

NATIONAL JUNIOR COLLEGE  
SH2 Preliminary Examinations for  
General Certificate of Education Advanced Level  
Higher 1

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**ECONOMICS**

Paper 1

**8823/01****22 August 2022****3 hours**

No Additional Materials are required.

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**READ THESE INSTRUCTIONS FIRST**

An answer booklet will be provided with this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

Answer **all** questions.

The number of marks is given in brackets [ ] at the end of each question or part question.

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This document consists of **8** printed pages and **4** blank pages.



NATIONAL JUNIOR COLLEGE  
Economics Department

Answer all questions.

**Question 1: A winner in the pandemic – Amazon**

**Table 1: Retail revenue of the top ten largest Public Retailers (2010 and 2020)**

US Retailer	Retail Revenue in 2010 (in US\$ billion)	Retail Revenue in 2020 (in US\$ billion)
Amazon	50	1,400
Walmart	179	339
The Home Depot	47	267
Costco	24	134
Lowe's	29	102

*Source: visualcapitalist.com, accessed 29 June 2020*

**Extract 1: E-commerce worldwide**

Over the last few years, electronic commerce (e-commerce) has become an indispensable part of the global retail framework. The retail landscape has undergone a substantial transformation following the advent of the internet, and thanks to the ongoing digitalisation of modern life. As Wireless Fidelity (Wi-Fi) access and internet adoption are rapidly increasing worldwide, the number of digital buyers keeps climbing every year. In 2020, over two billion people purchased goods or services online, and during the same year, e-retail sales surpassed US\$4.2 trillion dollars worldwide.

Internet users can choose from various online platforms to browse, compare, and purchase the items or services they need. As of 2019, online marketplaces account for the largest share of online purchases worldwide. Leading the global ranking of online retail websites in terms of traffic is Amazon: The Seattle-based e-commerce giant that offers e-retail, computing services, consumer electronics, and digital content registered over 5.2 billion unique visitors in June 2020. In terms of gross merchandise value (GMV), however, Amazon ranks third behind Chinese competitors Taobao and Tmall. Both platforms are operated by the Alibaba Group, the leading online commerce provider in Asia.

One of the most visible trends in the world of e-commerce is the unprecedented usage of mobile devices. In 2021, smartphones accounted for almost 70% of all retail website visits worldwide, although desktop and tablet visits generated higher conversion rates in 2020. As the adoption of mobile devices is progressing at a rapid pace, especially in regions that lack other digital infrastructure, mobile integration will continue to shape the shopping experience of the future. Mobile commerce (m-commerce) is particularly popular across Asia, with countries like South Korea generating up to 65% of their total online transaction volume via mobile traffic.

The coronavirus (COVID-19) pandemic continues to have a significant influence on e-commerce and online consumer behaviour around the world. As millions of people stayed home in early 2020 to contain the spread of the virus, digital channels have become the most popular alternative to crowded stores and in-person shopping. In June 2020, global retail e-commerce traffic stood at a record 22 billion monthly visits, with demand being exceptionally high for everyday items such as groceries, clothing, but also retail technological items. How online usage, purchasing habits, and the overall future of e-commerce and the global retail industry will look like in 2021 and beyond will largely depend on the further progression of COVID-19.

In a year of widespread and often devastating hardships, no business or industry came through 2020 untouched by the COVID-19 pandemic. But for some key sectors, the news was not all bad. An example would be Amazon and other online retailers who are among the biggest winners of the pandemic. Amazon.com, Inc. is an American multinational technology company which focuses on e-commerce, cloud computing, digital streaming, and artificial intelligence.

*Source: Statista.com, accessed 28 June 2022*

### **Extract 2: Market strategy of Amazon**

Amazon is interesting not just because of its competitive scope, but also because of its market strategy. Amazon's service is differentiated. A differentiation strategy is where the product or service is either perceived to be, or is, of superior customer value and has a definite price premium.

Amazon is ultra-keen on customer feedback, and Jeff Bezos, founder and chief executive officer of Amazon.com, Inc., has spread customer focus as a mantra throughout the organisation. Such service differentiation does not just bring loyalty but also encourages customers to buy more from Amazon.

The company is venturing into some perhaps unexpected new areas, for example, by exploiting its distinctive capability in handling large amounts of data and for new types of customers, sending a shiver down the spines of many large Information Technology (IT) companies.

