### Why do we need money?



To exchange for those goods and services we each need and want but are unable to produce for ourselves, because

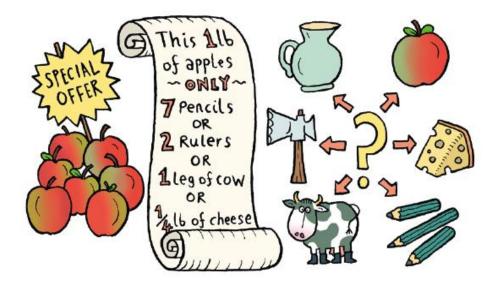
- we are not self-sufficient (individually we cannot produce everything we need and want)
- we specialize in those tasks and productive activities we are best able to do and therefore need to trade with producers of other products

### Barter

**Barter** involves exchanging goods and services, i.e. 'payment' for one product is made with another

#### Problems with barter are:

finding someone to swap with (there must be a double coincidence of wants) >

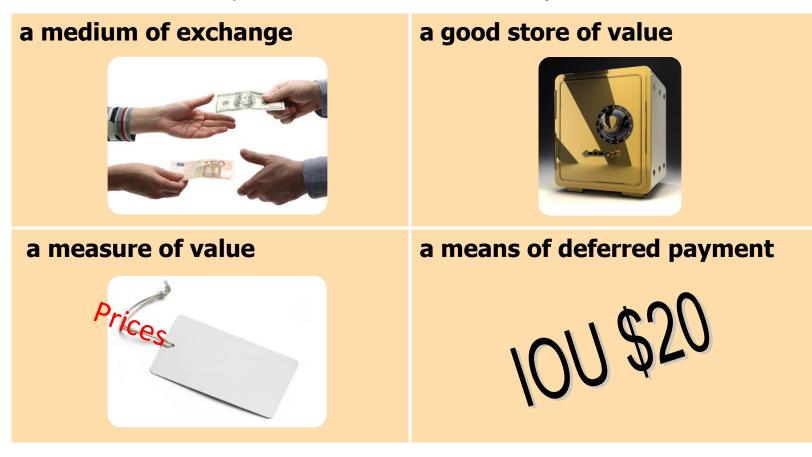




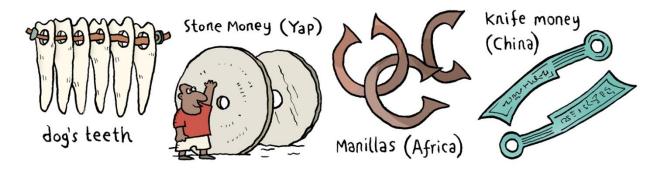
 how to agree values (how many apples to one cow, and how much cheese for one apple?)

# The functions of money

To overcome the problems of barter a money must be:



# Choosing a good money

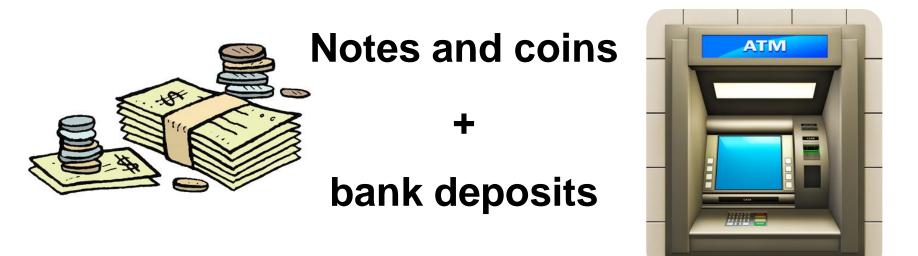


A good money must be:



- acceptable to others in payment for goods and services
- durable so that it is not worn down or damaged easily though frequent use
- **portable** so that it is easy to carry around
- divisible into smaller units and values
- scarce, otherwise if it is freely available it will be of little or no value to others

# What is money?



Bank deposits are '**near money**' because they can be withdrawn to provide cash to make payments reasonably quickly

### Financing economic activity

**Banks** lend money to people, firms and government organizations to finance their spending

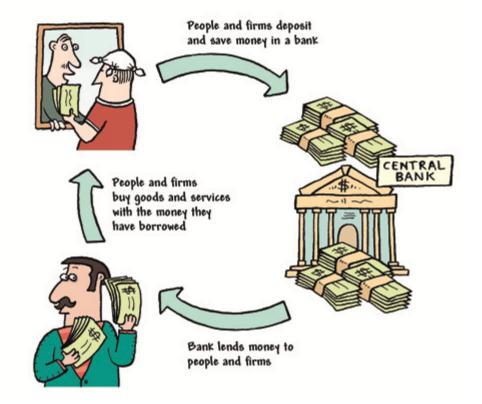
Stock can be sold on the stock market to provide long-term finance for companies and governments





