**05 Market Failure**

**Core Concepts**

1. Intro to Market Failure (MF)

**The 6 Market Failures (MFs)**

1. Monopolies
2. Externalities
3. Merit & Demerit Goods
4. Public Goods
5. Labour Immobility
6. Inequality of Income and Wealth

**MF Essay Structure**

1. Sometimes markets work
2. Sometimes markets fail
3. Sometimes Govt. can reduce the market failure
4. Sometimes Govt. makes the market failure worse
5. Your Position: Should Government intervene in this market, and if so, how?
6. **Introduction to Market Failure**

|  |  |
| --- | --- |
| **Market Failure****(MF)** |  |

**Starter:** Identify the types of market failure in the examples below.

1. The consumption of drugs leading to an increase in crime and increase in NHS costs,
2. Microsoft has dominated the market for computer operating systems with its product Microsoft Windows for many years. Some claim that this had led to inefficiency and higher prices which are against consumers’ interests.
3. Soaring house prices in London and substantially higher living costs have prevented workers relocating to the capital to get a new job. Many have had to stay in their own area and remain unemployed.
4. It would not make sense for private firms to provide a national prison system as it would be impossible to get citizens to contribute towards it without forcing them to through taxation.
5. Free markets on their own cannot redistribute wealth, from the rich to the poor, and therefore what you earned would be your income and nothing more.
6. In the past consumers were unaware of the negative impacts of smoking and therefore took up smoking unaware of the damage it could have on themselves and others.
7. If UK healthcare was in the hands of the private sector and people were charged for its use, this could cause under consumption of the service.

**B. Competition**

**Activity 1:** Discuss what the following terms mean and try to identify an example of each.

|  |  |  |
| --- | --- | --- |
| **Type of Firm** | **Definition** | **Example(s)** |
| Pure Monopoly |  |  |
| Legal Monopoly |  |  |
| Duopoly |  |  |
| Oligopoly |  |  |

**Ext:** Which *type of firm* faces the most competition and why? Is this good for economic efficiency?

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**The Carrot & Stick of Competition**

**STICK… if firms are failing
they go out of business**

**CARROT…**

**successful firms get
more profit**

**Activity 2:** Why do Economists like Competition? Explain the reasons on the mind-map below

Why do Economists like Competition?

**Activity 3:** Competition v Pure Monopoly: Explain the benefits of having many different car manufacturers, instead of just one manufacturer that holds a ‘pure monopoly’ in the market

**Hint:** Think of all the different types of cars you can get and all the different firms supplying in the market: Volvo, Ford, BMW, Ferrari etc.

**Ext:** Are there any drawbacks to having many different car manufacturers instead of just one?

**p**

**C. Concentration Ratios**

|  |  |
| --- | --- |
| **Concentration** | “ |
| **Concentration Ratio** |  |

Market structures range from which has to monopoly with

**.** A implies that there are few firms in the market and low competition.

A **concentration ratio** expresses the

**Calculating Concentration Ratios**

|  |  |  |
| --- | --- | --- |
|  | **Market A** | **Market B** |
| **Firm 1** | 60% | 8% |
| **Firm 2** | 20% | 6% |
| **Firm 3** | 10% | 5% |
| **Firm 4** | 4% | 3% |
| **Firm 5** | 3% | 3% |

**Activity 1:** Use the data above to complete the table below:

|  |  |  |
| --- | --- | --- |
|  | **Market A** | **Market B** |
| **3 firm****concentration ratio** |  |  |
| **5 firm****concentration ratio** |  |  |
| **Type of Market Structure** |  |  |

What does the data tell you

**Limitations of Concentration Ratios**

**1. Problem defining the market:** it is important that the right market is identified. However, defining the market is not as easy as it may seem. What market is Coca-Cola in? Cola drinks? Soft drinks? Drinks? The wider the market considered the lower the concentration ratio will be.

