

A-LEVEL H2 ECONOMICS

ESSAY POINTS AND EVALUATION

Common Arguments and *Common Evaluation*

PRICE THEORY

If only one market given, split up the market e.g. healthcare consists of specialised vs. generalised healthcare.

If 'different types of firm', consider market structure – price rigidity, PED.

Otherwise, analyse 3 markets as follows:

Market 1: Main Market
<ul style="list-style-type: none"> • Demand Factors <ul style="list-style-type: none"> ○ PES / YED / XED ○ Price, Quantity ○ TR / CE • Supply Factors <ul style="list-style-type: none"> ○ PED ○ Price, Quantity ○ TR / CE • Overall Impact <ul style="list-style-type: none"> ○ Price, Quantity ○ TR / CE
Market 2 & 3: Related Good
<p>Substitutes / Complements – use XED</p> <p>Final Products – consider ΔP of FOPs (main market)</p> <p>FOPs – consider changes in derived demand</p>

PED	Expensive brands of jeans have a relatively price elastic demand, as they constitute a significant proportion of consumer incomes. <i>Expensive brands of jeans may appeal only to a select group of wealthy customers, to whom the price may not form a large proportion of their income. At the same time, companies often rely on their brand value to reduce the substitutability of their jeans with other products, making the demand more price elastic</i>
PES	
XED	
YED	<i>Whether a good is inferior or normal largely depends on the income of individuals. In developed economies such as the UK, despite their low rates of economic growth, their per capita income is still significantly higher than developing economies. For majority of the consumers in developed countries, _____ may be regarded as an inferior good, while it could be deemed as a normal good for the lower-income individuals.</i>

SHORT-TERM / LONG-TERM	
<p><i>Some farmers may have buffer stocks of grains to feed their livestock and are thus protected from the price increase of factors of production in the short-term.</i></p> <p><i>The duration of price increase also matters. If adverse weather conditions were to persist, then it can be expected that most firms using vegetables as factor inputs or selling vegetables will inevitably have to raise prices eventually.</i></p>	

Project into the future – with government initiatives to transform Singapore into a ‘smart city’, more smartphones and laptops will likely be utilized, possibly increasing their demand.

CETERIS PARIBUS ASSUMPTION

Only if the ceteris paribus assumption holds true, is the above analysis valid. This is unlikely in real life as other demand and supply factors e.g. government assistance in the form of food coupons and grants to farmers / non-price strategies such as promotions to increase demand for their jeans may affect the outcome on price and quantity.

Demand increases due to higher disposable incomes → In anticipation for future increases in demand due to strong economic growth, there may have been entrances by new firms to capitalise on the growing demand, so SS **may** ↑

WEIGH IMPORTANCE OF DD/SS FACTORS

It is likely that the rise in SS outweighs the rise in DD because...

Tech advances appear to be the most important factor in determining the output of computer based products because...

GST Hike (A-level question prediction)

Explain how the proposed change in tax policy (7% → 9%) might impact consumers and producers of different types of g/s and

Discuss whether the SG government should exempt basic necessities from the rise in GST to help the lower income households.

Note: impact on consumers and producers measured in terms of either TE/TR or CS/PS. In this case where there is only a shift in supply, CS/PS is a better analysis.

Intro: An indirect tax will lead to a rise in the cost of production. Define PED/PES.

Necessities: PED < 1	Luxuries: PED > 1
Likely PED < PES – consumers bear a greater burden of the tax Impact on <u>consumer</u> : ↓ consumer surplus, ↑ TE Impact on <u>producer</u> : ↓ producer surplus	Likely PED > PES – producers bear a greater burden of the tax Impact on <u>consumer</u> : ↓ consumer surplus, ↓ TE Impact on <u>producer</u> : ↓ producer surplus
Exempt	Don't Exempt
<p>GST hike affects lower-income households significantly more than higher-income households</p> <ul style="list-style-type: none"> • GST is regressive since higher income earners pay a lower proportion of their income on g/s (more likely to save since needs fulfilled). • Lower income households spend a larger proportion of their income on necessities. They 	<p>Exemption is a blanket measure that helps the rich more than the poor</p> <ul style="list-style-type: none"> • Both higher income households and lower income households spend on necessities. • Higher income households spend more on necessities than lower income households. e.g. mansions use more water and electricity than a HDB.

will hence bear a greater burden of the \uparrow GST compared to higher income households

- Hence GST is not equitable, so exemption can help achieve equity by making necessities affordable.

Furthermore, the exemption of the GST may ensure the lower income households have sufficient leftover income to spend on areas like education, allowing them to potentially command higher wages in the future, hence helping to break the poverty cycle.

- An exemption of basic necessities will give higher income households a greater tax relief vis-à-vis lower income households

Loss in government tax revenue

- Fall in government tax revenue which is particularly damaging because:
 - Aging population + declining birth rate \rightarrow shrinking tax base \rightarrow budget position worsens
 - Less reserves available to mitigate global economic downturns
 - Net Investment Returns Contributions (NIRC) – need large reserves to gain large investment returns to strengthen our budget position in the future. (Tax Revenue + NIRC – Government Expenditure = Budget Balance)

Other solutions are more effective

- NO GST exemption. However, the lower income households are compensated for the GST increase.
- Calculate the impacts of an increase in GST on lower income households. *This is made possible by systematic data collection in Singapore with the help of a small and educated population.*
- Provide transfer payments to lower income households equivalent to the total impact of the GST increase on lower income households.
- This has been done via GST vouchers. In Singapore, GST vouchers are progressive in nature because the payout decreases as household income increases.

Limitations

GST impacts consumers on a day-in, day-out basis. GST voucher cash is given out on an annual basis (every August).

When faced with a large increase in purchasing power, consumers are likely to splurge on large purchases. Hence, consumers may not be rational in using the GST vouchers to offset the daily impact of the GST.

Synthesis

This is a more targeted approach as the revenue gained from the rise in GST may be directed towards the transfer payments, rather than a blanket measure that exempts all income groups from the GST.

While GST vouchers can help to alleviate the financial burden in the short-term, the root cause of the widening income inequality has to be addressed as well in the longer term. The digital divide between those with relevant technological skills in relevant industries and those without such skills is causing a widening wage gap in Singapore today, as it makes the transformation towards a smart city and pushes for automation to move up the value chain. The wider economic contexts need to be considered as structural unemployment remains a significant concern for Singapore. In order to address the income inequality, other macroeconomic policies need to be considered.

