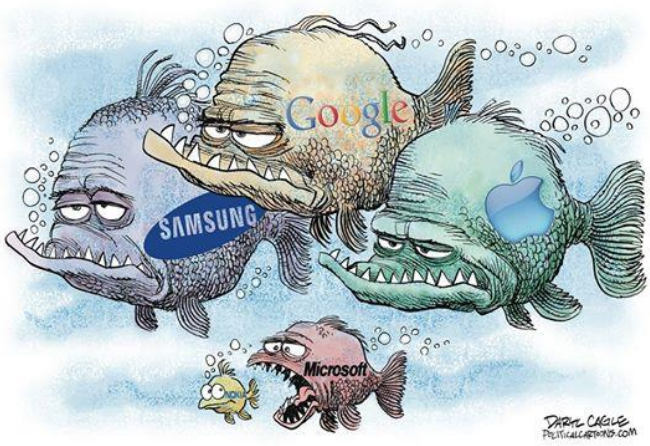


Topic 8:

Policies to Address Market Dominance; Contestability

Theme 2.2: Firms and Decisions

How to use this set of lecture notes?

1) **BEFORE LECTURES – UNDERSTANDING CONTENT**
   - Reference your notes against your H2 syllabus. Mark out the key concepts so that you know what you MUST know
   - Read your notes ahead so that you can focus on listening and capturing additional notes during lectures

2) **During lectures – APPLYING CONTENT**
   - Bring your hard copy notes along, and use your PLDs to refer to the lecture slides concurrently
   - Capture additional notes, especially the real-world examples where you can note down how concepts are applied and how economic analysis are developed in varying contexts
   - You should make use of a notetaking/consolidation tool to take notes during lessons and to consolidate your learning at timely junctures. Examples are MIRO, Notion, Goodnotes, Notability, Microsoft OneNote, KAMI, etc. The choice is yours!

3) **After Lectures – TUTORIAL PREPARATION to use content flexibly to show application, analysis and evaluation skills**
   - Revise concepts relevant for the case study and essay questions
   - Refer to the notes and use it flexibly to prepare your answers to meet question requirements. Pure memorisation will not work as it does not involve deep understanding.
   - Do share your notes with your friends to multiply learning!

CONTENTS

Essential Questions:

1. What is the role of governments in addressing market dominance, a source of market failure?
2. To what extent do policies address the various negative impacts on economic agents and society?

1. Policies to Address Market Dominance, a cause of Market Failure

Market dominance refers to a situation in which a market is dominated by one or a few large firms, and it occurs in both the **monopoly and oligopoly market structures.** These firms have considerable market power; they are not only able to set prices but are also able to act in ways that preserve and enhance their market power. Market dominance is a source of market failure that results in the inefficient allocation of resources. As discussed earlier (under "Impacts), market dominance can bring about many negative impacts on society. Thus, government policies are often required to address these negative impacts.

Similar to Topic 5: Market Failure, we will use the **H-A-L framework** to discuss government policies:

- **H**ow the policy works
- **A**dvantages
- **L**imitations

In discussing Advantages and Limitations, we will use the **FIRST** framework. Do note that not all elements of the framework can apply to all questions and you will have to choose the one applicable to the given context. There might also be advantages and limitations that lie beyond what this framework covers.

FIRST	Possible Guiding Questions	Remarks
Feasibility & **F**lexibility	1. Why might the policy be easily implemented? What might hinder its implementation? 1. Can the government carry out the policy? 2. Is the policy politically unpopular? 2. Can the policy be easily adjusted/changed according to dynamic conditions?	In deciding which relevant point to choose, consider the **nature and state** of the economy/market
Impediments (or lack of)	Even if the government can carry out the policy: 1. Is there a lack of information? 2. Are there offsetting factors? 3. Are the conditions for the policy to achieve its objective met? 4. Are the assumptions met?	
Root cause	Is the policy targeted at the root cause of the problem?	
Side effects (Unintended Consequences)	1. What problems will this policy cause? 2. What are the trade-offs incurred? 3. How does the policy affect different economic agents?	
Time period/ **T**imeliness	1. Is the policy sustainable in the long run? 2. Is there a time lag? (A long-run policy has to be complemented with a short-run policy.)	

1.1 Types of Policies to Address Market Dominance

There are generally 2 types of policies to address market dominance – policies to prevent/reduce market dominance and policies to address the negative impacts of market dominance.

1.1.1 Policies to prevent/reduce market dominance

These policies aim to prevent market dominance from occurring/worsening or to reduce the degree of a market dominance in the market. For example, a government can implement policies to prevent mergers between firms which will worsen monopoly power. Governments could also lower regulatory BTE (such as licencing rules) to encourage more firms to compete in the market.

The policy options available are:

1.1.1.1 Legislation: Pro-competition Acts (Anti-trust Laws)

Pro-competition acts have been designed in many countries to prevent the formation of monopolies and to curb collusive behaviour of firms. Likewise, a Competition Act was passed in Singapore in the year 2004.