*Source: accaglobal.com, accessed 14 July 2022*

### **Extract 3: China's online shopping addiction is killing its green packaging drive**

The e-commerce industry is trying to reduce plastic waste from the millions of packages it ships every day. If you worry about all the waste generated by the annual rush of holiday shopping and gift giving, it is nothing compared to the mountains of discarded packaging that comes from a single event in China.

On 11 November each year, the world's biggest consumer market goes into overdrive as e-commerce giants like Alibaba Group Holdings Ltd. and JD.com Inc. lure shoppers with huge bargains during the Singles' Day bonanza. Alibaba reported almost 500 billion yuan (US\$76 billion) of sales this year, nearly four times United States (US) Black Friday and Cyber Monday spending combined. Greenpeace, an independent global campaigning network that acts to change attitudes and behaviour to protect and conserve the environment, estimates that Singles' Day generated 52,400 metric tons of carbon dioxide (CO<sub>2</sub>) from manufacturing, packaging and shipping in 2017. The national railway has to employ hundreds of high-speed trains to help with deliveries every year.

As President Xi Jinping pushes for stronger environmental protection and consumers grow more eco-conscious, the nation's e-commerce giants are under pressure to find greener ways to handle the annual extravaganza, starting with plastic. China's soaring use of the material has become one of the world's most pressing environmental issues but switching to other materials is costly for smaller businesses and the government has struggled to implement a plan to phase out single-use plastics.

E-commerce companies are trying to stem the tide. For Singles' Day this year, Alibaba's logistics arm Cainiao designed recyclable corrugated cardboard boxes that do not have to be sealed with plastic

tape. The company offered the packaging to more than 500 sellers on Tmall, including brands like Nestle SA and Procter & Gamble Co. The so-called zipper boxes cost twice as much as their usual packaging. Cainiao says it used 190,000 plastic-free boxes and 3 million biodegradable bags to package Singles' Day orders this year. While that is a step forward, it is just a fraction of the total increase in packaging this year. Cainiao emblazons the boxes with dolphin images to 'raise awareness of how plastic pollutes the oceans'.

Still, without government regulation, companies are left to decide if they want to use more sustainable packaging. Online shopping has become such a key driver of China's domestic economy, especially during the pandemic, that authorities have been reluctant to institute rules that could hurt the industry. The environment ministry, which drives climate policies, does not have the power to mandate greener packaging.

*Source: Bloomberg News, 21 December 2020*

**Questions**

- (a) Compare the relative change in the retail revenue for Amazon, Walmart and Home Depot in 2010 and 2020. [2]
- (b) Using a diagram, explain how the rapid adoption of internet access impact a country's production possibility curve. [5]
- (c) Identify and explain the two main characteristics of a public good, and comment on whether these are likely to be possessed by the Wi-Fi services provided by telecommunications firms. [6]
- (d) Explain the likely value of the price elasticity of supply (PES) for the services provided by online retailers. [2]
- (e) Using a relevant elasticity concept, explain how Amazon's differentiation strategy may have contributed to the change in its revenue. [5]
- (f) Using information from Extract 1, discuss whether demand factors or supply factors have a greater impact on the online transaction volume for e-commerce in the long run. [10]
- (g) The 'mountains of discarded packaging' (Extract 3) that comes from online shopping addiction leads to economic inefficiency in resource allocation.
- (i) Using a diagram, explain how the 'mountains of discarded packaging' leads to economic inefficiency in resource allocation. [5]
- (ii) Assess the most appropriate measure to deal with this economic inefficiency in resource allocation. [10]

[Total: 45]

**Question 2: COVID-19 disruptions on global economies****Extract 4: COVID-19 shook, rattled and rolled the global economy in 2020**

As the hit to economic activity from the coronavirus (COVID-19) pandemic became more widespread, this triggered the steepest global recession in generations as government-mandated shutdowns of businesses and any non-essential activities in much of the world unleashed a wave of joblessness not seen since the Great Depression. Still, unemployment levels varied dramatically across the countries.

In some countries, like Germany, deployed government-backed schemes supported struggling firms which kept their workers on company payrolls even as work dried up. Elsewhere, including the United States (US), workers are instead supported through dramatic expansions in unemployment benefits fuelling rampant job losses.

Unprecedented levels of government stimulus prevented even larger damage to many economies but also added to a global mountain of sovereign debt amassed by governments, raising questions about whether a financial crunch is the next crisis the world must deal with.

