Economic history since 1900
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EC2096
2016

Undergraduate study in
Economics, Management,
Finance and the Social Sciences

This is an extract from a subject guide for an undergraduate course offered as part of the University of London International Programmes in Economics, Management, Finance and the Social Sciences. Materials for these programmes are developed by academics at the London School of Economics and Political Science (LSE).
For more information, see: www.londoninternational.ac.uk
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pressure of work the author is unable to enter into any correspondence relating to, or arising
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please use the form at the back of this guide.

The course previously known as EC2096 Economic history in the 20th century has
now been renamed EC2096 Economic history since 1900. There is no change to the
assessment methods or course content.
## Contents

### Chapter 1: Course introduction ................................................................. 1
  1.1 What this course is about ................................................................. 1
  1.2 What is economic history? ............................................................... 1
  1.3 Learning outcomes ........................................................................... 2
  1.4 What you should be able to do after studying this course ............... 2
  1.5 Some important concepts ................................................................ 2
  1.6 The structure of the course ............................................................... 8
  1.7 A note on the names of countries .................................................... 10
  1.8 The subject guide ............................................................................ 10
  1.9 Essential reading ............................................................................. 11
  1.10 Further reading ............................................................................. 12
  1.11 Online study resources ................................................................. 13
  1.12 The examination ............................................................................ 14
  1.13 Summing up ................................................................................... 15

### Chapter 2: International trade and economic growth ............................. 17
  What this chapter is about .................................................................... 17
  Objectives ............................................................................................ 17
  Learning outcomes ................................................................................ 17
  Essential reading .................................................................................. 17
  Further reading ..................................................................................... 17
  Introduction .......................................................................................... 17
  2.1 Factors that determine economic growth ....................................... 18
  2.2 ‘Modern economic growth’ ............................................................ 20
  2.3 Industrialisation ............................................................................. 23
  2.4 The spread of modern economic growth ....................................... 24
  A reminder of your learning outcomes .............................................. 27
  Questions .............................................................................................. 27

### Chapter 3: The development of an international economy by 1900: trade, capital and labour .............................................................. 29
  What this chapter is about .................................................................... 29
  Objectives ............................................................................................ 29
  Learning outcomes ................................................................................ 29
  Essential reading .................................................................................. 29
  Further reading ..................................................................................... 29
  Introduction .......................................................................................... 30
  3.1 Characteristics of the international economy ................................ 30
  3.2 Why did international trade grow so fast? ...................................... 31
  3.3 Overseas investment ...................................................................... 35
  3.4 International migration ................................................................... 37
  Summary ................................................................................................ 38
  A reminder of your learning outcomes .............................................. 38
  Questions .............................................................................................. 38
Chapter 4: Institutions that underpinned the international economy before the First World War ......................................................... 39
  What this chapter is about .................................................................................................................. 39
  Objectives .......................................................................................................................................... 39
  Learning outcomes ............................................................................................................................... 39
  Essential reading ................................................................................................................................. 39
  Further reading....................................................................................................................................... 39
  Introduction .......................................................................................................................................... 39
  4.1 Free trade ...................................................................................................................................... 40
  4.2 Multilateral settlements .................................................................................................................. 41
  4.3 The gold standard ........................................................................................................................... 42
  4.4 ‘Rules’ for international and domestic policies: some questions .................................................. 46
  4.5 The British economy ...................................................................................................................... 46
  Summary............................................................................................................................................... 48
  A reminder of your learning outcomes ............................................................................................... 48
  Questions............................................................................................................................................... 49

Chapter 5: The development of modern industry ................................................................. 51
  What this chapter is about .................................................................................................................... 51
  Objectives .......................................................................................................................................... 51
  Learning outcomes ............................................................................................................................... 51
  Essential reading ................................................................................................................................. 51
  Further reading....................................................................................................................................... 51
  Introduction .......................................................................................................................................... 51
  5.1 The early development of manufacturing .................................................................................... 52
  5.2 The growing strength of US industry ............................................................................................. 55
  5.3 Germany and ‘catch-up’ with the USA ............................................................................................ 59
  5.4 UK industry .................................................................................................................................... 60
  Summary............................................................................................................................................... 60
  A reminder of your learning outcomes ............................................................................................... 60
  Questions............................................................................................................................................... 61

Chapter 6: Britain – trade and empire ............................................................................. 63
  What this chapter is about .................................................................................................................... 63
  Objectives .......................................................................................................................................... 63
  Learning outcomes ............................................................................................................................... 63
  Essential reading ................................................................................................................................. 63
  Further reading....................................................................................................................................... 63
  Introduction .......................................................................................................................................... 63
  6.1 The UK’s share of world trade ........................................................................................................ 64
  6.2 The pattern of multilateral settlements .......................................................................................... 64
  6.3 UK imports: tariff protection or free trade? ..................................................................................... 65
  6.4 The UK balance of payments surplus ............................................................................................ 66
  6.5 Long-run issues .............................................................................................................................. 67
  6.6 The economic costs and benefits of empire .................................................................................. 67
  6.7 Trade aspects of empire ................................................................................................................ 68
  Summary............................................................................................................................................... 71
  A reminder of your learning outcomes ............................................................................................... 71
  Questions............................................................................................................................................... 71
Chapter 7: The First World War and the international economy .................. 73

What this chapter is about ........................................................................... 73
Objectives ........................................................................................................ 73
Learning outcomes .......................................................................................... 73
Essential reading ............................................................................................. 73
Further reading ............................................................................................... 73
Introduction ...................................................................................................... 74
7.1 War economies and the direct effects of the First World War ............... 74
7.2 The long-run economic effects of the First World War .......................... 77
7.3 Long-run trade problems ......................................................................... 78
7.4 Long-run capital flow problems ............................................................... 80
7.5 Inflation ...................................................................................................... 81
7.6 The new gold standard ............................................................................. 82
7.7 Political problems ..................................................................................... 82
Summary .......................................................................................................... 83
A reminder of your learning outcomes .......................................................... 83
Questions ......................................................................................................... 83

Chapter 8: The world economic and financial crisis, 1929–33 .................. 85

What this chapter is about ........................................................................... 85
Objectives ........................................................................................................ 85
Learning outcomes .......................................................................................... 85
Essential reading ............................................................................................. 85
Further reading ............................................................................................... 86
Introduction ...................................................................................................... 86
8.1 What was the long-run context of the crisis? ......................................... 86
8.2 How serious was the Depression? ............................................................ 87
8.3 What happened in the USA? ................................................................... 87
8.4 What happened in Germany? ................................................................. 88
8.5 What happened in primary producing countries? ............................... 88
8.6 What went wrong for Brazilian coffee producers? .............................. 89
8.7 How did the Depression spread through the world? ............................ 90
8.8 How did a banking crisis finish off the gold standard? ......................... 92
8.9 Had the gold standard made the crisis worse? ....................................... 93
8.10 How could the crisis have been avoided before 1929? ......................... 94
8.11 Aftermath ............................................................................................... 95
8.12 Overview ............................................................................................... 95
Summary ......................................................................................................... 95
A reminder of your learning outcomes .......................................................... 96
Questions ....................................................................................................... 96

Chapter 9: Government intervention, recovery and the international economy in the 1930s ............................ 97

What this chapter is about ........................................................................... 97
Objectives ........................................................................................................ 97
Learning outcomes .......................................................................................... 97
Essential reading ............................................................................................. 97
Further reading ............................................................................................... 98
Introduction ...................................................................................................... 98
9.1 Crisis and response in the USA ............................................................... 98
9.2 The effect of American policy on the international economy ............. 100
Contents

Summary ......................................................................................................................... 140
A reminder of your learning outcomes ............................................................................. 140
Questions ......................................................................................................................... 140

Chapter 13: The American economy since 1960: supply-side economics .......... 141
What this chapter is about ............................................................................................... 141
Objectives ....................................................................................................................... 141
Learning outcomes ......................................................................................................... 141
Essential reading ............................................................................................................. 141
Introduction .................................................................................................................... 141
13.1 The dominance of the American economy ............................................................. 141
13.2 Supply-side economics in theory ........................................................................... 146
13.3 Reaganomics in practice ....................................................................................... 147
13.4 What does the Reagan experiment tell us about the relationship between
government intervention and the growth rate? .......................................................... 149
Summary ......................................................................................................................... 149
A reminder of your learning outcomes .......................................................................... 149
Questions ......................................................................................................................... 150

Chapter 14: Technology and deindustrialisation ......................................................... 151
What this chapter is about ............................................................................................... 151
Objectives ....................................................................................................................... 151
Learning outcomes ......................................................................................................... 151
Essential reading ............................................................................................................. 151
Further reading ............................................................................................................... 151
Introduction .................................................................................................................... 152
14.1 Deindustrialisation ............................................................................................... 152
14.2 The relationship between technology and the structure of industries ............... 157
14.3 Japan and the third revolution .............................................................................. 159
Summary ......................................................................................................................... 162
A reminder of your learning outcomes .......................................................................... 163
Questions ......................................................................................................................... 163

Chapter 15: International trade and developing countries in the late
nineteenth century .................................................................................................... 165
What this chapter is about ............................................................................................... 165
Objectives ....................................................................................................................... 165
Learning outcomes ......................................................................................................... 165
Essential reading ............................................................................................................. 165
Further reading ............................................................................................................... 165
Introduction .................................................................................................................... 166
15.1 World trade patterns ............................................................................................ 166
15.2 Developing economies ....................................................................................... 170
15.3 Can trade be an engine of growth? .................................................................... 174
15.4 Can growth be an engine for trade? .................................................................. 175
Summary ......................................................................................................................... 176
A reminder of your learning outcomes .......................................................................... 176
Questions ......................................................................................................................... 176

Chapter 16: Japan and China ...................................................................................... 177
What this chapter is about ............................................................................................... 177
Objectives ....................................................................................................................... 177
Learning outcomes ......................................................................................................... 177
Reading ............................................................................................................................ 177
Chapter 1: Course Introduction

1.1 What this course is about

Welcome to this 200 course about economic history, a wide-ranging subject that you will hopefully find stimulating. Economic history uses many economic concepts which can help our understanding of economic changes, including changes that are occurring in the world at the present time. We hope that you enjoy studying the course.

There are no formal prerequisites to take this course. No previous knowledge is expected. However, it is assumed that you have a grasp of economic concepts or at least that you will obtain a grasp as you study. If you have followed an economics subject in this degree or diploma or are taking an economics subject at the same time, that will give you sufficient knowledge of economics for you to follow this subject.

1.2 What is economic history?

The first question to answer is this: what do we mean in this course by ‘economic history’? Here is our definition:

**Economic history is the study of history using economic concepts.**

Come back and remind yourself of this definition from time to time. Before going further, let us look a little closer at this.

Economic history explains how economies have developed. Although its subject matter is in the past it is rather different from the history which you may have encountered at school. Economic history is less concerned with explaining what individuals (kings, prime ministers) did, which is what ‘political history’ does. Rather, economic history is more concerned with large groups of people (industrial workers, farmers) and with explaining technological change or how business worked, or with analysing the effects of institutions, such as governments or trade associations on the economy.

Economic history is also concerned with quantities (tonnes of steel, kilowatt/hours of electricity or statistical constructions like gross domestic product or total factor productivity).

But the main difference between political and economic history is that economic history uses more theory and in particular, economic theory. This is why economic history is considered to be a part of the social sciences as opposed to a part of the humanities. Economic history is also different from economics because economics is more likely to use abstractions (e.g. assumptions like ‘other things being equal’). Abstractions allow economics to give very powerful explanations but these explanations are not always easy to apply to the ‘real world’.

