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International Economics

David Gowland



INTERNATIONAL ECONOMICS

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DAVID GOWLAND



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1 THE CHANGING WORLD

1.1 International Economics

In international economic text books it is conventional to start by justifying the need for a separate branch of the subject. The reason for doing so is self-evident. The whole of economics should be 'international', for example all macroeconomic analysis must take account of overseas factors. In many ways international economics is the natural extension and complement to the other branches of economics. For example, the pure theory of international trade, Chapter 2, is an extension of the elementary analysis of the gains from exchange. Commercial policy, Chapters 3 and 4, is a complement to other analyses of government intervention. Balance of payments theory, Chapters 6 to 10, extends Keynesian and monetarist analysis to an open economy and analyses the exchange rate as another macroeconomic weapon. Chapters 11 to 13, international finance, similarly complement domestic financial economics.

However, to show the value of international economics does not explain why it should be studied as a separate branch of the subject. Hence some economists have tried to find a theoretical rationale for the existence of the subject. For example, it has been suggested that within an economy all the factors of production are (perfectly) mobile but that they are not mobile between economies. From this it is natural to derive a theory of international economics as the study of the relationship between these distinct economies. Unfortunately for this approach, however, factors are not very mobile within an economy and are not immobile between them. Even labour is quite mobile between countries in many cases, e.g. the 'guest workers' from Turkey, Portugal and Italy in Germany and Switzerland and between Canada and the USA. Indeed labour is far more mobile between Michigan (in the USA) and Ontario (in Canada) than between Ontario and Vancouver or Michigan and New York.

The justification for a separate and distinct international economics is, therefore, essentially a political one. Nation states, and groupings of them, are of fundamental importance in modern life irrespective of whether different countries do or do not represent distinct economies in any theoretical sense. Thus it is necessary to study the relationships between nations and to analyse them economically because of this underlying political reality. It is equally essential to be aware of the changing nature of the world which is being studied.

1.2 Some Developments

The major change in the world economy since 1950 has been the growing interdependence of economies, especially within the developed world. Underdeveloped countries have

tried to reduce their dependence and perhaps thereby contributed to their continued lack of development. This interdependence has both caused and been caused by the very rapid growth of world trade which has risen six-fold since 1950, almost twice as fast as world output (see Table 1.1). The growing interdependence of economies is dramatically revealed in the US's import ratio which was a mere 3 per cent in 1960 but nearly 11 per cent in 1980 (Table 1.1). In 1980 one new car in every four purchased in the US was an import.

This growing interdependence is in part the result of market forces. These always work to intergrate economies but their effects have been especially prominent since 1950. The most important and dramatic manifestation of market forces is the Eurocurrency market (see Chapter 13). This has produced a massive degree of integration of world financial markets and consequent integration of real markets. Real transport costs have fallen substantially, mainly because of Japanese developments in shipbuilding and the 'container revolution' they faciliated. Communications have improved dramatically because of the impact of jet planes and electronics. Innovations of all sorts, whether dramatic, like television, or humdrum, like cheaper ships, have made the world in the popular, but accurate, cliché much smaller.

This growth in world trade and increasing interdependence has been encouraged by the movement towards the liberalisation of trade, i.e. the removal of restrictions on imports. This trend in particular has meant that most countries have reduced the discriminatory taxes on imports called tariffs (see p. 28 below). In the US, for example, the average tariff was reduced from over 60 per cent in 1932 to less than 10 per cent in 1970; although this is a very crude measure of the protective effect of tariffs, it reveals the very clear trend. The high tide of protectionism was in the mid-1930s, especially after the UK abandoned free trade in 1932. The sustained trend towards liberalisation began as part of post-war reconstruction programme which also remodelled the international financial system (see p. 163 below). The moves towards trade liberalisation were originally beset with difficulty, for example no nation ratified the Havana Charter (1947) which would have set up an International Trade Organisation, ITO. Such attempts were heavily criticised, e.g. Worswick and Ady (1952), p. 31, but within a decade liberalisation had become unchallenged orthodoxy: in the US after Eisenhower's Reciprocal Trade Act of 1954, in the UK after the Conservative victory in 1951. The formal framework for these developments was provided by the General Agreement on Trade and Tariffs, GATT, established in 1944 with a permanent secretariat (see Dam (1973)). In practice, barriers to trade were reduced by hard bargaining amongst national governments, e.g. in the much-vaunted Kennedy round, which was discussed from 1962-7 before implementation. The trend towards freer trade ended in the later 1970s when quasi-protectionist views became widespread in most countries.