MARKET FAILURE

RDM → EFFICIENT	RDM → INEFFICIENT
<p>RDM by consumers and producers lead to efficient resource allocation provided</p> <ul style="list-style-type: none"> • The market is perfectly competitive • No externalities exist • The good is not a public good • Perfect info and factor mobility <p>These conditions ensure that MPB/MOC are the same as MSB/MSC.</p>	<p>Public Goods (Complete MF)</p> <p>As such, it is rational for government to intervene by providing such goods so that the optimal amount is provided</p>
	<p>Externalities (Partial MF)</p> <p>As such, it is rational for government to intervene through e.g. tax, subsidies...</p>
	<p>Market Dominance (Partial MF)</p> <p>As such, it is rational for government to intervene through e.g. MC pricing, AC pricing...</p>
	<p>Government Failure</p> <p>Public goods – <i>government may not know accurate amount to provide.</i></p> <p>Externalities – <i>government may not be able to estimate accurately the amount of tax/grants/subsidies to impose/give to bring about optimal consumption level.</i></p> <p>Market dominance – <i>MC pricing imposed on natural monopolies usually leads firms to suffer subnormal profits. If they shut down, this could lead to even greater welfare loss</i></p> <p><i>Outcome after intervention still not socially optimal.</i></p>

EVALUATION

WEIGH GOVERNMENT POLICIES

In the market for healthcare, govt implements measures such as moral suasion to encourage people to go for health screening, coupled with grants for consumers (e.g. Medifund) should they require hospital care. Moreover, the government directly provides certain healthcare via policlinics/public hospitals etc.

Amongst these, since prevention is usually better than treatment, the govt can save money in the long-run by making health screening for certain conditions free as these screenings could lead to earlier detection of diseases and reduce the costs of expensive treatment subsequently (less draining on taxpayers). Furthermore, with more people now educated, they are better able to understand what preventive help they should do on their own accord. A healthier & more productive workforce pays for itself through economic growth and higher incomes, feeding into greater tax revenue for the government.

GOVERNMENT FAILURE

Even though information is made available for products such as financial services/insurance/electronic devices, their nature of being inherently complex implies that the govt herself will also be subject to failure. Thus, government policies e.g. educational campaigns may not fully reduce MF too and consumers themselves will have to take extra care in purchasing such products

SHORT-TERM/LONG-TERM

As markets evolve, some producers may accumulate more market power and possibly withhold more product info from consumers. If so, this may worsen information failure. On the other hand, the widespread use of the internet & social media may help consumers gather info more easily e.g. product reviews.

As countries become more globalised, dominant firms may inevitably face greater competition not just domestically but also from the rest of the world. This itself may incentivise firms to continually engage in product and process innovation in order to survive. If so, such competitive pressures alone will be quite effective in limiting the adverse effects of market dominance, implying less need for govts to intervene.

MISC

Most Policies

- *Difficult to put intangible benefits/costs such as environmental pollution, health etc. into monetary terms, hence government may over/underestimated the amount of tax/subsidies required → This can be circumvented in SG where there is systematic data collection by the government especially when a small, educated population and good infrastructure makes data collection easy for the government, allowing them to **estimate** the economic costs/benefits.*
- *Government may incur substantial administrative costs to enforce the policy.*

Some Policies

- *'Pays for itself' in terms of productivity growth, encouraging sustained economic growth and hence increasing national income, leading to a larger and wealthier tax base, hence the tax revenue collected in the future justifies the current government expenditure*
- *The people who are most likely affected are those who command low wages, especially with the digital economy increasing the income disparity between the haves and the have-nots. It seems that policies such as subsidies to lower the cost/prices of such courses are also needed to achieve equity.*
- *The demand/supply may be relatively price inelastic, so any tax/subsidy would be relatively ineffective in increasing/decreasing quantity demanded/supplied. (furthermore, **taxes will increase the price** significantly, making the good less affordable to lower-income groups and causing inequity)*

Government Supplements Production

- *Government supplementing production also injects competition into the market as the government does not have a profit motive and may hence charge much lower prices for e.g. healthcare to achieve equity by producing beyond the profit-maximising point. Such competition can improve productive efficiency and cost savings can be passed on to the consumers.*

Tradable Permits

- *There are too few firms in SG to support tradable permits, making it less appropriate. This is not an issue in big economies like the US and the EU where a large number of firms can form a sufficiently large secondary market for the permits.*

- Usually difficult for government to determine the appropriate cap on total pollution. Too little permits issued may lead to over-priced permits, undermining the profitability of the industry.
- Firms with high clean-up costs will rather pay for more permits and continue to pollute. Hence, while some geographical areas may enjoy lower pollution, the pollution may only persist in other areas.
- Volatility in permit price may discourage investment in green technology, as firms cannot know for certain whether the future returns from sale of permits justifies the current investment in green technology.
- Does not provide the incentive for firms to reduce their pollution below the permitted level unless revenue from selling of permits is sufficiently high, which may not be the case.

Carbon Tax

- Especially for necessities, the tax burden will fall disproportionately on the consumer as the PED is low. The higher energy costs will lead to inequity for lower-income groups who may not be able to afford the higher prices. → To circumvent this, tax rebates should be given to lower-income groups.
- Carbon taxes increase COP for polluting firms in export-oriented industries as fossil fuels remain a key energy source. Furthermore, if maritime and aviation industries have to bear this added cost, the price of ship transportation and airfreight will increase, increasing the export shipping costs. This erodes the export competitiveness of the economy and may worsen the BOT position.
- Different tax rates should be implemented on different greenhouse gases. For example, methane is much more damaging than carbon dioxide. Hence, the tax rate should differ between industries to account for the different extent of damage from different industries.
- Despite its limitations, a carbon tax is a signal to all parties that the government is serious about fighting climate change, hence incentivising firms to invest in green energy to remain profitable in the long-term.
- When firms suffer a fall in profits, they are incentivised to restructure to switch to the use of green energy. The government revenue collected from the carbon tax can go towards subsidising clean energy R&D. This leads to a long-term transition into greener energy which justifies the short-term costs to export sectors.