For example, economic prediction for any period of more than a few years is very difficult. This is because a whole host of circumstances and also human behaviour are constantly changing. Economic history is also different from economics because, like all history, we actually know what happened next. In other words we can apply the theory to real circumstances that actually happened.
Of course in economic history we don’t know anything like as much about the past as we do about the present. Also, economic history will never give us a blueprint to tell us what will happen to the economy in the future – history rarely repeats itself. But what it does teach us is the importance of understanding the historical context. For example why was it possible for governments to follow a particular policy in some years and not in other years?

If you have some knowledge of economic history, you will not only know how the present world economy was created but you will also have acquired a tool that will help you understand economics and the other social sciences.

### 1.3 Learning outcomes

At the end of this course, and having completed the Essential reading and activities, you should have learnt:

- how economic growth is transferred from one economy to another
- how the nature of the international economy affects the transfer of economic growth
- what the benefits to economic growth and international trade of fixed versus fluctuating exchange rates are
- how relatively free capital mobility and controls on capital flows compare
- how the effects of relatively free labour mobility (migration) compare with the effects of controls on mobility
- why the ability of a country to ‘catch up’ the economic growth of other countries is affected by the ‘social capabilities’ (the underlying conditions) in the country
- how technical change affects the economy.

### 1.4 What you should be able to do after studying this course

By the end of this course, students should have acquired the following skills:

- techniques for using simple economic theory to explain how various factors led to economic growth
- the ability to construct economic reasons for historical events
- the ability to identify and select the sort of data that is needed to do this, and how to assess how much data is needed to make valid judgements.

### 1.5 Some important concepts

Economic historians use a range of concepts to analyse the past; many are taken from economics. You will learn to use these concepts as you work your way through the course. We summarise the main ones below.

#### 1.5.1 Gross national product

This is a measure of the total output or size of an economy. Gross national product (GNP) includes all the output of goods (e.g. manufactures), all the output of resources (e.g. oil), all the output of services (e.g. transport and
universities), plus all exports. It also includes all the money returned to the country from overseas investments. GNP is easier to measure now than in the past. Nevertheless we have good estimates for most countries from about 1870.

1.5.2 Gross domestic product

A slightly different measure from GNP, gross domestic product (GDP), has been commonly used in recent years. GDP only measures the output made within the country, that is it includes exports but not money made from overseas investments, like profits from overseas factories. Until recently GDP and GNP were not very different.

1.5.3 The production function

This is a way of measuring the ‘inputs’ that go into making goods (goods that are otherwise known as the ‘outputs’). For example a farmer could use a lot of labour and a little machinery (‘capital’) or he or she could use a lot of capital and little labour. We will see that in the late nineteenth century United States’ farmers used relatively more machinery and relatively less labour than European farmers. But remember, this does not tell us which combination was the more ‘efficient’, because the cost of labour and the cost of machinery were different in Europe and the USA.

1.5.4 Total factor productivity

The concept of total factor productivity (TFP) is a way of measuring efficiency. It calculates the amount of each input (labour, capital and other resources) that are used and the price of the inputs to the producer. This shows how well (or how efficiently) the producer (and ultimately the whole economy) is using the factors at its disposal. There is usually an unmeasured part which is the ‘residual’. This is a rough measure of changes in technology – that is the increase in output which is not accounted for by more labour, more capital or more resources. Or it may include the effect on output if the quality of inputs increases. A good example is the effect of better education on the quality of workers. In most modern economies, TFP growth is usually more important than the increase in resources, labour or capital.

1.5.5 Comparative advantage

The concept of comparative advantage is used especially in the theory of international trade. It can make economic sense for a country to import products (A) even though it could produce A cheaper itself. This is because although the country has a cost advantage in producing A, it has an even greater cost advantage in producing B and importing A. By specialising in producing B and exporting some of its production of B, the country can obtain more A (by imports) than it can by trying to produce both A and B. We may say that the country has a ‘comparative advantage’ in the production of B compared with other countries. Similarly, for the other country (the trading partner), the comparative advantage lies with A and the disadvantage lies with B.

1.5.5.1 Tariffs

Tariffs prevent countries from following their comparative advantage in trade. Why? Because tariffs change the price of goods A and B when these goods are traded. An import tariff means that it may no longer be worthwhile for a country to specialise in B and export B while importing A.
1.5.6 Gains from trade

If two countries have comparative advantages in the production of something, then there are gains from trade. World output rises because the same resources are used to make more goods than if there was no trade. A good historical example would be the gains from the exports of (frozen) beef from Argentina to the UK in the early twentieth century. The Argentine meat farmers gained, as did those involved in the trade (like railway companies). The British consumers gained (because the price of meat fell). But the other Argentine farmers lost (because the land became more expensive), American meat farmers lost (because they lost the UK market) and British meat farmers lost. Note that there is no automatic mechanism for evening out the gains and losses from trade and these may continue for some time.

1.5.7 Liquidity trap

A liquidity trap is the situation in a depression where very few people are willing to risk putting their money into investment. So the economy stagnates. With liquidity preference people are more likely to hold cash or government bonds. This usually comes about because the interest rate on investment is low – that is, low relative to the risk involved in investment. In more normal times there is a premium for investment which compensates so that people do not put excessive funds into cash. The ‘solution’ usually involves (extra) government expenditure, often paid out of borrowing. But if liquidity preference is high, government expenditure will not lead to an increase in income level. Liquidity preference will mean that individuals will save their money rather than spend it.

1.5.8 Human capital

The concept of human capital means the skills embodied in the labour force. At its simplest level this means the extent of literacy and formal schooling, but historically many skills are ‘embodied’. They are learned on the job. Most of the skilled workers in Britain before the First World War leaned their skills at work rather than by formal training, for example.

1.5.9 Entrepreneurs

These are people who take risks to make a profit. They are not the same as inventors, although they may use inventions. But they have to see a market, raise finance and organise production. Usually the main incentive is profit, but governments have often engaged in entrepreneurial behaviour. Obtaining and using capital is an important part of the risk an entrepreneur takes.

1.5.10 Catch up and social capability

These are very important concepts in economic history. They are often used to explain why poorer countries take such a long time to catch up with the income levels of richer countries. Social capability includes, among other things, the skill level of the labour force and the nature of the government. For example if a government cannot guarantee the rule of law, entrepreneurs will not invest since they have no guarantee that they will benefit from the investment. You may wonder if this means that only a democracy had the social capability to increase total factor productivity and grow richer. The answer is no. There are many examples of rapid growth in undemocratic countries, for example, the People's Republic of China is one.
1.5.11 Increasing returns to scale

This is a simple concept. It means that the cost of a product is related to the scale of production. Increasing returns means that if you double the scale and use double the inputs, you more than double output. As a result unit costs fall.

Increasing returns occur because the cost of the technology involved can be spread over a greater amount of output. It is easier to achieve scale economies in manufacturing as long as the market is large enough. However, it is important to remember that economies in production are not the only economies. There can be economies in marketing, for example, or in purchasing raw materials.

1.5.12 External economies

These are different. In the previous section we were discussing what are called ‘internal economies’ – those affecting the plant directly. But cost, and therefore efficiency, is also affected by external economies. One example is that of a so-called ‘thick’ labour market where there are many people with similar skills; another is the existence of particularly good transport links. External economies are the main reason why industries tend to cluster together and the main reason for the growth of cities. This means that to ‘catch up’ an economy needs more than importing technology.

1.5.12.1 Negative external economies

An example of a negative external economy is pollution coming from industry. Pollution raises costs for a firm; for instance, workers are less healthy and less productive. (This was a particular problem in the USSR and Eastern Europe in the 1960s and 1970s.) In general though there are more positive external economies than negative ones.

1.5.13 Principal-agent problems

In the early years of economic development, before modern communications existed, it was difficult for governments and businesses, the ‘principals’, to monitor the performance of their ‘agents’ who were working a long way away. For example, would a Dutch trader be able to be sure that the captain of the ship he had sent to the Indies was not stealing from him? The easiest way to deal with this problem was to use his relatives, who could be disinherit if things went wrong, but this strategy was obviously limited. The development of modern transport and communications improved this as it allowed agents to be monitored.

1.5.14 Transactions costs

One way to look at the process of economic development may be seen as a continuous reduction in the cost of making deals, including making payments. For instance, the cost of raising government revenue was initially very high. It cost a lot of money (paying for tax-gatherers) to raise a little. Nowadays, tax-gatherers cost relatively little money but taxes raise a lot. So more of government expenditure can be used for beneficial purchases rather than paying for tax-gathering. In recent years information and communications technology (ICT) has reduced transaction costs to very low levels.

Another point to remember is that nowadays, there are large parts of the service sector whose purpose is to reduce transaction costs (lawyers who make and enforce contracts, for instance).
1.5.15 Tariff and non-tariff barriers

One way to protect a country from imports is to erect a tariff. This is a charge on goods entering the country. Tariffs are either a fixed payment per unit, say £1 per bottle of wine, or a proportion of the price, say 30 per cent. A proportional tariff is called an *ad valorem* tariff.

A fixed tariff is the same whatever the price of the import. However, an *ad valorem* tariff varies according to the price of the import. If wine falls in price from £3.00 to £1.50, a 30 per cent tariff falls from £0.90 to £0.45. A fixed tariff of £1 doesn’t change.

1.5.16 Non-tariff barriers

These can be more protective. For example, a state railway might have very unusual technical standards to which its electric trains must conform. This might aim to stop foreign makers of railway locomotives competing with local firms. Another example is a refusal to recognise foreign qualifications to reserve jobs for locally trained people. This might be to protect local colleges and teachers against foreign competition and to preserve jobs for locals. It is a barrier to trade in services. Non-tariff barriers are frequently used when tariff barriers are low or non-existent. (Both these examples are from the recent history of the EU.)

1.5.17 Opportunity cost

This is the cost of the next best alternative. For instance, say I can employ a gang of workers at wages of £1,000 per month. If I don’t employ them, say I can lend the money I would have paid on wages to someone else and receive interest of £10 per month. The opportunity cost of employing the gang is £1,010 per month. In other words £1,010 is the opportunity I forgo by employing the gang. Hence I will not employ them unless they make more than £1,010 per month for me.

1.5.18 Contagion

In a depression there is a fall in income, investment and growth. But the most damaging effect would be a collapse of a major bank or banks. Since all banks have large funds with other banks, the collapse of one bank is likely to lead to the collapse of other banks. The collapse of Lehman Brothers in 2008 was a major example of this. The US government allowed Lehman Brothers to go bankrupt but compensated those banks (or other institutions) who were owed money by Lehman. In other words, nowadays, contagion makes it very close to essential that the government will step in. (This usually means that the government will increase money supply.) In some circumstances the government may nationalise, or partly nationalise, the banks.

1.5.19 The prisoner’s dilemma

The prisoner’s dilemma is commonly encountered in economics. At its simplest it explains why it is often very difficult to make agreements. This is because one party may not be able to predict what the other will do. For example, two farms are alongside a river. The river will flood unless £1,000 is spent on flood control. Both farmers will lose if it floods. The best way is for both farmers to pay £500. But each knows that if the other farmer paid £1,000, he or she would get the work for nothing. So each waits for the other to pay £1,000. In the meantime the river floods, costing each farmer more than £500. It may be necessary for governments to force cooperation in the best interests of the parties.
1.5.20 Terms of trade

The calculation of the terms of trade can be complicated, but at their simplest they show the prices a country obtains for exports compared with the prices for imports. If the latter is rising compared with the former, it is said that the terms of trade are moving against the country. This may not mean that the country is worse off, of course, since that will depend on the volume of exports and imports. It is also possible to talk of the terms of trade faced by different producers – farmers, for example.

1.5.21 Rational expectations

The idea of rational expectations is very important in modern monetary economics. Simply put it says that people are able to anticipate what government policy will be in the future. This makes it very difficult for government policy to be effective. For example, there may be inflation, which the government wishes to control. So it increases interest rates. But if the population anticipates that this is what the government are going to do, they now spend as much as possible. Also, if they can, they will borrow at the old interest rate before the rate goes up. This means that inflation increases. Government finds it harder to control and there will probably have to be a second interest rate rise, which is also subject to rational expectations and could be damaging to the economy.