Political developments greatly changed the environment in which world trade took place. In 1946 the British Empire and Commonwealth was still a tightly knit economic bloc comprising a quarter of the world's population. By 1970 virtually all of this former empire was independent and, while the Commonwealth survived in name, it was of economic significance only in a few areas, notably the link between New Zealand and the UK. Successor states in Africa and Asia were usually protectionist. Less dramatic and slower, but almost equal in impact, was the demise of the French Empire. China became communist in 1949 with a consequent enormous reduction in its external trade. Trade

between communist Eastern Europe and the rest of the world was much less important than had been trade with its predecessors.

All of these developments had a major effect upon the pattern of world trade. An ever-increasing proportion of world trade was between members of the developed world rather than between developed and underdeveloped countries. For example, as shown in Table 1.1, only one-third of UK exports in 1951 went to Western Europe and North America, whereas by 1980 two-thirds did. Trade in manufactured goods was also of everincreasing importance, its growth rate being over twice that of food, raw materials and fuel and amounting to around two-thirds of world trade by 1970. Hence, whereas in 1950 the typical pattern of trade was that of an underdeveloped country exchanging raw materials for the manufactured products of a developed country, by 1970 it was of two developed countries exchanging their manufactured products. These trends were reinforced by the re-emergence of Germany as a major trading power in the 1950s. Its share of exports rose from 10 to 20 per cent of world trade in manufactured goods between 1950 and 1960. Japan also benefited. Its share of world trade rose by 50 per cent in the 1950s (from 4.1 to 6.9 per cent), nearly doubled in the 1960s and rose by over a quarter in the 1970s (see Table 1.1). The UK and USA both lost substantial shares of world trade, between them falling from nearly half of all manufactured trade in 1951 to only a quarter in 1980. This reflected many factors, some external, such as the end of the sterling area (Commonwealth) trading bloc, and some internal, especially an inability to produce cheaper reliable goods as quickly and as well as Japan.

The tendency for world trade to become ever more concentrated as trade in manufactured goods between developed countries was encouraged by the development of the EEC (European Economic Community). The origins of this were in the aftermath of World War II. On the one hand, there was a desire to ensure that France and Germany fought no more wars. On the other, there was a desire to create a strong anti-communist bloc, especially amongst the Christian Democrat politicians who were prominent in Germany, France (MRP), Italy and the Benelux countries. They were inspired by Pope Pius XII's fervent anti-communism and by Catholic social philosophy to pursue (Western) European unity. Their schemes mixed political unity, military co-operation and economic policy, e.g. in the Western European Union, and sometimes were designed to facilitate co-operation with and sometimes to exclude the USA and UK. After the defeat of the European Defence Community in 1954 and the partial eclipse of the MRP in France after 1951, the schemes became entirely economic. The first major development was the European Coal and Steel Community, ratified in 1952. However, the main changes came after the Treaty of Rome (1957) which established the EEC, or Common Market. This was a customs union (see Chapter 5) linking the six countries of France, Germany, Italy, Belgium, Luxemburg and the Netherlands. Its major achievement was the growth in trade amongst its members which the EEC stimulated both directly, by reducing tariffs, and indirectly, by promoting a favourable climate. However, its major policy was the infamous Common Agricultural Policy, CAP. This was designed to increase farmers' incomes and to reduce food imports. It utilised very high guaranteed prices and a variety of devices designed to exclude imports (see p. 66 below). The sky-high prices meant that supply of agricultural products exceeded the demand but the EEC bought up the difference and stored it, the famous butter, beef and apple mountains. The policy was enor-mously expensive and seemed bizarre to observers,