**2. Concentration ratios may be misleading:** a market may contain firms with the following market shares. They will have the same five-firm concentration ratio but have very different market structures.

|  |  |  |
| --- | --- | --- |
|  | **Market A** | **Market B** |
| **Firm 1** | 68% | 15% |
| **Firm 2** | 3% | 15% |
| **Firm 3** | 2% | 15% |
| **Firm 4** | 1% | 15% |
| **Firm 5** | 1% | 15% |

**Activity 2:** Calculating Concentration Ratios

1. **UK Broadband Market**

|  |  |
| --- | --- |
| UK Broadband provider | Market Share (2016) |
| BT | 32% |
| Virgin Media | 19% |
| Talk Talk | 13% |
| Sky | 23% |
| EE | 4% |
| Others | 9% |

1. Calculate the 3-firm and 5-firm concentration ratio for UK broadband providers, the market shares are given above:
2. **What does this imply about the market structure of the UK broadband industry? Justify your answer**

**Ext: US Cars vs. UK Supermarkets**

 **a) Which market is more highly concentrated? Refer to concentration ratios in your answer**

**b) What has happened to market concentration in these industries over time and why?**

**1. Monopolies**

**Protecting Monopoly Power: Barriers to Entry**

|  |  |
| --- | --- |
| **Barriers to Entry**  |  |

**Activity 1:** Explain how Monopolists protect their market share through

Barriers to Entry

**Activity 2:** Explain why excessive ‘Monopoly Power’ is an example of Market Failure

**Hint:** Use the following terms in your explanation: *allocative efficiency, productive efficiency, choice, price, quantity, free market, misallocation of resources*

**Ext:** Give some examples of industries where monopoly power is most prevalent – do they have

anything common?

**Activity 4:** Show the Market Failure on a Diagram

**HInt:** *Restrict output, increase price, inelastic PED, lack of competition*

|  |  |
| --- | --- |
| **Diagram** | **Explanation of Diagram** |
|  |  |

**Ext 1:** Discuss the ways in which the Government can intervene to reduce the Market Failure

**Ext 2:** Discusshow the Government intervention may be unsuccessful or cause other problems

**Benefits of Monopoly Power**

**Activity 3:** Explain the benefits of Monopoly Power on a mind-map i.e. how are Monopolies an example of Market Success (MS)?

Economic Benefits of Monopoly Power

Essay Question

“Evaluate the case for and against Monopolies” (25 marks)

**2. Externalities**

**Private Costs & Benefits**

|  |  |
| --- | --- |
| **Private Costs** |  |
| **Private Benefits** |  |

**External Costs & Benefits**

|  |  |
| --- | --- |
| **External Costs(Negative Externality)** |  |
| **External Benefits(Positive Externality)** |  |

Using the example of cigarettes outline the private costs and benefits and the external costs and benefits

**Social Costs and Benefits & Market Failure**

|  |  |
| --- | --- |
| **Social Costs** |  |
| **Social Benefits** |  |

This over or underconsumtion of the good/service is a **market failure**… A misallocation of resources.

**Activity 1:** For each of the cases below, identify the external cost OR external benefit and explain why an economist would view this as market failure.

1. Private healthcare…

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1. Chocolate consumption…



**Activity 2:** Examples of Externalities

For each example identify:

a) the private costs and benefits
b) any external costs and benefits
c) why it is market failure



|  |  |  |  |
| --- | --- | --- | --- |
|  | **Higher Education** | **Cigarette Consumption** | **Medical Vaccinations** |
| **A** | **PC** = cost of degree approx £9,000 pa, opportunity cost (of working)**PB** = increased future income, making friends |  |  |
| **B** |  | Passive smoking, high healthcare cost, fall in productivity and size of the workforce |  |
| **C** |  |  | Under-consumed in a free market |





|  |  |  |  |
| --- | --- | --- | --- |
|  | **Alcohol Consumption** | **Intensive Farming** | **A car journey** |
| **A** |  |  |  |
| **B** |  |  |  |
| **C** |  |  |  |

**Ext:** For each example above, **i)** identify policies that government can introduce to correct the market failure **ii)** explain how the policy will reduce the market failure.

**Notes Page**

**Externality Diagrams**

**A world with no externalities…**

Annotate this diagram to show the equilibrium price and quantity in a free market

**Cost / benefit**

**S = MPC**

**D = MPB**

**Quantity**

**Marginal Private Cost (MPC) and Marginal Private Benefit (MPB)**

* When we look at externalities, we are interested in whether each unit will be consumed or not. Therefore, we study marginal costs and benefits i.e. the costs and benefits from **one** **additional unit**.
* **Marginal private benefit**
* **Marginal private cost**

**Market Equilibrium**

Below are the (hypothetical) cost and benefit curves for the consumption of chocolate bars, per day:

**Cost / benefit**

**MPC**

**P1**

**MPB**

**Quantity
(chocolate bars, per day)**

**8**

**7**

**6**

**5**

**4**

**3**

**2**

**1**

**0**

**Negative Externalities**

Again we have shown the cost and benefit curves for the consumption of chocolate bars. However, we are now considering the external & social costs of chocolate consumption by including the following:

* **MSC:**
* **MSB:**

**Cost / benefit**

**MPC**

**P2**

**MPB**

**MSB**

**8**

**7**

**4**

**5**

**Quantity
(chocolate bars)**

**6**

**3**

**2**

**1**

**0**

**Positive Externalities**

Now let’s look at the cost and benefit curves for the consumption of healthcare. We are again considering all costs and benefits of healthcare and therefore this time we add the following:

* **MSB:**
* **MSC:**

**Cost / benefit**

**MPC**

**P2**

**P1**

**MPB**

**2**

**4**

**Quantity**

**3**

**1**

**0**

**There is market failure.**

**Final Diagrams**

|  |  |
| --- | --- |
| **Welfare Loss** |  |
| **Welfare Gain** |  |

We can indicate the *extent* of market failure with **welfare loss** and **welfare gain** triangles. These show the amount of extra external costs incurred (welfare loss with negative externalities) and the amount of external benefit that wasn’t gained (welfare gain with positive externalities) due to externalities being present.

**Activity 1:** Draw a diagram to show the following 4 types of externality MFs

**Ext:** Explain the MF

**a) Negative Externality in Consumption of Alcohol**



**b) Positive Externality in Consumption of Higher Education**



**c) Negative Externality in Coal fired power station**



**d) Positive Externality in the Production of Renewable Energy**



**Notes Page**

**Extension Activity**

**1.** Below are the benefits and costs for producing steel. We are assuming there are no external benefits (only external costs) and no Government intervention.

**MSC**

**Cost / benefit**

**MPC**

**MPB=MSB**

**Q10**

**Q4**

**Q3**

**Q9**

**Q7**

**Q6**

**Q8**

**Q5**

**Quantity of Steel
(tonnes, 000s)**

**Q2**

**Q1**

**0**

a) Mark the following on the diagram:

* Marginal external cost at Q2
* Free market equilibrium quantity and price
* Social optimum quantity and price
* Welfare loss / gain triangle

b) Using appropriate terminology and with reference to the diagram, explain why there is market failure in the market for steel production.

**2.** Below are the benefits and costs for higher education (university). We are assuming there are no external costs (only external benefits) and no Government intervention.

**Cost / benefit**

**MPC = MSC**

**MSB**

**MPB**

**Q10**

**Q9**

**Q8**

**Q7**

**Q6**

**Q5**

**Q4**

**Q1**

**Q2**

**Q3**

**Quantity
(higher education)**

**0**

a) Mark the following on the diagram:

* Marginal external benefit at Q8
* Free market equilibrium quantity and price
* Social optimum quantity and price
* Welfare loss / gain triangle

b) Using appropriate terminology and with reference to the diagram, explain why there is market failure in the market for higher education.

**3. Merit & Demerit Goods**

**Activity 1:** Answer the questions below in the space provided

(Hint: Healthy fruit and vegetables are merit goods)

1. What are merit goods?
2. Who provides merit goods? The state sector or the private sector?
3. Why would merit goods are under-consumed in a free market?
4. Identify 3 other examples of merit goods

**Ext:** How can Govt. increase consumption of merit goods?

**Activity 2:** Education & Healthcare as Merit Goods

|  |  |  |
| --- | --- | --- |
| **Question** | **Education** | **Healthcare** |
| 1. Identify three positive externalities from consumption |  |  |
| 2. Explain the information failure (why is it underconsumed in a free market) |  |  |
| 3. Explain one way the Govt. could intervene to correct/reduce the market failure |  |  |
| 4. Draw the market failure on a diagram (MSC = MPC, MSB > MPB) |  |
| **Ext:** Evaluate your answer to Q3 above- Will the policy be effective?- Are there downsides? |  |  |

**Activity 3:** Merit Goods & Demerit Goods

|  |  |  |  |
| --- | --- | --- | --- |
|  | Explain the Information Failure & Market Failure | + or - Externalities (not taken into account by the price mechanism) | Govt. Intervention (to reduce the market failure) |
| Fast-food  |  |  |  |
| Saving into a private pension |  |  |  |
| Alcohol |  |  |  |
| Subsidised bike scheme  |  |  |  |