1.5.22 Hedge funds

The rationale of a hedge fund is to lead the market. For instance in a depression, a hedge fund will sell the local currency with the aim of forcing a devaluation, then changing the money back again at a profit. This happened in the Thailand devaluation in the 1997. (Of course, there are many more sophisticated versions of this.) Hedge funds have become much more dominant in recent years, possibly because globalisation has made it easier to finance. Hedge funds usually say that the desired effect (that is, devaluation) would have happened anyway. But many people deny this.

1.5.23 Elasticity

Elasticity shows the effect of a change in one variable on another variable. It has many forms. For example, price elasticity shows how much more of a commodity will be purchased if the price falls and how much less will be purchased if the price rises. If, for example, a 10 per cent fall in the price leads to more than a 10 per cent rise in purchases, demand is said to be 'price elastic'. An example would be the sales of textiles in a relatively poor country. If, on the other hand, a 10 per cent fall in the price leads to less than a 10 per cent rise in purchases, the demand is said to be 'price inelastic'. An example of this would be the demand for food in a relatively rich country.

Note what happens to 'total revenue' (price X quantity). When price increases, total revenue falls if demand is price elastic. In contrast, when price increases total revenue rises if demand is price inelastic.

'Elasticity' may also relate to income. If a rise in income of 10 per cent leads to an increase in sales of more than 10 per cent then demand for that good is said to be income elastic. An example would be the demand for health care in rich countries.
1.5.24 Quantitative easing

In a depression, quantitative easing is a way of increasing money supply. It applies to a country with an independent central bank. The government sells an additional tranche of government stock which the bank buys. The government now has a currency which it can use. The central bank does not market the government stock. Of course, quantitative easing may not work if the money is saved – that is, it does not increase money supply, for example if liquidity preference is very high.

1.6 The structure of the course

Chapter 1

This is an introduction to the course. If you get lost, this is the one to return to.

Chapter 2

We examine what we call ‘modern economic growth’ – a relatively recent phenomenon. We see why it started in Europe and how it has spread from one country to another. This introduces the concept of economic ‘catch up’.

Chapter 3

We explain how movements of capital, labour and goods created the international economy and how trade was related to the growth of world output. We examine the development of modern industry, including an explanation of why both assembly-line production and the business corporation first developed in the USA.

Chapter 4

We look at the main economic institutions of the pre-First World War period. These were:

• free trade
• fixed exchange rates
• multilateral payments.

We explain why these were characteristics of the period before the First World War and not after. This introduces you to the idea of 'contingency' – why, for example, fixed exchange rates have often been thought to be universally desirable, but the condition of the international economy has not always made it possible to have fixed exchange rates.

Chapter 5

We consider why Britain remained the most important player in the international economy even though it was no longer the largest economy.

Chapter 6

We examine the economic advantages of colonies to the colonial powers. We also discuss colonial development and see how far being a colony inhibited development.

Chapter 7

We examine the long and short-run effects of the First World War on trade and international finance. This introduces the idea of a war economy and how it differs from a peacetime economy. Then we look at the medium-run consequences of the war, in particular the reasons for the poor performance of the international economy after 1918.
Chapter 8
We look at the international economic crisis of 1929–33. We examine the spread of the crisis through the world economy, its causes, and why it was not possible to use (macro) economic policy to contain it. We explain why the Depression was more serious in some countries than in others, why the rate of recovery was also different and why national economies recovered faster from the Depression than the international economy. We also discuss the changes in economic theory and their influence on economic policy.

Chapter 9
We look at the economic history of the Second World War, particularly the successes and failures of the main economies. We look once more at the nature of war economies and the relationship between the economy and strategy.

Chapter 10
We examine the development of the international monetary system and of international economic cooperation in the post war years (1945–52). We discuss the changes to the Bretton Woods agreements and why the agreements took a long time to implement. Then we look at the development of the international monetary system in the later twentieth century, including the end of fixed exchange rates and the change to the floating exchange rate system of the late twentieth century. We analyse the causes and effects of the oil crises.

Chapter 11
We look at the reasons why economic growth was so fast in the major European economies up to the early 1970s and why growth rates then fell. We discuss why some economies have grown faster than others. Then we look at the growth of the European Economic Community. We look at changes in economic policy in the post-war period, particularly the end of the Keynesian consensus and the fashion for ‘supply-side economics’ in the United States and Britain.

Chapter 12
We consider Japanese industrial performance, particularly the position of Japan in the world motor industry since the Second World War, showing how Japanese innovations and industrial organisation contrasted with American.

Chapter 13
We explain ‘deindustrialisation’ and why services have become more important than manufacturing in national economies.

Chapter 14
We show the development of industrial technology from the early factory system through mass production to the flexible production systems of today.

Chapter 15
We try to answer the question: is economic growth easier or harder to transfer to poorer countries in the twenty-first century compared with the twentieth century? This returns us to the relationship between trade and development with which we started the module.
Chapter 16
We show how China developed into the most important manufacturing country in the world and how Japan developed extremely fast but in recent years development has stalled.

Chapter 17
We show the main causes of the recent financial crisis, and how it spread from one country to another.

1.7 A note on the names of countries

- Occasionally we use ‘Britain’ and ‘the UK’ as synonyms in the course, even though the word Britain excludes Ireland. Our apologies if our attempt to add variety causes offence to some readers.

- All of Ireland was part of the UK during the period 1801–1922. Since then, only Northern Ireland has been part of the UK. We do not consider here the economic history of the Irish Republic after independence in 1922. The economic history of Northern Ireland since 1922 is part of the economic history of the UK and ‘Britain’.

- We use the word ‘Germany’ for both the whole country and also for West Germany (1945–90). We do not discuss East Germany (1945–90).

- We restrict the name ‘Americans’ to people who live in the USA. People who live in other countries on the American continents are named after their country – Canadians, Brazilians, Argentines, etc.

- We use the names European Economic Community (EEC), European Community (EC) and European Union (EU) according to the period under discussion.

1.8 The subject guide

This subject guide, as its name suggests, is designed to guide you through the material. You must use it with the suggested readings. The guide is not intended to replace these readings. If you work your way through the subject guide and follow the readings, you will be ready to take the examination. The subject guide has 17 chapters, each of which considers a large question or series of questions about the development of the international economy.

1.8.1 How to use the subject guide

1. Read through the text of the chapter.

2. Read those parts of the basic books which are recommended in that chapter. If you are able to get hold of any of the supplementary reading, read that too.

3. As you read, think about the questions that are raised in the text. The ‘Pause and think’ sections and ‘Activities’ in the chapter are designed to help you to understand particularly important questions. But think about any other questions that suggest themselves to you. Do not be afraid to use economic concepts and theory with which you may be familiar as well as insights and concepts from other social sciences.

4. Look at the suggested questions at the end of the chapter and write a draft of how you might answer them. These questions are similar to those set in the examination. Remember that writing something down is the best way of ordering your thoughts and finding out whether you really understand the issues involved.
1.8.2 Try to link the subject guide chapters together as you study

The chapters are designed to introduce you to the most important and the most interesting parts of the subject. If you follow the guide right through you will have thought about most of the important parts of the syllabus and the main features of the development of the international economy.

The chapters are not self-contained and it is a mistake to think of each chapter as a discrete piece of material, or as an answer to a particular question that might come up in an examination.

For example, to learn about the reasons why the international economy deteriorated after the First World War (see Chapter 7), you need to have read the material on international economic institutions in Chapter 4. To learn about the causes of the world economic crisis of 1929–33 (see Chapter 8), you need to read first Chapter 7. Pay particular attention to the earlier chapters. They contain material that will help your understanding of the later part of the subject guide.

1.8.3 You do not need to learn lots of historical facts by heart for the examination

It is not necessary to remember a great deal of factual information to pass the examination. It is much more important to use simple economics.

For example, if you are considering why prices of agricultural products sometimes rose and sometimes fell, it is important to consider the conditions that determined the supply of and demand for agricultural products. Of particular importance is the concept of elasticity. You should be able to use this concept which we introduced above.

Of course you need more than knowledge of economic theory to follow economic history. But you do not need to know the details of the historical record, only the broad outlines. Nor is there any need to remember long runs of statistics such as car or steel output in different countries or details of trade and exchange rates.

All you need to know are the broad quantities. For example, you need to remember that UK annual growth rates in the 1950–80 period were about a half of those in the countries of the European Community. During the 1980s and 1990s, UK annual growth rates were more or less the same as the EU average.

1.9 Essential reading

The textbooks are the books that you will use the most. They cover different aspects of the subject as described.

The best book to buy is:


If you buy only one book, buy this one. It is a simple but comprehensive account of the development of the international economy. It will not tell you much about the national economies, however, and you will need to look at other books to find out about them.

Other important books which you could consider purchasing:


Eichengreen provides an excellent concise analysis of the development of the main financial institutions since the early nineteenth century (the rise and fall of the gold standard, the Bretton Woods system etc.).

You should also consider purchasing the following texts:


Detailed reading references in this subject guide refer to the editions of the set textbooks listed above. New editions of one or more of these textbooks may have been published by the time you study this course. You can use a more recent edition of any of the books; use the detailed chapter and section headings and the index to identify relevant readings. Also check the virtual learning environment (VLE) regularly for updated guidance on readings.

### 1.10 Further reading

Please note that as long as you read the Essential reading you are then free to read around the subject area in any text, paper or online resource. You will need to support your learning by reading as widely as possible and by thinking about how these principles apply in the real world. To help you read extensively, you have free access to the VLE and University of London Online Library (see below).

Other useful texts for this course include:


Good coverage of changes in the European economies, and the main changes in the international economy, such as the Depression of the 1930s, the Bretton Woods system and the creation of the EEC (now EU).


A basic book about Japanese economic development.


Covers the most important aspects of the development of industry and business in the three countries, including the development of the business corporation and the rise of mass production.


A very sophisticated discussion of the inter-war period. Read Kenwood and Lougheed (above) before you read this book.

The Foreman-Peck text is an excellent treatment of the subject. You should read Kenwood and Lougheed first and move on to this book which is more difficult and sophisticated than Kenwood and Lougheed.


Contains important material on Japanese development and other parts of south-east Asia (the NICs).


Naughton provides an excellent treatment of the Chinese economy.


1.11 Online study resources

In addition to the subject guide and the Essential reading, it is crucial that you take advantage of the study resources that are available online for this course, including the VLE and the Online Library.

You can access the VLE, the Online Library and your University of London email account via the Student Portal at: http://my.londoninternational.ac.uk

You should have received your login details for the Student Portal with your official offer, which was emailed to the address that you gave on your application form. You have probably already logged in to the Student Portal in order to register! As soon as you registered, you will automatically have been granted access to the VLE, Online Library and your fully functional University of London email account.

If you have forgotten these login details, please click on the 'Forgotten your password' link on the login page.

The VLE

The VLE, which complements this subject guide, has been designed to enhance your learning experience, providing additional support and a sense of community. It forms an important part of your study experience with the University of London and you should access it regularly.

The VLE provides a range of resources for EMFSS courses:

- **Electronic study materials:** All of the printed materials which you receive from the University of London are available to download, to give you flexibility in how and where you study.

- **Discussion forums:** An open space for you to discuss interests and seek support from your peers, working collaboratively to solve problems and discuss subject material. Some forums are moderated by an LSE academic.

- **Videos:** Recorded academic introductions to many subjects; interviews and debates with academics who have designed the courses and teach similar ones at LSE.

- **Recorded lectures:** For a few subjects, where appropriate, various teaching sessions of the course have been recorded and made available online via the VLE.
• **Audiovisual tutorials and solutions:** For some of the first year and larger later courses such as Introduction to Economics, Statistics, Mathematics and Principles of Banking and Accounting, audio-visual tutorials are available to help you work through key concepts and to show the standard expected in exams.