For the love of knowledge!

The Competition and Consumer Commission of Singapore (CCCS) is Singapore's competition authority. The value proposition of CCCS is to provide a robust competition regime that forms the framework to grow a **vibrant economy with competitive markets and innovative businesses**. This will **strengthen the ability of domestic companies to compete in the international market**. It will also **attract foreign investment** to Singapore because companies know that they will compete on a level playing field.

The CCCS is tasked to administer and enforce the Competition Act.
The three main prohibited activities under the Competition Act are:

1. Agreements, decisions and practices which prevent, restrict or distort competition (anti-competitive agreements)
2. Abuse of dominant position
3. Mergers and acquisitions that substantially lessen competition

Market Dominance - Pro-Competition Acts (Anti-trust Laws)
How it works
Pro-Competition Acts aim to prohibit monopolisation of a market by any firm. For example, any mergers/acquisitions of firms will have to be approved by the regulatory authority. This can be seen in the recently announced acquisition of Uber's Southeast Asia's assets by Grab. These laws also prevent certain monopolistic behaviour, such as price-fixing practices (collusion) and territorial arrangements between firms in the same industry. ***Note:*** *Not all acquisition and mergers are anti-competitive. Some mergers are pro-competitive (because they positively enhance levels of rivalry). For example, a merger between 2 smaller firms may force the market dominant firm to behave more competitively.*

Advantages	Limitations
Root cause: It addresses the root cause of the problem, which is the lack of competition, and the conduct that comes along with monopoly power.	*Impediments:* • It is often difficult to prove that firms are colluding as a lot of information is required to do so. For example, are prices charged by different firms the same because they are colluding? Or is it because these different firms are facing the same demand and supply considerations? • Large firms (who are the ones most often being regulated) can devote huge amount of resources to come up with ways to go around regulation. • One major issue of regulations is the issue of regulatory capture, where the *regulator* is captured by the *regulated*. This could be done via political lobbying by the regulated firms to impose huge pressure on the authorities to reduce/remove the regulation. Regulatory capture is possible as the dominant firms are large and influential and could be critical to the country's economic growth and employment.

In the News

Coronavirus: Govt cracks down on mask profiteers, retailer Deen Express queried on alleged inflated prices

The authorities are cracking down on profiteers, following complaints that some businesses and individuals have been selling face masks for grossly inflated prices amid a surge in demand. The Government's Price Controller on Thursday (Jan 30) asked a retailer at 313@Somerset mall to explain the basis for the selling prices of its masks, giving it until next Monday to respond.

A packet of 10 surgical masks usually costs around $5 and 20 N95 masks cost about $40. But the masks sold at the Orchard Road store, Deen Express, are alleged to cost much more. The Ministry of Trade and Industry (MTI) said in a statement that a letter of demand was issued to the retailer and it must provide information such as its cost price and profit margins or face a fine, though it did not state how much the shop had been selling masks for. Deen Express could not be reached for comment.

Letters of demand have also been sent to e-commerce platforms Lazada, Carousell and Qoo10 to request information on any potential profiteers on their platforms, MTI said.

If they do not comply, they can be fined up to $10,000 for the first offence, and up to $20,000 for the second and subsequent offences.

Source: *https://www.straitstimes.com/singapore/govts-price-controller-requests-store-at-313somerset-to-explain-alleged-inflated-mask*, 3 Mar

1.1.1.2 Lowering Barriers to Entry

In certain situations, the government can directly step in to lower barriers to entry and increase competition in the market. Barriers to entry includes both natural and artificial barriers.

Note: *Governments may be more able to lower artificial barriers to entry, e.g., legal and financial BTEs. It could be more challenging to lower nature barriers to entry such as geographical endowment and limited market size.*

In the News

Rejecting global protectionism, Singapore government lowers barrier to entry for foreign startups

Rejecting the political currents sweeping countries like the US towards economic nationalism, the Singapore government wants to position itself as a place tech entrepreneurs can call home.

"The rising global protectionist sentiments that emerged in 2016 present us with the opportunity to position Singapore as an attractive startup location for global talent. Foreign entrepreneurs have the capacity to add to the vibrancy of our startup scene. They complement our local startups through the cross-fertilisation of ideas, catalyse new partnerships and create good jobs for our people,'' said Singapore's Minister of State for Trade and Industry, Dr. Koh Poh Koon.

The key changes are as follows:

- Startups will no longer need to have S$50,000 (US$35,000) of paid-up capital to enter the city. Paid-up capital is money invested by firms or individuals in exchange for equity. ***(think financial BTEs!)***
- The criteria for international startups to 'explore' the scene in Singapore will be broadened. ***(think legal BTEs!)***
- EntrePass recipients will be granted a two-year pass as compared with the current length of one year. ***(think legal BTEs!)***

Source: *https://sg.news.yahoo.com/rejecting-global-protectionism-singapore-government-lowers-barrier-entry-044547800.html* 7 Mar 2017

Market Dominance - Lowering Barriers to Entry

How it works

Lowering barriers to entry makes it easier for potential entrants to enter the market to compete with incumbent. This will cause the demand for the good of the dominant firm to fall and become more price elastic as the number of substitutes in the market increases, and hence reducing its monopoly power/market power to abuse its market dominance by raising price and restricting output. With more competition, the dominant firm will compete by reducing price towards MC, hence **reducing allocative inefficiency**.

