

Suggested Answer

Q1 Malaysia implemented a 6 per cent Goods and Services Tax (GST) in 2015 on all goods and services except for staple food and some medicine.

Discuss the various impact of such a tax on consumption and production decisions in various markets. [25]

Question interpretation and requirement:

This is a rather open ended question because students can select and choose the various markets (necessity vs luxury goods markets, markets imposed with GST vs those exempted from GST) to discuss the impact of the GST. In discussing the impact, what is certain in the question is that GST (an ad valorem tax) would lower the supply of goods, ceteris paribus. However, the extent of change in market quantity and price would depend on numerous factors. This is where students should make use of relevant concepts such as elasticity, differing firms' action within a market, initial market price of gds/svs etc to examine the impact of GST on consumer decision (in terms of Qdd and spending) and producer decision (in terms of Qss, how much GSTs to absorb). Students can also analyse how decisions may differ across different consumers or producers in the same market.

Being an open-ended question, markers should not expect every possible outcome to be discussed but reward the quality of the response. Students are expected to touch on some of the analysis below.

Introduction:

- Explain that GST is an indirect tax on producer which raise unit COP and thus decrease SS (in a pivotal manner since it is an ad valorem tax (% tax))
- Explain the effects of GST on markets in general (higher market P and lower market Q) due to fall in SS, shown by a diagram.
- Explain what is meant by consumers (how much to buy and how much to spend) and producer decisions (how much to produce and how much to price dependent on absorption of GST).

Body: Note that the analysis may not have to be in this order but this represent the various ways in which students can approach the question. To hit L3, students need to be able to analyse at least 2 different ways.

Approach 1: Analyzing impact using 2 markets with different PEDs when SS falls

Using a market where DD is price inelastic as example:

- Assuming ceteris paribus and similar initial market prices of the gds/svs in the 2 markets, when SS falls due to GST, the good with price inelastic demand will result in a more than proportionate increase in price and less than proportionate fall in Qdd. (explain in context with diagram for diagrammatic analysis)
- Gave 1-2 brief reasons why DD may be price inelastic.
- Consumer decision → consume less than proportionately due to price inelastic demand given the higher price, consumers will end up spending more on that good.
- Producer decision → produce less than proportionately since they know that demand is price inelastic. However, a GST would result in less revenue earned by the producers and

some firms in the market may end up with subnormal profit which may cause some firms to close now.

To examine impact of GST on producer further, we would need to look at the relative elasticity of DD and SS to determine who bear greater tax burden. If we assume that DD is more price inelastic than SS then producer would bear less tax burden and firms

- Provide a comparative analysis for the market with price elastic demand.
- 2 diagrams to shows contrast in terms of new market price, quantity and consumer spending for the same SS shift on 2 different PED. Accept parallel shifts in SS as well but comment on it.

Preliminary Evaluation: extent of negative impact on consumers and producers decisions depend on the PED,

Approach 2: Analyzing impact of using a market in which GST is imposed and one in which GST is not imposed

- Student can use XED to explain how the higher market price in the good in which GST is imposed can affect the DD for the good in which GST is not imposed.
- Producers in markets in which GST is not imposed can decide to produce more or less depending on the XED

Evaluation: Conclude that the differing (positive or negative) impact is due to cost vs benefits of the GST on various markets. Evaluate that the extent of the positive impact on the market in which GST is not imposed depend on the closeness of the relationship of the good and the type of relationship (complement or substitutes).

Approach 3: Analyzing impact using 2 markets with different initial market prices (low vs high initial price) when supply falls

Using luxury market as example:

- Market with high initial price of gds/svs eg car or other big ticket items, GST would cause a much higher rise in absolute price of a more expensive good thus resulting in larger fall in Qdd. Impact on consumer spending depends. Converse is true for market with low initial price.
- provide diagrammatic analysis using two diagram
- GST imposed on a luxury good market would cause a much larger leftward shift in SS, causing Qss to fall significantly. The price of the good will increase by a much larger absolute amount. Producer is less likely to absorb the GST since it will result in a huge loss of revenue. Producer will produce much less in future.
- 2 diagrams to shows contrast in terms of new market price, quantity and consumer spending with ad valorem tax.

Evaluation: impact differs across income groups of consumers, producers may face shut-down especially for luxury markets if the GST resulted in substantial loss of revenue. Producers may choose to produce or sell cheaper versions of the same type of goods.

Overall evaluation and conclusion		
<p>- conclude that the impact on consumers and producers in a free market depends on (i) PED, (ii) whether the GST is imposed, (iii) initial market price of the product which affect the amount of GST.</p> <p>- evaluate that in a free market where we assume many sellers and buyers, their decision are affect in similar manners but in the real world, different consumers may respond differently depending on their responsiveness to GST, income level etc. Different producers may also react differently due to imperfect firms where they are able to influence price which will depend on the market structure and competition, ability to absorb or pass on the GST to consumers etc.</p>		

Suggested Mark Scheme (9757)

	Knowledge, Application/Understanding and Analysis	
L3	For an answer that uses appropriate demand, supply and elasticity concepts as analysis to explain the impact on decision of both consumers and producers. Good use of diagrams to provide an analytic explanation from more than one perspective. Student only need to provide 2 approaches.	15-20
L2	For an answer that uses demand and supply framework with limited analysis to explain the impact on consumers and producers decision. Diagrams are not use effectively as analytical tool. Max 14 if students only provide 1 form of analytical comparison/approach. Max 9 if answer only capture 1 market or only explain impact on consumers or producers.	9-14
L1	For an answer that shows knowledge of how GST may affect decisions. For an answer that consist of huge conceptual errors.	1-8

	Evaluation	
E3	For an answer that uses analysis to support an evaluative conclusion on why different impact on consumer and producer decision may occur depending on the extent in which they are affected by the GST, or cost/benefits that may occur due to the GST.	4-5
E2	For answer that make some attempt at evaluation or conclusion about the above.	2-3
E1	For an answer that give unsupported evaluative statement	1

Suggested Mark Scheme (9732)

	Knowledge, Application/Understanding and Analysis	
L3	For an answer that uses appropriate demand, supply and elasticity concepts as analysis to explain the impact on decision of both consumers and producers. Good use of diagrams to provide an analytic explanation from more than one perspective	15-21
L2	For an answer that uses demand and supply framework with limited analysis to explain the impact on consumers and producers decision. Diagrams are not use effectively as analytical tool.	10-14

	Max 14 if students only provide 1 form of analytical comparison. Max 9 if answer only capture 1 market or only explain impact on consumers or producers.	
L1	For an answer that shows knowledge of how GST may affect decisions. For an answer that consist of huge conceptual errors.	1-9

	Evaluation	
E2	For an answer that uses appropriate demand, supply and elasticity concepts as analysis to explain the impact on decision of both consumers and producers. Good use of diagrams to provide an analytic explanation from more than one perspective	3-4
E1	For an answer that give unsupported evaluative statement	1-2