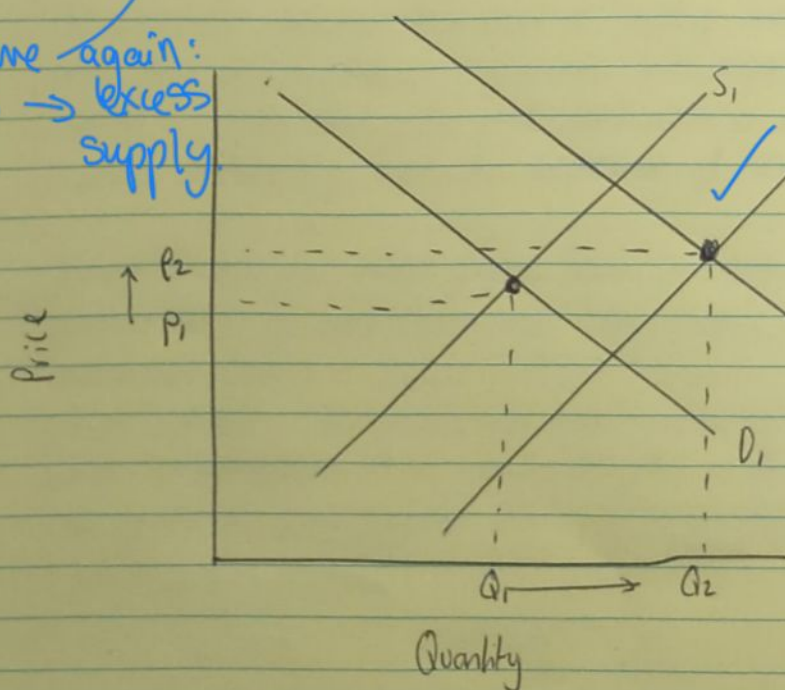
The growth in the global market for sand is driven by derived demand. Sand is a key material in cement, glass and other building materials, so it is derived from the construction boom. The construction boom is a period of rapid, large rises in building, while cheaper transportation reduces the cost of production/distribution for global suppliers of sand.

The occurrence of an East-Asian construction boom and cheaper ^{global} transportation has caused huge growth in the sand market, shifting global demand and supply outward.

The rapid urbanisation of East Asia caused the derived demand for sand to surge, as it is a key component in construction and infrastructure. Simultaneously, cheaper shipping lowered the cost of distribution, creating more opportunity for international trade.

The boom creates excess demand at the equilibrium price for sand, causing the demand curve to shift from $D_1 \rightarrow D_2$. The reduced transport costs will create excess supply, causing the supply curve for sand to shift from $S_1 \rightarrow S_2$. The combination of these two shifts causes a massive expansion in the global market for sand, enabling the market to satisfy all of the excess demand and construction needs ($Q_1 \rightarrow Q_2$). In the real world, an example of this is Chinese construction statistics and Singapore's reliance on imported sand for land reclamation. This derived demand for sand is satisfied by cheaper D_2 more accessible trade routes, so importing sand from Australia to Dubai becomes economically sound.

Same again:
 $\uparrow S \rightarrow$ excess supply



wrong order: $\uparrow D \rightarrow$ excess demand.

Careful using words like this - use words like

- Significant
- Substantial

instead.

7/9

Very good just -1 mark for having the excess supply/demand explanation the wrong way.

Great application.

Question 4

Market forces refer to the allocation of resources via the interaction of supply and Demand using the price mechanism, with no government intervention. Government intervention occurs when the government interferes and overrides these market forces, using tools like taxes, subsidies or regulation.

Market forces can theoretically solve the increasing scarcity for sand through the price mechanism: rationing, signaling and incentivising. As global sand reserves become scarce relative to surges in demand, the free market price will naturally rise.

As supply of accessible sand diminishes, the higher price acts as a device for rationing, pricing out other uses for sand. Furthermore, the price increase is a signal and incentive for builders. Higher price of sand increases their production costs, incentivising them to shift to other alternatives, such as recycling existing building materials. For producers, sustained high price signals there is profit in other tech developing tech to produce these alternatives. Therefore the market naturally resolves the shortage by driving innovation, avoiding the need for intervention. In extract C, this is shown: 'rising prices will eventually also force builders in developing countries to explore alternatives'. Well done explaining a tricky concept.

To evaluate, because this sand is highly inelastic necessity for construction with few substitutes, rising prices will simply inflate building costs in the short run. Therefore, the price mechanism is a long-term solution that cannot immediately halt the depletion of sand.

Good but only 2 chains of evaluation - develop further e.g. mention straw/wood being the only substitutes or explain negative externalities of production and 'the tragedy of the commons', making government intervention crucial. impact of shortage on the housing market.