Educational Campaigns / Moral Suasion

- Depends on the literacy of the population and the quality of the campaign
- Desensitisation to info e.g. cigarette packaging with gory images

Lemon Laws

- Consumers may have used the good in an abusive way and demanded for refund/repair → unfairly advantageous to the consumer

GOVERNMENT POLICIES

Healthcare	In the market for healthcare, govt implements measures such as moral suasion to encourage people to go for health screening, coupled with grants for consumers (e.g. Medifund) should they require hospital care. Moreover, the government directly provides certain healthcare via polyclinics/public hospitals etc.
University Education	In 2013, Singapore spent <u>3% equivalent</u> of its GDP on Education. A portion of these spendings can be used as subsidies to education providers i.e the Government generally <u>subsidises 75%</u> or more of the cost of education for general courses such as Engineering, Humanities and Social Sciences provided by the autonomous universities, or about \$76,000 to \$105,600 for a four-year course per student. Students are expected to

	<p>bear their fair share of the cost of education as they are the prime beneficiaries who would benefit from higher starting pay and successful careers after graduation.</p> <p>National Day Rally 2019:</p> <ul style="list-style-type: none"> • Reduced university, polytechnic fees for lower-income students • Bursaries for university courses to increase from up to 50% to up to 70% of fees. • Bursaries for polytechnic diploma programmes to increase from up to 80% to up to 95% of fees • Increased bursaries for students at the ITE, Nanyang Academy of Fine Arts and LASALLE College of the Arts <p><i>In order to decide whether cutting subsidies is justifiable at all is thus dependent on the priorities of the government at the time. In this case, the priority of the government is likely to be prevent a recession and standards of living from deteriorating. A continued funding of subsidies of university education may limit the governments efforts to effectively reduce the government budget and prevent a recession in the short run. However, in the long run, once the fiscal deficit is reduced, it would be wise to reinstate such subsidies so that allocative efficiency and equity can be achieved.</i></p>
Land Transport	<p>Road Pricing – ERP: <i>in-vehicle units (IUs) are fitted in vehicles and require a cash-card to be inserted.</i></p> <ul style="list-style-type: none"> • Road users are charged a fee for using congested roads during peak hours. • A gantry controls the deduction. • The pricing serves as a tax for the use of congested roads → Higher MPC → reducing consumption towards the socially optimal level. • ERP Revisions and improvements (upgrades): satellite information on the severity of congestion – provides information to the government whether to increase, decrease or remain existing charges. • Limitations: the tax still forms a small proportion of the total cost of car ownership and usage in Singapore • Limitations: continual congestion cannot be sustainably solved by addition of more gantries <p>Vehicle Quota System</p> <ul style="list-style-type: none"> • <i>A 0.25% annual vehicle population growth rate is currently allowed under the vehicle quota system.</i> • <i>Car consumers will be required to bid for Certificate of Entitlements (COEs), and the supply of the COE is dependent on the vehicle population growth rate and the number of cars de-registered in each period.</i> • If vehicle population is left unchecked, there will likely be an unrestrained growth in vehicle population which will result in more driving causing increased congestion. • The VQS ensures that the vehicle population in Singapore does not spiral out of control, and therefore helps to ensure that the problem of congestion is managed. • Limitations: the VQS manages the car ownership in the country and has no direct relation to the car usage. Consumption behaviours are unaffected by the VQS. With the high costs of car ownership – motorists commonly exhibit the “sunk cost

	<p>fallacy” whereby maximisation of car usage occurs (returns on investment). The VQS hence must be supplemented with the ERP.</p> <p>Improving public transport as a viable substitute to private transport</p> <ul style="list-style-type: none"> • To make significant improvements in congestion, motorists should be encouraged to give up driving altogether • Since public transport is a substitute to private transport, by improving public transport to make it a more viable substitute to private transport, it will reduce the usage of private vehicles and therefore reducing congestion. • To make public transport a more viable substitute, the government needs to improve both the accessibility (convenience) and reliability of public transport. • <i>An expansion of the existing rail network is work-in-progress and there are plans to ensure that all homes are within walking distance of an MRT station soon. This should make public transport more convenient and convince people to make the change.</i> • Public transport reliability in Singapore should also be improved through a possible government expenditure on maintenance works that seek to reduce the incidence of breakdowns. The Singapore government has introduced the New Rail Financing Framework which entails the purchase of train assets from train providers, effectively taking over the responsibility of maintenance. • A reliable and convenient public transport can then convince more motorists to consume less of private transportation, improving the situation of congestion in Singapore.
<p>Public Transport</p>	<p>Under the Government contracting model, LTA will determine the bus services to be provided and the service standards, and bus operators will bid for the right to operate these services. They will be paid fees to operate the services, while fare revenue will be retained by the Government. As part of the new industry model, the Government will also own all bus infrastructure such as depots, as well as operating assets such as buses and the fleet management system.</p> <ul style="list-style-type: none"> • Over time, bus contracting will promote greater competition and efficiency among operators as they now have to compete for the right to run the services. This will, in turn, lead to provision of better bus services in a cost-competitive manner, thereby benefitting commuters. • At the same time, bus contracting will strengthen the Government's ability to respond faster to changes in travel demand and service level expectations. Under the current privatized industry model, it is more difficult to increase capacity and improve service standards as quickly, as the operators are expected to cover their capital and operating expenses and earn their returns from fare revenue, and so may not run services if these are assessed not to be profitable. With the changes in the social and operating environment, there is a need for us to explore another industry model which can better sustain the high quality of bus services we desire.
<p>Smoking</p>	<p>An outright ban on smoking for minors – in Singapore and many other countries, the minimum legal age to smoke would be 18. Those under 18 are likely to suffer from the problem of imperfect information</p>

Such a policy may not be easy to enforce since minors can bypass this law, by getting friends who are older to purchase on their behalf.

In Singapore, the Smoking (Prohibition in Public Places) Act bans smoking in public places.

Such legislation can help to directly reduce negative externalities but it is challenging to enforce, considering the high monitoring costs to ensure that smokers comply with this rule all the time.

In Singapore, a tobacco tax of 42.7 cents per gram is imposed on cigarettes. This increases the marginal private costs and shifts the MPC to the left, reducing the consumption of smoking

While taxes are easy to implement for goods like cigarettes, it may not be very effective in reducing consumption since demand for habit-forming goods is price inelastic – taxes may have to be frequently revised to account for income changes.