# The banking system

**Banks** are **financial intermediaries**: they bring together customers who want to save their money with customers who want to borrow it



# The price of money

... is the **interest rate** (expressed as a % per unit of money)

The base rate of interest in an economy is set by the central bank or the government. It is the rate which the central bank will charge banks for lending them money if they run short of cash.

#### SAVING MONEY

Banks need money to make loans

Banks offer savers interest to encourage them to save their money in savings accounts

The interest rate is a reward for saving money

Savers may be offered higher interest rates for long-term savings

For example:



to attract savings, a bank offers its customers annual interest of 3%

a person who saves \$1,000 in a savings account for one year will receive \$30 in interest at the end of that year

### The price of money

#### **BORROWING MONEY**

The interest rate is the cost of borrowing money

Lending money to people and firms involves administrative costs and risks of nonrepayment. Banks must cover these costs to make a profit

The longer the term of the loan and the greater the risk of non-repayment the higher the interest rate charged

Interest charges also compensate banks for price inflation which will reduce the value of the money they have tied up in loans For example :



a small firm borrows \$10,000 repayable in one year

the interest rate is 5% per year

the total repayable at the end of the year = \$10,500

### The role of a central bank

The **central bank** is at the centre of the banking system in most economies The main function of a central bank is to maintain the stability of the national currency and the money supply

#### THE BANKERS' BANK

Supervises the banking system and regulates the conduct of banks

Holds the accounts of banks and transfers money between them

Is lender of the last resort to banks if they run short of money



The Bank of England

# The role of a central bank

#### THE GOVERNMENT'S BANK

Issues notes and coins

Manages the national debt

Manages payments to and from the government

Manages the nation's gold and foreign currency reserves

Operates the government's monetary policy



The Central Bank of Indonesia

# Commercial Bank vs. Central Bank

	Central Bank	Commercial Bank
Main functions		
What services do they provide and to whom?		
How are they organized, controlled and financed?		
What are their relationships to other banks and financial organizations?		

# Commercial Bank vs. Central Bank

		Central bank	Commercial bank
1 Main fu	unctions	To maintain the stability of the national currency and the money supply	The provision of financial services to individuals and businesses
2 Service	25	issuing notes and coins managing payments to and from the government's account managing the national debt supervising and regulating the banking system acting as lender of last resort to the banking system managing the nation's gold and foreign currency reserves operating monetary policy	<ul> <li>accepting deposits of money and savings</li> <li>helping customers make and receive payments</li> <li>making personal and commercial loans</li> <li>buying and selling shares for their customers</li> <li>providing insurance</li> <li>operating pension funds</li> <li>financial and tax planning advice</li> <li>exchanging foreign currencies</li> </ul>
3 Organiz control finance	and	In most countries, the central bank is owned by the government and run by a public corporation	These banks are usually limited companies owned and financed by their shareholders
4 Relation with ot organiz	ther	The central bank in a country supervises the banking system, regulates the conduct of banks, holds their deposits and transfers funds between them	Commercial banks are regulated by the central bank; they lend money to other businesses and to government

# Issuing stock

**Stock** is the name used to describe money raised by a joint stock company or corporation, or a government.

**Joint stock companies** sell shares to raise **permanent capital**. Shares never have to be repaid.

The people and organizations that buy shares become the owners or **shareholders** of joint stock companies.

Each share held in a company entitles its owner to a share of any company profits. This payment from profits is called a **dividend**.

A government sells loan stocks or **bonds** to raise money for a fixed period of time, sometimes up to 25 years or more. Bonds are repaid with interest at the end of their term.

### The stock market

A **stock exchange**, is a business organization that enables individuals, companies and governments to buy and sell loan stocks and company shares on the global stock market.

The **stock market** is the global market for the buying and selling of new and second-hand government stocks and company shares.

The stock market brings together all those individuals and organizations willing and able to buy stocks and shares and all those individuals and organizations willing and able to sell them.