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especially as it harmed relations with the USA, Third World producers of food and other efficient farmers who disliked being excluded from European markets. However, the policy was in line with both continental tradition and Catholic social philosophy. In addition, inefficient farmers were large marginal blocs of votes in France and Germany. The UK, Denmark and Ireland joined the EEC in 1973. The decision to join the EEC was bitterly contested in the UK. Moreover, few UK politicians shared the ideals of the CAP, so there was a long series of quarrels within the enlarged EEC. The EEC was further enlarged when Greece joined in 1982.

The growth of world trade							
	World trade ^a			World industrial ^a production			
1951		100		100			
1960		161		148			
1970		330		254			
1980		571	343				
Share of world exports of manufactured goods (%)							
	1951	1960	1970	1980			
UK	21.9	15.9	10.8	10.3			
USA	26.6	21.7	18.5	16.9			
Japan	4.3	6.9	11.7	14.8			
Germany	10.0	19.4	19.9	19.8			
Import ratios ^b							
	1950	1960	1970	1980			
USA		3.0	4.1	10.7			
UK	18.0	17.8	18.0	20.6			
Germany		14.7	14.9	22.2			
Goods traded							
1. Volume	1948	1960	1970	1978			
Food and raw materials	100	180	277	397			
Fuel	100	227	302	378			
Manufactured goods	100	244	560	958			
2. Share (%)	1970	1978					
		1970 prices	1978 prices				
Food and raw materials	23.9	20.9	18.6				
Fuel	9.2	7.1	16.9				
Manufactured goods	65.2	69.0	63.2				
1978 world prices (1970–100)							

Table 1.1: World Trade Patterns 1950-80

Food and raw mater	ials	231				
Fuel		620				
Manufactured good	8	237				
UK export markets	UK export markets (%)					
	W. Europe (o EEC)	f which	N. America	Overseas sterling area ^c		
1951	24.5		10.7	49.5		
1960	25.7		15.3	40.2		
1970	37.8 ^d	(21.8)	18.7 ^e	36.3		
1980	55.7 ^d	(42.1)	11.0			

Notes: (a) Volume (b) Imports (FOB)÷GDP (market prices); in current prices; (c) Commonwealth less Canada plus Jordan; (d) EEC plus EFTA; (e) USA only for 1970.

Sources: IMF, Financial Statistics; NIESR, National Institute Economic Review; UN, Statistical Year Book; UK, US, National Accounts; OECD, National Accounts Principal Economic Statistics.

The final important change relevant to world trade concerned the oil market. In 1965 oil prices were controlled by a group of Western oil companies, often called the Seven Sisters (Shell, BP and five US companies). They ensured that oil prices were both low and falling. This economic control was reinforced by political muscle, e.g. the Gulf sheikhdoms were still largely ruled by UK political or resident agents supported by the Royal Navy. However, in 1968, the Wilson government withdrew from the Gulf. In 1969, the pro-Western regime was overthrown in Libya and King Feisal replaced his weak brother as King of Saudi Arabia. The oil-producing countries, who had formed an organisation called OPEC (Organisation of Petroleum Exporting Countries) in 1960, were now both willing and able to stand up to the Western governments and oil companies, which they did by blocking a price cut in 1970. In 1972 they forced a small increase in oil prices. The crucial change occurred in 1973 when the price of oil was quadrupled. A further rise followed in 1978. All in all, the price of a barrel of Saudi Arabian crude oil rose from \$1.80 in 1970 to \$34 in 1980. Energy prices rose 520 per cent in the decade, whereas other prices rose by about 150 per cent (see Table 1.1). In value terms fuel rose from 10 to 16 per cent of world trade, although it fell in volume terms. OPEC countries acquired enormous wealth with major effects on the world financial system. Oil production was stimulated elsewhere, e.g. in the North Sea.