• **Self-testing activities:** Allowing you to test your own understanding of subject material.

• **Study skills:** Expert advice on getting started with your studies, preparing for examinations and developing your digital literacy skills.

Note: Students registered for Laws courses also receive access to the dedicated Laws VLE.

Some of these resources are available for certain courses only, but we are expanding our provision all the time and you should check the VLE regularly for updates.

**Making use of the Online Library**

The Online Library (http://onlinelibrary.london.ac.uk) contains a huge array of journal articles and other resources to help you read widely and extensively.

To access the majority of resources via the Online Library you will either need to use your University of London Student Portal login details, or you will be required to register and use an Athens login.

The easiest way to locate relevant content and journal articles in the Online Library is to use the Summon search engine.

If you are having trouble finding an article listed in a reading list, try removing any punctuation from the title, such as single quotation marks, question marks and colons.

For further advice, please use the online help pages (http://onlinelibrary.london.ac.uk/resources/summon) or contact the Online Library team: onlinelibrary@shl.london.ac.uk

**1.12 The examination**

**Important:** the information and advice given here are based on the examination structure used at the time this guide was written. Please note that subject guides may be used for several years. Because of this we strongly advise you to always check both the current Programme regulations for relevant information about the examination, and the VLE where you should be advised of any forthcoming changes. You should also carefully check the rubric/instructions on the paper you actually sit and follow those instructions.

The whole assessment for this course is by examination.

• The examination is three hours long.

• The examination paper will consist of eleven questions of which you will be asked to answer four.

• The paper is divided into two sections. Section A covers the period up to 1938 and Section B covers the period from 1939 onwards. However, you will often find that an answer requires you to explain historical issues and trends that cover periods on both sides of this divide.

• The examination is designed to test your basic understanding of the subject. So the questions will test only what you have learnt about the
broad issues. As mentioned above, you will not be asked to answer
detailed questions about individual countries.

• Sample questions are given at the end of each chapter, and you will find
specimen examination papers on the VLE.

Remember, it is important to check the VLE for:

• up-to-date information on examination and assessment arrangements
for this course

• where available, past examination papers and Examiners’ commentaries
for the course which give advice on how each question might best be
answered.

1.12.1 A note on examination technique

Here are some important points to remember.

• When you sit down to take the examination, make sure that you read
through the whole examination paper before you begin to write.

• Make sure that you read the questions carefully.

• The Examiners take relevance very seriously. A common mistake,
for example, is for students to see particular words in a question
(e.g. ‘American railroads’) and to write about the economic history
of American railroads, when the question asked the student to write
about the effect of the development of American railroads before the
First World War on the British and other economies.

• Make sure that you allocate your time correctly. Give equal time to
each question. Examiners cannot give marks for blank pages. If you
only write three answers when you are asked to write four, you have
will have lost many marks.

1.13 Summing up

You do not have to read every word of the textbooks or the additional
readings mentioned in the guide. You may do more work on some chapters
rather than others, as you choose. But it is important for you to remember
that the guide has been designed only to introduce you to a very big
subject.

Remember also that this subject guide is not a set of examination notes. It
does not, on its own, contain sufficient material to enable you
to pass the examination.

Before the examination you will be sent the Examiner’s commentaries and
past examination papers for this course. It is a valuable resource. Make
sure that you read it carefully.
Chapter 2: International trade and economic growth

What this chapter is about

We focus on the period 1820–70 in this chapter. Modern economic growth began in Europe before this, but industrialisation was delayed until energy resources could be exploited on an industrial scale. This happened after 1820.

The first industrialised economy was Britain. We explain why this was so and the process by which growth spread to other European countries and to the USA.

Objectives

To:
• explain the factors that led to modern economic growth
• make clear the distinction between growth and industrialisation
• show what factors encouraged growth to transfer from the central economy (Britain) to a peripheral economy, the USA.

Learning outcomes

By the end of this chapter, and having completed the Essential reading, you should be able to:
• explain what is meant by modern economic growth and why it became a feature of countries over the last 200 years
• discuss how this relates to the development of the international economy
• outline the mechanism by which economic growth was ‘transferred’ from one economy to another
• demonstrate why some countries ‘caught up’ with more developed countries earlier than others did
• use economic concepts like the ‘gains from trade’ and ‘comparative advantage’ to analyse how the international economy developed.

Essential reading


Further reading

Introduction

We look at several processes that were under way during the nineteenth century. There was the establishment of what we call ‘modern economic growth’, meaning a rapid and continuous process of growth per head of the population. We see how this began in Britain and spread to other European countries. Next we consider the reasons behind this growth and see how industrialisation is part of the process.

Then we look at how growth spread to countries on the periphery of the international economy. We see how the preconditions for modern growth were present in nineteenth-century USA. As US growth accelerated, trade expanded on the basis of specialisation and comparative advantage. This led to gains from the trade in the USA and elsewhere (see 1.5.6).

Finally, we emphasise that growth and its preconditions form the basis for rising prosperity, while trade expands as a result of growth. Trade, without these preconditions, does not lead to modern economic growth. This is as true today as it was in the nineteenth century.

2.1 Factors that determine economic growth

For this section read Kenwood and Lougheed, pp.9–12; pp.22–24.

We live in an age when economic growth is expected. Slow-downs in growth or recessions are expected to be short-lived. Nobody today would vote for a government which promised that average income would be lower in five years time than in this year. A process of what we will call ‘modern economic growth’ has gone on for about 200 years. This chapter considers the causes of that growth. First of all we list the main factors involved.

2.1.1 What are the sources of growth?

- technology leading to increasing productivity
- learning by doing
- exploitation of natural resources
- capital inputs (more capital)
- labour inputs (more labour).

2.1.2 What makes growth more likely?

- favourable institutions
- reliable methods of payment
- high quality human capital
- a large market.

2.1.3 What makes it more likely that economic growth in one country leads to growth in other countries?

- favourable international institutions
- low barriers to trade
- international peace and security.

Pause and think

Why do more resources often lead to modern economic growth? Try to put this in your own words before reading on.
2.1.4 Causes of economic growth

More land or cheaper energy will increase output overall. As we said when discussing the key concepts in Chapter 1, output also grows by increasing the amount of labour and/or by increasing the amount of capital (machinery, stocks of materials, buildings etc.).

In the past, increasing labour inputs often led to growth because in sectors such as agriculture, output per head was very low. So long as it was possible to transfer labour to other more productive parts (i.e. industry), output rose. This source of growth is not now very important in developed countries since agriculture is only a small proportion of the economy (two or three per cent of overall output) and output per head is already relatively high. (Growth by transferring resources from agriculture to industry is important in present day China and India, for example.)

Capital inputs are another cause of growth. Capital includes buildings, stocks of materials or machinery. Let us consider the nature of capital for a minute.

Capital expenditure is something that is paid for today but the benefit of the spending only occurs tomorrow. In other words, it reduces consumption in the short run but increases output in the long run. Technical change is often part of capital inputs, but it does not have to be. In theory, a better way of doing something might not require investment. Moreover, technology does not usually affect economic growth by one-off inventions; for instance, by an inventor who has a brilliant idea in the bath.

Most technology in the present day that increases growth comes from within the firm, the factory, the farm or even the government. That is, people learn better ways of doing things on the job. Technical change is more of a ‘systematic’ than a ‘heroic’ process.

Pause and think

How did the invention of the motor car come about?

The first cars came from within the engineering firms of Daimler (Germany) and Renault (France).

- Companies who were already involved in other transport (carriages/horses/buses) were soon involved.
- But the success of the motor car depended on many things. In the first place, the internal combustion engine was soon copied. But the development of the industry also depended, for example, on new ways of refining oil to make petrol, on new metals and on the development of rubber tyres.
- Within ten years of their first appearance, cars were being manufactured in most industrial countries.
- Then mass production revolutionised the way that cars were made and made them cheap enough so that large numbers of people were able to buy them (see Chapter 6).
- In other words, the invention of the internal combustion engine was only a part of the development of the industry.

2.1.5 Additional factors affecting growth

Think about the way that modern economic growth was transferred from one economy to another. Some of the elements listed in 2.1.4 could also apply to many countries that did not develop very early. Something else must be important, things that make growth more likely.
The first element that makes growth more likely is the presence of favourable institutions, in particular, the rule of law. As we note above, entrepreneurs will not ‘invest’ (that is reduce current consumption in the expectation of more income in the future) if they think that their contracts will not be honoured or if they think that the government is likely to confiscate their property.

- As well as the rule of law, the economy needs reasonably stable financial institutions. Deposits in banks have to be safe. There has to be an easy way to make payments and, most important of all, an easy way to borrow money. A good financial system transfers savings from one part of the economy so that it can be invested in another. But it is not easy to develop stable financial institutions, especially if there is no rule of law.

- The level of education among the population is also an important element. Remember, however, that practical knowledge gained from experience was probably more important in the past than book learning. Nowadays technology is so advanced that formal education has become much more important.

- Finally, if an economy has access to a large market, entrepreneurs can produce on a larger scale. This market could be an export market in another country of course.

### 2.1.6 What makes it easier for economic growth in one country to be transferred to another country?

- Trade is one element, because it allows the ‘follower’ country to import modern products, for example machinery.

- Similarly, it is a big advantage if the follower country can import capital: if it can borrow from a more developed economy where savings are higher.

This means that relatively free trade and relatively free movement of capital helps the transfer of growth from one economy to another. There are exceptions to this which we explore below. In some periods international institutions, such as rules about exchange rates or international agreements, have made the transfer of growth more likely than in other periods.

For instance, a good international environment makes the transfer of economic growth more likely. And obviously wars reduce international trade and payments, so wars are bad for the transfer of growth.

### 2.2 ‘Modern economic growth’

We introduced this term earlier in this chapter. It is used to distinguish the rapid and, most importantly, continuous economic growth that characterised the world economy in our period from the much slower and more erratic growth that characterised earlier times.
There have been periods of economic growth in different parts of the world for all of recorded history. It was erratic, however, and there have been periods of stagnation and decline as well. (Sometimes the stagnation was because output could not keep up with population growth.) In China, for example, growth virtually stopped for about two hundred years. But in the last 60 or so years ‘modern economic growth’ has become established there. This continuous economic growth began in Europe then spread to the USA and countries where Europeans had settled overseas, such as Argentina, Canada and Australia. Only in the twentieth century did it spread to Japan and China, and, as we know, there are still many parts of the world where growth is not continuous. Parts of Africa, for example, have a lower per capita income than ten years ago.

### 2.2.1. The emergence of modern economic growth in Europe

There were several reasons why western Europe was at the forefront of economic growth some two hundred years ago. Three of the most important were higher agricultural productivity, demographics and marriage, and the development of the nation state. We look at these next.

### 2.2.2. Agricultural productivity

*Pause and think*

What were the effects of higher agricultural productivity on other parts of the economy – industry, for example?

Food production was essential, of course. Fewer resources were needed to produce food, so more resources (particularly labour) could be used to produce other goods – clothing, tools, buildings, for example. As we see later in this chapter, agricultural technology in Europe developed to allow labour to shift from farming to industry without resulting in reduced agricultural production. To use an economic concept, the ‘opportunity cost’ of working outside agriculture was lower in western Europe than in most other parts of the world.

Two other factors explain why Europe was the first region to experience modern economic growth.

### 2.2.3. Demographics and marriage in Europe

The number of people supported by a particular area of land was relatively smaller than in other parts of the world. In other words, there was a bigger gap in western Europe compared with elsewhere between the maximum number of people that could be supported by a given amount of land and those that actually were supported by it.

The reason was that people married at a later age in western Europe than elsewhere so that fewer children were born per married couple. In turn this meant that fewer children were born and there was less pressure on the land. This was a major reason why the agricultural population was relatively smaller and the non-agricultural population relatively larger.