### Why is the stock market important?

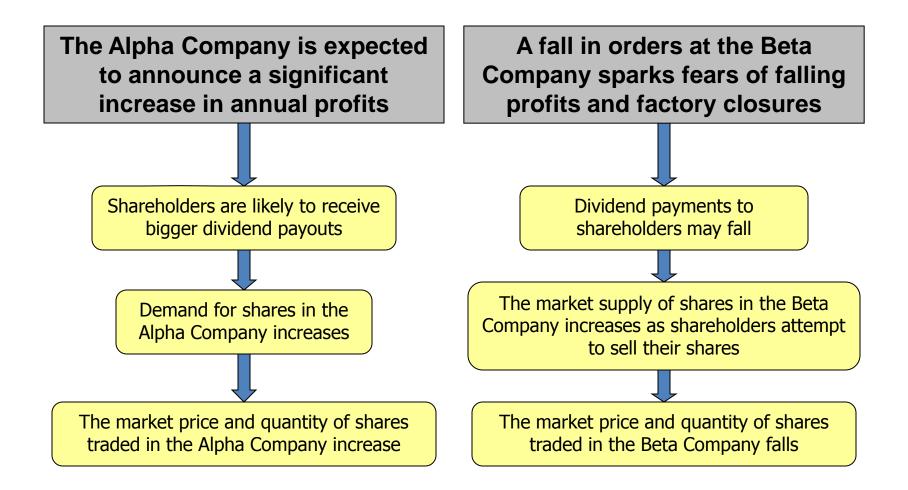
Far fewer stocks and shares would be traded if the individuals and organizations that bought them were unable to sell them on at a future date to other investors so they could get their money back.

If governments and companies cannot sell their newly issued stocks and shares they will be unable to raise the capital they need to finance their activities.

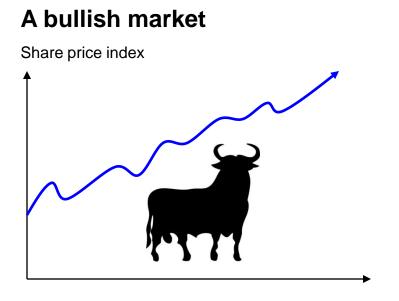
There will be less economic activity. Fewer goods and services will be produced.



### What determines share prices?



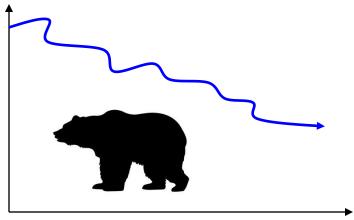
### Stock market conditions



Stock market prices are rising

#### A bear market

Share price index

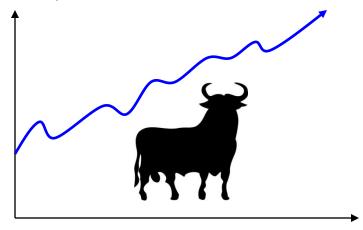


#### Stock market prices are falling

### Stock market conditions

#### A bullish market

Share price index



People and firms who buy shares in the hope their price will rise so that they can sell them at a profit are called bulls. The stock market is called bullish if share prices are rising in general.

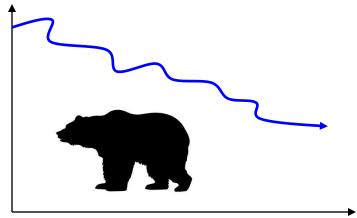
Stock market prices are rising

#### Stock market conditions

People who sell shares in the hope their price will fall so that they can buy them back later at much lower prices are called bears. When share prices are falling the stock market is called a bear market. Bears buy back the shares despite their falling prices because they believe their prices will rise again in the long run.

#### A bear market

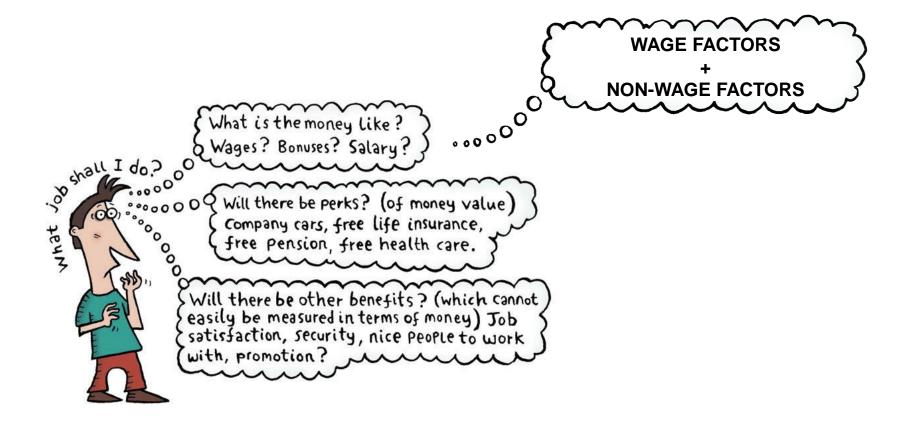
Share price index



#### Stock market prices are falling

# **Occupations and earnings**

### Why do people work?



# Wage factors

Most people will supply their labour to firms to earn an income. Firms pay **wages** to workers to supply their labour to produce goods and services.

