4 MARKET DEMAND

4.1 Introduction

Demand is defined as the quantity of a good or service that consumers are **willing and able to buy at a given price** in a given time period. Each of us has an individual demand for particular goods and services.

Market demand is simply the **sum of the individual demand** for a product from each consumer in the market. If more people enter the market, then demand at each price level will rise.

4.1.1 Example - Mobile Phones and Mobile Phone Services

For example, market demand for mobile phones has expanded rapidly over the last few years as call costs have fallen. Eventually though the market demand for mobile phones will reach **saturation point** – every product has a **life-cycle**.

An interesting case study in changing market demand is the market for third generation mobile phones. In 2000 the leading telecoms companies paid in total over £22 billion pounds to win licences to operate third generation (3G) mobile phone networks in the UK. The demand from consumers for such services has so far fallen well short of expectations causing the leading players to cut their prices and write off some of the debts accumulated when they bid such huge figures for the 3G licences. 3G services went live in March 2003 and it will be interesting to see how the level of market demand evolves over the next couple of years.

For further independent research on the mobile phone industry, use this link to a special Guardian web site report on mobile phones.

4.1.2 Example - Market Demand for Music Sales

Another example of how market demand changes over time is the demand for different formats of music in particular the declining market demand for CD music sales as the popularity of downloading music from the internet continues to grow. The internet poses a serious risk for music publishers. Global sales of CDs continued to decline in 2002.

The British music industry is facing up to a sharp fall in music sales which according to the British Phonographic Industry (BPI) threatens thousands of jobs directly and indirectly involved in the music industry.

One interesting side issue is the impact that a change in government **indirect taxation** might have on market demand for CD sales in the UK. At the moment, CDs are subject to **value added tax** of 17.5%. The British and European music industry is lobbying for a reduction in VAT in a bid to boost sales and also to bring the industry in line with other hobbies such as books and cinema tickets which at the moment are not subject to valued added tax.

4.2 Effective Demand and Willingness to Pay

Demand in economics must be **effective**. Only when a consumers' **desire** to buy a product is backed up by an **ability to pay for it** do we speak of demand. For example, many people would be willing to buy a luxury sports car, but their demand would not be effective if they did not have the financial means to do so. They must have sufficient **real purchasing power**.

Consider the market for **pay-per-view boxing events** – the companies promoting these events must price carefully so that they tap into the largest possible market.

4.2.1 Willingness to Pay

What price are you **willing to pay** to view a world championship boxing event? How much are you prepared to spend to watch Premiership soccer on a pay-per-view basis? Or would you be willing and able to pay to watch Elton John perform live through subscription channels? The concept of willingness to pay is crucial to the theory of demand for goods and services.

For businesses, working this out often entails significant expense in terms of **market research** or a lengthy period in a particular market from which the lessons of trying to sell to genuine customers can be analysed. In the summer of 2002, **the Post Office** decided to run pilot schemes to test the "willingness to pay" of consumers to have guaranteed mail deliveries before 9am in the morning. The result was clear – few consumers will willing to pay anything like the charges that the Post Office was proposing and the

idea was dropped very quickly because there was simply an insufficient market demand to make the new services profitable.

Willingness to pay is also evident in the growing use of auctions in selling the rights for broadcasting sports events and scarce works of art. A good example of how the market can change lies with the bidding for the rights to show Premier Division football and England's international matches.

FA faces cash crunch over TV bids

> The Football Association is facing a cash crunch after the value of bids for its next television contract covering the FA Cup and England home internationals fell by more than £115m.The FA's current £345m deal with the BBC and British Sky Broadcasting expires in summer 2004. But the total value of the highest bids for the next broadcasting contract is understood to have fallen by more than a third.
>
> The FA has split the rights for its next deal into two packages. The first package will allow the winning bidder to choose which FA Cup matches it wants to show and also allow it to broadcast live coverage of England home matches.
>
> The second package is expected to be sold for a smaller sum and will allow the broadcast of highlights of England matches, as well as the second pick of FA Cup matches. The sharp decline in what broadcasters are prepared to pay reflects how the market has changed since the last TV deal was struck. (Adapted from newspaper reports – June 2003)

At any given time there are likely to be many different **pricing strategies** at work in any given market. For example, many businesses practice what is called **price discrimination** whereby the same good or service is sold to different groups of customers at different prices on the grounds that each segment of the market has a different willingness to pay for the product.

