EBU5402 Enterprise Management

Lecture 4 – Economic Environment 1 - Microeconomics

©Bing Han 2018

Agenda

- What is the Economics, economic environment?
- Microeconomic and Macroeconomic environment
- Supply and Demand
- Price Determination
- Elasticity

©BH 2018

Queen Mary University of London

Why do we need to understand economics?

- **All** enterprises are affected by the economic environment
- Theoretically, enterprises in countries with **very strong government** regulation are **isolated** from the economic environment
- BUT
  - **No** country exists in isolation from the global environment
  - **All** countries have some degree of free market
- Most **telecom** service suppliers exist in a **free market** that is also subject to government and international **regulation**

3

Queen Mary University of London

Questions to ponder…

- What do you think of when somebody uses the term ‘economics’?
- How would you define the term ‘economics’?
- Why is it important for business organisations to understand and cope with their ‘economic environment’?

EBU5402 Enterprise Management 4

©BH 2018

Queen Mary
University of London

Definitions…

- **Economics** is the study of **human choice behaviour** and how it affects the production, distribution, and consumption of scarce resources [1]

- Studies of the economic environment look at how **individuals** and **societies** seek to satisfy needs and wants through incentives, choices, and allocation of scarce resources in the environment which surrounds them

EBU5402 Enterprise Management

5

Queen Mary
University of London

Crucial Concepts – Scarce Resources

- **All** things are scarce – there is a limited supply of all goods, raw materials etc.
- Societies want to ensure that these limited resources are fully **utilised**
- Scarcity can be **defined** as:
  - “the excess of human wants OVER what can actually be produced to fulfil those wants” [2]
  - Because of scarcity, **choices** have to be made between alternatives

Learn more: Scarcity Definition | Investopedia
http://www.investopedia.com/terms/s/scarcity.asp

EBU5402 Enterprise Management

6

©BH 2018

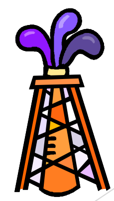
Queen Mary
University of London

Understanding scarcity

- Something may be scarce because there is a limit to how much can be **produced** at any time – e.g. memory chips

- Something may be scarce because there are limited **reserves** of it – e.g. oil, coal. Once it has been used – it's gone forever

Supply>demand=surplus
Supply<demand=scarcity



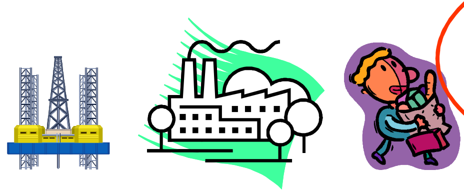
7

EBU5402 Enterprise Management

Queen Mary
University of London

Macroeconomics and microeconomics

- ***Macro*****economics** deals with the way the economy works at international or national level
- ***Micro*****economics** deals with individual organisations and their customers and suppliers



8

EBU5402 Enterprise Management

Microeconomics – formal definitions

Definition:

- "the branch of economics that studies **individual units** e.g. households, firms and industries. It studies the **interrelationships** between these units in determining the pattern of production and distribution of goods and services" [3]

- "the study of an organisation and its customers/suppliers in isolation from the rest of the economy" [*Palmer]*

9

EBU5402 Enterprise Management

Key aspects of microeconomics

Key aspects we need to understand are:

- Competition
  - Perfect
  - Imperfect
  - Oligopoly
  - Monopoly
- Demand & Supply
- Price determination
- Elasticity

We will define these terms later

10

EBU5402 Enterprise Management

©BH 2018

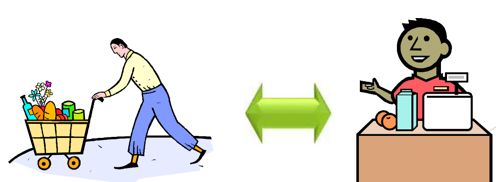
Competition

- Competition exists for most organisations operating in a commercial environment
- Ultimately organisations want to **attract customers** away from their competitors
- This is done in a number of ways, including
  - **better products** (differentiation – see Marketing lecture) and
  - **pricing** (see Marketing lecture)
- Competition can also arise between organisations when resources are scarce