Paid employment therefore provides people with money to buy the goods and services they need and want and cannot produce themselves.



The **supply of labour** to an occupation depends on the **wage rate** for the job:

- time rate per hour worked per employee
- **piece rate** per unit produced per employee
- performance-related pay: commission on sales, annual bonuses, etc.

# Non-wage factors

#### Non-wage factors include:

- hours of work
- holiday entitlement
- promotion prospects
- flexible working arrangements
- qualifications required

- quality of working environment
- how secure the job is
- how satisfying the work is
- fringe benefits
- training opportunities

- pension entitlement
- opportunities for promotion
- interesting and varie tasks
- distance or time it takes to travel to and from work.

A person will compare the advantages and disadvantages of different jobs or occupations in order to choose one to specialize in

All the wage and non-wage factors that affect the attractiveness of a particular job or occupation are called its **net advantages** 

1. Wages and salary levels will depend on the labour demand supply conditions for each job. Some jobs require people with high levels of skills and qualifications. However, the supply of labour with specific skills and qualifications may be relatively low compared to the supply of unskilled labour. So, for example, jobs for economists may offer high wages or salaries to attract a supply of suitably qualified labour. Similarly, jobs that require people to work long and unsociable hours or involve dangerous work may need to offer attractive wages to encourage a supply of labour willing to work in these jobs.

2. The job advertised for an economist is likelyo offer the higher salary because the supply of skilled economists may be limited. This is because good economists may have studied for many years at university to obtain the qualifications they need. In contrast, general labouring may offer the lowest wages because there is a ready supply of semiskilled and unskilled labour willing to undertake the work.

3. The economist job is likely to attract the least number of applicants. This is because economist skills are in short supply. The cost of long periods of study at college and the opportunity cost of foregone earnings during these periods will restrict the number of people wishing to become economists. 4. Your choice of job will depend not just on your skills and interests but also the net advantages of the positions, including the wage or salary, hours of work, the cost and time it takes to travel to and from your workplace, promotion prospects and many other factors.

### The net advantages of a job

#### Surgeon

- highly skilled and in short supply
- job involves many years of study and practice with little or no income
- long and often unsociable hours of work including evenings and weekends
- intense pressure at work
- high earnings are a compensating differential

#### **Office assistant**

- low or unskilled work
- little training involved
- five days a week
- few responsibilities and work may become boring
- large supply of labour relative to demand
- wages tend to be relatively low

### Most people specialize at work

#### **Advantages**

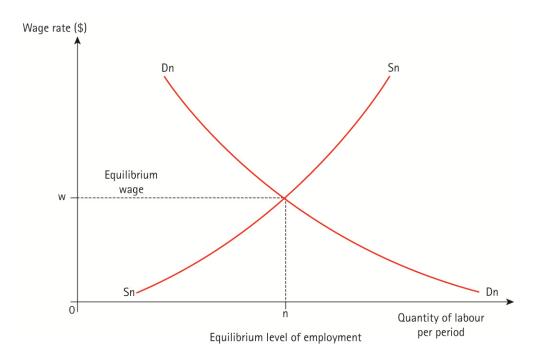
- They make best use of their skills and abilities
- They can improve their skills further by repeatedly carrying out the same or similar tasks
- More-experienced and skilled employees usually earn more than less-experienced and unskilled employees because they are more productive and demand for their labour by firms is greater

#### Disadvantages

- They must rely on others to produce the goods and services they cannot produce themselves
- Doing the same job for many years may become boring
- People can lose their jobs if their skills or occupations become unwanted as consur demand and/or technology changes