4.2.2 Latent Demand

Latent demand exists when there is willingness to purchase a good or service, but where the consumer lacks the **real purchasing power** to be able to afford the product. Latent demand is affected by **persuasive advertising** – where the producer is seeking to influence consumer tastes and preferences. For background reading on advertising, go to the web site of the Advertising Standards Agency.

4.3 Concept of Derived Demand

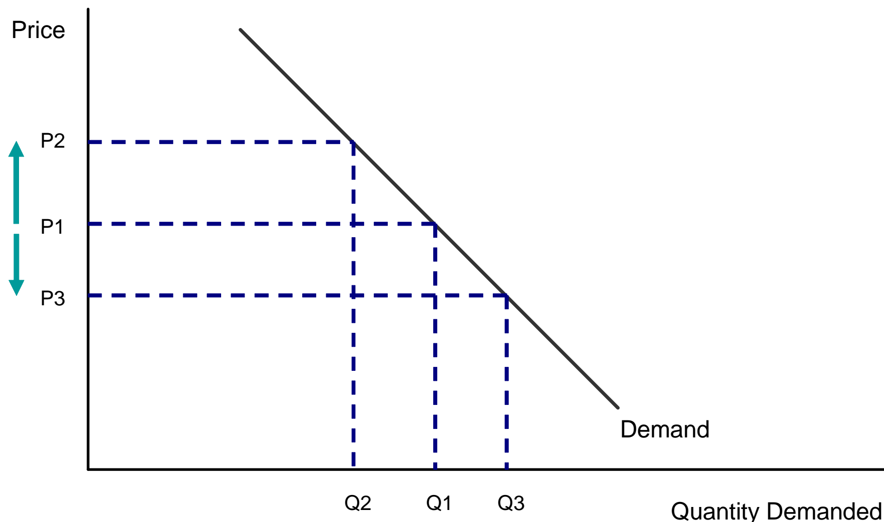
The demand for a product X might be strongly linked to the demand for a related product Y – giving rise to the idea of a derived demand. For example, the **demand for coal** is derived in part on the demand for fossil fuels to burn in the process of generating energy.

Likewise the **demand for steel** is strongly linked to the demand for new vehicles and many other manufactured products, so that when an economy goes into a downturn or recession, so we would expect the demand for steel to decline likewise. The major producer of steel in the UK is Corus. They produce for a very wide range of different industries; from agriculture, aerospace and construction industries to consumer goods producers, packing and the transport sector. Steel is a highly **cyclical industry** – the demand for steel is highly sensitive to changes in the economic cycle and fluctuations in the sterling exchange rate. In recent years, Corus has found it difficult to compete on cost and price with lower-cost steel producers in EU and non-EU countries and as a result output and jobs have fallen.

4.4 Law of Demand

The **law of demand** is that there is an **inverse relationship** between the price of a good and demand. As prices fall we see an **expansion of demand**. If price rises there should be a **contraction of demand**.

4.5 The Demand Curve



A **demand curve** shows the relationship between the price of an item and the quantity demanded over a period of time. For **normal goods**, more of a product will be demanded as the price falls. This is because at lower prices, consumers can afford to purchase more with their income. A fall in prices (shown by a movement from price P1 to p3) causes an increase in a consumers' **real income**.

Secondly, a fall in price makes one good **relatively cheaper** than a substitute encouraging consumers to **switch their** demand in favour of the lower priced product.