EBU5402 Enterprise Management

Markets

- Economists define markets in terms of the interaction between two groups:
  - Those wanting to **buy** products
  - Those wanting to **sell** them
- When studying microeconomics it is important to remember that it is assumed that the **national economy is stable**



12

EBU5402 Enterprise Management

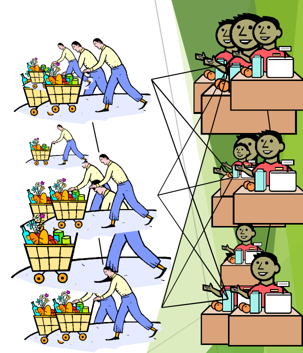
©BH 2018

Queen Mary
University of London

Market structure [4]

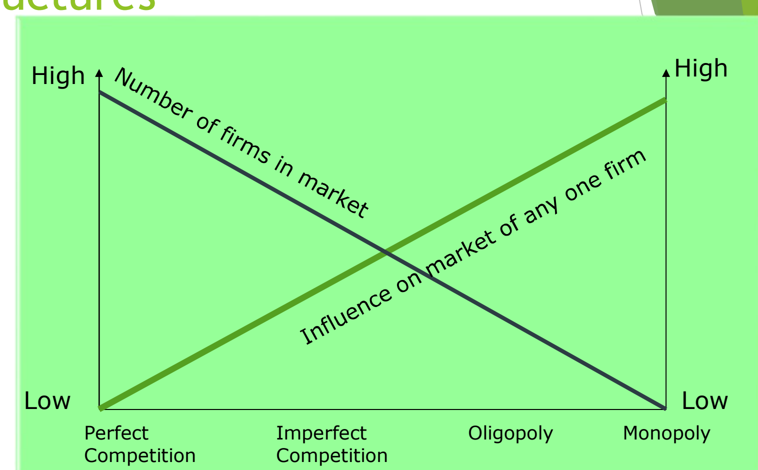
The term 'market structure' is used to describe

- The **number** of buyers and sellers operating in a market
- The extent to which the market is **concentrated** in the hands of a small number of buyers and/or sellers
- The degree of **collusion** or **competition** between buyers and/or sellers



Queen Mary
University of London

The continuum of market structures

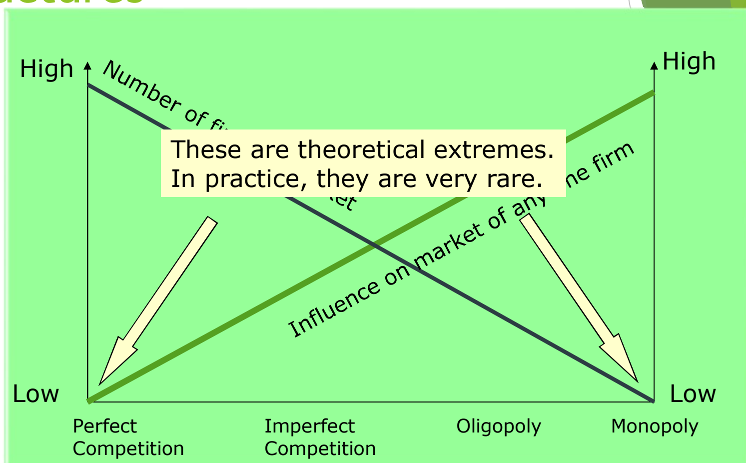


[5]

©BH 2018

Queen Mary
University of London

The continuum of market structures



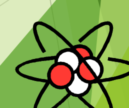
15

EBU5402 Enterprise Management

Queen Mary
University of London

Perfect (or 'atomistic') competition

- Definition:
  - "a market structure in which there are **many firms**; where there is **freedom of entry** to the industry; where all firms produce an **identical product**; and where all firms are price takers" [6]
- **Price takers** – meaning that the only determination of price is the competitive market forces alone
  - i.e. firms are not free to set what prices they would like
- **Simplest** type of market to understand
- Very **rarely** found in practice