### The market for labour

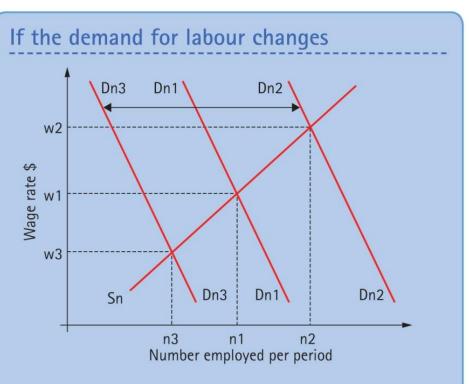


As the **wage rate** for a particular occupation rises

- the supply of labour to that occupation expands (i.e. the occupation becomes more attractive compared to leisure and other occupations)
- the demand for labour contracts (i.e. labour becomes more expensive to employ relative to capital equipment)

# Picking the winners in the agricultural labour market

# The demand for labour



If the demand for labour rises from Dn1 to Dn2, the wage rate rises from w1 to w2 and employment increases from n1 to n2.

If demand falls from Dn1 to Dn3, the wage rate falls from w1 to w3 and employment falls to n3.

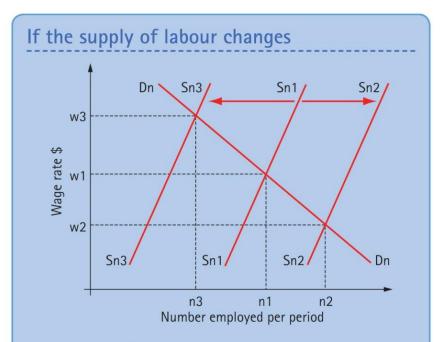
### What causes the demand for labour to increase?

- an increase in consumer demand
- an increase in labour productivity
- an increase in the cost of equipment
- a fall in non-wage employment costs, e.g. pension contributions, health and safety costs

#### What causes the demand for labour to fall?

- a fall in consumer demand
- a fall in labour productivity
- a fall in the cost of equipment
- a rise in non-wage employment costs

# The supply of labour



If the supply of labour rises from Sn1 to Sn2, the wage rate falls from w2 to w1 and more people are employed at n2.

If supply falls from Sn1 to Sn3, the wage rate rises from w1 to w3 and employment falls.

### What causes the supply of labour to an occupation to increase?

- an increase in its net advantages
- an increase in the population of working age
- an increase in the amount and quality of education and training available in relevant skills

# What causes the supply of labour to an occupation to fall?

- a reduction in its net advantages
- a fall in the population of working age
- a fall in in the amount and quality of education and training available in relevant skills

#### Activity 3.11 The rise and fall of labour

What has changed?	Impact on labour demand?	Impact on labour supply?	Impact on market wage rate?
<ul> <li>Nurses are offered new contracts with shorter working weeks</li> </ul>		Increase in the supply of nurses	Fall
<ul> <li>Consumer spending on flat-screen televisions increases significantly</li> </ul>	Increase in the demand for factory workers to make flat-screen televisions		Rise
<ul> <li>The government raises the retirement age of public sector workers</li> </ul>		Increase in the supply of people seeking public sector jobs	Fall
<ul> <li>Overtime payments for airline employees are to be scrapped</li> </ul>		Fall in the supply of airline industry workers	Rise
<ul> <li>Computerized assembly lines boost labour productivity in car plants</li> </ul>	Increase in the demand for car assembly line workers		Rise
<ul> <li>A major retail chain announces it will remain open 24 hours each day</li> </ul>		Fall in the supply of retail workers	Rise
<ul> <li>Assaults on police increase</li> </ul>		Fall in the supply of police	Rise

### Activity 3.11 The rise and fall of labour

<ul> <li>The government announces it will tax tips received by restaurant and hotel staff from next April</li> </ul>		Fall in the supply of restaurant and hotel workers	Rise
<ul> <li>A survey finds more people are working part-time and flexible hours</li> </ul>		Increase in the supply of part-time workers and others seeking more flexible working arrangements	Fall
<ul> <li>Statutory maternity leave and pay are to be increased</li> </ul>	Fall in the demand for female workers	Increase in the supply of female labour	Fall
<ul> <li>New technology allows more office workers to work from home</li> </ul>		Increase in the supply of labour to office-based occupations	Fall

## What explains wage differentials?

Some workers are paid more than others because they:

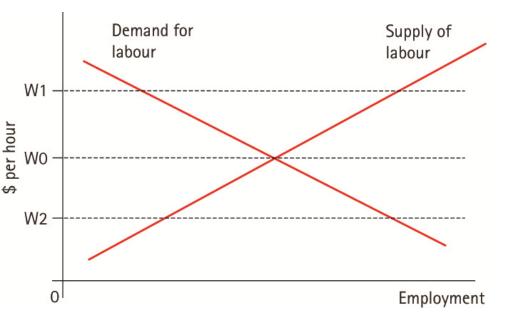
- are more highly skilled than others and are much in demand by employers
- are more productive, and add more to output and revenue than others
- are in dangerous jobs (e.g. soldiers, firefighters)
- work unsociable hours
- have more information than other workers about where the best paid jobs are
- are more able than others to move location and/or change their occupation to increase their pay
- Regional variations due to the cost of living (Tokyo vs. Akita)



## Who earns more and why?

Wage differential	Who is likely to earn more?	What are the possible reasons?
Public sector or private sector employees	Public sectors workers are often paid less for doing the same job	PS workers often enjoy more job security. The private sector needs to offer attractive wages to attract workers
Male or female employees	On average, male employees tend to earn more than females	More women take career breaks to raise children. More women choose occupations such as teaching, nursing and retailing, which tend to offer lower wages.
Skilled or unskilled workers	Skilled are paid more than unskilled workers.	Skilled workers are more productive. Some specialist skills are in short supply. Firms are willing to pay higher wages to attract and retain skilled workers.
Employees in different industries (agricultural vs. industrial)	Agricultural workers tend to be paid less than workers in manufacturing and service industries.	Agriculture has become more <u>capital</u> intensive so the demand for workers has declined. There is a shortage of supply of labour with specialist skills often required in the manufacturing and service industries.

## Minimum wage legislation



Minimum wage laws exist to raise the wages of the lowest-paid workers. Improved wages may also motivate them to increase their productivity.

But some employers argue that minimum wage laws increase costs and reduce the demand for labour:

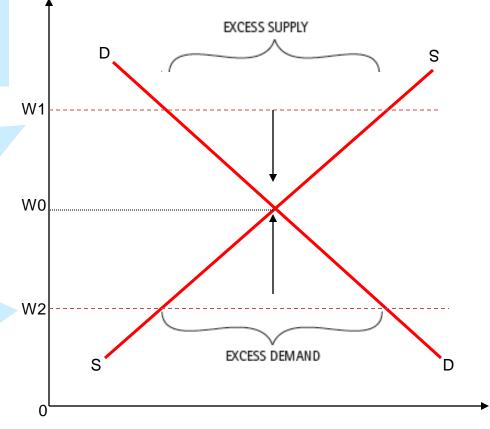
- free market equilibrium wage rate is W0
- if the minimum wage is set at W1 there will be an excess supply of labour
- if the minimum wage is set at W2 it will be below the equilibrium wage rate and have no positive effect on potential workers so they wont do the job. As a result employers will have to increase wages back to the equilibrium point.

## Minimum wage legislation

A labour market is in **disequilibrium** if the quantity consumers wish to buy is not matched by the quantity producers wish to sell

At wage W1 there is an **excess supply**. The minimum wage will need to fall to persuade firms to employ more workers

At wage W2 there is an **excess demand**. The minimum wages will need to rise to increase the supply of labour.



Employment

## Other labour market interventions

Governments may intervene in labour markets to:

- protect the rights of employees and employers, e.g. health and safety regulations, minimum rest periods
- outlaw and regulate restrictive practices that may be used by powerful trade unions and major employers, e.g. outlawing strikes by trade unions
- reduce unemployment, e.g. government training schemes, subsidies to encourage firms to locate in areas of high unemployment
- outlaw unfair discrimination, e.g. equal pay laws

# Spending, saving and borrowing

## Consumption

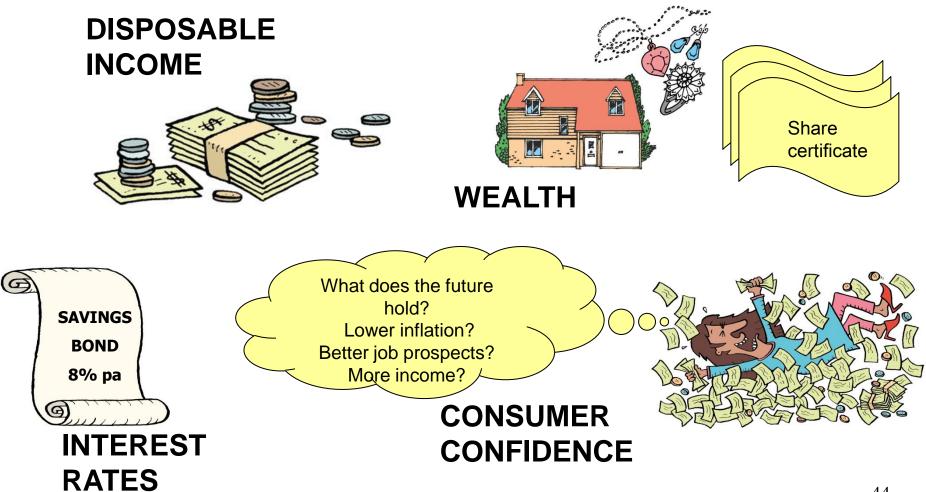
People will divide their disposable income between spending and saving



