



**GREAT BRITAIN—
THE WORLD'S
BEST CUSTOMER**

Great Britain—The World's Best Customer

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NOTE: Where possible, trade statistics are based on official Government sources and authoritative publications issued by the League of Nations Economic Intelligence Service. In the case of League of Nations statistics, new gold dollars have been converted into 1938 pounds sterling.

Some of the figures relating to the early development of trade in England, and throughout the world in the nineteenth century, are necessarily based on estimates and, as such, are liable to a wide margin of error. Allowance has not been made in these early figures for the varying purchasing power of currencies at different periods. They do, however, serve to give a picture of the very rapid development of world trade from its earliest beginnings to the years when accurate trade statistics began to be compiled in most countries.

In most cases throughout the book where statistics relating to Great Britain are quoted, the term "Great Britain" had been taken to include Northern Ireland.

Tables 1 to 5, and Table 7, together with various textual statements in Chapters 1 and 2, are taken from "A History of Commerce" by Clive Day, Ph.D., published by Messrs. Longmans Green and Co., New York. Trade figures up to the year 1900 which are included in the Charts facing pages 17 and 41 are also from the same source, and acknowledgment is made to Messrs. Longmans Green and Co., Ltd., for their permission to use this material.

GREAT BRITAIN— THE WORLD'S BEST CUSTOMER

Historically, one of the important factors in the economic development of most advanced countries has been the purchasing power of Great Britain.

Trade statistics show that over the last hundred and fifty years—during which the economies of all the advanced countries have undergone a radical transformation from an agricultural to an industrial basis—Great Britain has been, year by year, the world's best customer.

Why did Great Britain become the world's foremost trading nation?

What is her influence, and that of the Dominions and Colonies, on the world economy to-day?

What is that influence likely to be in the future?

To what extent is the prosperity of every country seeking to develop export markets in the post-war world affected by the prosperity, industrial strength, and purchasing power of Great Britain?

Is Great Britain likely to remain the world's best customer?

These are some of the questions to which an answer is attempted in this book.

Contents

	<i>Page</i>
Foreword By Geoffrey Crowther	5
Introduction What this Book is About	6
Chapter 1 Great Britain's Part in the Rise of International Trade	10
Chapter 2 Great Britain Becomes the Workshop of the World	14
Chapter 3 The Growth of Multilateral Trade	21
Chapter 4 Great Britain—The World's Best Customer	26
Chapter 5 Great Britain in the Post-War World Economy	37
Chapter 6 Great Britain's Post-War Economic Strength	43
Chapter 7 Does More Industrialisation Mean Less International Trade ?	51
Chapter 8 The British Commonwealth and World Trade	57
Chapter 9 Conclusion : World Trade and International Planning	62

by Geoffrey Crowther *Editor, "The Economist," London*

I am grateful to the Ministry of Information for giving me the opportunity to commend this little book. It gives an exact and informative account of the approach that the British community makes to the problems of international trade. Those who have not hitherto realised the implications of Britain's trading position will find much in this book on which they can reflect. Those who are already familiar with the problems will find many facts that are new to them.

As the title of the book states, Great Britain is the world's best customer. There are few facts in the economic world less disputable than this. Not only is the volume of British purchases higher than that of any other country and, on the whole, more stable, it also consists more largely of those staple primary products that other countries are usually most anxious to sell abroad.

The thesis of this book can easily be stated in a few short sentences :

Britain has in the past been the world's best customer and, for her part, is willing to continue to play this role.

But trade cannot be one-sided ; what is bought must be paid for.

In particular, Britain, having spent in the common cause a higher proportion of her substance, will have to pay for nearly all her future purchases with exports of her own goods.

Imports must therefore be balanced by exports ; and Britain (another of whose titles is the Workshop of the World) is preparing to make a great effort to supply the manufactures and the services the world wants.

The balancing of imports and exports should, for preference, take part in a system of relatively free, multilateral trading. Britain will play her part in bringing such a system into existence. But it is for other countries to say whether they too will co-operate in bringing into existence the conditions in which Britain can continue to be the World's Best Customer.