FIRMS' STRATEGIES

Firms' strategies → ↑Profits = TR – TC

<p>Price Discrimination</p>	<p>Charging different consumers different prices for the same product not due to cost differences</p> <ul style="list-style-type: none"> • Producer charges higher price in the market with a price inelastic demand • Producer charges lower price in the market with a price elastic demand <p>With price discrimination, the producer can now sell in both markets and enjoy higher TR.</p> <p style="text-align: center;">3rd degree: separate the market based on PED</p> <p><i>Might not know exactly how the demand curves for the respective markets are like. It is also hard for the hotels to decide when (time) the demand for the consumer has turned price inelastic so it will be difficult to determine when is the time period to raise prices.</i></p> <p><i>With the emergence of online shopping/booking/etc., consumers can easily compare prices online in a highly transparent manner, making the demand relatively elastic even though the purchase/booking is last-minute. Furthermore, if the competition is intense, any lowering of prices can be matched by other firms, making price discrimination by a first mover difficult.</i></p>
<p>Product Differentiation</p>	<p>Product promotion: Efforts to create perceived differences</p> <p>Product development: Efforts to create real differences to the inherent characteristics of a product/service compared to rival firms.</p> <p><u>Product</u> innovation: When producers ↑P, Qd↓ less than proportionately → ↑TR</p> <p><u>Process</u> innovation: ↓TC</p> <p><i>Product differentiation requires significant planning and financial resources → larger firms w/ past profits will be more successful than smaller firms. Since product differentiation eats into their profits, firms have to access whether the benefits of product differentiation justify the costs of doing so.</i></p>
<p>Reaping Economies of Scale</p>	<p>Note: collusion is illegal in most countries.</p> <p>Firms can consider mergers so as to reap significant EOS, which are cost savings reaped by the firm as they increase production. For example, some hotels have merged and come under a broader and more reputable name. They are able to enjoy</p>

greater discounts from their suppliers when they make bulk purchases of essential hotel equipment like bath towels, soap etc. + more effective training for staff. → ↓AC

Might be difficult for firms with different goals to come together to align their goals when they merge.

Larger firms also become productive inefficient as they grow complacent and lax in cost controls + more ground staff become alienated as the organisation gets bigger.

Firms can adopt a variety of strategies to improve profitability in order to be successful and these include ways to ↑ revenue and ↓ costs. Their survivability depends on their ability to adopt these strategies. Larger firms with significant past profits and know-how can plough these past profits into R&D and product differentiation, while smaller firms will find a harder time doing so and may eventually be forced to exit the industry if they end up making subnormal profits.

For larger firms, they may not even engage in the above strategies because they do not see the entry of new firms as a significant threat. In an oligopolistic market structure, these larger firms will exhibit a high level of rival consciousness and this results in price rigidity as they tend not to adjust the prices unless there is a significant change in MC for fear of losing market share.

MONOPOLY / CARTEL PERFORMANCE

Mergers Evaluation

→ may lead to unemployment as firms restructure

→ may improve economic growth if exports are more price competitive

DISADVANTAGES	ADVANTAGES
<ul style="list-style-type: none"> • Firms in a cartel act as a monopoly → restrict output and charge higher price to ↑profits, at the expense of consumer surplus • o/p lower and P higher than that in more competitive markets under similar cost conditions. With higher prices, consumers can buy less g/s, decreasing material wellbeing. • <i>Low income group spends a larger proportion of their income on necessities like food, fuel and utility, ↑P hurts them more.</i> • <i>If they cannot afford the essential commodities, this may well leave them with little leftover income to spend on services like education, further feeding into the poverty cycle while the rich get richer by commanding higher wages with more education. This increases income inequality.</i> 	<ul style="list-style-type: none"> • Firms in a cartel act as a monopoly → coordinate their production → supply with greater certainty, compared to the fluctuations of supply in a competitive market • Cartels are operating on a larger scale of production → reap economies of scale → pass on cost savings to consumer • Substantial profits → substantial pool of funds to undertake innovation / R&D. <ul style="list-style-type: none"> ○ ↑Efficiency as there is no duplication of innovation efforts by different firms. ○ Pooling of resources increase the ability and willingness of firms to do R&D, since firms that are too small might be unable to do it with their own resources. ○ ↓AC → ↓P ○ ↑Quality of g/s <p><i>However, whether these benefits materialise depends largely on the firm's decision, and is not determinate.</i></p> <p><i>Due to lack of competition, the cost savings from EOS may not be passed on to the consumer.</i></p> <p><i>Also, the lack of competition means that firms have less incentive to improve their products to stay in business.</i></p>

MACRO ISSUES: CAUSES + EFFECTS

CSQ: Stagflation, or recession-inflation, is a situation in which the **inflation rate is high**, the **economic growth rate slows**, and **unemployment remains steadily high**. This is caused by \uparrow SRAS.

Demand-pull inflation happens when there is **excessive growth**. There is **low unemployment** and possibly **wage-push inflation** since there are little spare FOPs but high demand.

COMMON EVALUATION POINTS

- *It is difficult to state conclusively how Singapore's NY and its components will be affected by an appreciating SGD because at any point in time, there are many other factors that are changing simultaneously. For e.g. if changes in global conditions such as the US-China trade war were to affect business outlook, this would inevitably cause changes in C and I too. Alternatively, if Singapore were to enjoy a rise in productivity, this may lead to a fall in export prices that may offset the loss of competitiveness from an appreciating SGD.*
- *On the other hand, a strong SGD may also deter 'I'. Reason being, for foreign investors who intend to enter Singapore to undertake investment projects, it is now more costly to buy any Singapore-produced raw materials/factor inputs required for production. E.g. a UK MNC such as Dyson who wishes to enter Singapore to build an electric car plant would now have to use more pounds to exchange for the same amount of SGD to buy the raw materials required for production in Singapore.*
- *If we assume a fall in AD coupled with a rise in SRAS, the ultimate effect on NY will depend on the extent of shift in AD and SRAS. Since both AD and AS has changed, the ultimate effect on NY depends on which shift dominates. (e.g. $AD \downarrow$ but $SRAS \uparrow$)*
- *Although an appreciating SGD reduces export competitiveness, this will be partially counter-balanced by a fall in cost of producing exports. Taken together, while a rising Singdollar leads to a fall in (X-M), the fall is partially mitigated by a fall in cost of producing exports, which means the fall in (X-M) may not be too substantial.*