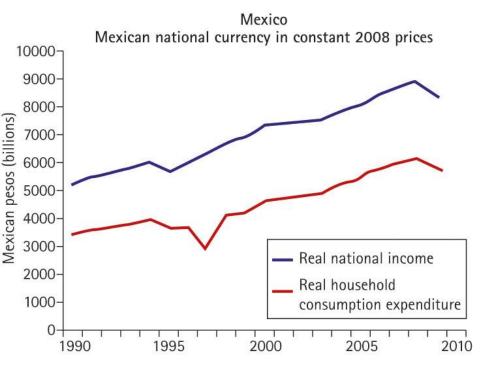
The more disposable income people have the greater their potential consumer expenditure

People will consume those goods and services that provide them with the most satisfaction or **utility** 

### What determines how much we spend?



## Expenditure patterns and trends



The income of an individual or group after taking into consideration the effects of inflation on purchasing power. For example, if you received a 2% salary rise over the previous year and inflation for the year was 1%, then your real income only rose 1%. Conversely, if you received a 2% raise in salary and inflation stood at 3%, then your real income would have shrunk 1%. There is a close relationship between real income and consumer spending

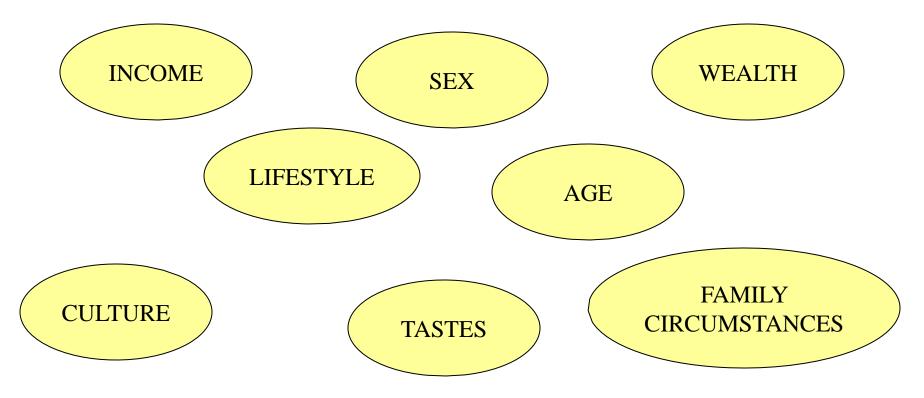
As <u>real incomes</u> have risen in many countries, so too has total consumer spending

Other drivers of change in consumer spending patterns include these factors:

- people are living longer
- they have more leisure time
- they are increasingly health conscious
- there is increasing concern for the environment
- more females have joined the labour force
- new technologies = new wants

#### Why do our spending patterns differ?

Our individual spending (and saving) patterns depend on our preferences, economic circumstances and characteristics



## Activity 3.16 Spending patterns

1. Households with the highest incomes spent proportionally more of their total weekly expenditure on restaurants and hotels, recreation and cultural activities and transport than low-income households. In contrast, lowincome households spent a larger proportion of their weekly expenditure on food and nonalcoholic drinks, housing, fuel and power, and alcohol and tobacco, than high-income households.

2. All households will have to spend money on essential products such as food, housing and power, but these costs will account for a far greater proportion of the weekly budget of a low-income household than a household with a much larger income. High-income households can afford to spend more on satisfying their wants and the purchase of luxury items, hence the larger proportion of their total expenditure they spend on recreation and culture, eating out at restaurants and travel.