*Sources: Reuters, 20 March 2020 and 31 Dec 2020*

**Table 2: Real GDP and unemployment in the US and Germany, 2017–2020**

Year	Real GDP growth rate (%)		Unemployment rate (%)	
	US	Germany	US	Germany
2017	2.3	2.6	4.4	3.8
2018	3.0	1.3	3.9	3.4
2019	2.2	0.6	3.7	3.1
2020	-3.5	-4.9	8.1	3.8

*Source: Worldbank Data, 2021*

**Extract 5: The economic toll of COVID-19 on ASEAN countries**

ASEAN countries are taking a huge hit caused by the spreading COVID-19 pandemic, on par with the fallout of the 1997–98 Asian Financial Crisis, or perhaps much greater. Country-specific impacts will depend on the structure of each economy and their initial economic conditions heading into the crisis. Hardest hit will be Thailand who was already struggling since 2019 with a severe drought that caused widespread crop damage and degradation in land quality, pummeling the fall of the world's largest exporter in sugar production and in other major export crops of rice and rubber, a strengthening currency and was somewhat slow to respond at the onset of the pandemic.

The impact of COVID-19 crisis is hitting these economies through several channels. First, ASEAN countries are highly open to trade and investment as well as tourism. Demand for these countries' exports – whether palm oil and metals from Indonesia; manufactured components from Thailand, Malaysia, Vietnam have fallen sharply. The likely very slow resumption of tourism will hit Thailand's economy especially hard, which depends on tourism and travel spending for one-fifth of its gross domestic product (GDP), and also impact the tourism-dependent economies of Malaysia, Indonesia, and Vietnam. Singapore had already experienced a decline in trade volumes, a result of the China-US trade conflict in 2019 and is now experiencing another decline due to COVID-19.

Second, the sharp drop in domestic demand due to lockdowns will have large multiplier effects on these economies, since consumption represents about 60% of GDP in major ASEAN economies, with Singapore being an exception.

On the brighter side, the shift of economic activity to the cloud and the need for mobile tracking and other tech solutions to contain and respond to future outbreaks of the virus could benefit ASEAN economies, in particular countries like Singapore, Indonesia, and Vietnam, which are already on the leading edge of the mobile-app-based digital economy. This shift will continue to deliver economic impact primarily by providing internet connectivity that enables the growth of small businesses, digital transformation of enterprises and granting access to life enhancing services and tools to all citizens. Mobile money is one example, with adoption scaling rapidly in parts of ASEAN as telecommunication operators support the region's shift to digital payments.

The rise of electronic commerce (e-commerce) has also spawned several e-logistics companies, opening up employment opportunities to many. For example, Ninja Van, a Singapore-based company in Vietnam, hires motorbike riders to deliver packages. Over 25,000 active riders are registered on the Ninja Van platform in Vietnam. A global or regional shift in demand toward digital applications, and government policies designed to support this sector, could spur innovation and boost entrepreneurs working in the digital economy, which would brighten the growth and development prospects for ASEAN economies once we get to the other side of this global crisis.

*Source: Centre for Strategic and International Studies, 14 April 2020*

#### **Extract 6: ASEAN countries fighting impact of COVID-19**

Most ASEAN countries have introduced stimulus packages and are mobilising both monetary and fiscal measures to avoid the economic catastrophe stemming from the impact of COVID-19, with the majority increasing their government spending and cutting interest rates.

Richer ASEAN countries are planning to implement large stimulus packages to save their economies from an economic catastrophe. Singapore stimulus package was the highest at US\$80 billion (20% of its GDP) followed by Thailand's package of US\$64 billion (16% of its GDP). Malaysia will be spending US\$60 billion (17% of its GDP). All other countries also have spending plans but may not have the capability to allocate such huge amounts.