POLICIES

LIMITATIONS

- Small multiplier

Fiscal Policy / Market-Oriented SSP

- Little room to lower CIT and PIT further as tax rates are already very competitive
- Given our aging population and hence shrinking tax base, lowering tax rates puts SG at risk of a budget deficit, especially as SG needs to spend more on areas like healthcare going into the future
- Crowding-out effect. \rightarrow *however, if the economy is already performing poorly, the poor economic outlook may have already deterred investment and consumption. Hence, the government is unlikely in direct competition with the private sector for loanable funds. There will then be a limited crowding-out effects*
- *The area in which G is spent on matters. If the G is spent on sustainable investment projects that will pay for themselves e.g. investing in export sectors will \uparrow (X-M) and hence AD and NY by a multiple, resulting in a wealthier tax base to collect more tax revenue, then the government need not be overly concerned with incurring temporary debts.*
- *Prudent FP allows SG to keep tax rates low \rightarrow improves competitiveness (\uparrow FDI, \uparrow foreign talent, \uparrow productivity). Also allows the government to gain additional returns through the Net Investment Returns Contribution (NIRC) to meet the increasing needs for social spending w/o \uparrow taxes.*
- FP in SG focuses on
 - Long-term EG, improving export competitiveness and attractiveness to investors e.g. schools/business infrastructure.

- Promoting inclusive growth e.g. social spending on education/healthcare
- Promoting sustainable growth e.g. preparing for climate change

Interventionist SSP

- Results of R&D not guaranteed
- Investment may not \uparrow productivity as much
 - as software products are typically generalised, rather than specialised for a firm's specific needs
 - as workers need to be trained to use the new technology
- Depends on the willingness of workers to be trained, quality of training and receptiveness of workers during training
- Frequency and intensity of training, especially in the modern world where the rate of skills obsolescence is rapid \rightarrow leads to digital divide and income inequality between the haves and the have-nots
- Strain on govt budget
- Conflicts with low structural unemployment as automation displaces jobs
- For large economies like the US, they may use protectionist measures to buy some time in declining industries since SSPs have quite a significant impact lag.
- *FWL/DRC $\rightarrow \uparrow$ inflation in the short run due to higher labour costs, \downarrow FDI as it is more expensive to do business in SG, \downarrow (X-M) as inflation in export-oriented markets would lead to erosion of price competitiveness*

Trade Policy

- Already signed a large number of treaties with trading partners, little room left for her to enter more export markets to generate higher export revenue or enjoy imports of cheaper inputs.
- Should SG sign FTAs w/ countries that are far-flung, e.g. Russia / USA, this would imply higher transport and logistics costs in exports, which may offset the benefits offered by the FTAs

Exchange Rate Policy

- Policy conflict between price stability and economic growth (both expansionary and contractionary). *Hence, some economies like SG prefer to **use SSPs to boost x/p competitiveness instead of relying on depreciation***
- Gain in export competitiveness offset by more expensive rate materials as price of imports in terms of SGD increases.
- Stance may be weakened in the event that other economies pursue a similar exchange rate policy stance to maintain competitiveness. *Especially as global currencies are becoming more volatile, depreciation by other economies may make the SGD appear relatively stronger even with a neutral stance. Even though MAS has never adopted a depreciating stance in the past, perhaps future economic uncertainties and volatility in regional currencies may warrant a depreciating stance.*
- *When the SGD appreciates, it erodes our export competitiveness. By carrying out a **modest and gradual** appreciation, it allows for supply-side policies to help mitigate the fall in x/p competitiveness over time.*
- Why 0% appreciation? \rightarrow Weaker SGD would make imported inputs more expensive $\rightarrow \uparrow$ COP \rightarrow negating any improvements in export competitiveness. Hence, no depreciation.

COMMON EVALUATION POINTS

- *The high public sector debt may stifle consumer and investor confidence, since they may expect future tax increases to pay off the debt.*
- *Having a relatively small domestic population means that domestic demand takes up a relatively small proportion of GDP. Given that FP can only stimulate domestic demand, it is essential to adopt trade policies and exchange rate policies to stimulate external demand so as to achieve the intended effect on NY.*

- *Although our multiplier is small, it is not insignificant. The Singapore government targeted the transfers such as Workfare Income Supplement (WIS) and GST Credit for the lower income group as they tend to have a relatively higher marginal propensity to consume (mpc) and hence larger k. This means that demand-management policies are not entirely ineffective in Singapore.*
- *The government needs to consider the costs and benefits of the individual policies, as well as unintended consequences and constraints. Unintended consequences may be that one policy could either limit the effectiveness of another policy or complement the other policies in the policy mix e.g. fiscal policy to build more training facilities and SSPs to encourage education and training.*
- *Given the complexity of problems faced today, the choice of a policy mix should not just cover the different range of problems, but within each policy, there should be a few measures in place to target the different aspects of the economy e.g. GST vouchers for lower-income individuals + better infrastructure which attract high-earning foreign talent as part of FP.*
- *Digitalisation as a response to rapid technological changes in the global environment can provide SMEs the opportunity to penetrate global markets and ride on the SG brand of trust and efficiency. As geography becomes less central to Singapore's trade, transforming into a digital economy will integrate SG into the global supply chain of future.*
- *On the back of rising protectionism, SG must be willing to diversify her current composition of trading partners, sourcing for alternative markets to protect against protectionism in one market leading to sudden rise in costs.*
- *As our neighbours become more price competitive (offering cheaper labour and ↓tax rates), SG needs to maintain non-price competitiveness by complementing any exchange rate policy with SSPs e.g. investment in human capital to improve technological innovation*
- *As emerging economies e.g. China and Vietnam continue to move up the value chain, there is a need for SG to refocus her shift from a value-adding economy to a value-creating one, positioning the economy as a home for innovative entrepreneurial companies to encourage innovation, as we continue to maximise our value as a trusted player in Asia.*