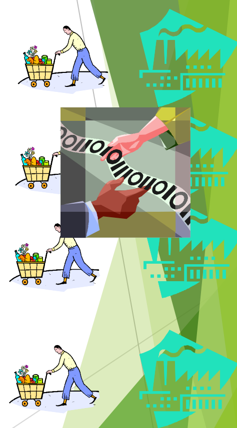


16

EBU5402 Enterprise Management

Characteristics of a perfect competitive market

- There are a large number of **producers**
  - Each has similar costs and an identical product
- There are also a large number of **buyers**
  - Each buying only a small percentage of the output
- Buyers and sellers are free to **enter** or **leave** the market
- There is a ready supply of **information** about market conditions



17

EBU5402 Enterprise Management

Building blocks of competition

- The building blocks of competition are:
  - Demand
  - Supply
  - Price determination

We will look at each of these

18

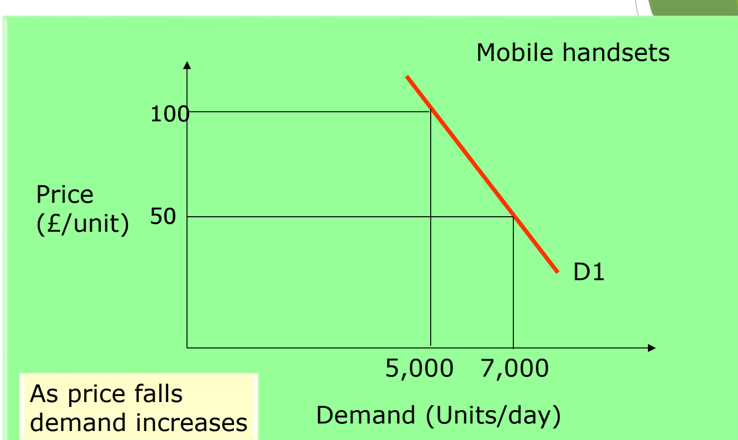
EBU5402 Enterprise Management

Demand

- Definition
  - " the **quantity** of a product that consumers are willing and able to buy at a specific **price** over a given **period** of time" *Palmer*
- General rules –
  - As the price of a product or service **drops** so the demand will be expected to **increase**
  - So, if the price of a product or service **rises**, then demand is expected to **decrease**

EBU5402 Enterprise Management 19

Demand curve



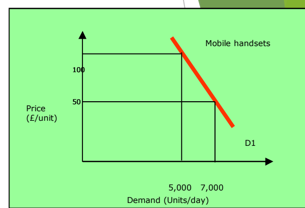
EBU5402 Enterprise Management 20

©BH 2018

Queen Mary
University of London

Demand curve assumptions

- The price of **substitutes** for mobile phones (e.g. landlines, Skype, Apple Watch etc.) will not change
- Consumers will **not** suddenly decide not to buy mobile phones any more!
- When these **assumptions change**, a new demand curve is needed to explain a new relationship between price and quantity demanded