The demand curve is normally drawn in textbooks as a straight line suggesting a linear relationship between price and demand but in reality, the demand curve will be non-linear. No business has a perfect idea of what the demand curve for a particular product looks like, they use real-time evidence from markets to estimate the demand conditions and they accumulated experience of market conditions gives them an advantage in constructing demand-price relationships.

4.5.1 Movements along a Demand Curve

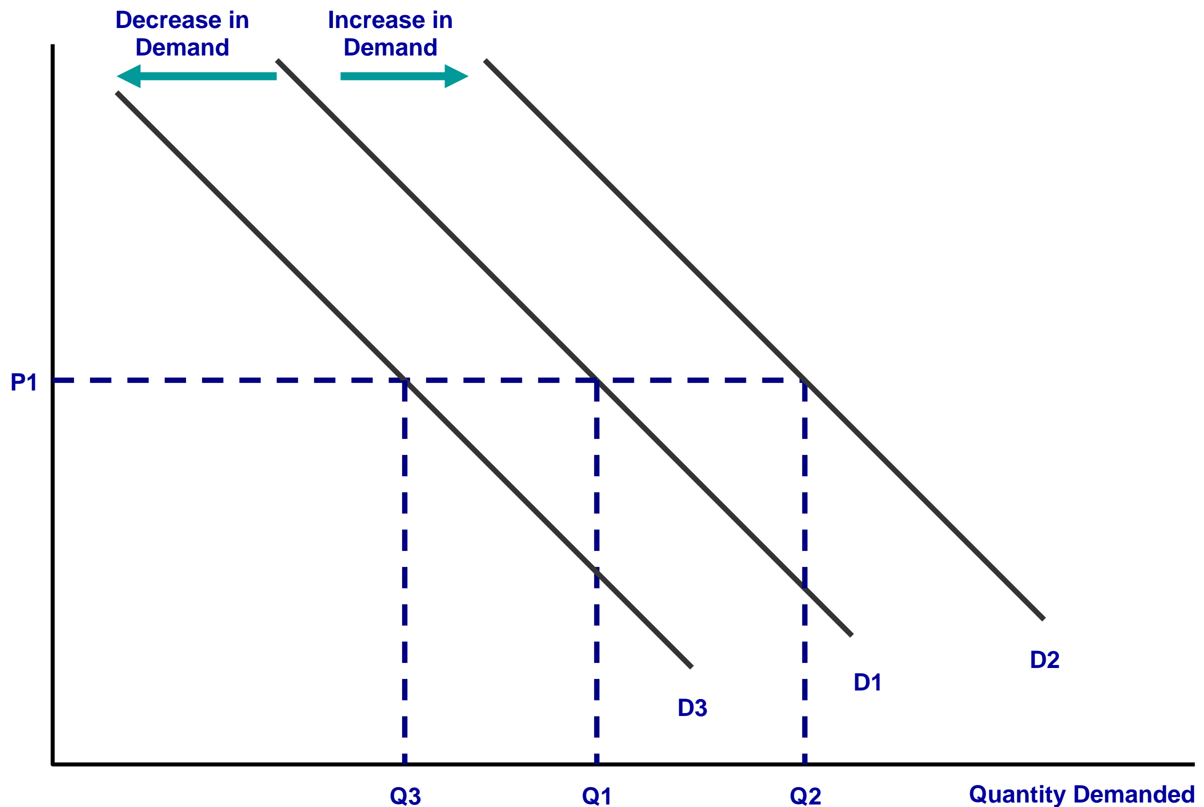
A change in the price of a good or service causes a *movement along the demand curve*. A fall in the price of a good causes an **expansion** of demand; a rise in price causes a **contraction** of demand. Many other factors can affect total demand - when these change, the demand curve can shift. This is explained below.

4.5.2 Shifts in the Demand Curve Caused by Changes in the Conditions of Demand

There are two possibilities: either the demand curve shifts to the right or it shifts to the left.