#### Activity 3.17 Shop 'til they drop

Consumer trends	Reasons
Rising sales of new cars	Increase in real disposable incomes and availability of motor vehicles in many developed and rapidly developing economies; increase in availability of credit to buy cars; increase in demand for travel and leisure activities as incomes have increased and tastes have changed; growing pressure to reduce vehicle use to cut harmful emissions and increasing taxes on petrol may reduce demand for cars and vans and travel in future. However, new low-emissions and electric vehicles are being developed and becoming more affordable as their scale of production is increased
Increased consumption of fruit and vegetables; reduced consumption of meats, potatoes, sugars and preserves	Increasing health conscious diets; increased availability of different fruits and vegetables from overseas; demand is likely to rise further as concerns about diet and obesity grow
Increasing household ownership of consumer durables	Rise in real household disposable incomes; increased availability and falling prices of many consumer durables; changes in lifestyles have increased demand for labour- saving products such as washing machines and microwaves; many products have reached saturation point so demand is likely to fall, requiring manufacturers to develop extension strategies and new technologies and products

Increase in mobile telephone and broadband subscriptions; falling fixed telephone line subscriptions	Increasing demand for fast Internet access and communications while on the move; increasing competition between broadband service providers has reduced charges; falling cost of mobile communications relative to cost of fixed lines and likely to see continuation of these trends; also cheaper for phone companies to supply mobile telecommunications instead of investing in the fixed-line network and physically having to visit buildings to connect telephones to the network
Fall in proportion of adults smoking	Increased taxation of tobacco products and increasing awareness of negative impact of smoking on health has reduced consumption. This trend is likely to continue
Increase in Internet usage	Rapid increase in usage as access to computers increases, in part due to falling prices of computers and growing competition between Internet service providers; This is also linked to population growth. The trend is likely to continue especially in developing economies, with increasing demand for mobile Internet access via WI-FI and on mobile telephones
Expanding global health and wellness tourism market	Due to rising incomes and ageing populations in many developed economies in particular, people have more leisure time and income to spend on health care and leisure activities such as spa treatments and massage. This trend is likely to continue as incomes and number of older people increase

## Saving

#### US savings ratio: personal savings as a percentage of disposable income

16% 14% 12% 10% 8% 6% 4% 2% 0% -Jan-70 Jan-75 Jan-80 Jan-85 Jan-90 Jan-95 Jan-00 Jan-05 Jan-10

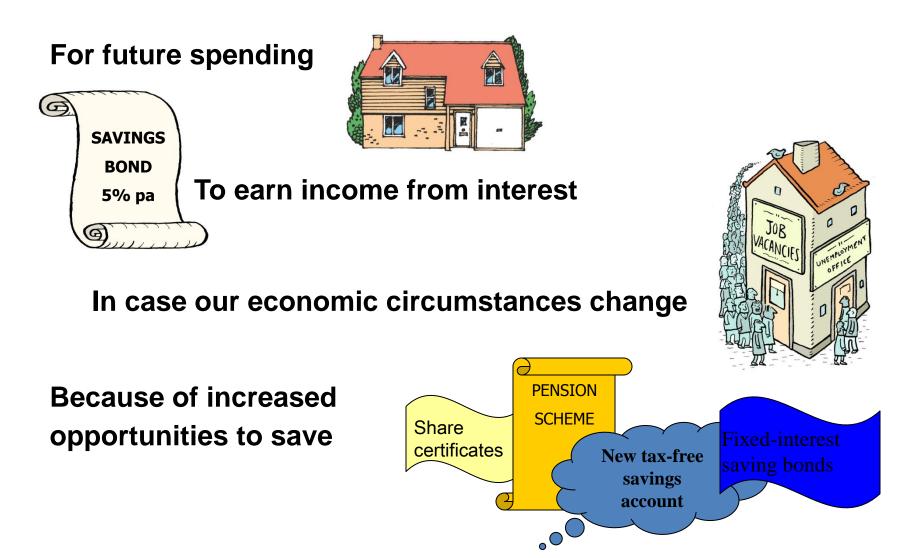
Source: US Bureau of Economic Analysis

**Saving** delays consumer spending to a later date

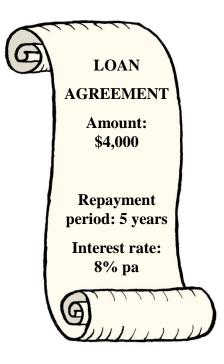


Withdrawing savings to spend is **dissaving** 

## Why do we save?



## Borrowing



Consumers borrow money to finance additional expenditure





They can then make loan repayments over time from their future earnings

**Personal debt** is the total stock of money borrowed and yet to be repaid by a person or a household





#### What determines how much we borrow?