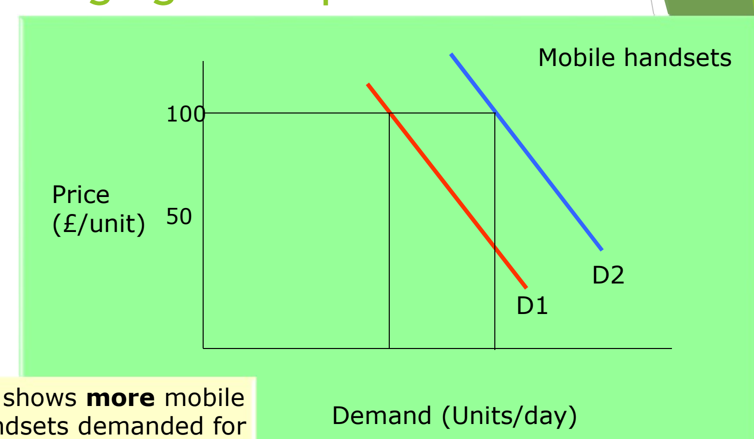


21

EBU5402 Enterprise Management

Queen Mary
University of London

Demand curve – changing assumptions



D2 shows **more** mobile handsets demanded for a particular price

22

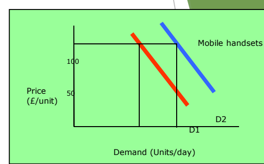
EBU5402 Enterprise Management

©BH 2018

Queen Mary University of London

Upward demand shift - possible causes

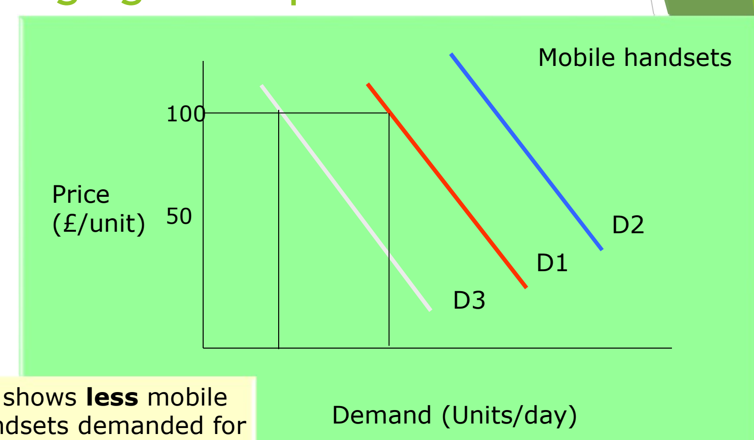
- Consumers could have become **wealthier**
- The price of **substitutes** (e.g. MP3 players, Apple Watches) could have increased
- Demand for **complementary goods** (e.g. music downloads, communications)
- Consumer **preferences** may change (eg Apple Watch vs smartphone)
- **Advertising** campaign may increase demand



23

Queen Mary University of London

Demand curve – changing assumptions



D3 shows **less** mobile handsets demanded for a particular price

24

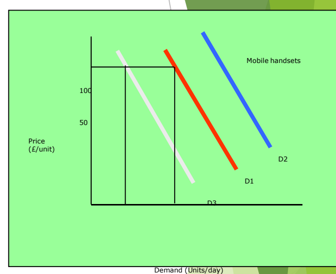
EBU5402 Enterprise Management

©BH 2018

Queen Mary
University of London

Downward demand shift - possible causes

- Consumers could have become **poorer**
- The price of **substitutes** could have reduced, making them more attractive than mobile phones
- Mobile phones become associated with **health hazards** – e.g. brain damage, especially in children
- An **advertising** campaign for substitute products