Please see the diagrammatic analysis on the next page.

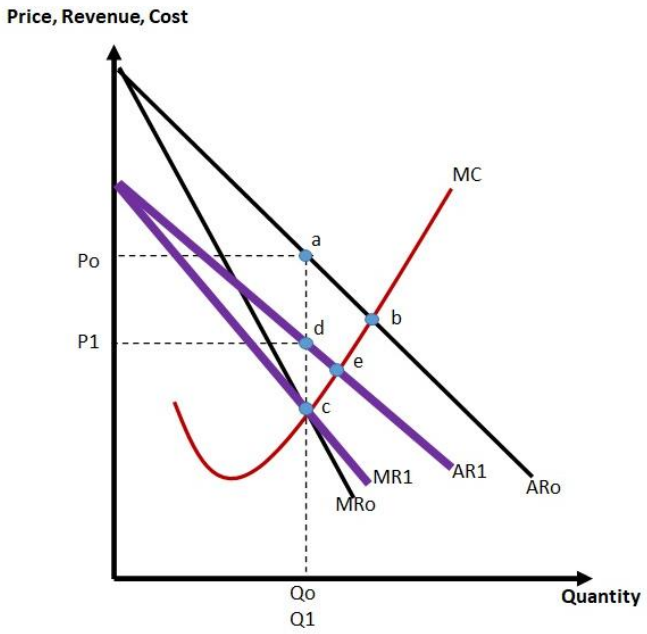


Figure 1: Impact of lowering BTE on DWL

Initially at AR_0 and MR_0 before entry of more competitors, the deadweight loss area is abc. Loss of societal welfare is high due to high market power as wielded by the monopoly.

With government's policy of lowering barriers to entry, more firms enter the market, resulting in the incumbent firm's AR (due to fall in demand) and MR to fall to AR_1 and MR_1.

Hack: For simplicity, we draw the new MR such that it cuts MC at the same quantity still. Note that the new price is now lower at P_1 which is now nearer to MC (hence greater Allocative Efficiency). The resulting deadweight loss is also smaller, area dec.

Conceptually: P close to MC
Diagrammatically: smaller DWL ➔ societal welfare rises and hence society is better off.

In addition, the increased competition will force the incumbent to be **more productive efficient** in order to maximise profits. Moreover, the increased competition will incentivise firms to innovate, **improving dynamic efficiency**.

Advantages	Limitations
Root cause: It addresses the root cause of the problem, which is the lack of competition, and the conduct that comes along with monopoly power	*Side effects:* • Introducing more competition reduces the demand for each firm's good and reduces the ability to enjoy economies of scale. Thus, firms may end up producing at higher costs, resulting in **greater productive inefficiency** instead. • Since firms can only enjoy lower profits now, they may not be able to innovate, **worsening dynamic efficiency.**

1.1.2 Policies to address the negative impacts of market dominance

In certain cases, allowing the existence of a monopoly is the lesser of evils. For example, in the case of a natural monopoly, introducing more competition will not be possible (as the market may be too small to support more than one firm). In these cases, the government should focus on addressing the problems created by market dominance (i.e., inefficiency and inequity). Below are some policies that the government can adopt:

- Regulatory Pricing (Price Controls)
- Regulatory Standards
- Lump-Sum Taxes
- Nationalisation
- Public-Private-Partnership

As explained, there are certain situations where governments have to accept the existence of market dominance (i.e., natural monopoly). In these cases, governments may have to implement other policies to address the drawbacks of market dominance.

1.1.2.1 Regulatory Pricing (Price Controls)

Regulatory pricing can be used to address the issues of inefficiency and inequity due to market dominance. For example, in Singapore, the approval of the Public Transport Council (PTC) is required before transport companies can increase their fares. The PTC is also empowered to make recommendations for a fall in fares when there is a sustained fall in fuel costs.

In the News

Public transport fares to be 4.2% lower from Dec 30

Public transport fares will be reduced by 4.2 per cent from Dec 30, the Public Transport Council (PTC) announced on Thursday (27 Oct). This means commuters will see a fare reduction of up to 27 cents per trip.

A further 1.5 per cent reduction will be carried forward to the next fare review exercise. A total reduction of 5.7 per cent is the maximum quantum allowed in the fare adjustment formula, which takes into account wages, core inflation and energy costs. Last year, transport fares were cut by up to 1.9 per cent. About 2.2 million commuters are expected to benefit from the fare revision.