*Source: OECD, 4 May 2020*

**Table 3: Gini ratio by ASEAN member states**

ASEAN member states	Year		
	2005	2010	2019
Indonesia	0.36	0.38	0.38
Malaysia	0.46	0.44	0.41
Philippines	0.44	0.46	0.43
Singapore	0.47	0.48	0.45
Thailand	0.49	0.49	0.43
Vietnam	0.42	0.44	0.40

*Source: ASEAN Secretariat, ASEANstats database, 2021*

**Table 4: Mobile phone subscriber connected to internet penetration rate**

ASEAN member states	Year	
	2019 (%)	2025 (%) (Forecast)
Indonesia	48	61
Malaysia	66	72
Singapore	81	86
Thailand	69	83
Vietnam	73.5	85

Source: GSMA Asia Pacific, 2020

### Questions

- (a) Using Table 2, compare the real GDP growth rate and unemployment rate in the US and Germany over the period 2017 to 2020. [2]
- (b) With reference to Extract 4 and Table 2:
- (i) Explain why 'unemployment levels varied dramatically across the countries' and comment whether the data in Table 2 for the year 2019–2020 supports the expected relationship between real GDP growth rate and unemployment rate for the US and Germany. [8]
- (ii) Explain **two** consequences of 'unprecedented levels of government stimulus' on living standards. [4]
- (c) Using AD/AS analysis and Extract 5, explain how 'degradation in land quality' and 'a strengthening currency' are likely to have impacted Thailand's economy in both the short-run and long-run. [8]
- (d) With reference to Extracts 5 and 6, discuss how 'monetary and fiscal measures' in stimulus packages can help a country avoid an economic catastrophe stemming from the impact of COVID-19. [11]
- (e) Extract 5 mentioned there are government policies designed to support the growth of the digital economy.

Discuss the extent to which growth in the digital economy can achieve inclusive growth. [12]

[Total: 45]



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**National Junior College  
Economics Department**

**Preliminary Examination 2022**

**Paper 1 Answer Booklet**

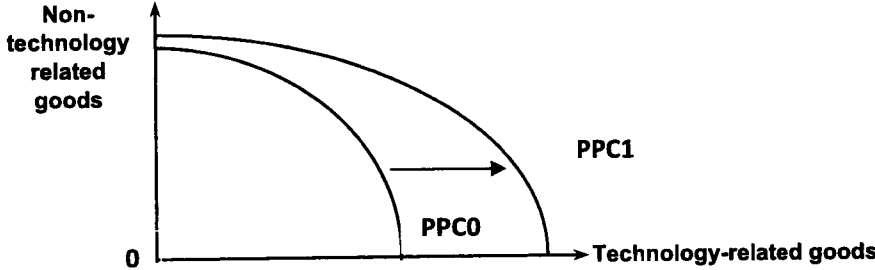
**(Students' Version)**

**Senior High 2**

**H1 Economics**

**(Syllabus 8823)**

**Suggested Answer Outline and Examiners' Comments: Case Study Question 1**

(a)	Compare the relative change in the retail revenue for Amazon, Walmart and Home Depot in 2010 and 2020. [2]
	<ul style="list-style-type: none"> <li>• Similarity: All three firms have seen an increase in their retail revenue between 2010 and 2020.</li> <li>• Difference: However, the rate of increase in the retail revenue for the three firms are different, with Amazon experiencing the largest increase (2,800%), followed by The Home Depot (466%) and Walmart (90%).</li> </ul>
(b)	Using a diagram, explain how the rapid adoption of internet access impact a country's production possibility curve. [5]
	<ul style="list-style-type: none"> <li>• The rapid adoption of internet access worldwide would mean a rapid improvement in technology by firms in the economy as well. This would result in an increase in both the quantity and quality of capital resource in Singapore.</li> <li>• Firms that rely on technology (internet access in their production) will be able to produce more output.</li> <li>• The expansion of Singapore's production possibility curve can be illustrated by a skewed outward shift of Singapore's PPC from <math>PPC_0</math> to <math>PPC_1</math> as shown in Fig. 1.</li> <li>• Diagram.</li> </ul> <div style="text-align: center;">  <p>Fig 1: Production Possibility Curve</p> </div>
(c)	Identify and explain the two main characteristics of a public good, and comment on whether these are likely to be possessed by the Wi-Fi services provided by telecommunications firms. [6]
	<p>Explain</p> <ul style="list-style-type: none"> <li>• A public good are goods or services that have the features of non-rivalry and non-excludability.</li> <li>• Define non-rivalry: non-rivalry means that the consumption of the good by one person does not reduce/diminish the benefit of the good available to others.</li> <li>• Define non-excludable: non-excludability means that it is technically impossible or economically unfeasible to exclude anyone from the benefits of the good once it is provided.</li> </ul> <p>Comment</p> <ul style="list-style-type: none"> <li>• The services provided for Wi-Fi access may not possessed the characteristics of non-rivalry and non-excludability.</li> </ul>