### 2.2.4. The nation state

The second main reason for the early development of modern economic growth in western Europe was the early development of the competitive nation state before other parts of the world. Precursors of the European nation state were the city-states that emerged in Italy during the Renaissance period.
By the early part of the nineteenth century, there were already many European nation states. Chief among these were Britain, France, the Netherlands, Denmark, Sweden, Spain and Portugal.

By 1914, Italy, Germany, Norway, Belgium and Greece had joined the list. The rest of Europe became organised into nation states after 1918.

Not all features of the nation state were beneficial to economic growth (the destruction created by wars is one example), however, nation states did offer three advantages:

- The governments were more trustworthy.
- Property rights and contracts were easier to enforce, and more likely to be enforced.
- Bankers and traders found it easier to accumulate capital.

Pause and think

Consider the following situation and questions:

You enter a contract with another business person. You need to know that the contract would be honoured. In other words, that your ‘property rights’ in the contract would be protected.

- If your trading partner does not fulfil his or her obligations, how can you be confident that the legal process will help you gain redress?
- How does this point relate to the nation state?

An entrepreneur is more likely to enter contracts, for example, to introduce new technology or begin trading voyages when the state is a helpful and benign influence. He or she needs to be confident that the state itself will not arbitrarily confiscate property.

In other words the cost of making transactions in western European countries was lower than in most of the rest of the world, where the state (if it existed) was different. (1.5.14 tells you what ‘transactions costs’ are.)

Consider a non-nation state. In 1820 there were a number of non-nation states in Europe (Turkey, Austria and Russia). Elsewhere there was the Chinese Empire and Japan, which was cut off from the world, plus the various colonies of the imperial powers.

Pause and think

Why do you think that these states were less encouraging to economic growth? After all, they all had codes of law.

- Although they protected property rights with legal codes, these could be changed according to the ruler’s pleasure.
- If an empire was multinational, some nationalities were often treated better than others.
- As a result, property rights were less reliable and lending money (e.g. putting it in the bank) was less attractive.

In contrast, in Britain and the USA the business community had, by 1820, become an important part of government. This made it less likely that the government would act in an arbitrary way.
2.3 Industrialisation

By 1820 modern economic growth in western Europe was established, though in most countries it was still rather slow – say about 1 per cent per head per year. By about 1900, it was faster, but still less than 2 per cent per head per year. This acceleration came about through the spread of industry – a process known as ‘industrialisation’.

Pause and think
The first signs of modern economic growth can be found in Europe much earlier than 1900. Why, then, did the process of industrialisation take so long to become established?

The reason why industrialisation came late was that until the late eighteenth century, economies could not produce large amounts of energy. Most energy came from waterpower, animal or human power. The wind provided a cheaper source of power for ocean transport.

Pause and think
Watermills and windmills have been used for hundreds of years. Why weren’t they used to power industrialisation?

These were not able to generate sufficient energy for industrialisation. Modern economic growth is rapid and continuous. It requires new sources of energy. The problem was that exploiting most existing energy sources needed labour. That meant competition for labour with farms and therefore endangered the production of food.

In economic terms, the amount of energy available was a constraint on development.

The breakthrough came with an increase in agricultural productivity, thanks to a number of innovations made much earlier. Higher agricultural production allowed labour and other resources to be diverted into other sectors of the economy without reducing food production. In addition, the production of coal after about 1780 in Britain and later in Belgium, France and parts of Germany, enabled modern growth to spread and accelerate.

Once the energy problem was solved, major changes in engineering and in transport (e.g. the railway and steam shipping) were possible. These transformed the international economy. In the period 1820–1850, Britain, followed by Belgium and parts of Germany and France, experienced very high growth rates in iron production, engineering, coal and textiles.

The acceleration in growth rates is frequently called, ‘the Industrial Revolution’. Growth was fastest in textiles, production of which became mechanised, in iron and in engineering. However, growth was much more widely based. Non-mechanised industries could expand by taking on more labour and agricultural productivity measured both by returns to labour and returns to land increased – although not by as much as in industry.

2.3.1 Summing up

• Modern economic growth began in western European nation states during the period 1780–1820.

• We now know that a characteristic of modern growth is that it becomes permanent and continuous.

• Growth rates were modest by present day standards (around 1 per cent). Nevertheless, we can now see that a major historic change occurred.
In the subsequent period of 1820–50 the process of industrialisation began, based on coal and steam power. Growth rates began to accelerate (to between one and two per cent).

In this section we have used some of the concepts, which were mentioned in Chapter 1. In particular, we have been discussing productivity growth.

- Initially, the main source of growth was structural change.
- This means that labour and capital moved from one part of the economy to parts where they were more productive.
- The classic example was labour moving from agriculture to industry. Adding an extra person to a farm did not produce as much as adding an extra person to a factory (or to employment in services). This means that their labour productivity rose if they moved to a city.
- As the energy problem was solved, leading to industrialisation, capital was used to build factories or install machinery. This means that capital productivity rose as well.
- Transport development was also very important. Better, cheaper transport allowed manufactured goods, which were also now cheaper, to reach the farmers and food in sufficient quantities to reach the cities.
- Finally there was the increased size of the market, leading to higher demand and making an increase in the scale of industrial production possible. Note that agriculture was still not mechanised in Europe as late as 1900.

2.4 The spread of modern economic growth

We see above why modern economic growth began in western Europe before 1820 and why industrialisation followed after 1820. Next we look at how the growth spread from one country to another.

Pause and think
Why might the spread of growth from one country to another have happened?

We use the term ‘centre’ and ‘periphery’ in economic history to help explain this. Modern economic growth spread from western Europe, (the ‘centre’) to other parts of the world (the ‘periphery’) in two main ways.

- **By conscious copying.** For example, once the railways had been developed in Britain they were quickly copied in other countries. They did not have to be reinvented.

- **Through trade.** The most important way that growth was transferred was through trade. Britain was the most important trading country before 1914 because it had been the first to industrialise. Later starters could import capital and consumer goods from Britain in exchange for primary products (raw materials and foodstuffs).

We can use a famous nineteenth century example, the relationship between Britain and the USA.

- In the early nineteenth century Britain and the United States were each other’s best customers.

- Britain exported industrial products to the USA in return for cotton and timber (unfortunately, since cotton was produced by slaves, cotton exports prolonged the life of slavery in the USA).
• But United States exports were not enough to pay for US imports. In other words, the USA had a balance of payments deficit (we look at the balance of payments in Chapter 4).

• Britain lent money to the USA which financed the deficit. Note that, in order to encourage this flow of credit, US interest rates had to be higher than British interest rates.

The relationship between, what we call, a ‘central’ country like Britain, and a ‘peripheral’ country, which the USA was at the time, raises several points.

2.4.1 ‘Catch up’

Once one (central) country industrialised, the position of many other economies was transformed. It became easier for them to develop – that is to ‘catch up’. But we know that in the nineteenth century, only a few countries managed to ‘catch up’. This is because of the need for ‘social capability’ in a peripheral economy that tries to catch up with the centre.

The peripheral economy has to be able to take advantage of the connection with the more developed economy. This means having similar institutions to those in the central country. Such institutions include a benign government, the enforcement of contracts, a comparable level of literacy and some useful raw materials. Without these, trade with the centre does not lead to modern economic growth. In an extreme case, trade leads to a plantation economy and/or colonial exploitation.

In other words, the nature of the peripheral economy was, in the nineteenth century, the determinant of whether trade led to modern growth.

For example, Americans were rich, well educated and had a strong government well before the USA industrialised. They had the right institutions and could not return to being an economic colony of Britain. Some smaller, weaker countries did become economic colonies, however.

2.4.2 Use of other countries’ resources

Britain, the first industrial country, gained access to the abundant (and therefore cheap) resources of other continents, especially the resources of the USA in the beginning. This allowed Britain to specialise in those products in which it had a ‘comparative advantage’, which increased its income. These were products which Britain produced relatively more cheaply than other countries. This meant that Britain exported manufactures and services. Eventually, Britain was able to import most of its foodstuffs, leading to a still higher level of specialisation.

2.4.3 Trade as a consequence of industrialisation

This is an important point. The growth of trade in the nineteenth century was a consequence of industrialisation not a cause of it. This is because industrialisation meant specialisation in industrial goods. This led to a demand for imported primary products. Remember this important relationship. You can find it re-stated at the end of the course (see Chapter 15).

2.4.4 Trade and policy

The development of the relationship between the first industrial country and the rest of the world had important implications for policy. In particular, it was in Britain’s interest to adopt free trade.
Pause and think

Why was free trade in Britain’s interest?

• Britain industrialised first and was the world’s cheapest producer of a large range of industrial products.
• Free trade increased imports of food and raw materials into Britain. This gave other countries more money with which to purchase British exports.

For instance, if countries did not have an iron industry, they could import railways from Britain. In the long run this might not be politically acceptable. Take the example of US railways. In the 1850s the USA imported iron rails from Britain to build its railway system. Since the US iron industry was relatively underdeveloped, importing from Britain meant that the USA was able to develop a railway system earlier than otherwise.

But Americans did not want to be dependent on British imports. They wanted to manufacture rails for themselves. Hence, in the 1860s, the American government raised tariffs on a range of (British) imports. This allowed American manufacturers to compete with the cheaper British products. Eventually, they became even cheaper producers than British manufacturers, to the benefit of the American economy.

This is an example of an ‘infant industry tariff’ allowing ‘import substitution’. This pattern applied to other industrialising countries. In the early stages of industrialisation, countries purchased cheap capital goods imports, but later raised tariffs to allow ‘import substitution’.

Pause and think

Under what circumstances does it make sense to introduce tariffs on cheaper manufactured imports?

Think about the long-run consequences. Is it probable that the goods could eventually be produced more cheaply at home? And even if they were, is there another product in which the country has a comparative advantage?

2.4.5 Factor proportions and comparative advantage

Pause and think

Why were Britain and the USA initially such important trading partners?

The reason why Britain and the USA were initially such important trading partners is because the economies were complementary:

• The USA had very large resources of land and raw materials. What it lacked was capital and labour. Because resources were abundant, labour and capital were scarce, by definition, and therefore more expensive.

• Britain had relatively abundant labour and because it industrialised first, relatively abundant capital. This meant that the return to labour (wages) was higher in the USA than in Britain, and the return to capital (interest rates) was also higher in the USA. On the other hand, land and new materials were relatively scarce in Britain, and relatively expensive.

• Labour (emigrants) and capital (investment) moved from Britain to the USA and those goods that used a lot of natural resources (i.e. were
resource-intensive), such as timber and cotton, were traded from the USA to Britain. The two countries specialised in those areas where they had a comparative advantage.

A reminder of your learning outcomes

Having completed this chapter, and the Essential reading, you should be able to:

- explain what is meant by modern economic growth and why it became a feature of countries over the last 200 years
- discuss how this relates to the development of the international economy
- outline the mechanism by which economic growth was ‘transferred’ from one economy to another
- demonstrate why some countries ‘caught up’ with more developed countries earlier than others did
- use economic concepts like the ‘gains from trade’ and ‘comparative advantage’ to analyse how the international economy developed.

Questions

1. Why did Britain introduce free trade in the mid-nineteenth century?
2. How did energy production constrain the rate of economic growth before industrialisation?
3. Were there any features of the nation state in western Europe that made economic growth easier?
Chapter 3: The development of an international economy by 1900: trade, capital and labour

What this chapter is about
A number of factors helped the development of the international economy during the period 1870–1914. In particular:

• a rapid growth in international trade
• migration of labour
• international capital flows
• helpful economic institutions such as the gold standard (we deal with the gold standard in Chapter 4.)
• peace and security in international affairs which encouraged the development of the international economy.

In this chapter we look at the first three of these factors.

Objectives
To explain:

• why trade grew so rapidly
• what role labour migration played
• what stimulated capital flows.