Sand extraction is done in rivers and oceans, involving exploiting open-access resources. As a result, the free market over consumes these resources, as the producer only considers their Private Marginal Costs (PMC) of extraction, ignoring the ^{social} external marginal costs (SMC) on third parties. msc

✓

The extraction of sand creates severe environmental damage, destroying marine biodiversity and vulnerability. An example of this is in Indonesia, where the over-extraction lead to some of the islands submerging into the sea. ✓ The free market ignores external costs, price is too low and quantity extracted is too high relative to the social optimum, creating a huge deadweight loss. Government intervention, such as taxation, is needed to ~~shift the externality onto the internalise the externality~~ and force the market to operate at the social optimum. → Shorten

Your explanation so you can include the tax diagram explanation

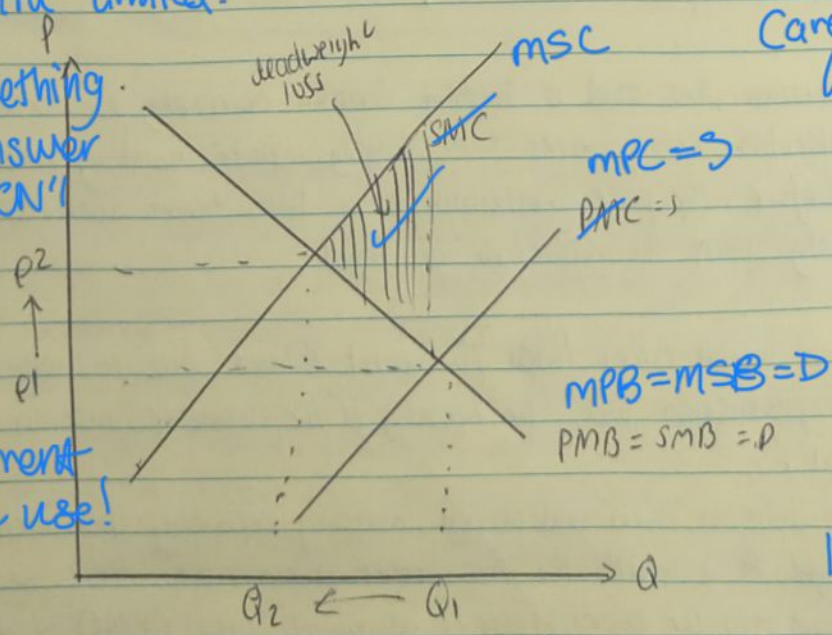
However, intervention risks government failure, especially in developing countries. strict taxes may incentivise illegal extraction and a rise in black market use, bypassing environmental law and render regulation ineffective and may worsen the cost to the environment. If only doing 2 evals, these need more development.

In conclusion, the scarcity of sand is best solved by government intervention. The price mechanism will eventually incentivise developing of new alternatives in the long run, but ignore external costs of sand extraction in the short term. If left to market forces, irreversible biological/environmental damage will occur before signalling transition the economy away from sand.

Conclusion still limited.

either
1) find something that the answer "DEPENDS ON"

or
2) state which policies the government needs to use!



Careful with these labels.

15/25.

- Analysis + Application very good
- Eval not developed enough + conclusion
- 2nd Diagram would also benefit this response.

Question 13

A minimum price is ^{an} imposed price floor set by the government above the free market equilibrium, preventing the price of the good/service to fall below that point. PED, price elasticity of demand measures how quantity demanded responds to changes in price. Price elasticity of supply measures the responsiveness of quantity supplied to a change in price.

The impact of minimum price depends on whether PED for the good is price inelastic or elastic. When minimum price is set, it forces the price up. If demand for the good is price inelastic ($PED < 1$) consumers are unresponsive to this price increase, leading to a less than proportionate contraction of quantity demanded. Consequently, the minimum price will not significantly reduce consumption, but it will raise producer revenues, as higher price outweighs the loss in sales. Alternatively, if demand is elastic, a minimum price will cause a contraction in demand creating a much larger surplus.

An example of this is the minimum price set on alcohol. Alcohol is addictive, and meaning its demand is inelastic. The minimum price did not drastically reduce consumption, the resulting excess supply was relatively small. Could mention minimum price on alcohol in Scotland - a great example.

The impact of a minimum price is also heavily dictated by PES, which is determined by factors like spare capacity and time lag. Minimum price acts as a strong profit incentive for firms to increase output. If PES is ~~inelastic~~ elastic, producers are very responsive to this incentive, leading to a greater than proportionate increase in supply. This large boost in supply causes a large excess supply. The more elastic the supply, the larger the surplus generated. The unsold stock can lead to wasted resources, like perishable goods, the government may have to intervene to avoid waste.

A real world example is the minimum prices for ~~starry~~ ^{wheat}, Agricultural supply is very elastic, so farmers allocated more resources to expand their wheat supply. This resulted in huge excess in supply (surplus), creating massive waste of the perishable good.

PTO

Question 14

12/15 - Great response - all that is missing

is a few more examples of the determinants of PED and PES.

A national minimum wage (NMW) is an imposed price floor by the government above in the labour market, placed above equilibrium. The aim of the NMW is to prevent the exploitation of low paid workers, providing a minimum wage for all workers in the labour market.

A NMW is beneficial as it prevents the exploitation of workers in monopsony labour markets, it can boost employment and boost productivity.