The logic of this is irrefutable, and those countries who hope to enjoy a market in Great Britain will be very well advised to reflect upon it. The abandonment of multilateral methods of trading would be a disaster for the world in which all would share. A substantial programme of co-operation is needed to ward off the evil. It cannot begin too soon.

What this book is about

The pre-war mechanism of international exchange had been rusting at a standstill for more than five years. No interchange of raw materials, goods or services could take place between large areas of the world's surface. Europe—a great importer of foodstuffs from abroad and exporter of manufactured goods to the rest of the world in peace time—has been walled in by the Allied blockade. Nearly every country in the world has been submitted to the grip of war economy. This applies almost as much to neutral States as to belligerents. A war economy means shortages, rationing, substitute materials; control of currency, investment, prices and wages. To the man in the street it brings, if not an actual lack of necessities, at least a restriction of choice when he has to decide on purchases to satisfy even fundamental wants.

With the end of war the economic system of most of the world requires to be rebuilt. Many countries will have been compelled to transform or radically to adapt their economic life. Battle and aerial bombardment have destroyed immense quantities of industrial equipment. There has been a long drain upon the mercantile shipping of the world, and inland communications have suffered severely in many countries. The capacity of many countries to absorb surplus products from overseas or to supply the needs of other countries by export may prove to have been modified in important and far-reaching respects. And there have been corresponding changes in the incomes and earning powers of nations.

Meanwhile, the peoples of all countries are looking with increasing longing to the restoration of—if not “normal” conditions—conditions which at least will permit a more general availability of every sort of goods. Everything made by man and known to modern civilisation is required: houses, furniture, household articles and equipment of every description, wireless sets, cars, civil aircraft, foodstuffs, drinks, tobacco, watches, razor-blades; all the multifarious impedimenta of an industrial

civilisation—railway rolling stock, omnibuses, lorries, machinery and machine tools for the factories of industrialists who have awaited the end of the war as an opportunity to resume or to improve and extend production ; fertilisers and agricultural implements in great quantities. And since no one country—not even the U.S.S.R.—can hope to supply all its own needs within its own frontiers, some system of international exchange of goods and services obviously must be set up again. *What is likely to be the nature of this?* That is a question of intense interest, a question which must grow in interest as international reconstruction begins, and it is a question of considerable complexity. To consider certain very important aspects of it is the mission of this book.

Obviously, to deal in detail with all aspects of the problem is beyond the scope of this book. The thesis of this book—very broadly—is that, on an examination of the relevant facts, it appears desirable that the main forms of the pre-war world trading system should be restored ; a system which had as its pivotal point the key position of Great Britain as one of the largest exporting nations, and as the largest importer in the whole world.

An effort has been made to present our case as simply as possible, but this subject is unavoidably a complicated one, and it may be helpful to provide here a brief sketch of the plan and contents of this book.

Our starting point is, as has just been indicated, the assumption of the desirability of the restoration of multilateral international trade. Sufficient authoritative pronouncements have been made to justify us in saying that the financial authorities of the United Nations are thinking in terms of this.

We will select only the most important of these pronouncements for specific reference at this point. On April 22, 1944, United States and United Kingdom experts issued a joint statement on the Establishment of an International Monetary Fund. This statement served as an introduction to the Bretton Woods Conference at which official representatives of the United and Associated Nations discussed proposals to meet post-war international monetary problems.

The Joint Statement opens by pointing out that the International Monetary Fund was conceived as part of a general plan for international co-operation, the objectives of which, as a whole, would be *the progressive development of international trade*, active employment, reasonable stability of prices and the machinery for the orderly adjustment of exchanges.

The desirability of restoring rapidly the network of world trade was stressed in the Keynes and White Plans (“Proposals for an International Clearing Union” and proposals for ‘A United and Associated Nations Stabilization Fund’ issued respectively by Great Britain and the U.S.A.) These plans were the basis for further expert consideration of post-war monetary problems culminating in the Bretton Woods Conference.