MACRO-PRUDENTIAL POLICIES

Policy Tool	Authority	Objective
Loan-to-Value (LTV) limit and minimum cash down-payment for first housing loan	MAS	Discourage borrowers from taking on excessive leverage. Provide buffer for lenders against losses. (↓DD)
Lower LTV limit for second and subsequent housing loans	MAS	Temper investment demand for residential properties. (↓DD) The LTV ratio indicates how much cash a buyer has to put down when buying a house. Lower ratio means buyers are only able to borrow less from the bank and thus need to use more of their own cash to finance home purchases. This will mean people with insufficient cash savings will have to put off their purchases of a second property if they still have a mortgage to finance and this will reduce the demand for properties, especially from the speculative consumers. Limitation: <ul style="list-style-type: none"> • Prices might fall too much and existing asset owners will suffer from the wealth effect. This could possibly have a contractionary effect on the economy when homeowners put off or delay their consumption expenditures as well. • This method also doesn't deter potential buyers who are cash rich and need not take up a loan.
Loan tenure limit <i>The tenure of a loan refers to the period for the entire life of the housing loan.</i>	MAS	Discourage borrowers from taking on excessive leverage. (↓DD)
Seller's Stamp Duty (SSD) <i>Tax levied on seller if property is sold within 3 years of buying it.</i>	MOF	Discourage short-term speculative activity which could distort the underlying prices of industrial properties and raise costs for businesses. (↓ speculative DD)
Additional Buyer's Stamp Duty (ABSD) <i>N.A. for SG citizens buying 1st residential property</i>	MOF	Moderate demand for residential properties. (↓DD) The implementation of the stamp duty serves as a direct tax on buyers of properties and this will quell speculative demand for properties in Singapore. It targets both local and foreign property investors intending to purchase a 2 nd and 3 rd property. The government have clamped down on the purchases by the foreigners after identifying that a significant portion of the speculative demand for property came from foreign buyers Limitations:

		<ul style="list-style-type: none"> • Rich are still able to pay for stamp duties comfortably and afford another property • Worsen the income inequity problem between rich & poor since the former can still continue to invest in more properties while the poor will have significantly less chance to invest in property. • Owners of existing properties will find their wealth rising at a slower rate as the pool of prospective buyers decrease. This may have a dampening effect on consumption and investment expenditures in Singapore.
<p>Land Supply</p> <p><i>To facilitate implementation of the Concept Plan and Master Plan, State land is released for development through the Government Land Sales (GLS) Programme.</i></p>	<p>MND</p>	<p>Planned for underlying medium-term demand. (↑SS)</p> <p><i>Underlying demand estimates what the demand for newly-built housing might be given the growth in population, trends in household size, demand for second (or holiday) homes, and economic conditions (e.g. employment, interest rates, etc)</i></p> <p>The government has expanded public housing production and increased the supply of land for residential development under the Government Land Sales (GLS) Programme. With more land designated for residential properties, the problem of property price inflation can be dealt in a more sustained manner as prices will fall as a result of increase in supply.</p> <p>Limitations:</p> <ul style="list-style-type: none"> • Opportunity cost of land released for residential purposes. Land could have been used for either industrial or commercial purposes in land-scarce SG.

GLOBALISATION / INTERNATIONAL TRADE

Issue with US-China trade war: $\downarrow Y$ of major economies like US/China $\rightarrow \downarrow (X-M)$ of other economies. Furthermore, economies down the supply chain also suffer a fall in exports due to the fall in derived demand.

PATTERN OF TRADE DETERMINANTS

Pattern of trade of an economy refers to the **composition**, **direction** and **volume** of trade.

Different CA due to different factor endowments
<p>Theory of CA: export goods that have a lower opportunity cost and import goods that they have a higher opportunity cost in producing</p> <p>SG: specialises in producing capital and knowledge intensive goods and services such as integrated circuits, financial services and pharmaceutical drugs, while it imports labour-intensive goods due to its shortage of labour</p>
Government Policies: SSP and Trade Policy
<p>SSP / trade pol $\rightarrow \uparrow X$ competitiveness + change in type of goods that SG exports (e.g. PCP will help move SG exports up the value chain)</p>
Demand Factors
<p>Rising affluence of trading partners, changing tastes and preferences</p> <p>e.g. China and Vietnam develop \rightarrow import capital goods from SG</p> <p>e.g. Singaporean consumers may prefer to consume different model of car from Japan, Germany, USA, or Korea and these tastes and preferences may change over time.</p>

PROTECTIONISM

FOR	AGAINST
<p>Protection of Infant Industries</p> <p>Imposing protectionist measures will shelter infant industries from international competition and provide these infant industries with time to develop so that they can acquire a comparative advantage.</p>	<p>Perpetuates Inefficiencies</p> <p>Protectionist measures may reduce the pressure on protected industries to reduce their average costs, making them overly reliant on protection.</p> <p>Infant industries: Become complacent. Producers benefit from protectionist measures at the expense of higher prices and lower output for consumers.</p> <p>Declining industries: These industries may be suffering from wages that have risen faster than the growth of labour productivity or are adopting technology that have lagged behind foreign competitors, thereby making their product less price competitive. <i>Workers may not benefit in the long run because the longer they are retained in such declining industries, the harder it may be for them to pick up skills that are needed to get</i></p>

	<p><i>rehired once these industries are phased out. This may lead to a situation of high structural unemployment.</i></p> <p><i>In practice, once given, governments usually face tremendous difficulty in removing such protection. Hence, the inefficiencies are further perpetuated into the long term.</i></p>
<p>Prevent Dumping</p> <p>Dumping occurs when goods are sold in overseas markets at a price below marginal cost. The aim is to drive domestic competitors out of the market to establish monopoly power. Even though dumping has short-term benefits for the countries receiving cheap goods, there may be a reduction in domestic output and employment in the longer term, especially if predatory pricing is practiced since domestic producers are unable to compete in terms of pricing. With protectionism, the domestic production can contribute to exports of the economy, thus increasing AD and contributing to economic growth.</p> <p><i>However, dumping is very difficult to be proven as foreign countries e.g. China may truly have a comparative advantage in producing certain goods, hence leading to the low cost.</i></p>	<p>Retaliation</p> <p>The problem with the arguments for protectionism is that other countries are likely to retaliate by doing the same, especially in times of recession. Thus, any gain in employment for protected industries may be offset by a loss in employment in other unprotected industries.</p> <p><i>Even if other countries did not retaliate, employment may still be affected ultimately. This is because, as citizens buy less foreign goods due to protectionist measures, foreigners will in turn have less income to buy imports. This reduces exports and may hurt export-related industries in the economy.</i></p>
<p>Prevention of Massive Unemployment in Sunset Industries or During Times of Recession</p> <p>When there is a general fall in world trade caused by global recession, a country may restrict imports via protectionist measures in order to ensure that income is spent on domestically produced goods. Such spending will provide income and hence employment for domestic industries, thus limiting the extent of cyclical unemployment.</p>	<p>Does Not Address Root Problem</p> <p>Ultimately, an assessment of which policy is better would depend on the underlying cause of the lack of competitiveness for the economy.</p> <p>An overvalued exchange rate may be corrected by weakening the currency.</p> <p><i>However, losing comparative advantage can only be corrected by implementing supply-side policies to increase productivity of factors of production or quality of the good.</i></p>
	<p>Administrative Costs</p> <p>Beyond the costs to consumers, there are many administrative costs. With thousands of different quota and tariff classifications and with tariffs ranging from 0 to 100%, huge costs have to be incurred in enforcing, policing and monitoring so that importers do not evade these regulations. The above implies that substantial amounts of resources are wasted in the course of</p>