Queen Mary
University of London

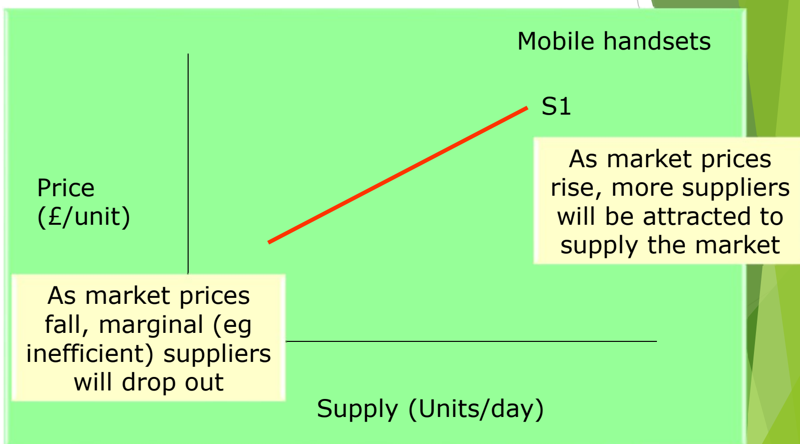
Supply

Definition

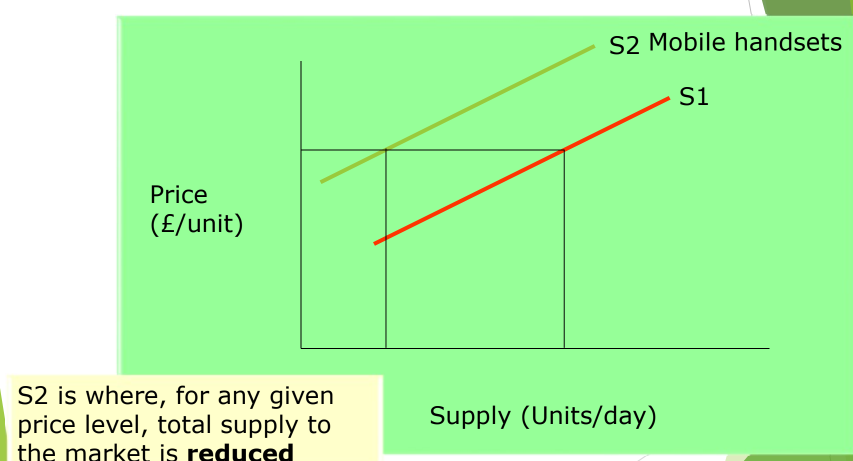
- “the **amount** of a product that producers are willing and able to make available to the market at a given price over a particular period of time” (*Palmer)*

©BH 2018

Supply curve

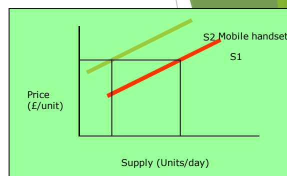


Supply curve – changing assumptions

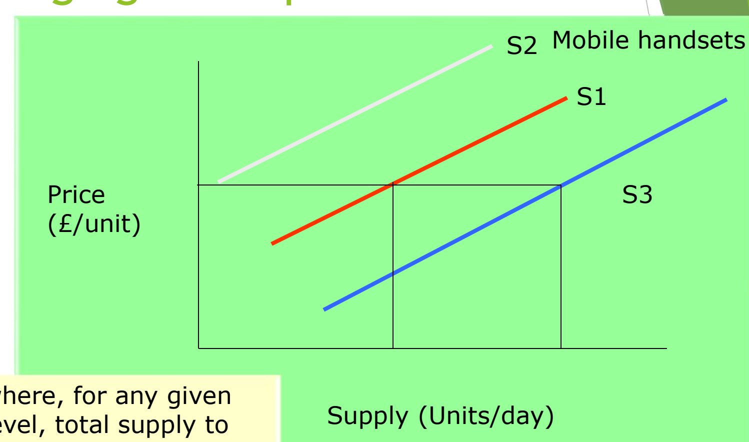


Reduced supply – possible causes

- **Production** could become more expensive. For any given price level, fewer firms will be willing to supply to the market as they will no longer be able to cover their costs
- **Extraneous factors** (e.g. transport problems) could result in producers having difficulty in getting their produce to the market place
- Governments may impose additional **taxes** on supplies



Supply curve – changing assumptions

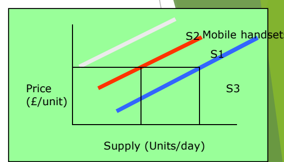


S3 is where, for any given price level, total supply to the market is **increased**