Source: *https://www.businesstimes.com.sg/transport/public-transport-fares-to-be-42-lower-from-dec-30* 28 Oct 2016

One form of regulatory pricing is **Marginal Cost pricing**.

Market Dominance - Marginal Cost Pricing

How it works

In the free market, the monopoly will produce output Q_M, charge a price of P_M and make supernormal profits equal to the area P_MABC. Under MC pricing, the price is set equal to the marginal cost of producing the last unit of the output (i.e., P = MC). This is at the intersection point between the DD (AR curve) and MC curves, seen in Figure 2 below. The regulated firm now has no choice but to charge the price of P_{MC} for each unit produced. In so doing, allocative efficiency is attained since the correct amount of resources are used to produce the correct amount of goods.

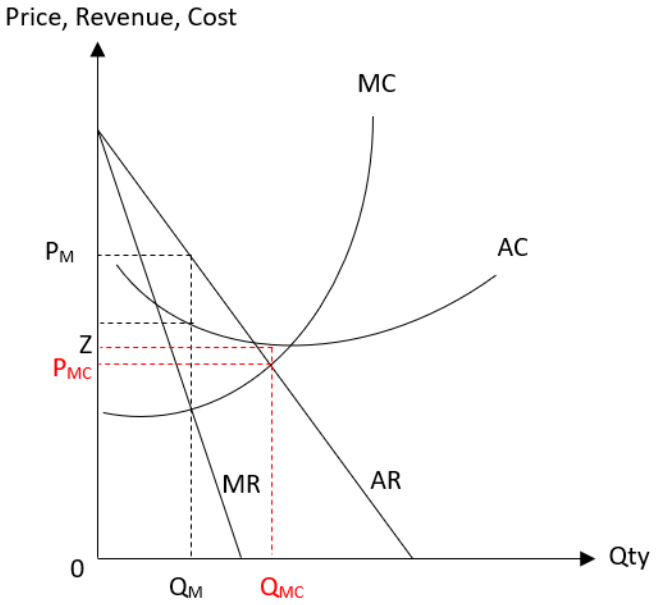


Figure 2: Marginal Cost Pricing for Monopoly

Advantages	Limitations
Flexibility: Price controls can be flexibly adjusted in accordance with changing revenue and costs conditions. In contrast, legislation may need to be passed through parliament and thus take a longer time to take into effect.	*Side effects:* • Without MC pricing, the firm can make supernormal profits (blue area). With MC pricing, the profits become subnormal (red area) since total revenue ($0P_{MC}XQ_{mc}$) is less than total cost ($0ZYQ_{MC}$). • If nothing is done to help the monopoly, it may have to shut down (recall shut down condition). With no production of the good, allocative efficiency will not be achieved.

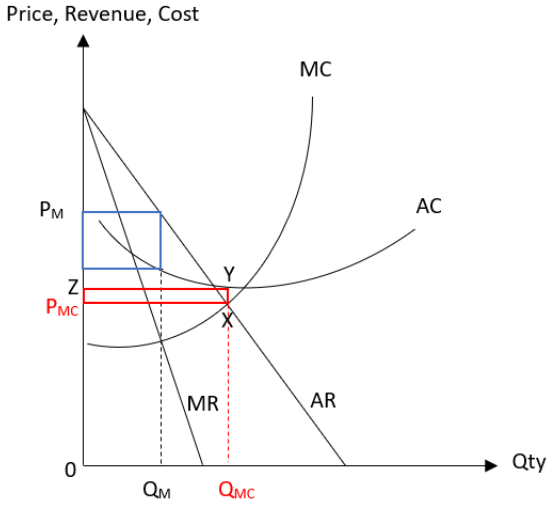


Figure 3: Subnormal profits under MC Pricing for Monopoly

- To ensure that the monopoly sustains its existence and production, the government will need to provide a subsidy that is at least equal to the loss ($P_{MC}XYZ$) so that the regulated natural monopolist can earn at least normal profits and still have the incentive to continue production. This subsidy may have to come from spending on merit goods which worsens allocative efficiency in other markets.

Due to the above limitations of Marginal Cost pricing, another form of regulatory pricing that is more commonly used by governments is **Average Cost Pricing.**

Market Dominance - Average Cost Pricing

How it works

This is a pricing policy in which the government enforces that the monopoly sets the price to be equal to AC (i.e., P = AC). The aim of AC pricing is to reduce monopoly profits to zero (normal profits) while bringing the output produced closer to the socially efficient level.

Please see the diagrammatic analysis on the next page.