	<ul style="list-style-type: none"> <li>The Internet is technically rivalrous in the sense that the computer networks on which it depends (its “physical layer”) accommodate a finite amount of traffic.</li> <li>Wi-Fi access is excludable since the users must pay for Internet access via the subscriptions, they pay for the services provided for Wi-Fi access by the telecommunications firms in the country.</li> </ul>
(d)	Explain the likely value of the price elasticity of supply (PES) for the services provided by online retailers. [2]
	<ul style="list-style-type: none"> <li>The likely value of PES for the services provided by online retailers is likely to be more than 1.</li> <li>This could be explained by the durable nature of the products offered by these online retailers, namely, e-retail, computing services, consumer electronics which allows the online retailers to easily stock up and keep the stocks of good available.</li> </ul>
(e)	Using a relevant elasticity concept, explain how Amazon’s differentiation strategy may have contributed to the change in its revenue. [5]
	<ul style="list-style-type: none"> <li>Amazon worked on differentiating their services, for e.g. priorities were placed on customer feedback and service were prompt and this has the effect of changing the taste and preferences of consumer towards the services provided by Amazon, leading to an increase in demand for their services.</li> <li>The increase in demand leads to a new equilibrium where price and quantity will increase.</li> <li>Their differentiation strategy promotes customer loyalty who believes that the high standard of services could not be found in the services provided by their rivals, that is the service offered by Amazon is not easily substitutable</li> <li>With <math>PED &lt; 1</math>, hence, Amazon could increase the price of their products/services, leading to a less than proportionate decrease in quantity demanded. Hence its revenue will increase.</li> </ul>
(f)	Using information from Extract 1, discuss whether demand factors or supply factors have a greater impact on the online transaction volume for e-commerce in the long run. [10]
	<p>Introduction:</p> <ul style="list-style-type: none"> <li>The impact on the online transaction volume for e-commerce in the long run will be discussed by an analysis of the demand and supply factors affecting online e-commerce transactions.</li> </ul> <p>Body:</p> <p>(1) Demand side factor – Changes in consumers’ taste and preferences and increase in the size of digital consumers.</p> <ul style="list-style-type: none"> <li>Consumers’ taste and preferences can change over time. Taste and preferences can be affected by the latest developments e.g., the advent of the internet and the ongoing digitalization of modern life, thus changing tastes and preferences favorably towards online shopping. This is illustrated by the rightward shift of the demand curve (from <math>D_0</math> to <math>D_1</math>) in Fig. 2 below.</li> </ul> <p>(2) Supply side factor – Fall in the costs of relevant resources</p> <ul style="list-style-type: none"> <li>For firms providing online retailing, internet access and services could be seen as one of their factors of production. The fall in the price of internet access will in turn lead to a fall in their cost of production, hence increasing the market supply of e-</li> </ul>

commerce services. Thus, the supply curve shifts right from  $S_0$  to  $S_1$  in Figure 2 below.

**(3) Impact on the online transaction volume for e-commerce**

- The increase in demand combined with the increase in supply will result in a new market equilibrium quantity at quantity  $Q_1$  as shown in Figure 2 below, indicating a higher volume of online transaction in the e-commerce market.

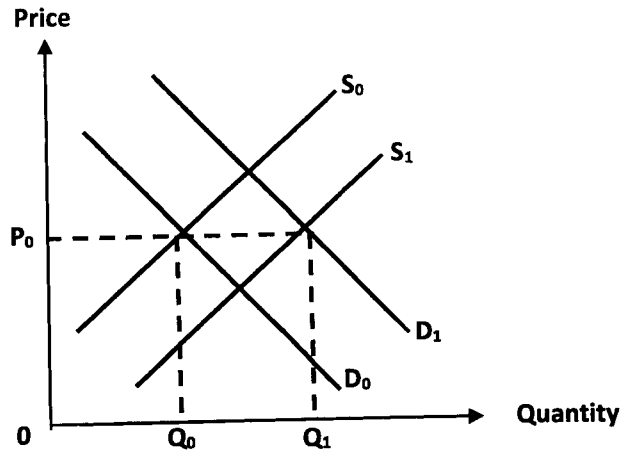


Figure 2: Market for e-commerce

**Evaluative Conclusion:**

Supply factors may have a greater impact on the online transaction volume for e-commerce in the long run.