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THE PURE THEORY OF INTERNATIONAL TRADE

2.1 Introduction

The purpose of the pure theory of international trade is to show why international trade exists and that it is beneficial. This might seem a redundant exercise, since there is no reason why the normal arguments used in elementary economics to demonstrate the existence of trade (internal or external) should not be applied at the international level. The argument in elementary theory is that trade will occur whenever it is profitable for two or more people to trade. If the price of a good is different in two places then it will pay someone to buy in the cheaper and sell in the dearer market. In addition to such *arbitrage* transactions, sellers will gravitate to the higher-priced market and buyers to the lower-priced until prices have been equalised. It is, in general, a sufficient condition for the existence of international trade of a good (in the absence of legal prohibitions or barriers) is that its price should be different in different countries. The gain to the participants may be regarded as self-evident or be proved using the familiar tools of welfare economics.

International trade theory, however, has set itself two slightly different and more precise goals:

1. to show that trade is beneficial to the nation as a whole, not just to exporters and importers.

This might be analysed using the 'market failure' framework to see whether international trade generates (negative) externalities but has usually been treated as a separate subject (for market failure, see Gowland (1982b), Chapter 8).

2. to show *minimum* conditions for the existence of trade.

It is easy to think of reasons for the existence of trade, such as different prices, but the theorists seek to show why prices differ and to find as many reasons as possible why they might differ. There are two principal approaches to these problems: the Ricardian and the Hecksher-Ohlin (p. 16), besides the alternative theories reviewed in section 2.9.

2.2 The Ricardian Theory

The Ricardian, or classical, theory of international trade argued that trade would occur and would be beneficial because of *comparative advantage*. This was simply a way of saying that beneficient trade would occur if *marginal opportunity costs* differed between countries. Given competitive assumptions, different marginal (opportunity) costs will be reflected in

different prices, as it is, of course, a basic prediction of competitive analysis that price equals marginal cost; so the existence of trade is guaranteed. It is desirable because it will produce a potential pareto improvement compared to autarky (no trade), i.e. that more of all goods will be available for consumption so there must be a conceivable distribution of income that will make everyone better off, the definition of a potential pareto gain. This argument is best demonstrated by an example, which abstracts and simplifies by using only two countries and two goods. The two countries will be labelled the USA and the UK; anyone not sharing this Anglo-Saxon chauvinism should relabel as 'the rest of the World'. The two commodities will be wheat and cotton, a gesture to textbook tradition. The example is shown in Table 2.1.

Without trade, the US produces and consumes 50 million bushels of wheat and 30 million bales of cotton. Its marginal opportunity cost of production of 1 million bushels of wheat is 1 million bales of cotton. In other words, for each 1 million bales of cotton by which production is reduced, 1 million extra bushels of wheat can be produced and vice versa. The UK produces and consumes 10 million bushels of wheat and 8 million bales of cotton. Its marginal opportunity cost of 1 million bales of cotton is 3 million of wheat. Hence, if it reduces production of cotton by 1 million bales, wheat output can rise by 3 million, and if wheat output is reduced by 3 million bushels, cotton output can rise by 1 million bales.

With the aid of a *deus ex machina*, perhaps the Walrasian auctioneer on his day off, the two nations decide to:

- 1. trade at a price of two bushels of cotton for one of wheat;
- the US will sell 6 million bushels of cotton to the UK in exchange for 12 million of wheat;
- 3. the US will reduce its output of wheat by 10 million bushels and increase its output of cotton by 10 million bales so it will produce 40 of each;

		No trade	No trade Trade					
		Production (=consumption)	Production	Exports (-) Imports (+)	Consumption	Gain from trade		
US	Wheat	50	40	+12	52	+2		
	Cotton	30	40	-6	34	+4		
	Marginal opportunity cost 1W:1C							
UK	Wheat	10	25	-12	13	+3		
	Cotton	8	3	+6	9	+1		
	Marginal	opportunity cost 1W	7:3C					

Table 2.1: Gains from Trade

Note: US trades 6 million bales of cotton for 12 million bushels of wheat; US reduces production of wheat by 10 and so can increase output of cotton by 10; UK reduces production of cotton by 5 and so can increase output of wheat by 15.