A majority of economists follow the statesmen in viewing the resumption of multilateral world trade as the most desirable objective of post-war world economic planning.

The economic network, finely balanced and of fascinating complexity, which, despite totalitarian developments, was still broadly the pattern of world-trade before the catastrophe of 1939, cannot be really understood with a glance backward at the early history of industrial development and overseas commerce in Great Britain. Great Britain has become a World Power as the result of her people's mastery of industrial technique, and on the strength of her many contributions to the growth and efficient functioning of international trade. The British Commonwealth, too, has grown out of the activities of the British people as a great commercial nation rather than from an insatiable drive for territorial expansion.

The first two chapters of this book trace the growth of multilateral world trade from its origins in the industrialisation of Great Britain in the eighteenth and early nineteenth centuries. They show that the development of a world system of trade was one of the consequences of the rise of Great Britain and the British Commonwealth of Nations. By the end of the nineteenth century Great Britain and the British Commonwealth were responsible for roughly one-third of the world's trade—the position the Commonwealth still maintained in 1938.

Great Britain was the chief promoter of world trade. World trade benefited the whole world. It encouraged the sensible, economic use of the world's available material resources, labour power and technical skill. It led to a steady improvement in the material standards of living of all peoples in proportion as they were able to participate in the international exchange of primary products, manufactured goods, and services. Chapter Three assesses the contribution of world trade to the great material progress of the world over the last three generations.

During a long period, and right up to the outbreak of the war, Great Britain, through the magnitude of her seaborne imports and exports, occupied a pre-eminent and indispensable place in world trade. That fact had various consequences which in greater or less degree affected the economic lives of all nations. And in the chapter entitled "Great Britain—the World's Best Customer." (Chapter Four) it is shown that in the pre-war system of international trade the prosperity of many countries depended upon their ability to find a ready market for their exports in Great Britain. In 1938 Great Britain was the *best customer* for some 31 countries wishing to sell abroad. Great Britain was the greatest single importer in the world of food, raw materials, and articles semi and fully manufactured. A great number of countries maintained favourable trading balances with Great Britain. They exported a greater value of goods to Britain than they imported from her. This surplus enabled them to obtain foreign currency which they were free to spend elsewhere in the world's markets to obtain whatever was necessary or helpful to their internal economies.

To sum up : the prosperity of many countries dependent upon a flourishing export trade was absolutely bound up with the prosperity of Great Britain. The question must, therefore, naturally arise as to what extent Great Britain can, in the post-war years, continue to play the same all-important economic part in the world that she played before the war began.

This question is discussed at length in Chapter Five. The main points are fairly simple. If Great Britain is, following the war, to be able to pay for her normal peace-time imports of food, raw material and manufactured goods, she must substantially increase the value of her export trade. Part of Great Britain's national income before the war came from overseas investments.

During the course of the war these have been largely liquidated. Other sources of income have also diminished. Great Britain can regain her pre-war purchasing power only through a very strenuous effort to increase the value of her exports. The importance of her achieving success in this is recognised by the economists of other nations. They are well aware that it would not be in *their* countries' interests for Great Britain to decline as an exporting nation. Her remarkable war record—she has one of the highest *per capita* production records of any of the warring nations—convincingly proves the vigour and adaptability of Great Britain's industrial machine. And the war has also shown that the inventive genius of her people, so active in the world's early industrial history, has lost nothing of its resource. There is every reason to anticipate a vigorous post-war expansion in all those fields in which Great Britain has traditionally specialised, together with the successful establishment of many new types of industry.

Chapter Six, which is entitled "Great Britain's Post-War Economic Strength" strikes a confident note in looking ahead to a thriving British industry and export trade in the post-war years.

The next two chapters are concerned with certain other questions which naturally present themselves in connection with the post-war restoration of international trade. There is the question whether the industrialisation of less-developed countries will lead to less demand for international trade. The facts, as Chapter Seven shows, are all on the other side. More industrialisation, as economic history has time and again demonstrated, almost always leads to more, not less, foreign trade. Chapter Eight asks whether the countries of the British Commonwealth could ever be welded into a powerful and self-sufficient economic bloc. The answer is that the British Commonwealth could not be isolated, even if its leaders so desired, from the effects of a fluctuating world trade. In pre-war days, exports and imports of the British Commonwealth rose and fell remarkably consistently with world exports and imports.