- According to Extract 1, over the last few years, e-commerce has become an indispensable part of the global retail network.
- Since the impact of COVID-19 has been a significant force in influencing consumers' taste and preferences as well as the number of online consumers, but its further progression is unpredictable.
- On the other hand, online commerce landscape is changing rapidly, supported by the technological innovation. Policy makers and businesses and provides evidence that internet access and speed, online security, and financial inclusiveness matter in facilitating internet retail sales. Governments should consider these as important issues in building an enabling environment that will help B2C online commerce adapt to the post COVID-19 world and ensure that innovations create opportunities for all.

(g) The 'mountains of discarded packaging' (Extract 3) that comes from online shopping addiction leads to economic inefficiency in resource allocation

(i) Using a diagram, explain how the 'mountains of discarded packaging' leads to economic inefficiency in resource allocation. [5]

- With reference to Extract 3, Greenpeace estimates that Singles' Day generated 52,400 metric tons of CO<sub>2</sub> from manufacturing, packaging and shipping in 2017.



The generation of CO<sub>2</sub> from these activities results in pollution of the environment. This is the external cost of consumption imposed on the environment.

- Since MEC to society is not internalised by the consumers of online shopping, there is divergence between MPC and MSC, as seen in Figure 1 below, the actual costs to society are where  $MSC = MPC + MEC$ .
- Online shoppers only consider their private cost of consumption. MEC is not internalised, leading to a greater private consumption, where  $MPC = MPB$  at  $Q_p$  units, than the social optimal level of output, where  $MSC = MSB$  at  $Q_s$  units of consumption in Figure 1.
- There is over-consumption of  $Q_s Q_p$  units of online shopping. This results in allocative inefficiency and deadweight/welfare loss to society of area  $AE_0E_1$ .
- diagram

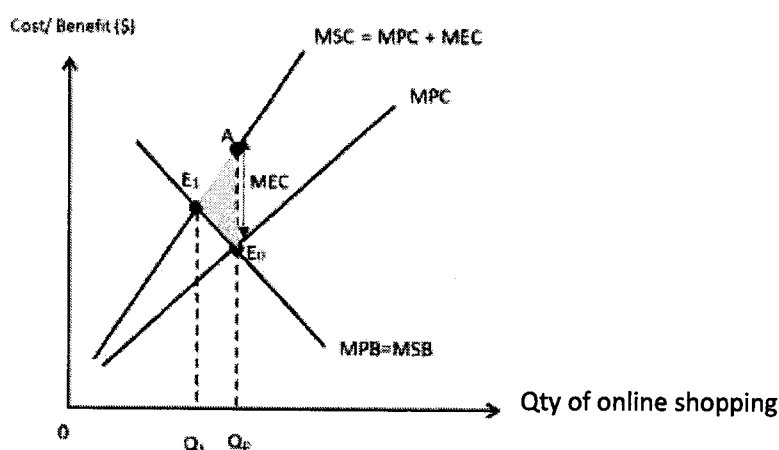


Figure 1: Negative externalities from the discarded packaging due to over-consumption.

- (ii) Assess the most appropriate measure to deal with this economic inefficiency in resource allocation. [10]

Introduction:

- Given the inefficient allocation of resources discussed in part (i), firms and governments alike have implemented measures to deal with the negative effects that packaging waste have on the environment.

Body:

Measure (1): Government could impose an indirect tax on the expenditure on online shopping

- The aim of such indirect specific taxes (for example, expenditure tax) is to get online shopping addicts to internalize the negative cost imposed on the environment caused by packaging wastes.
- As seen in Figure 4, the tax will increase the marginal cost of online shopping as illustrated by an upward shift of the MPC curve from MPC to  $MPC + tax$ .
- Consumers will thus consume online shopping at  $MPB = MPC + tax$ , thereby decrease their consumption from  $Q_p$  to  $Q_s$  as illustrated in Figure 4.
- As  $Q_s$  is the socially optimal output where allocative efficiency is achieved and there is no welfare loss, the market failure is addressed.

