

ECONOMICS IN THE REAL WORLD

STUDENT RESOURCES

A-LEVEL



ADAM SMITH
INSTITUTE

AQA Economics A-Level: Section 4.1.5.8 The dynamics of competition and competitive market processes.

Edexcel Economics A-Level: 2.3.3 Long-run Aggregate Supply.

Innovation + Competition

Definitions

- Innovation - the process of improving products/technologies or improving techniques of production
- Invention - the process of developing new products/technologies and finding new techniques of production
- Creative Destruction - the process of old industries and products being replaced by new and improved versions of the same service

Examples of creative destruction

- Netflix and Blockbuster
- Horses and cars
- Spotify and CDs

Note: in an essay this is a good opportunity to mention that lower costs, *ceteris paribus*, result in more disposable income which increase the standard of living, measured by material wellbeing.

The impact of innovation

- Increases standard of living. New technology introduces more efficient ways of doing things, saving individuals and firms time and money.
- The threat of creative destruction provides firms with the incentive to be more efficient. It also replaces complacent firms who fail to innovate, ensuring that firms who are dynamically inefficient will be replaced in the long run.

ECONOMICS IN THE REAL WORLD

STUDENT RESOURCES

A-LEVEL



ADAM SMITH
INSTITUTE

Arguments against creative destruction

- **Structural Unemployment:** people who become unemployed will not necessarily have the required skills to find other jobs of a different nature (or the ability to relocate to them).
- **Regional Unemployment:** labour is not perfectly mobile, therefore often people will not move to where the jobs are. Because of this, creative destruction can cause significant levels of regional unemployment.
- **Hysteresis effect:** due to regional unemployment and structural unemployment people may be out of work for prolonged periods of time. If this happens they may experience the hysteresis effect. This is when over time they lose skills, this leads to a reduction in their MRPL, and resultingly their wages will be reduce.

Conclusions about creative destruction

Innovation will always be 'destructive,' however, while it destroys some jobs it creates them in other industries. Creative destruction creates wealth, those who profit from innovation will inevitably spend their money creating new jobs, and potentially new industries. For example, while today there are few scribes there are far more software engineers than there was 100 years ago.

Furthermore, the increases to standard of living generated by creative destruction are generally more significant than the temporary structural unemployment caused due to innovation.

While there are some short term negatives associated with creative destruction, it is undoubtedly overall a positive process.

ECONOMICS IN THE REAL WORLD

STUDENT RESOURCES

A-LEVEL



ADAM SMITH
INSTITUTE

AQA Economics A-Level: Section 4.1.5.8 The dynamics of competition and competitive market processes.

Edexcel Economics A-Level: 2.3.3 Long-run Aggregate Supply.

Technological change:

This is the process of the refinement or development of new technology which improves the efficiency of production or creates new goods and markets.

It comes in the form of innovation and invention, which are not the same thing!

- Innovation is the development/refining of already existing technologies.
- Invention is the creation of new technologies that did not exist before hand.

The impact of technological change on firms

Technological change can impact firms in a variety of ways

- **Methods of Production:** Changes in methods of production due to technological change are most clear when looking at countries going through an industrial revolution. The UK's agricultural industries and manufacturing changed hugely, going from hand looms to large factories of power looms.
- **Productivity:** Technological change has greatly increased labour productivity, this means that output per hour worked has consistently increased.
- **Goods and services being produced:** This will change as innovation and invention leads to new and improved versions of goods and services being sold.