Learning outcomes
By the end of this chapter, and having completed the Essential reading and activities, you should be able to:

• explain why international trade grew so rapidly
• analyse the reasons for the high levels of both international investment and international migration in the period before 1914
• apply the idea of comparative advantage to these movements
• explain the effect of migration on different economies
• account for the relatively low barriers to the mobility of factors of production in the international economy 1870–1914.

Essential reading

Further reading


Introduction

During the period from 1870 to 1914 world trade grew by about a third per head per ten years. World output (GDP) grew by only seven per cent per person per decade, slower than trade but still impressive. The world did not see such rapid growth in trade again until 1945–73.

Growth of trade and output were already under way in the 1820s. In this chapter we examine why the increase took place. The chapter has four main sections:

• characteristics of the international economy
• international trade
• overseas investment
• international migration.

A problem for us is that we have the benefit of hindsight. It seems almost inevitable today that the international economy would have grown in that period. Population was growing, new production processes were coming on stream and, in particular, there was great development of steam transport. But it was not inevitable that the international economy would grow.

In this and subsequent chapters, we see how beneficial conditions encouraged the international economy to grow. Several relate to one country, the UK. The UK was the first industrial economy and it could have turned inward towards domestic production. It did not do so.

Instead, the UK became the dominant trading nation, with a large empire which lasted well into the twentieth century. The UK also played a major part in running the world’s monetary payments and credit. At the same time the UK put up no barriers to trade, or any hindrances to the outflow of labour or capital. It is worth remembering that the international economy could have stagnated if different policies had been adopted.

In the twentieth century, the UK’s share of world exports and its share of world overseas investment declined. This meant that its influence in the international economy also declined. Once that happened, it was important for the smooth functioning of the international economy that new institutions were created to take over the role which the UK had once had. As we see in Chapters 8, 12 and 13, this proved difficult.

In this chapter we look at the period 1870–1914, when UK influence was at its height.

3.1 Characteristics of the international economy

Chapter 1 in Kenwood and Lougheed sets out how they view the causes of the expansion of the international economy in the period before 1914.

The main characteristics of the international economy between 1870 and 1914 were the relatively free movement of:

• goods
• labour
• capital.
Chapter 3: The development of an international economy by 1900: trade, capital and labour

There were fewer restrictions than at any period in history except perhaps in very recent years.

3.1 Goods

Countries did have tariffs, but they rarely discriminated – the level of tariffs faced by one country's exports was usually the same as the level faced by other countries. If a ‘discriminatory tariff’ is used it means that imports might not come from the cheapest overseas producer. This reduces income.

3.1.1 Goods

3.1.2 Labour

There were no restrictions on international migration by people of European origins. On the other hand, there were serious restrictions on non-white emigration, even within the British Empire.

3.1.3 Capital

There were no restrictions, such as exchange controls, on international capital movements.

All the major world currencies were freely convertible into each other at fixed rates. The reasons why there was monetary stability are discussed in Chapter 4. In this chapter we concentrate on the three factors above.

3.2 Why did international trade grow so fast?

This is a good question to think about. We must distinguish between cause and effect. The real reason for the growth of the international economy was not the relatively free movement of goods, labour and capital. It was the other way round. Fast growth convinced countries that the best policy was to allow relatively free trade. So growth led trade.

Growth even led trade in countries like Australia and Canada whose economies grew because of massive export growth of wool and wheat, respectively. Exports from these countries grew because:

• demand in the industrial countries grew
• the industrial countries provided the essential technology and capital to build the railways and ships to carry the exports.

Australia and Canada became very successful economies, but there are countries that became successful exporters of important products but did not achieve sustained economic growth. Examples include Jamaica and sugar, Bolivia and tin and Nigeria and oil. Simply put, this was because these countries had insufficient social capability (see 1.5.10).

So success in trade does not guarantee economic growth and higher incomes. Similarly, countries can grow without trade being very important. The USA is a prime example. US trade has been a minor cause of American economic growth throughout the twentieth century, for example.

There were several reasons why the period before the First World War (1870–1914) was particularly favourable to the growth of international trade.
3.2.1 Peace

Between the end of the Franco-Prussian War in 1871 and the outbreak of the First World War in 1914 there were no wars between any of the great powers (Britain, France, USA, Russia and Germany).

3.2.2 Transport costs

Transport costs declined at a faster rate than in any previous period. The development of railways enabled goods to be moved overland at low cost. Previously, goods could only be moved cheaply by water, which is why all the major cities of the pre-industrial world were either ports or on navigable rivers.

The development of steam shipping created an international market in all the main commodities. This was because steam ships were not dependent on the weather, but could go anywhere that goods were cheap and sell them anywhere that goods were expensive. This made the prices of, for example, cotton, wheat, rubber and tin the same across the world except for transport costs.

Pause and think

Can you think of goods which did not have the same price worldwide?

For goods to have the same price worldwide they have to be homogeneous, like wheat. Transports costs still remained high for some goods – that is those that could be damaged in transit.

3.2.3 Travel and communication

Other developments were the telegraph, marine cables and postal services. The effect was massively to increase the amount of information available to businessmen and traders, that is information about the market in particular commodities. These costs of doing business are called ‘transactions costs’ (see 1.5.14).

- In preindustrial societies, there was little certainty about economic transactions (e.g. about markets, the weather, safety, the creditworthiness of clients). More useful information reduces uncertainty.

- Less uncertainty allows an increase in the number of transactions. If you think about it, this is virtually the same as increasing economic growth. Resources that were used to make transactions can now be used to create more goods.

There is also a link between falling transport costs and lower transactions costs. Over time, the speed of obtaining information depended less on the wind and the speed of horses and more on the steamship and telegraph cable.

3.2.4 The international market in commodities

So far we have talked about ‘goods’. From now on we reserve this label for manufactured goods. We use the word ‘commodities’ and ‘primary products’ for basic raw materials – the products of mines, forests, fishing and agriculture.

Pause and think

How did lower transport costs affect international trade in commodities?
The combined effects of the fall in transport costs and the increase in information was to create an international market in the basic commodities. Take wheat as an example.

- Let us assume that there was a very good harvest in Argentina and a poorer one in the USA.
- The price of wheat would be lower in Buenos Aires than the price in, say, Chicago.
- At the same time, the information about the Argentine harvest would be available in, say, London. Ships would go to Buenos Aires to buy wheat at a low price.
- In this way, the harvest in Argentina affected the price in the USA.
- Ultimately, the price of wheat anywhere in the world was the same except for transport costs, which for bulk commodities like wheat were low. ‘Futures markets’ subsequently developed, allowing people to trade in basic commodities worldwide before the crops were even harvested.

**Activity**

Which of the following goods and commodities are commonly traded internationally today and which are not? Can you think why?
- cement
- bricks
- steel sheets
- potatoes
- tropical root crop foods like cassava.

Cement and bricks have a low value-to-weight ratio and are seldom worth trading internationally. Steel sheets are traded as long as they are of high quality (and value) to make it worthwhile. Potatoes are easily stored and graded so do get traded. Cassava is heavier and more uneven, so it is more difficult to trade. In short, it depends on the value, the weight, and the ease with which the product may be bought and sold. Then, if one country has an advantage in its production trade develops. Otherwise it doesn’t. Note that a country only needs to have a **comparative** advantage to make trade worthwhile (see 1.5.5).

### 3.2.5 Specialisation

One of the main ‘gains from trade’ is a consequence of specialisation. Consider what happened in UK, in the period from 1870 to 1914.

- Food imports increased because of the development of ‘virgin lands’, first in the western part of the USA and then in other countries, such as Canada. Note that this would not have been possible without transport development, particularly the railway.
- In turn, agriculture in the UK declined because it became cheaper for basic food to be imported rather than produced at home.

Of course, if the British government had decided to protect British farmers, there would have been fewer imports. But the UK did not protect food imports (see Chapter 5).

Imports meant that basic food costs in the UK fell by half in thirty years (1870–1900). Since, at the time, British people, on average, spent about half of their income on food, this had a significant effect on the standard
of living. Also the British economy could concentrate on more productive sectors, in which they had a ‘comparative advantage’ – for example, the export of manufactures.

**Pause and think**

How do you think that the agricultural sector responded to this new competition from abroad? Try to answer using the concept of ‘comparative advantage’ (see 1.5.5)

If this question gives you difficulties, have a look at Kenwood and Lougheed, 75. They explain how farmers in the UK and Denmark moved out of grain and cattle farming for meat, into areas where they had a comparative advantage, notably pig rearing and dairy farming. A century later Denmark is still well known for bacon and cheese production.

The answer to this question forms an example common to many situations. There was increased competition from abroad, the loss of comparative advantage and the search for a new product where the local producers still had a comparative advantage. The effect was that different countries specialised, to some extent.

### 3.2.6 The supply of primary products

In the late nineteenth century, those parts of the world with very low population densities, and where the resources had previously been little exploited, were entering the international economy; areas such as the west of the United States, most of Australia, Argentina and parts of Siberia. These ‘regions of recent settlement’, as they are called, experienced ‘constant returns to scale’ in agriculture and primary production. Constant returns to scale means that the output per hectare did not fall as total output increased (see 1.5.11).

**Activity**

Imagine three families each having farms of 25 hectares in nineteenth-century Kansas. A government land grant enables them each to increase to 50 hectares (25+25). Each family uses double the inputs (labour, cattle, machinery etc.) Each family obtains the following results:

- The first family gets 200 per cent of the previous output.
- The second family gets 50 per cent more output.
- The third family gets 100 per cent more output.

Now describe the ‘returns to scale’ of each farm. Try this before reading on.

The first family obtains increasing returns, the second decreasing returns and the third constant returns to scale.

But what if there was no extra land available?

Then 50 per cent more output, or a worse result, is the only conceivable outcome. In other words, where land is scarce there are diminishing returns to land.

But in the regions of recent settlement, technology and transport liberated agriculture from diminishing returns to land – that is where adding more labour and capital could not lead to an equivalent increase in output because the amount of land could not be increased.

In the regions of recent settlement, the amount of land could be increased and any increase in labour and capital applied to the land would lead to a large increase in the output of food.
This is why the massive rise of population in the industrial countries and increased demand for commodities did not lead to rising food prices.

Activity

Draw a supply and demand diagram for the world supply of food. The diagram should show:

- a demand curve that shifts to the right as population increased
- a supply curve that shifts to the right as new areas come into production in new areas
- an equilibrium price for food.

Finally, comment on the diagram:

- Is the price of food falling?
- Under what conditions would it fall?

Think about the increase in supply compared with demand, and if you know a bit more economics think about the elasticity of demand. We know that world food prices fell c. 1870–1900. What are the implications for the diagram?

Bear in mind that food prices did begin to rise after 1900, once the best land in the regions of recent settlement was taken up and farmed.

3.3 Overseas investment

Economic conditions in the later nineteenth century were exceptionally favourable for international investment. The countries that had already industrialised were generating capital from the profits of industry. The UK, the first country to industrialise, was the biggest capital-exporting country; 40 per cent of the £10 billion of outstanding foreign investment in 1913 was still British-owned.

Pause and think

- How could the UK afford to invest such an enormous amount overseas?
- Where did the money come from?

The UK could only invest overseas because it had a surplus of exports of goods and services. Consider how the balance of payments is made up. On one side are exports of goods and services. On the other side are imports of goods and services. Obviously, the balance of payments must balance. For example:

- If a country is importing more than it exports, it must have paid for the imports. In other words, to acquire the foreign currency to pay for the imports it must be importing capital, that is borrowing.
- If a country is lending overseas, as the UK was in the nineteenth century, it must have been earning the foreign currency with which to make the investment. To do this, the UK must have exported more goods and services than it imported. It must have had an export surplus.