This book concludes with a brief review of the international plans which have so far emerged for the rapid post-war restoration of world trade.

Great Britain's part in the rise of International Trade

The pattern of world trade before 1939, some return to which is envisaged by statesmen and economists as the most desirable means of restoring world prosperity after the war, cannot be understood completely without some knowledge of the historic forces still actively at work after centuries. Great Britain's early start was one of the chief reasons for the special position she occupied, which in turn had its effect on all countries participating in international trade. This Chapter traces the beginnings of Britain's overseas trade in her maritime expansion in the sixteenth century, and brings the story up to the close of the eighteenth century.

The multilateral trading system first began to take on its present pattern in the nineteenth century. This was the period during which the economies of Britain, America, and many other countries were transformed from an agricultural to a mainly industrial basis. A revolution in the technique of production took place through the release of the latent energy in coal, the improvement of communications, and the application of steam power to the machine. These changes, great enough to mark a complete break with the living conditions of the past, came earliest in Great Britain, and London became the nerve centre of a vast trading network that linked up continent with continent, country with country, and people with people.

The merchants of the City of London have powerfully influenced the course of British history. When Charles I and his advisers struggled with Cromwell and Parliament, it was to the City of London that Parliament turned for the negotiation of loans to carry on the war. Parliament was able to do what the king could not—levy taxes on the trade of England and introduce customs and excise duties on merchandise. In the past the king, with the merchants' help, had broken the power of the barons. Now the king, seeking to exercise despotic power, could no longer serve the interests of the merchant class. Parliament, in which the merchants were strongly represented, was

both a more democratic and a more effective means of wielding a governmental authority that was becoming increasingly preoccupied with the shaping of policies that affected home and overseas trade.

But the great English sailors of the fifteenth and sixteenth centuries, as well as the merchants, played an outstanding part in the development of England's trade. The sixteenth century was the age of adventure, exploration and discovery for European peoples. A spirit of adventure, and the hope of finding treasures, urged the tough, freebooting sea captains—who were usually traders as well—to sail farther and farther over unknown seas. And behind the sailors stood the merchant princes of Europe, who found that the land routes to Asia were becoming increasingly hazardous with the decline of the Mongol power.

Hardy, enterprising and inventive, the English of that time built and sailed seaworthy merchantmen that were a great advance on the medieval "round" ships designed for sheltered waters and coastal trade. At the same time the tactics of naval warfare were transformed by English naval architects who designed warships with a length three times or more that of their beam, instead of double the beam—the normal design of the period. The foundation of a navy by the central government to protect the shores of England in the sixteenth century, the seamanship of English sailors, and the terrible gunnery "broadsides" of the English naval ships, gave protection to English traders in times of piracy and war. And in that century, with the exploits of English sailors such as Hawkins, Drake, Raleigh and Frobisher, the traditions of British sea supremacy were founded, and the protection of English merchantmen sailing over the trade routes of the world was assured.

The English export and import trade, established under the protection of sea power and in the favourable atmosphere of political stability, developed rapidly. And as it grew in volume it began to change in character. From an exchange of luxury articles affecting only a privileged class, it passed gradually into an exchange of goods that affected the living habits of the people. The luxuries of one generation became the necessities of the next. Before the end of the eighteenth century imports of tea, coffee and sugar contributed over one-fourth of the total imports into England, and all three had become common articles of consumption—an interesting example of the way in which trade between communities can operate in raising the general standard of living. Trade was bringing the natural products of far-away countries into England, and in exchange England was sending out raw materials "worked-up"—mainly in the form of woollen and cotton goods and haberdashery. The network of world trade as we know it to-day, with its extensive interchange of primary goods, raw materials, manufactured goods and services between one country and another, was in process of formation—and England was geographically and financially at the very centre of that network. By 1800 England was exporting around £29,000,000 worth of merchandise. This figure did not include the transshipment of goods passing through England from one region to another. Already the geographical position of England was making it inevitable

that the port of London should become a great clearing house for the world's trade ; and the City was perfecting the banking, exchange, and credit facilities that made London the financial centre of the world.