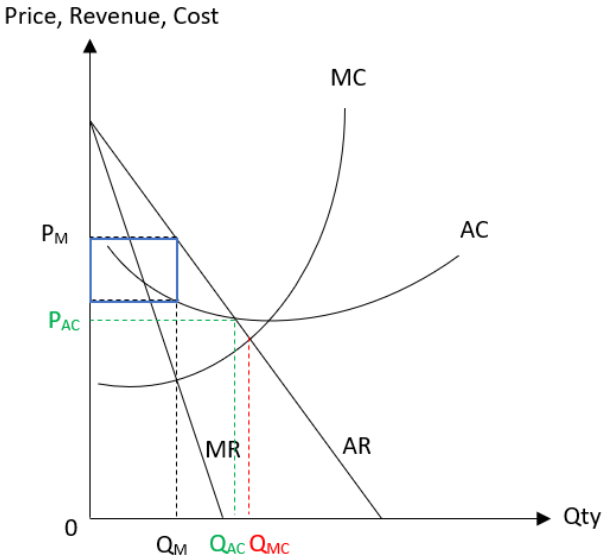


Figure 4: AC Pricing for Monopoly

In the free market, the profit-maximising monopoly will charge price P_M and produce at output Q_M (determined by MC=MR), making supernormal profits represented by the blue area.

Regulation requires that the monopolist charges a price equivalent to its AC at point X. As a result, the monopolist will produce Q_{AC} and charge a price of P_{AC}. At this level of output and price, total revenue is equal to total cost ($0P_{AC}XQ_{AC}$), the monopoly will earn normal profits.

Advantages	Limitations
Feasibility: Compared to MC pricing, AC pricing allows the firm to remain in operation and the good/service will still be made available.	1. *Impediments:* However, the problem of **allocative inefficiency still exists** although the issue is mitigated (Q_{AC} is closer to Q_{MC}). 2. *Side effects:* AC pricing can also lead to other inefficiencies. For example, since the regulated firm can only earn normal profits, there may be **no incentive to improve efficiency or to engage in R&D** to improve profitability.

1.1.2.2 Regulatory Standards

Other than being concerned about whether the optimal quantity of goods is being produced or whether prices are excessively high, governments are also concerned about the **quality of goods and services being produced**.

For example, besides regulating public transport fares (the allowable fare adjustment quantum is based on a formula that is centred on transport operators' costs and productivity, energy costs, core inflation and wages), the Public Transport Council (PTC) also establishes quality of service standards and bus operators are punished if there are lapses and breakdowns in service. For the rail operators, the Land Transport Authority (LTA) has a set of operating performance standards and regulatory requirements. Failure to comply with them would similarly lead to penalties. Imposing such regulatory standards would thus help to improve consumers' welfare by improving the quality of the goods.

1.1.2.3 Lump-Sum Taxes

As mentioned earlier, dominant firms, such as monopolies and oligopolies may earn **excessive profits** and **worsen equity** in society. The government can impose a **lump-sum tax** on such firms to improve equity.

Market Dominance – Lump-Sum Tax

How it works

With reference to Figure 5, before the imposition of the lump-sum tax, the dominant firm produces where MC = MR - price charged = P_M and output = Q_M. The firm makes supernormal profits given by area P_MABC. When lump-sum tax is imposed, average cost rises, and the AC curve shifts upwards from AC_1 to AC_2. As a lump-sum tax is seen as a fixed cost, the other curves are not affected (recall from Topic 6 that MC will only change when variable cost changes). Even though the price charged, and the output produced remaining unchanged, profits earned by the dominant firm falls from P_MABC to the shaded area.

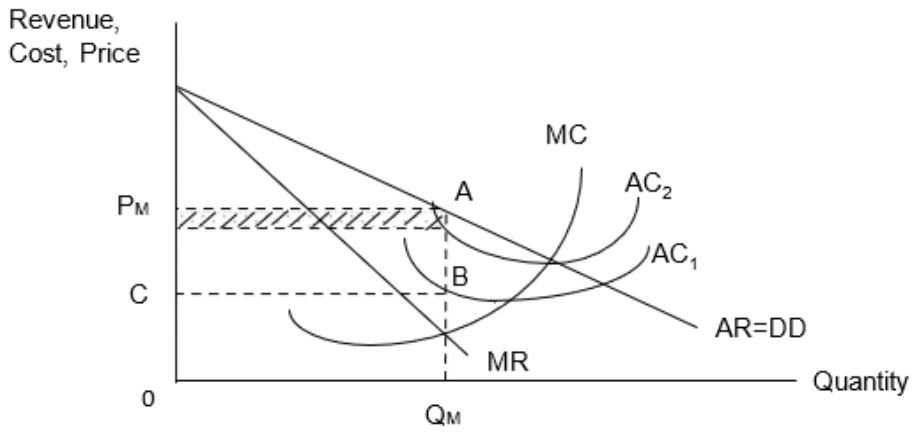


Figure 5: Lump-sum Tax

The amount of lump-sum tax to impose will then depend on the amount of profits that the government wish to tax. It is not possible to pass any part of it to the consumer through a higher price (since MC and MR are not affected). All the monopolist's profits can potentially be taxed away through a lump sum tax.

