Imperfect Information

1. **Information failure** occurs when people have inaccurate, incomplete, uncertain or misunderstood data and so make potentially ‘wrong’ choices. From pensions to computer games consoles, from investing in the stock market to ignorance about the consequences of borrowing and debt, all of us suffer from one or more information failures.

2. The key issue to evaluate is whether the information failure is trivial or whether it has a huge effect on individuals, their families and society as a whole.

3. There may well be a case for the government to intervene in the market in some way if information failures become serious.

Examples of information failure

Imperfect information can be caused by

- **Misunderstanding the true costs or benefits of a product**: E.g. the social costs and benefits of different classes of drugs and the private and social benefits from higher education when there are so many universities and courses to choose from.

- **Uncertainty about costs and benefits** e.g. should younger workers be buying into pension schemes when we can only guess at economic conditions in 40 years time?

- **Complex information** for example choosing between makes of computers requires specialist knowledge of hardware. Do I buy an Apple or PC computer? Consider too the problems of choosing a quality second hand car or when deciding whether or not to buy a property.

- **Inaccurate or misleading information** e.g. persuasive advertising may ‘oversell’ the benefits of a product leading to more consumption than is optimal. Spam mail can be a cause of misinformation for consumers. **Read this Tim Harford article on spam**!

- **Addiction** e.g. drug addicts may be unable to stop consumption of harmful substances

- **Lack of awareness** – a good example here is that of tuition fees in Britain. The Coalition Government has introduced a new system of tuition fees for universities in the UK, but many parents and students claim to find the fee system mystifying and feel they have not received enough information about it. A public information campaign seems to have made little impact. Many students say that they are not fully aware of the charges and get little information from universities on the careers prospects and future earnings of their graduates after they have moved into the labour market.

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**Tough Health Warnings**

The FDA in the United States has decided to significantly ramp up the mandatory health warnings on cigarette packets. Starting next year, cigarette cartons, packs and advertising will feature graphic warnings, replacing the discreet admonitions that cigarette manufacturers have been required to offer since 1966.

**The new tuition fee system in England**

Under the changed system of tuition fees, universities in England from 2012 are allowed to treble their yearly tuition fees to £9,000. These will be paid, as now, by the government on behalf of students in the form of student loans. Graduates then pay back the costs of these directly from their pay once they begin earning more than £21,000. Interest rates will be up to 3% plus inflation, depending on earnings, for graduates who started university in 2012.
Asymmetric Information

For markets to work, there needs to be symmetric information i.e. consumers and producers have the same level of knowledge about the products, and they know everything there is to know about them.

Asymmetric information occurs when somebody knows more than somebody else in the market. This can make it difficult for the two people to do business together.

Examples include the following:

- **Warranties**: The miss-selling of extended warranties by high street retailers on domestic electrical goods such as televisions and dishwashers.
- **Sub-prime mortgages**: A lender does not know how likely a borrower is to repay their loan.
- **A car insurance company** cannot tell the risks associated with each single driver.
- **A used-car seller** knows more about the quality of the car being sold than do buyers. The mini case study below on the Market for Lemons covers this example!

The Market for Lemons

Assume that used cars come in two types: those that are in good repair, and duds (or “lemons” as Americans call them). Suppose further that used-car shoppers would be prepared to pay $20,000 for a good one and $10,000 for a lemon.

As for the sellers, lemon-owners require $8,000 to part with their old banger, while the one-owner, careful-driver old lady with the well-maintained estate won’t part with hers for less than $17,000. If buyers had full information they could strike fair trades with the sellers, the old lady getting a high price and the lemon-owner rather less.

If buyers cannot spot the quality difference, though, there will be only one market for all used cars, and buyers will be ready to pay only the average price of a good car and a lemon, or $15,000. This is below the $17,000 that good-car owners require; so they will exit the market, leaving only bad cars. This result, when bad quality pushes good quality from the market because of an information gap, is known as “adverse selection”. A great many markets, including those for shares, labour and insurance, often resemble a used-car sale more closely than a McDonald’s restaurant.

*Source: Adapted from the Economist, October 2010*