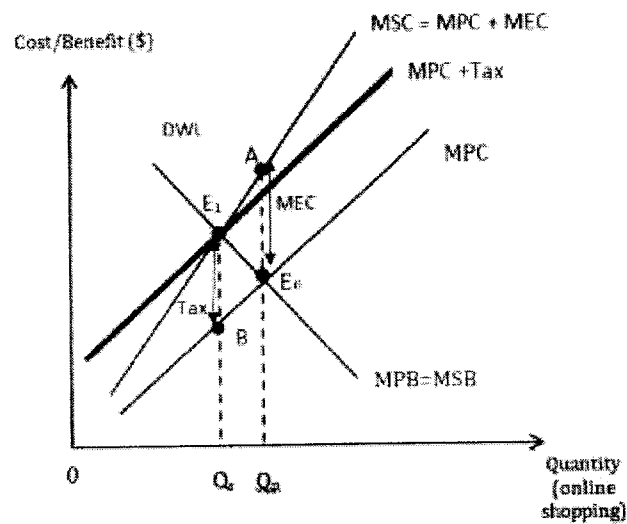


Figure 4: Impact of taxes

#### Limitations of taxation

- It is difficult to estimate the exact MEC as the impact of discarded packaging waste on the environment is intangible and hard to quantify.
- Hence, the government may under-tax or over-tax, hence underconsumption or overconsumption still persists, which does not eliminate the deadweight loss to achieve allocative efficiency. For instance, if the government were to under-tax, the consumption will still be between  $Q_s$  and  $Q_p$  and not fall  $Q_s$ .

Measure (2): Government could implement a regulation to phase out single-use plastics and encourage the switch to other materials.

- With regulation against the use of single-use plastics, a material used mainly in packaging, the demand for plastics will decrease.
- At the same time of the phasing out of plastics, government should encourage these online shopping platforms to switch to other materials. This can be seen in Extract 3, where Alibaba's logistics arm Cainiao designed recyclable corrugated cardboard boxes that don't have to be sealed with plastic tapes. This is also known as the zipper bag. Alibaba has also offered this packaging to more than its resellers such as Nestle SA and Procter and Gamble Co to use. Cainiao also used 190,000 plastic-free boxes and 3 million biodegradable bags to package their Singles' Day orders this year.

#### Limitations of Regulation / Legislation of phasing out single-used plastics

- Regulation is a blunt tool, which may incur high costs of monitoring to be effective, such costs includes the cost of checking on firms to ensure that they are abiding by the regulations and prosecuting them in case of non-compliance.

#### Evaluative conclusion:

- In the short run, it will be more appropriate to use indirect taxes as a measure to reduce the inefficiency in resource allocation in the online shopping market as it is relatively quick to implement and the least costly way to reduce the over-consumption. Taxation forces the consumers to internalize the external costs to the socially optimal level.

**Suggested Answer Outline and Examiners' Comments: Case Study Question 2**

(a)	Using Table 2, compare the real GDP growth rate and unemployment rate in the US and Germany over the period 2017 to 2020. [2]
	<ul style="list-style-type: none"> <li>• Real GDP growth fell for both US and Germany.</li> <li>• Unemployment rate increased for both US and Germany.</li> </ul>
(b)	With reference to Extract 4 and Table 2:
(i)	Explain why 'unemployment levels varied dramatically across the countries' and comment whether the data in Table 2 for the year 2019–2020 supports the expected relationship between real GDP growth rate and unemployment rate for the US and Germany. [8]
	<p><b>Explain:</b> Differences in government's response. From Extract 4, Germany's government-backed schemes kept workers in their jobs'. On the other hand, the US government paid out unemployment benefits to workers who have lost their jobs, further intensifying the loss of jobs.</p> <p><b>Comment:</b> From Table 1 the data observed for the year 2019–2020 supports the expected relationship between real GDP growth and unemployment rate for the US and Germany i.e a fall in real GDP growth causes a rise in unemployment rate. However, in the US the fall in real GDP growth of 1.3% is relatively smaller than the rise in unemployment rate at 4.4% compared to Germany where the fall in real GDP growth is higher at 4.3% but unemployment rate is lower at 0.7%.</p>
(ii)	Explain two consequences of 'unprecedented levels of government stimulus' on living standards. [4]
	<p><b>Material SOL (2m)</b></p> <ul style="list-style-type: none"> <li>• If a govt raises tax rates to finance its unprecedented levels of government stimulus, this means a fall in disposable income → fall in material SOL</li> </ul> <p><b>Non-Material SOL (2m)</b></p> <p>The unprecedented levels of government stimulus could mean a rise in transfer payment to households so to alleviate the stress brought on by uncertainty in job security due to COVID-19 → rise in non-material SOL.</p>
(c)	Using AD/AS analysis and Extract 5, explain how 'degradation in land quality' and 'a strengthening currency' are likely to have impacted Thailand's economy in both the short-run and long-run. [8]
	<p><b>Impact of degradation in land quality</b></p> <p>→ ↓SRAS, ↑GPL</p> <ul style="list-style-type: none"> <li>• degradation in land quality would lead to ↑cost of production</li> <li>• ↓SRAS → ↑GPL</li> </ul> <p>→ ↓LRAS ↓Potential growth</p> <ul style="list-style-type: none"> <li>• degradation in land quality lead ↓ Quantity of arable land for crop cultivation of sugar and rice.</li> <li>• ↓ Potential growth</li> </ul>