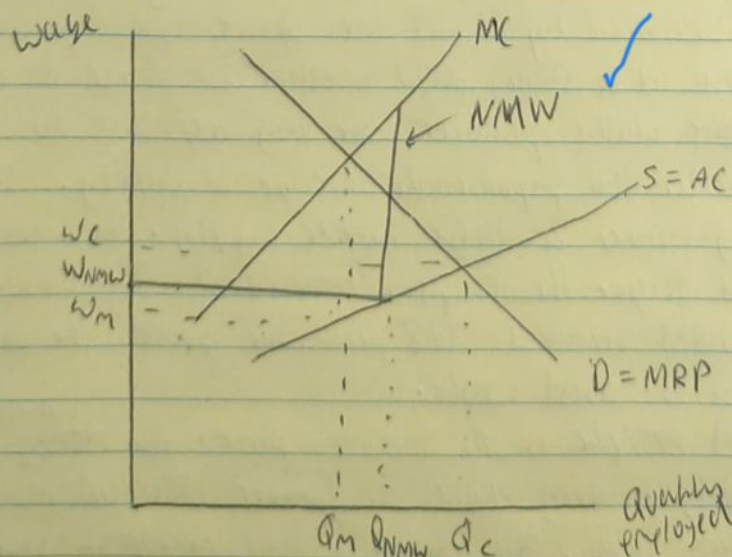
A monopsony is a dominant employer of labour in a labour market.

Profit maximizing monopsonists hire where $MCL = MRP$ allowing them to pay wages significantly lower than competitive equilibrium.

When a NMW is employed on a monopsony, the MCL curve becomes elastic up until the min wage, making the firm a wage taker at the legally enforced wage. As a result, employment rises towards the competitive level ($Q_m \rightarrow Q_{NMW}$), whilst wages rise simultaneously, reducing poverty and inequality. Furthermore, paying a higher wage boosts motivation, boosting productive capacity of the market.

A real world example is in the UK, when a NMW was implemented in social care, where there were monopsony employers. Incomes rose and employment as a result, allowing the market to shift towards a more competitive labour market.

you can mention UK NMW = £12.21



what depends? Be specific

To evaluate, this depends on how high the NMW is set. If it is set too aggressively, the monopsony will be forced to reduce hiring, this would actually reduce employment and create inequality within the labour market, having an adverse effect than intended.

↳ Too Short - explain this using the diagram.

A NMW can be detrimental to an economy if it operates in a competitive labour markets. It can cause real wage unemployment and can worsen inequality for disadvantaged groups. In a competitive labour market, wages are determined by Supply/Demand of labour.

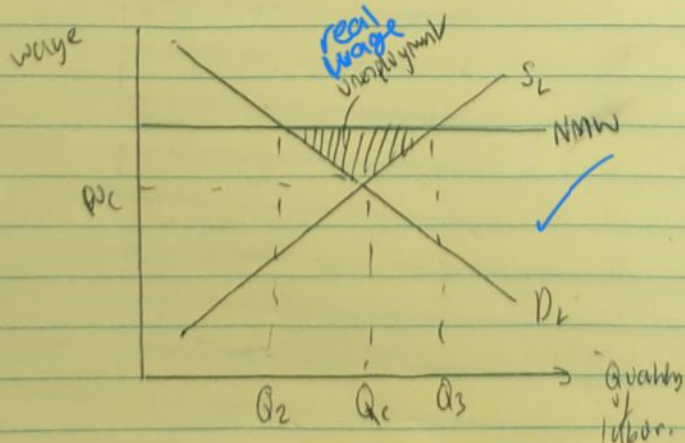
By setting NMW, it artificially raises the cost of production for firms. Because the legally mandated wage is now set above MRP, profit maximizing firms will contract their demand for labour. Simultaneously, this creates an excess supply of labour, leading to structural and real wage unemployment. Because the unemployment is targeted at low skilled workers and school leavers ~~over~~, poorly targeted NMW can reinforce existing inequality by locking disadvantaged workers out the labour market. ✓

A real world example is in the fast food sector, as minimum wages rose, firms like Macdonalds shifting away from labour and towards self service, creating large structural and real wage unemployment for replaced workers. ✓

very good paragraph.

The severity of unemployment depends on the PED for labour. If labour demand is inelastic, the contraction in employment will be limited. Also in the long run, the height of

↳ again, good eval but no development marks



To conclude, a national minimum wage is highly beneficial to the economy if it is implemented cautiously. It can correct market failures caused by monopsonies and alleviate in-work poverty and worker exploitation. While the theoretical risk of classical unemployment in competitive labour markets is valid, if the NMW is managed to a certain level it rarely creates mass unemployment. Instead, it transfers excess profits to firms to low-income households, boost macroeconomic demand due to rising wages and incentivises firms to focus on long term productivity, rather than short-term exploitation of workers.

Phrase this as "it depends on the magnitude of the NMW...."

- 12/25
- great points and application
 - ^{two} good eval points but lacking development
 - Conclusion too general

52/80 B A⁺ 63
A 54
B 46