**Ext:** Evaluate your Govt. interventions above

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**4. Public Goods**

**Starter:** Decide if the following statements are Ture or false

1. Merit goods are only provided by Government
2. Merit goods generate postive consumption externalities
3. The Govt. often subsidises the provision of merit goods
4. A KFC bargain bucket is an example of a merit good
5. The private benefits of consuming a merit good are more than the social benefits
6. The private benefits of consuming a merit good are equal to the social benefits
7. The private benefits of consuming a merit good are less than the social benefits
8. Private cost + external cost = social cost
9. Social benefits – private benefits = positive externality
10. The free market equ. Is where MSB=MSC

|  |  |
| --- | --- |
| **Public Goods** |  |

**Defining characteristics of Public Goods**

1. **Non-Rival:**
2. **Non-Excludable:**

Any good that has these characteristics is called a e.g.. Some goods show some characteristics of but not totally and are often called.

* Many goods in our economy are not public goods, they are goods. This means that they are *neither* nor **.** For example, if I consume it you cannot and a producer can stop me consuming, as if I do not pay for it I cannot consume it.

**Public Goods and Market Failure**

If left to the market public goods would.

People want street-lighting and if it were not provided then this is a source of market failure. There is one main reason why public goods are not provided….

**The Free Rider Problem**

|  |  |
| --- | --- |
| **Free Rider Problem** |  |

* Once a public good has been provided for one individual, it is automatically provided for all. The market fails because
* However, if everyone waits for others to supply the public good then it

 . The non-excludability characteristic means that the price mechanism

**Discussion:** Imagine a world, exactly the same as the one that you currently live in, except there is no Govt. and firms will only produce goods when they can make a profit. Can you think of circumstances that would allow a firm to make a profit on selling street lighting? Lighthouses? Fireworks displays?

**Activity 1:** Using your definition of public goods in addition to your knowledge of merit goods, decide whether the following goods are (quasi) public goods or merit goods

1. Nursery provision
2. Mortorways
3. Social housing housing
4. National Parks
5. The Police Force
6. Museums
7. Flood defence
8. The Army

|  |  |  |
| --- | --- | --- |
| **Public Good** | **Quasi Public Good** | **Merit Good** |

**p**

**5. Labour Immobility**

|  |  |
| --- | --- |
| **Labour (im)mobility** |  |
| **Structural Unemployment** |  |

If there is **labour immobility**

. The economy will be producing PPFs due to there being unemployed resources (an inefficient allocation of resources and **market failure)**.

This unemployment may be  **unemployment**. This occurs when

**Geographical and Occupational Immobility**

|  |  |
| --- | --- |
| **Geographical Immobility** |  |
| **Occupational Immobility** |  |

There are two types of labour immobility: geographic and occupational.

**Activity 1:** Explain why there was mass unemployment in South Wales during the 1980s when the coal mines closed

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**Activity 3:** You are the Chancellor of the Exchequer. Explain policies that you could use to reduce unemployment caused by geographical and occupational labour immobility

|  |  |
| --- | --- |
| **Geographical Immobility** | **Occupational Immobility** |
|  |  |

**Ext:** Evaluate one policy x3 in the space below

**Factors Affecting Labour Mobility**

**a) Geographical mobility**

**b) Occupational Immobility**

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**6. Inequality**

**Starter:** Explain why different workers earn different salaries?

|  |  |
| --- | --- |
| Equality |  |
| Inequality |  |

In a free market an individual’s ability to consume goods and services depends upon his or her **income** or **wealth**. Note that the two concepts are linked but are not the same.

* **Income**:
* **Wealth:**

**Why is Inequality seen as Market Failure?**

**Activity 1:** Identify whether the following terms would be seen as ‘income’ or ‘wealth’

*Wages, Property, Salaries, Art, Dividends, Benefits, Shares, Wine, Cash, Bank Deposits, Interest, Bonus*

|  |  |
| --- | --- |
| Income | Wealth |
|  |  |

**Activity 2:** Identify **i)** the main causes of income inequality and **ii)** the economic and social costs

**Causes Costs**

**Activity 4:** Evaluating Policies to Reduce Inequality

|  |  |  |  |
| --- | --- | --- | --- |
| **Policy** | **Example** | **An (how it works)** | **Ev (balance)** |
| Higher minimum wage |  |  |  |
| Free provision of services (healthcare, education) |  |  |  |
| Higher rates of income tax |  |  |  |
| Subsidies for child care |  |  |  |
| **Ext**: Create a policy of your own  |  |  |  |