The main demand for foreign investment was from the so-called ‘regions of recent settlement’, such as the USA, Canada, Argentina and Australia. These were countries which had only recently been settled by Europeans; the native population was relatively small. Inward investment was mainly used for infrastructure such as railways and docks.
Think about the return to new investment (capital) in these countries and in the UK. Because they were relatively underpopulated, countries such as Canada, Argentina and Australia and, until about 1900, the USA had little capital but a lot of resources. In fact, if they had a lot of resources, they would have relatively little capital, by definition. This meant that the productivity of capital was high and the return to capital was high.

Pause and think
What else was needed, besides a favourable ‘resources-to-capital’ ratio, to make investment in the regions of recent settlement profitable?

Demand for the products that the resources helped to create was also required. This is an important point. Investment in these countries was only profitable as long as there was a demand for the products associated with the investment, such as a railroad that carried the products.

An example may help. British investment in railways in Argentina:
• allowed Argentine beef to reach the coast, so exports of beef rose
• gave the Argentine borrower the money to repay the loan, from sales of beef in the UK
• made it profitable for the UK lender to lend the money in the first place, as this repayment with interest justified the investment.

3.3.1. Technology transfer
Foreign investment also led to technology transfer (sometimes called technical transfer). This allowed regions of recent settlement to copy and learn from more developed countries. This is how many countries acquired railways, for example. Instead of having to produce their own rail and locomotives, the new countries could use what had already been developed by industrial countries like the UK and France.

Another type of technical transfer happened later in the period. After 1900 companies were beginning to make direct investments abroad, for example in manufacturing.

Pause and think
What impeded technical transfer?

In 1900, technical transfer was not as easy as it is today. One reason is that at the time many skills were ‘embodied’ in the workers who made the products. Local labour often did not have enough skills, enough ‘human capital’, to work the new machines.

This is an example of how a lack of ‘social capability’ can impede ‘catching up’ with a more developed country. This was one reason why technical transfer often occurred alongside international migration.
3.4 International migration

Just as the fall in transport costs and the development of information mechanisms allowed an international market in goods to develop, it also allowed the partial development of an international labour market. It became possible for people, particularly from Europe, to increase their income by emigration to the regions of recent settlement, of which the most important, by far, was the USA. (Non-European emigrants were not always welcomed, however; many countries banned non-white immigration.)

The flow of emigrants from Europe was a response to the relative labour shortages of the regions of recent settlement and the relative labour surplus in Europe. In the regions of recent settlement, resources were relatively abundant and labour was relatively scarce.

Pause and think

- Who gains and who loses from such migration?
- Is it all cost for the country of origin and all gain for the recipient country?
- Write down a balance sheet for the two countries involved.

Simple international trade theory suggests that the migration of labour increases income in both countries. For the factors you should have in your balance of costs and benefits see Kenwood and Lougheed, pp.54–56. If you want to try something a bit harder, ask yourself what the difference is if the emigrants return to Europe? About a third returned during the 1870–1914 period.

You should be able to see that, in a sense, overseas investment, trade and migration are substitutes. For example, capital investment could provide jobs in Europe. If the investment went to the USA, for example, it would increase jobs there and, other things being equal, which is a large assumption, of course, migration to the USA would increase.

The reason that workers went from Europe to the USA and other countries was that they increased their standard of living by doing so. In other words, returns to labour were higher in the USA and other countries of recent settlement.

In the long run, it was likely that migration from Europe to the USA would fall. This was because the differential between European and American wages would fall, as the relative scarcity of labour in America fell, and the relative abundance of labour in Europe fell. This is eventually what happened, but it did not happen very fast because returns to capital were also higher in the USA than in Europe. So capital continued to flow towards the USA, relatively increasing labour demand there and relatively reducing it in Europe, which meant that wages were not equalised and migration continued.

Pause and think

Were some immigrants more useful to an economy than others?

Many of the international migrants had valuable skills but the great majority were unskilled.

Pause and think

Did this mean the unskilled were of little use?
No. A high proportion were young adults. They entered the new countries at the peak of their productive and consuming power. In other words, the cost of their upbringing had been paid in the country from which they came. They were a free gift of human capital from Europe.

**Summary**

In this chapter we cover a lot of ground. Even so, we do not have space to expand and discuss some important and interesting issues. You should make sure you complete the reading before moving on.

- We have argued that there is a two-way relationship between the growth of individual countries and the growth of the international economy.
- In some countries trade based on exporting raw material led to a lot of economic growth. In other countries to much less.
- European countries, especially the UK, experienced growth at home that led to an expansion of exports and created a demand for imports.
- Many of the capital flows in the period were reliant on the UK export surplus. This ‘recycling’ of export earnings was a vital part of the development of the international economy.
- Labour migration had costs and benefits in both the country the emigrants left and the one in which they arrived. It was only an unambiguous benefit to the latter.

**A reminder of your learning outcomes**

Having completed this chapter, and the Essential reading and activities, you should be able to:

- explain why international trade grew so rapidly
- analyse the reasons for the high levels of both international investment and international migration in the period before 1914
- apply the idea of comparative advantage to these movements
- explain the effect of migration on different economies
- account for the relatively low barriers to the mobility of factors of production in the international economy 1870–1914.

**Questions**

1. Assess the relationship between the spread of agriculture into previously uncultivated land and the growth of industry in the UK and other European countries before 1914.

2. Examine the effect of transport development in the creation of an international market in the basic commodities in the early twentieth century.

3. Why was the level of international investment high in the early twentieth century?
Chapter 4: Institutions that underpinned the international economy before the First World War

What this chapter is about

In this chapter we explain why international monetary relations were stable in the late nineteenth and early twentieth centuries. Why, for example, most exchange rates were fixed and why most currencies were convertible into each other. In later periods it proved difficult, and sometimes impossible, to fix exchange rates as rigidly as they were fixed during the period from 1870 to 1914.

This chapter introduces the idea of ‘contingency’ – why it was possible for exchange rates to be fixed in the period before the First World War. Also why, at the time, bankers, traders and governments were almost universally in favour of fixed exchange rates.

Objectives

To explain:
• the implications of fixed exchange rates in the historical context
• how the gold standard worked in practice.

Learning outcomes

By the end of this chapter, and having completed the Essential reading and activities, you should be able to:
• explain why businessmen and governments were determined to maintain fixed exchange rates
• outline what it was that allowed fixed exchange rates (i.e. the gold standard) to be maintained
• discuss whether the gold standard worked because central banks followed a set of rules or for some other reason
• explain how the flow of capital made it easier for the gold standard to work, and give examples.

Essential reading


Further reading

Introduction

The international economy in the period from 1870 to 1914 was characterised by three institutions. (An institution is defined here as ‘something manmade for a purpose’.) Laws, rules and organisations are all examples of institutions. As we see in this chapter, there are three institutions which were closely linked together:

• free trade
• multilateral settlements
• fixed exchange rates.

4.1 Free trade

Although free trade was not practised by all countries, the most important trading economy, the UK, had virtually no restrictions on imports at all in the period from 1870 to 1914. We have already seen why free trade was important for the UK. It was also important for the smooth working of the international economy.

There is a detailed examination of the rise and fall of free trade in Kenwood and Lougheed, Chapter 4. The chapter includes a discussion of commercial policy, but you will not be examined on the details of commercial policy.

Free trade became the norm between 1850 and 1880 (see Chapter 2). Later industrialising countries, like the USA and France, wanted to import technology and capital goods from Britain, hence free trade made sense. But eventually these countries sought to replace imports of manufactures with domestic production. Hence, they introduced ‘infant industry tariffs’. These tariffs never reached the levels of 1919–39. After 1870 some industrial countries introduced tariffs on food imports in order to protect their own agriculture.

Activity

• What determines whether or not a country introduces tariffs on food imports?
• How does this affect the standard of living?
• Make a case using the concept of ‘comparative advantage’ (1.5.5). Do this before reading on.

You could make the following points to answer the questions above:

• Imported cheap food would mean major changes in the countryside, for example, a large number of farmers might have to give up farming and move to the cities.
• This would be an advantage if the country had a ‘comparative advantage’ in manufactured exports and disadvantage in farming.
• On the other hand, there might be political and military reasons to protect agriculture.
• Cheap food imports hold down the cost of living for industrial workers. This exerts downwards pressure on wage rates and costs. Other things being equal, this makes manufacturing exports more competitive.

The free trade stance of the UK was very important because it gave other countries free access to the UK market. The UK remained the world’s largest importer until 1939.
In the main, UK exporters were able to maintain their sales in the face of tariffs and foreign competition. This was, partly, because the world market was growing fast, and partly because UK exporters were very good at finding new products and new markets. (UK exports still continued to grow, although the UK's share of total world exports was falling as other countries began to compete.)

4.2 Multilateral settlements

Consider imports. These have to be paid for, so the level of imports depends on a flow of payments from overseas. If exports and imports in each country had to balance with each other – so-called 'bilateral' trade – the level of trade is limited. We can see the effect of multilateral settlements in a simple diagram. Look at Kenwood and Lougheed, 94 (including the diagrams), or look at Figure 4.1 which is simpler.

Figure 4.1 Multilateral settlements
- Country A imports 50 more units from B than it exports to B. Hence it owes 50 units in funds.
- Country B imports 20 more units from C than it exports to C. Hence it owes 20 units in funds.
- Country C imports 70 more units from to A than it exports to A. Hence it owes 70 units in funds.

To settle the account, the three countries need 140 units of currency. (50 plus 20 plus 70). If they could not obtain the currency, they could each only import the same amount as they exported. So, A's imports would be 50 fewer, B's 20 fewer and C's 70 fewer. These are what are called bilateral settlements – that is just between a pair of countries.

Pause and think
- What would have happened if the settlements were multilateral?
- Can you work out what C must pay A and B pay C?

Note how just two payments settle all accounts between A, B and C.

If the settlements were multilateral the countries' currencies would have to be convertible into each other. The entire account could be settled by one payment of 20 units from C to A; and one payment of 30 units from C to B. Only 50 units of foreign currency are needed. In other words, a smaller amount of currency finances the same amount of trade.

Pause and think
What condition must be satisfied for multilateral payments to work?
This is important to remember, so don't read on too quickly!
All the countries must be willing to accept C’s currency. B would have to accept C’s currency which was paying debts owed by A.

Fixed exchange rates were thought to be an essential component of the international economy in the years before the First World War. It was thought that multilateral trade depended on certainty about exchange rates.

pause and think

Why did people believe that multilateral trade depended on certainty about exchange rates?

For trade to be multilateral, as in the example above, traders had to accept paper, usually, a so-called ‘bill of exchange’, from a foreign buyer. The trader would then use the bill to purchase something in a third country. So traders needed to be certain about the future exchange rate. You can find a more complicated example in Chapter 6 of Kenwood and Lougheed.

Another area where fixed exchange rates were important was in overseas investment. Fixed exchange rates removed the exchange rate risk faced by investors who bought overseas stocks and shares. We may assume, therefore, that there would have been less overseas investment if exchange rates had fluctuated.

4.3 The gold standard

The so-called gold standard was the mechanism for ensuring that exchange rates remained fixed. Remember, it was only a means to an end, not an end in itself. When a country decided to go on to the gold standard, it had to:

- Fix its currency in terms of gold (e.g. one franc equals x grammes of gold).
- Allow its paper currency to be convertible into gold, at face value, if people requested it. In practice, only large amounts of gold could be exchanged in most countries.
- Ensure that the amount of paper money in circulation was related to the reserves of gold held by the central bank.

Kenwood and Lougheed cover this in their Chapter 7. Read the chapter in conjunction with these notes.

4.3.1 The price-specie-flow mechanism

The main threat to the above occurred when there was a balance of payments deficit. (Exports were less than imports.) If a country had a persistent balance of payments deficit, the demand for its currency abroad was lower than its demand for foreign currency at home. In time, the country would lose so much gold and foreign exchange that it would have to devalue its currency and allow the exchange rate to fall, thus leaving the gold standard and breaking up the system.