	<p><b>Impact of Strengthening of currency</b> → ↓(X-M), ↓AD, slowdown in actual growth, ↑cyclical unemployment</p> <ul style="list-style-type: none"> <li>• Strengthening of Thai Baht</li> <li>• Marshall-Lerner condition holds for Thailand (i.e. <math> PED_X + PED_M  &gt; 1</math>).</li> <li>• Strengthening of Thai Baht → ↓(X-M) → ↓AD → more than proportionate ↓real output via the reverse multiplier effect.</li> <li>• slowdown in actual growth, ↑cyclical unemployment since a fall in real output means a fall in demand for factor inputs including labour.</li> </ul>
(d)	<p>With reference to Extracts 5 and 6, discuss how 'monetary and fiscal measures' in stimulus packages can help a country avoid an economic catastrophe stemming from the impact of COVID-19. [11]</p>
	<p><b>Introduction:</b></p> <ul style="list-style-type: none"> <li>• Expansionary monetary and fiscal policy would lead to a rise in AD, causing a rise real output and a corresponding fall in unemployment, helping a country avoid an economic catastrophe stemming from impact of Covid-19.</li> </ul> <p><b>Body:</b></p> <p><b>Expansionary Monetary Policy: ↓interest rates</b></p> <ul style="list-style-type: none"> <li>• From Extract 5, the majority of ASEAN members countries adopting expansionary monetary policy via cutting interest rates would lower cost of borrowing</li> <li>• ↑Consumption expenditure (C)</li> <li>• ↑Investment expenditure (I)</li> <li>• Actual growth and a ↓ cyclical unemployment</li> </ul> <div data-bbox="555 1115 1129 1460" style="text-align: center;"> </div> <p style="text-align: center;">Figure 1</p> <p><b>Limitation</b> Weak expectations about economic condition</p> <ul style="list-style-type: none"> <li>• Consumers and firms weak expectations / pessimism about economic outlook.</li> </ul> <p><b>Expansionary Fiscal Policy: ↑G and ↑C</b></p> <p><b>Limitation</b> Strain on government finances</p> <ul style="list-style-type: none"> <li>• Governments with greater financial ability such as richer ASEAN countries (Extract 6) would be able to spend more and therefore stimulate economic activity even more and real output by a larger extent.</li> </ul> <p><b>Evaluative Conclusion</b></p>

	<ul style="list-style-type: none"> <li>Both expansionary Fiscal Policy and Expansionary Monetary Policy will bring about a rise in real national output and stimulate economic activity, helping a country avoid an economic catastrophe stemming from the impact of Covid-19.</li> </ul>
(e)	<p>Extract 5 mentioned there are government policies designed to support the growth of the digital economy.</p> <p>Discuss the extent to which growth in the digital economy can achieve inclusive growth. [12]</p> <p><b>Thesis: Growth in the digital economy can achieve inclusive growth</b></p> <ul style="list-style-type: none"> <li>rise in investment expenditure (I) and government expenditure (G) leads to an <math>\uparrow</math> aggregate demand (AD) <math>\rightarrow</math> actual growth and fall in cyclical unemployment.</li> <li>more employment opportunities, narrowing of the income inequality gap</li> <li>Growth in the digital economy can achieve inclusive growth.</li> </ul> <p><b>Anti-Thesis: Growth in the digital economy may not achieve inclusive growth</b></p> <ul style="list-style-type: none"> <li>Structural shift towards the digital technology means a change in the nature of existing jobs.</li> <li>If lower skilled workers do not reskill or upskill lead to structural unemployment.</li> <li>Income inequality widens</li> </ul> <p><b>Evaluative Conclusion</b></p> <ul style="list-style-type: none"> <li>To a large extent, growth in the digital economy can achieve inclusive growth.</li> <li>employment opportunities should be created for all segments of the population.</li> <li>The government could adopt supply side policies</li> </ul>