In the diagram below we see two shifts in the demand curve:

D0 - D2 would be an example of an **outward shift of the demand curve** (or an increase in demand). When this happens, more is demanded at each price. A movement from D0 - D1 would be termed an **inward shift of the demand curve** (or decrease in demand). When this happens, less is demanded at each price.



4.6 Causes of Shifts in the Demand Curve

4.6.1 Changing Price of a Substitute Good

Substitutes are goods in **competitive demand** and act as **replacements for another product**.

For example, a rise in the price of Esso petrol (other factors held constant) should cause a **substitution effect** away from Esso towards competing brands. A fall in the monthly rental charges of cable companies or Vodafone mobile phones might cause a decrease in the demand for British Telecom services.

Consumers will tend over time to switch to the cheaper brand or service provider. When it is easy to switch, consumer demand will be sensitive to price changes (see the section on price elasticity of demand)

Much depends on whether consumers have sufficient information about prices for different goods and services. One might expect that a fall in the charges from one car rental firm such as Budget might affect the demand for car rentals from Avis Hertz or Easycar. But searching for price information to get the best deal in the market can be time consuming and always involves an opportunity cost.

The development of the internet has helped to increase **price transparency** thereby making it easier for consumers to compare relative prices in markets.

4.6.2 Changing Price of a Complement

Two complements are said to be in **joint demand**. Examples include: fish and chips, DVD players and DVDs, iron ore and steel, success and hard work.

A rise in the price of a complement to Good X should cause a fall in demand for X. For example an increase in the cost of flights from London Heathrow to New York would cause a decrease in the demand for hotel rooms in New York and also a fall in the demand for taxi services both in London and New York.

A fall in the price of a complement to Good Y should cause an increase in demand for Good Y. For example a reduction in the market price of computers should lead to an increase in the demand for computer peripherals such as printers, scanners and software applications.

The extent to which a change in the price of one good leads to a change in the demand for a complement is determined by the cross-price elasticity of demand.

4.6.3 Change in the Income of Consumers

Most of the things we buy are **normal goods**, that is, more is bought when our income rises. When an individual's income goes up, their ability to purchase goods and services increases, and this causes an outward shift in the demand curve. When incomes fall, for example during an economic downturn or recession, there will be a decrease in the demand for most goods.

The size of a change in demand following a change in income is measured by income elasticity of demand.

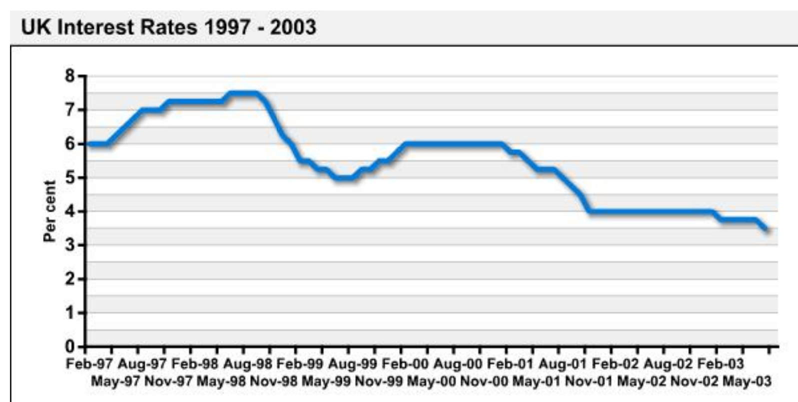
4.6.4 Change in Tastes and Preferences

Consumers' tastes can be volatile leading to unexpected fluctuations in demand. An example would be demand for British beef during the BSE crisis or the foreign demand for British lamb and pork in the wake of the Foot and Mouth crisis.

Persuasive advertising and marketing is designed to changes the tastes and preferences of consumers. The National Beef Association has been working hard over the last few years to changes consumer preferences and for a recovery in market demand for British produced beef.