There was a mechanism within the gold standard that was supposed to prevent a persistent balance of payments deficit occurring. This is usually called the ‘price-specie-flow’ mechanism. ‘Specie’ is an old word meaning monetary gold. The price-specie-flow mechanism is explained below.

But first, note an important point. It was not the mechanism itself that ensured exchange rate stability because it was not an automatic mechanism. Rather, it was a rule, which told central banks what to do if
they chose to. The point is that the central banks were usually willing to subject themselves to the discipline of the price-specie-flow mechanism. We will explain why this was later.

Figure 4.2: The price-specie-flow mechanism

The price-specie-flow mechanism operated as follows:

- Think about a world with two countries, A and B.
- Country A has an excess of exports, country B an excess of imports.
- To pay for the import surplus, country B would be losing foreign currency or gold.
- This means that, under gold standard rules, the money supply in country B falls. This reduces prices. This means that country B’s exports become cheaper and some domestic goods become cheaper than imported goods.
- Hence, exports (X) from B are raised, imports (M) to B fall and the balance of payments (BoP) deficit is closed.
- At the same time, country A gains gold, which means that its money supply increases and prices rise.
- In consequence, exports fall and imports rise. Country A’s balance of payments surplus disappears.
- Balance of payments equilibrium in A is restored.

Note three points:

- There are no changes in exchange rates, which is the intention.
- In this simple example, there is no change in output, only in prices.
- The adjustment was painless; no one lost their job, no companies went bankrupt, no factories closed.

Pause and think

Read Kenwood and Lougheed, p.111. Work through their example now.
4.3.1.1 The ‘rules of the game’

Central banks (like the Banque de France or the Bank of England) usually intervened to speed up the process. They were applying what has come to be called ‘the rules of the game’.

The ‘rules of the game’ are shown in Figure 4.2. They were an unwritten set of guidelines that central bankers were supposed to follow. If the central bank of country B followed these ‘rules’, it would increase the interest rate at the central bank when it observed that country B was losing gold. In turn, this would increase interest rates across the whole economy. This would lead to a fall in investment and output would fall. The fall in output would cause a fall in prices, which would increase exports and decrease imports, as above.

At the same time, the central bank of country A would observe that it was gaining gold. If it followed the ‘rules’, it would reduce interest rates which would increase investment and output. Prices would rise, imports would rise and exports would fall.

Pause and think

What was the monetary variable that played the part of an adjustment mechanism under (a) the price-specie-flow and (b) the ‘rules of the game’?

If you answered (a) the money supply and (b) interest rates, read on. Otherwise look back over the last few paragraphs and in the readings to see where you went wrong.

Activity

The ‘rules of the game’ gave national economies more pain than the price-specie-flow mechanism. See if you can explain why. Take a few minutes over this, and then read on.

When answering the question above you might have said something like this:

A rise in interest rates in the deficit country affects output and employment but the effects might not be too great if the rise in interest rates is temporary. Conversely, a fall in interest rates in the surplus country may have an inflationary effect and this can be damaging.

4.3.2 Why was the gold standard a success?

We know that the gold standard was a success. By the late nineteenth century all the major currencies (pounds, dollars, marks, French, Belgian and Swiss francs and guilders) were tied to gold and, unlike in the late twentieth century, their exchange rates remained fixed. No major economy had to devalue its currency.

Pause and think

Was the stability because of the rules of the gold standard (the price-specie-flow mechanism plus the ‘rules of the game’) or was it because of something else? Look in Kenwood and Lougheed, 115–18, for ideas. Once you have formed an opinion, read on.

So far we have only talked about the gold standard and the international economy. But the gold standard had important advantages in domestic economies as well. The main reason was the relation with government finance.
Pause and think

Can you think how the gold standard and government finance were related?
(Remember about the danger of inflation.)

- A government borrows money on different terms to a private institution because a government can repay the loan by creating more money.
- Such government borrowing can create inflation.
- Someone who lends money to the government can lose if inflation erodes the real value of the loan – that is it was repaid in devalued currency. In the jargon, if this was unexpected, it is called a ‘monetary surprise’.
- If the currency were tied to gold, a country would lose gold if it had inflation. Technically, if the inflation rate was higher than that in the other countries. Losing gold would lead to monetary contraction.

As long as a country remained on gold, lenders were guaranteed that the government would honour its debts and there would be no ‘monetary surprises’. Lenders could lend without fear of inflation. This is why the gold standard has been described as a ‘good housekeeping seal of approval’.

The ‘seal of approval’ was especially important for the peripheral countries. Greece and Argentina, for example, sometimes had balance of payments problems that forced them to leave the gold standard. But when they needed international loans, they returned to the gold standard, which made their commitment to repaying the loans more credible.

The ‘seal of approval’ even outlasted wars. It was not expected that countries would stay on the gold standard during wartime because the government would have to borrow to finance the war. But once the war was over, it was expected that the country would return to the gold standard as soon as possible. In other words, the government was not expected to honour its debts in wartime, but eventually the government would go back to gold, which would eliminate inflation and hence, honour the commitments made before the war. As we see in Chapter 7, this led to problems after the First World War.

4.3.3 Further considerations relating to gold standard

We can think of the implications for domestic policy of the gold standard in a different way. The gold standard effectively limited what a government could spend over and above what they could raise in taxes. We may see this from a simple example.

- Assume for a moment that a government wished to increase expenditure significantly, and without increasing taxation for some socially desirable purpose, for example pensions, state housing provision. (That is, they intended to borrow to meet the expenditure.)
- If this borrowing was on a large scale, the mechanisms that we described above would mean that the country would lose gold. The central bank would then have to tell the government that it had to choose one of two courses: either (a) stay on the gold standard or (b) abandon the socially desirable expenditure

Before 1914 governments always chose (b). That is, they thought that the exchange rate (staying on the gold standard) was more important than social expenditure. Remember, governments of that period were under
little political pressure to increase social expenditure. In other words, since there was little pressure on governments to spend (government spending of only 10 per cent of GNP was normal, including all defence expenditure) it was easy for them to commit the economy to the gold standard.

But after the First World War, governments were faced with increasing demands to increase expenditure, partly because there was more pressure from the electorate. Government expenditure was commonly 25 per cent of GNP in this period. This made it much more difficult to stay on the gold standard (see Chapter 7).

4.4 ‘Rules’ for international and domestic policies: some questions

Pause and think

You should pause here until you are quite clear about your answers to the next three questions. The answers affect your understanding of other periods in the history of the international economy.

- Do you think that it has ever been possible to establish a set of rules both for international and domestic policies which, if all countries followed them, would lead to stability?
- Historically, have countries followed rules only when it was in their interests to do so?1
- Think about the situation in your own country at the moment. What would be the advantages of fixing the exchange rate forever, and what would be the disadvantages?

1 We explore another attempt to set up a set of rules, the 1944 Bretton Woods conference, in Chapter 11.

4.5 The British economy

First consider the table below and then read on.

![Figure 4.3 The pattern of British capital exports c.1875–1914](image)

Pause and think

- Were there some other factors which made the gold standard last so long?
- What about the British economy?
- What about the British balance of payments?

Think about how these played a part in providing financial stability for the international economy.
The position of the UK economy was very important. The UK was the largest exporter of both goods and services and the greatest provider of overseas investment; 40 per cent of the total, as late as 1914. The UK had a balance of payments surplus; exports of goods and services exceeded imports, and earnings from foreign investment exceeded new investment.

Pause and think

- Do you think that if the largest trading country always had a surplus, the gold standard could not have worked properly?
- In what direction was gold and foreign exchange moving? What was the effect on central bank reserves in the other countries?
- How was it possible for the world to live with the UK surplus?

The point was the British surplus was continuously recycled. Look at Figure 4.3 again. The UK had a permanent balance of payments surplus. Therefore other countries, such as, in the late nineteenth century, the USA, must have had permanent deficits.

- Under the gold standard, a deficit country had to choose between leaving the gold standard, as mentioned above, or accepting higher interest rates and lower output.
- The US growth rate would have had to be lower. But in reality, the USA could always finance its deficit (i.e. pay for its excess of imports) because it was always possible to borrow from the UK.

The UK was a free-trade country. The UK imported the bulk of its food and raw materials. This meant that if a country borrowed from the UK, it was relatively easy to obtain sterling to pay the interest by exporting to the UK. In other words, in effect, the world was using a sterling standard, rather than a gold standard.

Pause and think

Can you think of a later example where large balance of payments surpluses needed to be recycled?

4.5.1 Confidence in sterling

Obviously if they were to use sterling, international traders and bankers needed to have confidence that there was no possibility of its devaluation. Sterling was as 'good as gold' for three reasons.

- First, the pound had been tied to gold for far longer than in any other country; from 1717, with the exception of the Napoleonic War period.
- Secondly, the British economy had a consistent payments surplus, which meant that demand for sterling was consistently higher than demand for foreign currency. This means that if the pound had been floating, it would have floated upwards.
- Thirdly, sterling's stability was ensured by Bank of England policy. The most important objective of the Bank of England and the government was to maintain the value of sterling. Monetary policy was extremely conservative; the Bank would always act to curb inflation, for example. Hence, the UK had the 'seal of approval'. In the last quarter of the nineteenth century the British price level was falling, and in the years up to the First World War, it was rising at only 1 per cent each year. There were no fears about the value of sterling before the First World War.
It is not surprising that most countries held their foreign exchange reserves in sterling rather than gold.

### 4.5.2 Joining the gold standard at the right time

A major reason why the gold standard worked was that countries did not fix their currencies to gold until after the exchange rate had been stable for some time. For example, Germany joined the gold standard in 1874, the United States in 1879, Japan and Russia in 1897. All these countries had a strong balance of payments for some years before they joined the gold standard.

In other words, they started after their economies had adjusted to a fixed exchange rate. They did not fix their exchange rate and then hope that their economy would adjust to it. We can say that their exchange rates had ‘converged’ to a sustainable level. We return to the concept of ‘convergence’ in later chapters, where we consider the tendency of some countries’ GNP and/or growth rates to equalise.

### 4.5.3 Crises and the gold standard

What we do not know is what would have happened to the gold standard if there had been a serious financial crisis in one of the large economies, say Germany. There is no guarantee that the gold standard would have survived such a crisis.

The gold standard was suspended during the First World War (see Chapter 7). After the war it was difficult to re-establish the gold standard, and when there was a massive financial crisis in Europe in the early 1930s, the gold standard collapsed (see Chapter 8). The point to note is this. Since there were no serious crises in Europe, the gold standard remained unchallenged up until the First World War.

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**Summary**

As we said at the beginning of this chapter, the gold standard worked because:

- There was strong trade growth which made it easier for countries to fix their exchange rates. Trade growth made it easier to earn foreign currency.
- One country, the UK, had a persistent trade surplus. But this was not a problem for other countries because the UK recycled the surplus.
- There was a strong central currency, which was universally expected to remain strong.
- The gold standard could have been threatened if governments had borrowed substantially, since this would have led to inflation. But governments did not wish to borrow heavily.

**A reminder of your learning outcomes**

Having completed this chapter, and the Essential reading and activities, you should be able to:

- explain why businessmen and governments were determined to maintain fixed exchange rates
- outline what it was that allowed fixed exchange rates (i.e. the gold standard) to be maintained
• discuss whether the gold standard worked because central banks followed a set of rules or for some other reason
• explain how the flow of capital made it easier for the gold standard to work, and give examples.

Pause and think

Consider the two questions below. You may want to return to them again later in your studies.

• Before 1914 what would have happened to the international economy if the UK had stopped recycling its surpluses?
• After 1918 what did happen to the international economy when the UK was no longer able to earn large surpluses?

Questions

1. Why were exchange rates fixed before the First World War?
2. Explain the reasons for the stability of the international monetary system before the First World War.
Notes