Advantages	Limitations
1. *Flexibility:* Lump sum taxes can be adjusted in accordance with changing revenue and costs conditions. Governments can choose an amount that is finely balanced between maintaining the ability of the firm to innovate as well as what is considered excessive and inequitable profits. 2. *Side effects: T*he tax revenue collected can then be redistributed to low-income households, thereby improving equity.	*Side effects:* While a tax on monopoly profits can help to reduce income inequity, firms may no longer be as incentivised or have the means to innovate as R&D requires significant investment. This may then conflict with other economic objectives such as efficiency.

1.1.2.4 Nationalisation: Government-run Monopolies

Nationalisation refers to government taking over ownership of certain industries. For example, government can take over control of key industries such as water and electricity supply. This is to prevent the provision of such essential services to be subjected to the private firm's profit-maximising behaviour. Such industries are termed nationalised industries or state-owned industries.

Market Dominance - Nationalisation

How it works

With government ownership, the objective changes from profit-maximising to that of welfare-maximising. Hence, the government bases its price and output decision on maximising efficiency and equity. For example, a government might choose to produce at the socially optimal quantity, Q_s, where P=MC. This helps to remove the allocative inefficiency associated with market dominance.

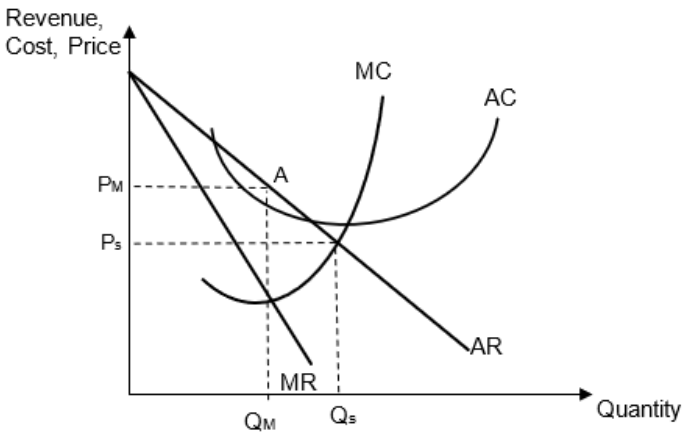


Figure 6: Nationalisation of Monopoly

Advantages	Limitations
Timeliness - In taking over production of the good/service, the government can directly and immediately ensure	**1.** *Impediments:* • The government may lack the technical expertise to operate the firm. For example, a government may not be able to run a water purification plant efficiently, leading to

the quality of the good or service provided.	higher costs of production, and worsening productive inefficiency. • The quality of service might worsen due to lack of expertise, worsening consumer welfare. 2. *Side effects:* In certain cases, the firm will likely incur subnormal profits when producing at P=MC. Governments will have to cover the subnormal profits with tax revenue, or by diverting subsidies for other industries (such as healthcare), which may worsen allocative efficiency overall.

1.1.2.5 Public-Private-Partnership

Besides nationalisation, governments may also adopt Public-Private-Partnership (PPP).

Market Dominance - Public-Private Partnership	
How it works	
Public-Private Partnership (PPP) is a method in which the government and the private sector collaborate on projects that often include the building of infrastructure, through long-term concession agreement. The government can engage private sector providers in delivering non-core government services if it is more efficient to do so. Some of the PPP projects in Singapore include: SingSpring Desalination Plant project between national water agency PUB and a consortium led by now-bankrupt water treatment firm Hyflux, PUB's Changi Newater plant, Housing Board's Design, Build and Sell Scheme flats and Community Health Assist Scheme (CHAS). Through PPP, there is an optimal use of the government and private sectors' expertise, resources and innovation to meet public needs at the best value for money. In particular, the government will ensure that: a) The private providers can meet the public needs efficiently, **increasing quantity from monopoly output Q_M to the socially optimal Qs** (refer to Figure 6). b) Private providers must adopt least cost methods to provide the public services, to provide the best value to win the government contract. This translates to **lower prices from monopoly price P_M to the socially optimal price Ps** (refer to Figure 6). This also ensures public services **remain affordable for the lower income groups**, ensuring equity. c) PPP can improve the quality, cost-effectiveness, and efficiency of public services, to better meet the needs of the public thus **improving consumer welfare.**	
Advantages	**Limitations**
1. *Feasible; Flexible:* It is more cost-effective to provide public services by tapping on private sector expertise. It is also flexible as the government can negotiate the contract terms based on	1. *Impediments:* There might be imperfect information on the part of the government to monitor the service quality of the private sector e.g., regular maintenance of the system to ensure that the

changing public needs and ensure allocative efficiency. 2. *Side effects:* The government and the private sector share the risks of delivering a service. Typical risks that are allocated to the private sector include design, construction and revenue and financing risks. On the other hand, the public sector may take on political and regulatory risks. By transferring the financial risks to the private sector, there will also be greater certainty over the government's future cash flows.	system remains robust in the long-term, not just limited to short-term effectiveness when the contract was awarded. 2. *Timeliness:* It may take a considerable amount of time to establish and negotiate the terms of the contract. If the private sector may be required to provide a wider range of services and over a longer contract period (between 15 and 30 years). It will also require time to compare and select the right private sector service provider.