	implementing protectionist measures and that these resources could be put to better use instead.
<p><i>Perhaps the most compelling argument against protectionism is that economies will have to bear short-term costs for long-term benefits in terms of greater world output by the theory of comparative advantage. Yet, by the same theory, there can be allowances made for the argument of protecting infant industries, provided these measures are removed after some time. However, overall, it is highly unlikely that the reasons for protectionism can truly ever be justified.</i></p>	

GLOBALISATION AND SINGAPORE

FOR	AGAINST
<p>Greater Access to Overseas Markets</p> <p>With a small domestic market, the amount of goods that can be produced and sold in SG is limited, making it difficult to rely solely on domestic consumption to drive SG's growth.</p> <p>With access to world markets, firms can export to more countries. As they increase production, economies of scale can be reaped, reducing average costs and translating to more competitive exports.</p> <p>This boosts export volumes directly, translating to $\uparrow AD$ and $\uparrow NY$ by a multiple, generating employment in export-related industries.</p> <p>As exports constitute $> 100\%$ of SG's GDP, the gain in export volumes is substantial.</p> <p><i>In fact, SG's good geographic location and various FTAs w/ many countries make it easier to export goods out of SG to other parts of the world.</i></p> <p>OR</p> <p>Obtain Cheaper Supplies of Raw Materials and Final Goods</p> <p>Being resource poor and having to import nearly 90% of our needs, access to a diversified base of imports keep prices of raw materials and final goods low \rightarrow reduces likelihood of cost-push and imported inflation. For e.g. Singapore has diversified her food sources to ensure that supplies of necessities are kept steady despite weather disruptions.</p>	<p>Greater Exposure to Fluctuations in the World Economy</p> <p>e.g. the 2009 global financial crisis led to a big drop in demand for SG's exports, making her the 1st country in East Asia to slip into a recession.</p> <p>With exports $> 100\%$ of GDP, this led to a fall in SG's GDP and a rise in cyclical unemployment, first in export related sectors followed by other sectors.</p> <p>Currently, the US-China trade war has affected SG's manufacturers because factories which make products for China companies – products that would eventually be assembled and shipped to the US – are not receiving orders. Coupled with uncertainty in the global investment climate, this has affected all sectors and increased retrenchments.</p> <p><i>If SG's economy were less open, such adverse effects may be of smaller severity.</i></p> <p><i>Nature of our high-value added exports today are more price elastic and income elastic \rightarrow more vulnerable to external shocks.</i></p> <p>Hasten Changes in CA</p> <p>Since it is now easier for firms to relocate their operations to any part of the world, MNCs have become more footloose.</p> <p>e.g. in recent years, rising production costs in SG had led to some firms relocating to Malaysia and Indonesia</p> <p>This leads to a hollowing out of the economy and causes unemployment in the short term, especially among the lower-skilled.</p>

	<p>[Hollowing out] is the deterioration of a country's manufacturing sector when producers opt for low-cost facilities overseas.]</p> <p>Although SG is diversifying the composition of its manufacturing sector and moving towards higher value-added production e.g. biologics and 3D manufacturing, structural unemployment remains a concern because retrenched workers cannot acquire relevant skills quickly to close the skills gap.</p>
<p>Greater Flows of Investment</p> <p>When MNCs set up plants in SG, this increases I and thus AD. In the short-term, NY and employment increase.</p> <p>Over time, FDI facilitates transfer of technology and expertise, improving our productive capacity and shifts out the LRAS, resulting in potential growth.</p> <p>e.g. Dyson will be building an electric car plant in SG. Such moves will contribute to higher-end jobs being created, translating to higher wages for Singaporeans.</p> <p>Compared to pumping large amounts of funding into R&D, attracting FDI to spearhead higher-value-added activities is more cost-effective for SG.</p>	<p>Widening Income Gap / Structural Unemployment</p> <p>As the DD for new skills outpace the SS of workers with these skills, skilled workers working in industries that cater to international markets will usually earn higher wages compared to low skilled workers in declining industries.</p> <p>With the influx of foreign low-skilled workers, the supply of low-skilled labour increases. This depresses the wages of low-skilled workers.</p>
<p>Augment Labour Force to Support Growth Needs</p> <p>For many years, the influx of foreign talent and labour has helped SG meet the demands in the construction, manufacturing and service sectors.</p> <p>Foreign <u>talent</u> facilitates the growth of our knowledge intensive industries while the availability of foreign <u>labour</u> prevents wages from rising excessively, thus preventing wage-push inflation.</p> <p>Furthermore, jobs which Singaporeans shun are taken up by foreigners e.g. construction, allowing the economy to function despite limited labour.</p> <p><i>In recent years however, the SG government has moderated the inflows of foreign labour in a bid to push firms towards productivity-driven growth. Such a trend is expected to continue into the future, and low-cost foreign labour may become increasingly irrelevant.</i></p>	<p>Competition Against SMEs</p> <p>SMEs may not be able to compete with the MNCs investing in Singapore, leading to unemployment in the short-term.</p>
<p><i>Small, open and resource-poor economies like SG generally gain relatively more compared to those resource-rich, less open economies with a larger domestic market. With a larger domestic market, they can rely on their domestic</i></p>	

C and I to cushion the impact of any negative shock to X or FDI. Moreover, being more self-sufficient, they are less import reliant, shielding them from imported inflation.