©BH 2018

Increased supply – possible causes

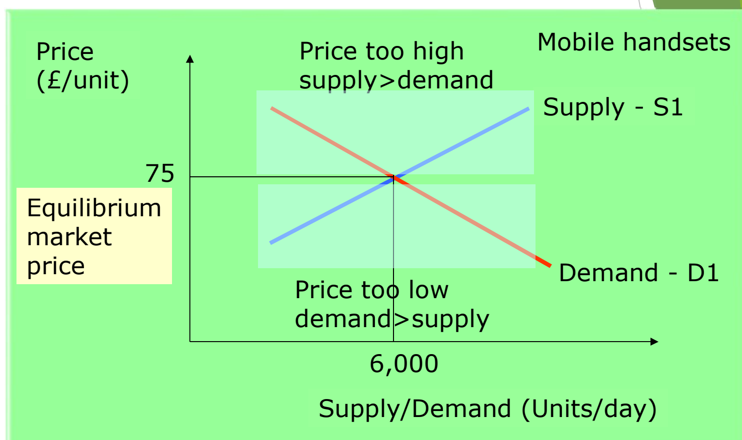
- New **production technology** could result in mobile phones being produced more efficiently
  - suppliers are then prepared to supply more handsets at any given price
- **Extraneous factors** (e.g. loss of other markets) could result in a glut of produce which must be sold and the market is therefore flooded with additional supply
- Governments may give **subsidies**, thereby increasing suppliers' willingness to supply to the market



Price determination

- An examination of the demand and supply graphs indicate that they share common axe
  - Vertical axes refers to the price
  - The horizontal axis refers to the quantity changing hands
- So, It is possible to redraw the original demand and supply lines on the same graph

Equilibrium market price

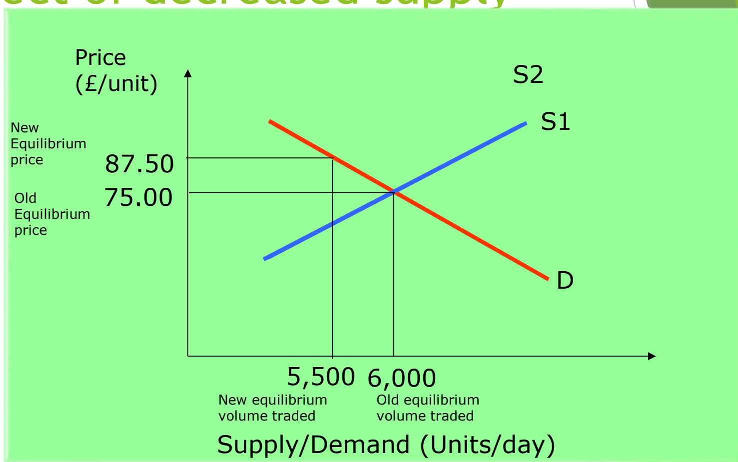


Price determination

- In perfectly competitive markets, the process of achieving **equilibrium** between supply and demand happens automatically without external intervention
- The market alone determines the 'going rate' for the product – firms are 'price takers'

Queen Mary
University of London

Equilibrium market price – effect of decreased supply



35
EBU5402 Enterprise Management

Queen Mary
University of London

Changes in the equilibrium price

- Remember - the market alone determines the 'going rate' for the product – firms are 'price takers'
- Changes in the equilibrium price come about for two reasons
  - Assumptions about **suppliers**' ability or willingness to supply change, resulting in a shift to a new **supply curve**
  - Assumptions change about **buyers**' ability or willingness to buy, resulting in a shift to a new **demand curve**
- New equilibrium prices and trade volumes can be found at the **intersection** of the supply and demand curves

36
EBU5402 Enterprise Management

©BH 2018

Queen Mary
University of London

Elasticity of demand

- Definition “the extent to which demand changes in relation to a change in price or some other variable such as income”
- **Price elasticity** of demand refers to the ratio of percentage change in demand to the percentage change in price
- Where demand is relatively **unresponsive** to price changes, demand is said to be **inelastic** with respect to price

price elasticity of demand =	change in demand (%)
	change in price (%)

Learn more:
http://www.investopedia.com/terms/p/priceelasticity.asp

37

EBU5402 Enterprise Management

Queen Mary
University of London

Elasticity of supply

- Definition
  - “a measure of the responsiveness of supply to changes in price” Palmer
- If suppliers are **relatively unresponsive** to an **increase** in the price of a product, the product is described as being **inelastic** with respect to price
- If producers **increase** production substantially as **prices rise**, the product is said to be **elastic**

price elasticity of supply=	change in supply(%)
	change in price(%)