In the News

Starting from 2016, we will adopt a new contracting model which will enable the Government to make public bus services more responsive to changes in ridership and commuter needs. It will also inject more competition into the industry, leading to higher service levels for commuters over time.

How bus contracting works

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.

Benefits of bus contracting

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 transition to a bus contracting model, commuters will be able to enjoy higher service levels. All bus services will have scheduled headways of no more than 15 minutes during both the morning and evening peak periods, with at least half of the bus services having even shorter scheduled headways of no more than 10 minutes, and of these, the feeder services will run at even shorter intervals of 6-8 minutes.

Source: www.mot.gov.sg

Let's consolidate our **Enduring Understandings**:

1. In Theme 2.2 on Firms and Decisions, we have examined the strategies of firms to achieve their objectives and understand that while decisions made by producers are necessary for the functioning of markets, these decisions may lead to inefficient and/or inequitable outcomes.

2. The monopolistically competitive market structure is one of the more common types observed. We can generally tell that a market is monopolistically competitive when you observe the decisions and strategies they engage in. In the real world however, there are occasions where it is not as clear which market structure type it aligns to. **What is most important is that you will need to discern what strategies are sensible in context and thus the likely impacts of the different economic agents.**

3. Firms in more concentrated/less competitive industries tend to experience higher degree of **mutual interdependence** and are thus more likely to collude and employ non-price competition over price competition. This is seen in an oligopoly, which is largely similar to that of a monopoly. The key difference between an oligopoly and monopoly is that there is more than one firm with significant market share, and this makes all the difference in terms of the strategies oligopolists adopt, and the impacts of its decisions and strategies.

4. We have also explored how governments may intervene through public policy measures to improve efficiency and equity, while recognising the advantages and limitations, unintended consequences and possible trade-offs of government intervention.

5. Microeconomic concepts and theories that we have learned will provide the foundation and extend our understanding of the microeconomy to the macroeconomy (which we will cover in Theme 3 in JC2). As Economics students, you should now be able to gain insights into real-world microeconomic issues and opportunities to deepen economic reasoning, analysis and apply microeconomic concepts to markets in both Singapore and the global economy.

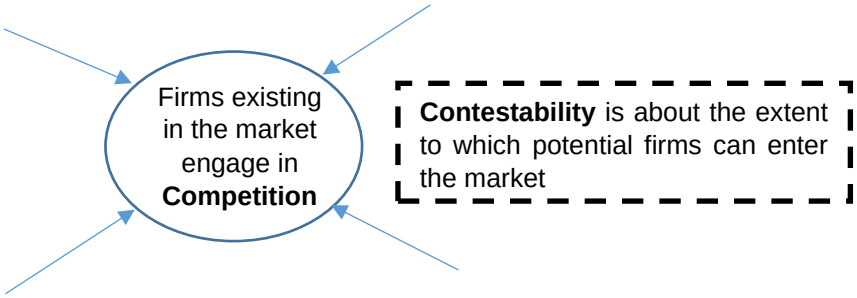
2. Contestable Markets with Potential Competition, a case of Government Policy of Lowering BTE

When making decisions and engaging in strategies, firms do also consider the **potential levels of competition** in the industry.

As explained earlier, monopolies have high barriers to entry. With these high BTE, a monopolist can make supernormal profits in the long run and remain a dominant firm.

However, it is **possible for the entry and exit costs in an industry to change**, either due to free market forces (e.g., technological advancement) or due to government intervention of lowering BTE. For example, the computer gaming industry was dominated by a few major producers in the past as it took expensive computing equipment and software to develop games. However, these barriers to entry have fallen in recent years as software costs have come down and it is now much easier to develop games on free platforms.

How will a dominant firm behave if the entry and exit costs into its market become lower? The following concept map shows the difference between market competition and contestability:



Hence, competition *in* the market is distinct from competition *for* the market (Contestability).

2.1 Characteristics

The characteristics of a contestable market are:

- Small number of firms
- Ease of entry and exit of firms
- Hit and run competition from potential entrants causing incumbent firms to be unable to raise price.

A contestable market is one with low entry and exit costs to potential entrants.

With low entry and exit costs into a market, the **threat** of entry is enough to keep existing firms alert. In a contestable market with potential entrants, firms are forced to keep excess profits to a minimum and choose sales maximisation rather than profit-maximisation. Profits would be pushed down to normal profits (where AR = AC). **This means that even if there are a few firms, or a single firm, a market with low entry and exit costs will resemble a highly competitive one**. Contestable markets can reap the theoretical benefits of competitive markets, but without the need for a large number of firms.

Potential firms can use a *hit and run strategy*, which means that they can 'hit' the market, given there are low costs to entry, and make profits. After making these

profits, firms can easily leave the market ('run') as there are low costs to exit. For example, it may be possible for these firms to recoup some of their start-up costs.

