

 **HL IB Economics**

Your notes

## 2.10 Market Failure: Asymmetric Information

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## 2.10.1 Asymmetric Information

# Understanding Asymmetric Information

- **Information gaps** exist in nearly all free markets and distort market outcomes resulting in market failure
- One of the underlying assumptions of a free market is that there is **perfect information** in the market
  - This means that buyers and sellers have exactly the same level of information about the good/service. This is called **symmetric information**
  - In many markets buyers and sellers have different levels of information. This is called **asymmetric information**. For example, there is **asymmetric information** in the used car market - sellers know more about the vehicle than the buyers
- **Asymmetric information** distorts socially optimal prices and quantities in markets resulting in **over-provision** or **under-provision** of goods/services
  - For example, goods/services with **dangerous side effects** would be sold in lower quantities if buyers were aware of these effects (consider the VW emissions scandal). **Fewer** factors of production should be allocated towards producing these
  - Similarly, goods/services with **extra benefits** would be sold in higher quantities if buyers were aware of them. **More** factors of production should be allocated towards producing these

## Adverse Selection & Moral Hazard

- Adverse selection and moral hazard arise in the presence of asymmetric information, where one party has more information than the other in an economic transaction

### 1. Adverse Selection

- Occurs when the party with more information (typically the buyer) has an advantage in **knowing their own risk profile** as compared to the party offering the service or product
- E.g. In insurance markets, adverse selection can occur if individuals with a **higher likelihood of making a claim** or having a pre-existing condition are more motivated to purchase insurance
  - This can lead to an imbalance in the risk pool, with a higher proportion of higher-risk individuals and insurers may need to raise premiums to compensate for the increased risk
  - This makes insurance less affordable for lower-risk individuals and potentially leads to a further concentration of higher-risk individuals in the pool

- To reduce adverse selection, insurance companies may **use various strategies such as risk-based pricing or medical underwriting** to ensure that premiums accurately reflect the risk profile of the insured person
- Adverse selection **distorts the process** by which the price and quantity of services are determined – leading to market failure



## 2. Moral Hazard

- Occurs when one party in a transaction is protected from risk and so they are likely to behave differently than if they were fully exposed to the consequence of the risk
- Economic agents take more risks as the other party have limited knowledge of the risks they are taking
  - E.g. After the 2008 recession, banks continued to take high risk decisions as they **knew the government would bail them out** if they failed
- Moral hazard leads to **market failure** as a party will act in their own self-interest leading to inefficient market outcomes

# Government Responses to Asymmetric Information

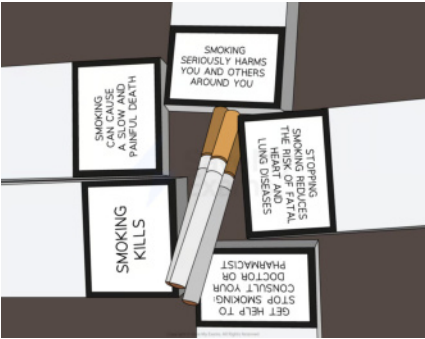
- Firms are aware that asymmetric information can give them more market power
- The government have the responsibility of **removing or reducing information failure** through
  - Legislation and regulation
  - Provision of information

## 1. Legislation and Regulation

- Laws backed up by enforcement such as fines e.g cigarette firms must point out the danger of smoking on the back of their packaging

### Advantages and Disadvantages of Legislation and Regulation

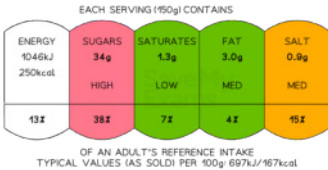
Legislation and Regulation	Advantage	Disadvantage

	<ul style="list-style-type: none"> <li>They can limit the use of <b>demerit goods</b> and goods which generate <b>negative externalities</b></li> <li>There are <b>clear legal sanctions</b> such as fines and bans, which will cause people to change their behaviour</li> </ul>	<ul style="list-style-type: none"> <li>This can lead to <b>more illegal activity</b> to bypass legislation and regulation (black markets)</li> <li>It can create more bureaucracy for firms, <b>leading to higher costs</b> and lower profits</li> </ul>
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## 2. Provision of Information

- The government **provide additional information** about goods and services or require firms to do so, so that consumers make more informed choices
  - E.g. food manufacturers providing information about nutritional content on food packaging

### Advantages and Disadvantages of Provision of Information

Provision of Information	Advantage	Disadvantages
	<ul style="list-style-type: none"> <li>This can influence individuals to make better choices in terms of consumption of <b>merit goods</b> and goods/services which generate <b>positive externalities</b></li> <li>The information can be <b>targeted to the individuals who specifically need the information</b></li> </ul>	<ul style="list-style-type: none"> <li>If information is not presented in a clear manner, the targeted individuals <b>may still make not make the correct decisions</b></li> <li>There is an opportunity cost involved in the cost of information provision                     <ul style="list-style-type: none"> <li>e.g. the Stop Smoking Campaign run by the NHS in 2018 cost £5m</li> </ul> </li> </ul>



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# Private Responses to Asymmetric Information

- Private responses refers to **action taken by private firms or consumers** without any government intervention. These include
  - Signalling
  - Screening

## 1. Signalling

- This is a strategy used by individuals or firms **with private information** to convey that information to others
- It is useful in situations where one party has **superior information** about their qualities or characteristics, they may **use signals to communicate this information to others**, particularly to gain a competitive advantage or **establish trust**
  - E.g. a Used car seller may offer a comprehensive 60 point checklist of the condition of the car they are selling which would include honest assessments

### Advantages and Disadvantages of Signalling

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>It provides a good indication to consumers about the quality of a good/service</li> <li>This leads to <b>more informed choices</b> for the consumer as asymmetric information is reduced</li> </ul>	<ul style="list-style-type: none"> <li>There may be additional costs associated with signalling which private firms may not be willing to incur                             <ul style="list-style-type: none"> <li>E.g. warranties mean that firms may have to take action which may be expensive if there is an issue with a product/service</li> </ul> </li> <li>Signalling is only effective if the private agent decides to reveal the necessary information</li> </ul>

## 2. Screening

- Another method to tackle adverse selection is to provide buyers with the opportunity to **screen out biased, inaccurate or misleading information** to make better purchasing decisions
- Buyers may employ screening mechanisms to assess the quality or reliability of sellers

- This can involve examining product features, reading reviews, seeking recommendations, or relying on trusted third-party certifications
- By screening sellers, buyers aim to **make informed decisions** and **reduce the risk of purchasing low-quality** products or services



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### Advantages and Disadvantages of Screening

Advantages	Disadvantages
<ul style="list-style-type: none"><li>▪ Screening allows individuals to gather more information</li><li>▪ It results in improved purchasing decisions</li></ul>	<ul style="list-style-type: none"><li>▪ There may be <b>additional costs</b> and time associated with gaining more information<ul style="list-style-type: none"><li>▪ E.g. In the United Kingdom, buyers of a second hand car will have to pay for a government HPI check if they require more information</li></ul></li><li>▪ Reviews used to base decision on may be <b>flawed or manipulated</b> by sellers</li></ul>