While the SG govt has always been open, policies have been implemented to alleviate the negative impact of globalisation on vulnerable groups. E.g. the govt has increased the social safety nets laid out in recent years while broadening them so as to help more at-risk groups. Training initiatives e.g. SkillsFuture help the low-skilled to level up, reflecting the govt's awareness of the rising number of people affected by globalisation.

With China moving up the value chain and increasing regional competition, the SG economy inevitably needs to transit into higher value-creation industries. But to do this, the govt has to intensify her training efforts to that the workforce possesses the relevant skills. These should be complemented with workers having the right mindset to upskill, as well as firms' ability to adapt to changing market conditions. Only when the govt, firms and workers work together, can Singapore continue to gain in the future.

While SG has gained considerably from globalisation, the gains are likely to be unevenly distributed, with some sectors and workers enjoying more gains first, compared to others. That being said, the unique conditions Singapore faces have made embracing globalisation a necessity rather than a choice, thus making govt policy formulation even more important.

A-LEVEL CSQ PREDICTIONS

2017 Events

- US-China Trade War
- Trans-Pacific Partnership
- GST Hike Announced

US-CHINA TRADE WAR

Discuss whether the trade war will likely benefit the U.S. in the long term.

	Yes	No
Short-Term	<ul style="list-style-type: none"> • Impose tariffs on China → import less from China → improve BOP 	<ul style="list-style-type: none"> • US firms become complacent → less efficient • Invite retaliation from China → less export revenue → worsen BOP • If one part of the production process is done in China, US producers might still suffer from higher costs of production and hence less competitive exports
Long-Term	<ul style="list-style-type: none"> • Less investment in China → less tech diffusion to China → ensures fruits of tech R&D in US is protected. (and less IP theft by China) • US may develop long-term CA in tech industries compared to China 	<ul style="list-style-type: none"> • US assumed that when locals buy less imports from china, they will switch to US goods. • However, if US goods are still more expensive, or if Chinese goods and US goods are not good substitutes ($XED < 1$), consumers may either: continue buying from China, or buy from other countries that offer a lower price than China. (Over time, consumers can source for alternatives) • Trade deficit with China is switched around to trade deficit with other countries instead e.g. Vietnam.
Evaluation	<p>These days, China is more technologically advanced, with firms like Huawei gaining superiority in areas like 5G.</p>	<p>For US firms in China, tariffs will dampen export competitiveness. For US firms who offshore part of the production process to China, tariffs will raise COP and hence dampen export competitiveness. Hence, US firms may adopt a 'in China, for China' approach which may reduce US consumer choice.</p>

How would China benefit from 'letting the Chinese yuan slide'?

- Cheaper exports in terms of foreign currency and more expensive imports in terms of domestic currency
- Mitigate the impacts of the tariffs.

Would it be a fair characterization to say that China is a currency manipulator?

3 conditions:

- Actively intervening in their currency markets
- Large trade surpluses with the U.S.
- Large overall current account surpluses

If US imposes trade tariffs on China → China export revenue ↓ → DD for yuan ↓ → Value of yuan ↓

OR China manipulates currency to boost export competitiveness OR both

Hence, uncertain which is the case.

Comment on whether Singapore would likely be ‘harmed’ from a prolonged US-China trade war.

Yes	No
<ul style="list-style-type: none"> • US, China NY ↓ → DD for SG exports ↓ • US, China X ↓ → DD for SG exports part of US, China supply chain ↓ • Pessimistic global outlook → C and I ↓ • (X-M) crucial to GDP, economic growth ↓ 	<ul style="list-style-type: none"> • Not only dependent on US / China for exports • SG finance minister Heng Swee Kiat: ‘monetary (neutral stance) and fiscal stimulus if necessary’ → able to counter-act the fall in AD • Competitive devaluation → SG devalue SGD to match the low value of the yuan (does not actually ‘devalue’ currency, but will bring us to zero appreciation <i>relative</i> to other countries) • Acting too early can have a signalling effect on the market, causing unnecessary panic to investors and consumers

GST HIKE

Explain why the GST Hike would likely affect the poor more than the rich.

Regressive tax:

- Rich spend lower proportion of their income on G&S
- Poor spend higher proportion of their income on G&S
- Hence, given the same tax rate on both rich and poor, rich pay lower proportion of their income as GST and poor spend higher proportion of their income on GST.

Evaluate the proposed measures to mitigate the impact of an increase in GST.

GST Vouchers

- GST impacts consumers on a day-in, day-out basis. GST vouchers are given out on an annual basis.
- When faced with a large increase in purchasing power, consumers are likely to splurge on large purchases (consumers may not be rational in using the GST vouchers to offset the daily impact of the GST)

Discriminatory Tax (lower tax on necessities)

- For many necessity goods, the rich consume more of them than the poor.
- e.g. lower tax on water → however, the rich save more on these taxes (e.g. swimming pools, industries)

Discuss whether the GST Hike is necessary

- Aging population + declining birth rate → shrinking tax base → budget position worsens
- Less reserves available to mitigate global economic downturns
- Net Investment Returns Contributions (NIRC) – need large reserves to gain large investment returns to strengthen our budget position in the future. (Tax Revenue + NIRC – Government Expenditure = Budget Balance)

UNEMPLOYMENT IN SINGAPORE

SG current unemployment rate = 2.3%. Natural rate of unemployment = 2-5%

Explain the present likely causes of unemployment in Singapore.Cyclical Unemployment

- US-China trade war may hurt our export industries. → AD ↓
- Economy may be soon headed into a recession (0-1% GDP growth in 2019, similar to that in GFC 2008-9)

Structural Unemployment

- Automation, skills not transferrable e.g. manufacturing
- Growing markets: computing, healthcare (with aging population)
- Job prospects of good generalist > specialist
 - With the rate at which the globalised world is changing, it is even more important that workers embrace lifelong learning, instead of believing in a one-time solution to their lack of skills.

Frictional Unemployment

- Imperfect information. Need time for employer to gather information on employee, for employee to gather information on jobs.

JAPAN

- Slowing economic growth
- Aging population → shrinking work force → ↑SRAS → cost-push inflation
- Aging population → ↓ disposable income → ↓ 'C'

US

- Slowing economic growth
- Fed striking a balance between low inflation and high economic growth
- Originally planned to ↑ i/r, announced no change in i/r
- Political pressures → protectionist stance in e.g. coal mining industries, slow productivity growth

CHINA

- Slowing economic growth
- Cut in value-added tax (VAT) – equivalent of GST.