Opening up a market to potential entrants may be sufficient to encourage efficiency and deter anti-competitive behaviour. For example, the government may force existing firms to open up their infrastructure to potential entrants, or to share technology – as in the case of broadband operators being allowed to use SingTel's infrastructure in Singapore. This is a common approach in the telecommunications industries where incumbents are likely to have significant market power in terms of control of a network.

What is the difference between a Competitive market and a Contestable market?

A **competitive** market (with perfect competition being the extreme case) means that there is actual competition, with many firms existing in the market.

A **contestable** market is only applicable to a market which is dominated by only a few sellers. However, the threat of entry by potential entrants forces these sellers to *behave* competitively.

Thus, by definition, **a competitive market ≠ a contestable market**. It is also irrelevant to discuss whether a competitive market (perfect competition or monopolistic competition) is contestable or not.

2.2 Factors Affecting Contestability

The extent to which a market is contestable depends on the following factors:

a. Ease of entry and exit

Potential firms must also find it **relatively easy to enter and leave** the market. A potential entrant cannot face difficulty in breaking into the market if it has to reshape consumer loyalty and perceptions to try unfamiliar brands or new products. It will need to do so if there is a high level of successful advertising by the incumbent firm giving it a significant advantage especially when consumers make an automatic association of the product with the brand. For example, terms like Pampers and Xerox are synonymous with the actual products.

b. Sunk costs (zero sunk costs promotes contestability)

Sunk costs are those costs that a firm cannot recover when leaving the market. Markets that involve high sunk cost usually incur high initial setup costs and these would deter any new entrant since the capital assets are likely to be specialised and non-transferable to other markets should the firm decide to exit in future. Thus, potential entrant needs to be confident of its long-term survival in the market before making a commitment to enter.

However, if these initial costs were low, or the costs of these capital assets could be recouped when firms choose to exit i.e., low sunk costs, potential firms would be **more willing to enter the market.**

c. Ability to have access to the same resources as incumbent firms

Some markets are very difficult to enter due to the shortage of skilled labour and access to technology, for example, creative arts, information technology or aerospace industry. Whatever access to resources that incumbent firms have, the potential entrants have the same level of access. The same access to resources will enable potential firms to be **able to produce the product/service** at costs comparable or lower than those of incumbent firms.

Note:

- **Contestable markets are likely to have competitive prices and low profitability.** This means that even a monopoly may be forced to lower prices and profits to remain competitive. If it is too profitable, an entrant can easily come in and take a big share of that profit quickly.
- **Natural monopolies are the least contestable markets** because of the natural barriers to entry and exit such as high economies of scale and asymmetrical information. Incumbents (existing firms) are likely to know much more about their industry than potential entrants and are likely to be unwilling to share their knowledge or technology.

2.3 Implications of a Contestable Market on Societal Welfare

As explained, if a market is highly contestable, an industry that only has one firm will also behave competitively to deter potential entrants. For example:

a. The firm might practice limit pricing to deter potential entrant. This will result in lower prices and higher output, **reducing allocative inefficiency** as well as **increasing consumer surplus.**
b. The firm might also innovate to improve the quality of its product (**improving consumer welfare**), as well as to improve its production processes (reducing costs of production and **improving productive efficiency**).
c. The lower prices that is a result of contestability can also **improve equity**, especially if the market produces essential goods such as water and electricity.

Because of the above reasons, the government can focus on policies that lower BTE, which in turn encourages potential entrants. By lowering BTE that encourage potential entrants, this will encourage the incumbent firms to behave competitively.

2.4 Criticisms of Contestable Market Theory

It does not consider any **retaliatory responses** by the incumbent firm against the new entrants. For example, it may take action to protect its market power by building up real or perceived barriers through, for example, successful advertising or appealing to consumer loyalty.

Production usually requires specific assets which cannot be transferred to alternative uses (occupational immobility) or locations (geographical immobility) without great costs. These may include physical machinery, advertising, research and development, expertise and skills. Such sunk costs are barriers to entry.

The assumption that consumers will switch instantly to the lower priced products of the new entrant firms is questionable. This is because there is often a time lag for consumers to react since tastes, habits and preferences need some time to change. Strong brand loyalty for existing products is a real barrier set up by consumers themselves.

Even though perfect information exists in a perfectly contestable market, it is doubtful if potential entrants can immediately duplicate the expertise and knowledge learned through years of experience by the incumbent firm. It is unrealistic to assume that the new entrants will be able to access such knowledge through "learning by doing" or "learning through experience". Such institutional knowledge may not even be explicitly known to the incumbent firm for such learning has already been internalised into its policies, practices and work culture.

In closing, let's consolidate our **Enduring Understandings**:

Throughout this Theme, we have brought you through the following key ideas. The series of application questions will enable you to apply your theories to real life contexts and develop greater appreciation for:

1. What decisions do firms make?
2. What factors influence a firm's decisions?
3. What are the different impacts of a firm's decisions?