38

EBU5402 Enterprise Management

Queen Mary University of London

Limitations of theory of perfect competition

- Perfect competition is an ideal situation – i.e. an automatic **balancing** of supply and demand at an **equilibrium price**
- However, this happens **very seldom** in practice

There are several reasons for this:

- Where economies of scale are achievable in an industry sector, it is possible for **firms** to grow larger and become more efficient
- Markets are often dominated by large **buyers** who are able to exercise a large amount of influence over the market
  - National telcos used to have enormous power over equipment suppliers

EBU5402 Enterprise Management

Queen Mary University of London

Limitations of theory of perfect competition – more reasons

- Incentives and barriers and to entry to a market are not, in practice, limited to
  - **high prices** and profits which attract new entrants and
  - **low prices** and loss of profits which cause the least efficient to leave
- A presumption of perfectly competitive markets is that buyers and sellers have **complete information** about market conditions
  - this is rarely the case e.g. mobile phone call tariffs or credit card interest rates

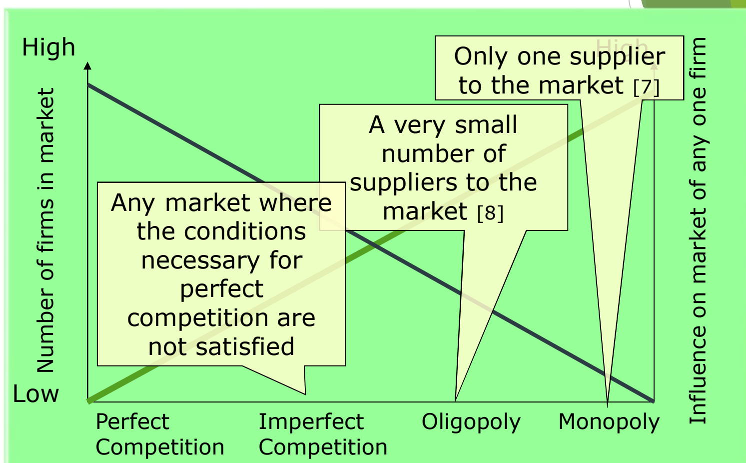
Learn more:
http://www.investopedia.com/video/play/perfect-competition-0/

40

EBU5402 Enterprise Management

Queen Mary University of London

Other forms of competition



41

EBU5402 Enterprise Management

Queen Mary University of London

Microeconomics – the effect of regulation and legislation [9]

- Market forces do not always ensure adequate competition
- Many countries have introduced **legislation** to ensure fair competition
  - The **European Union** can prohibit mergers of firms where the combined **turnover** would be > €200M or where the firm would have >25% of the national market
- Legislation may also be used to protect consumers from **unfair prices** or practices
  - The UK sets limits on price rises for basic utilities (e.g. water) or transport (e.g. rail)

42

EBU5402 Enterprise Management

In-class Exercises

In groups of 5:

- List 4 types of business where we are close to **perfect competition**
- List 4 types of business where we are close to a **monopoly**
- Presentation **–** if your organisation is in a highly competitive/monopolistic market, how would you cope/survive?

43

EBU5402 Enterprise Management

Exercise – possible answers

- List 4 types of business where we are close to perfect competition

  Did you have any other answers?

- List 4 types of business where we are close to a monopoly

  Did you have any other answers?

44

EBU5402 Enterprise Management

©BH 2018

Directed Reading

- Reading
  - Core Text Chapters 10 & 11

References

1. Economics for Business, J. Sloman & M. Sutcliffe, 3rd Edition, Prentice Hall, pg. 20
2. Sloman Pg. 21
3. The Business Environment, A. Palmer, 5th Edition, McGraw-Hill, pg. 370
4. Palmer Pg. 371
5. Sloman Pg. 212
6. Sloman Pg. 212
7. Sloman Pg. 213
8. Palmer Pg.420