4.6.5 Changes in Interest Rates

Many goods are bought on credit using borrowed money, thus the demand for them may be sensitive to the **rate of interest** charged by the lender. Therefore if the Bank of England decides to raise interest rates – the demand for many goods and services may fall. Examples of **"interest sensitive"** goods include household appliances, electronic goods, new furniture and motor vehicles. The demand for new homes is affected by changes in mortgage interest rates.



The chart above shows interest rates since 1997. The Bank of England was made independent in May 1997 and since then has had complete responsibility for setting of official interest rates in order to meet the inflation target set by the Government.

4.7 Income and Demand: Normal and Inferior Goods

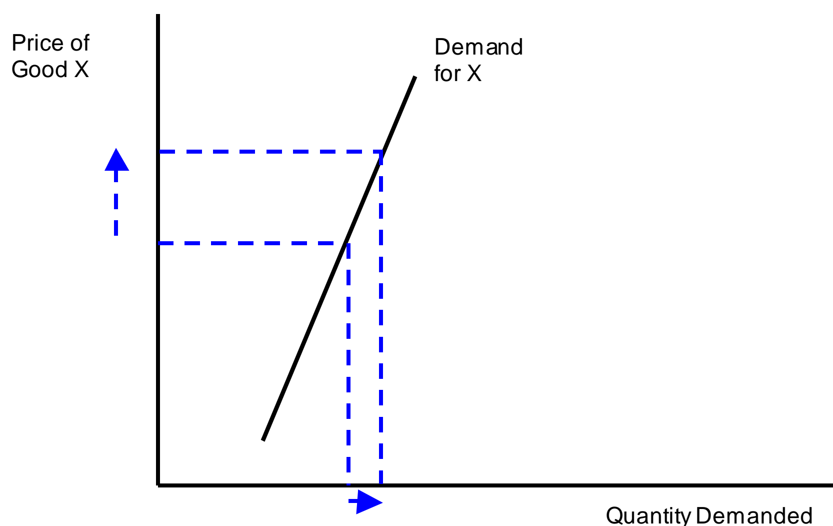
For **normal products**, more is demanded as income rises, and less as income falls.

Most products are like this but there are exceptions called **inferior products**. They are often cheaper poorer quality substitutes for some other good. Examples include black-and-white television sets, cigarettes, white bread and several other basic foods.

With a higher income a consumer can switch from the cheaper substitute to the more expensive, but preferred alternative. As a result, less of the inferior product is demanded at higher levels of income. Inferior goods have a negative income elasticity of demand.

4.8 Exceptions to the Law of Demand

Do consumers always buy more of something when the price falls? Some economists claim there are two exceptions to the normal law of demand – leading to the possibility of an upward sloping demand curve.



4.8.1 Ostentatious Consumption

Some goods are **luxurious items** where satisfaction comes from knowing both the price of the good and being able to **flaunt consumption** of it to other people!

A higher market price may also be regarded as a reflection of **product quality** and some consumers on high incomes are prepared to pay this for the **"snob value effect".** Examples might include perfumes, designer clothes, and top of the range cars.

Consider the case of VI which is considered to be the most exclusive perfume in the world. Only 475 bottles have been produced and bottles have been selling for £47,500 each – a classic case of paying through the nose for an exclusive good. The Vi perfume web site has more details if you are looking for an expensive birthday gift!

Goods of **ostentatious consumption** have a **high-income elasticity of demand**. That is, demand rises more than proportionately to an increase in consumers' income. With products of ostentatious consumption, the demand curve may slope upwards from left to right – more is bought at higher prices.

4.8.2 Speculative Demand

The demand for a product can also be affected by **speculative demand** in the marketplace. Here, potential buyers are interested not just in the satisfaction they may get from consuming the product, but also the **potential rise in market price** leading to a **capital gain** or profit.

When prices are rising, speculative demand may grow, adding to the upward pressure on prices. The speculative demand for housing and for **shares** (also known as equities) might come into this category.