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4. the UK will reduce its output of cotton by five million bales and increase its output of wheat by 15 million bushels—it will now produce 25 million bushels of wheat and 3 million bales of cotton.

The outcome is shown in Table 2.1. The US now consumes 52 million bushels of wheat (40 it produces and 12 it imports) and 34 million bales of cotton (40 it produces less 6 it exports). This represents a gain of 2 million bushels of wheat and 4 of cotton compared to autarkic consumption. The UK consumes 13 million bushels of wheat (25 produced less 12 exported) and 9 million bales of cotton (3 produced and 6 imported); a gain of 3 and 1 respectively. Hence trade has made both nations better off.

A number of crucial aspects of the analysis must now be emphasised.

2.2.1 Independence of Productivity

The example assumed nothing about productivity. There might be 200 million people in the US or just one person. Nothing in the example would change. This reveals why a nation can be more efficient in producing both goods and still gain from trade. If the US population were 5 per cent of the UK's, it would be more efficient at producing both goods (since it produces more of both with less resources and by examination of the marginal opportunity costs). If the US population were five hundred times that of the UK's, the reverse would be true. In either case the gains from trade would be the same.

2.2.2 Distribution of Income

Nothing is said in the example about who consumes the goods. It may be that international trade produces so adverse a distribution of income that autarky is (socially) preferable. The pro-trade argument needs to be either indifferent to distribution or assume that income distribution can be costlessly altered by other means, see p. 34 and p. 49 below.

2.2.3 Full Employment

The argument above implicitly assumes full employment, when wheat production was reduced, cotton production was assumed to rise. There was no consideration of whether this would, rather than could, happen, or whether instead resources might be unemployed. Those arguing for the adverse effects of trade have always concentrated on this.

2.2.4 Price

The price was plucked out of mid-air; the theory says nothing about price, except that for beneficient trade price must lie between the two marginal opportunity costs. Relative prices of exports and imports are called the terms of trade, see p. 13 below. Many Third World countries have grumbled about unfair terms of trade—and so have some European nations since oil prices rose.

22.5 Incomplete Specialisation

The Ricardian theory does not imply complete specialisation. In the example, both the UK and the US continue to produce both goods. For complete specialisation it would be necessary both for marginal opportunity costs to be constant and for trade to take place at the level at which it maximises welfare.

2.3 The Gains from Trade

The gains from trade can conveniently be illustrated by Figure 2.1. XY is the production possibility frontier of an economy which can produce two goods x and y; the slope of XY is therefore the marginal opportunity cost of x in terms of y. Without trade XY is also the consumption possibility frontier. Some point such as A represents the highest possible level of welfare under autarky, i.e. without trade. If this nation starts to trade, its consumption possibilities are expanded. VW is a line drawn tangential to XY (at P) whose slope is equal to the world price of x in terms of y. The nation can produce at P and then exchange along VW. Between P and V the nation would be giving up some (exporting) y and receiving (importing) x; between P and W it would export x and import y. If the nation were to export x it would receive x times the (world price x/ world price y) units of y for each unit of x it exported. As the relative price of x in terms of y is, by definition, the slope of VW, it can be checked that VW does represent the trading opportunities open to this economy.

VW also represents the new consumption possibility frontier. The nation can produce at P and trade along VW, so it can consume anywhere along VW. The gains from trade are the expanded consumption possibilities, the shaded area between XY and VW. Any point in the area SAR represents a potential pareto gain compared to A, as more of both x and y could be consumed. Some new consumption point along SR, e.g. C, would clearly leave the economy better off than at A (subject to the reservations discussed in 2.2 above). Some poing

Figure 2.1: The Gains from Trade