The opening of many new trade routes and territories had been the work of the trading companies established in England during the seventeenth century. The East India Company, the Eastland Company, the Russia Company, the Merchant Adventurers, the Levant Company, the African Company, the Hudson's Bay Company, were each granted monopolies and trading rights in certain of the world's territories. The formation of these great trading enterprises had been actively encouraged by the government and had been made possible by the introduction of the Joint Stock Company. An early development of the capitalist system, the Joint Stock Company added to the fluidity of capital, encouraged capital investment and allowed for trading operations on a far larger scale than had been possible under the family businesses of the early trading period. The trading companies served the purpose of preparing the way for the vast expansion of trade that took place in the next century. Table 1 shows how rapidly trade increased in England between 1700 and 1800.

Table 1 GROWTH OF ENGLAND'S FOREIGN TRADE, 1700—1800

ANNUAL AVERAGE OF	IMPORTS	EXPORTS
1698-1701	£5,500,000	£6,400,000
1749-1755	£8,200,000	£12,200,000
1784-1792	£17,700,000	£18,500,000
1802	£31,400,000	£41,400,000

Thus, in the course of a century, foreign trade increased nearly sixfold—gradually in the first half, at a far greater rate in the second half.

The distribution of England's foreign trade by areas over this period given in Table 2 shows that her trade ramifications already reached to every corner of the globe.

Table 2 TOTAL FOREIGN TRADE OF ENGLAND (EXPORTS AND IMPORTS) BY AREA 1700—1800

ANNUAL AVERAGE OF	CONTINENTAL EUROPE	AMERICA	ASIA	AFRICA	TOTAL
1698-1701	£9,200,000	£1,700,000	£800,000	£100,000	£11,800,000
1749-1755	£13,800,000	£4,500,000	£1,800,000	£200,000	£20,300,000
1784-1792	£19,600,000	£10,800,000	£4,900,000	£900,000	£36,200,000
1802	£39,400,000	£23,300,000	£8,700,000	£1,300,000	£72,700,000

By 1800 England had reached a leading position in world commerce. But the next century—the age of improving communications, the application of steam power, and the development of the factory system—was to see her emergence, not only as the foremost trading nation but as a World Power, and the administrator of a great Empire. And that Empire was to become far and away the most important trading group in the world. By 1900, Great Britain's share of world trade was about one-fifth of the total ; that of Great Britain and the British Empire combined nearly one-third. It has been estimated that about 1750—the beginning of the period usually referred to in English history as the Industrial Revolution—the population of England could not have risen much above 7,500,000 without lowering the standard of living to bare subsistence level. Yet by 1815 the population had risen to 12,000,000 ; in 1900 it had reached 35,000,000 with an increased material standard of living for the masses of the people. Now—with 703 people to the square mile—England is the most densely populated industrial country in the world. How could so great a population be supported on this small island in 1900 ? How can the population of Great Britain to-day, now standing at 47,500,000, be supported with any reasonable chance of securing freedom from want for the British people ? How has this relatively small island become the world's best customer ? The answer is to be found in a consideration of Great Britain's industrial development after 1750, and of the great part she played in international trade with the coming of the machine age around the middle of the nineteenth century.

Great Britain becomes the workshop of the world

In this Chapter, continuing a review of the historical forces which led to the pre-war pattern of world trade, a brief account is given of Great Britain's industrial development in the nineteenth century. Great Britain was the leader in engineering development, the pioneer of railways, the inventor of a great number of industrial processes making possible the speedy production of the goods the world wanted. This not only brought her great prosperity, but enabled her to be the means of the industrialisation of other countries, and a principal agent in their subsequent progress. As a natural consequence, Great Britain achieved a unique position as chief supplier and chief customer of the whole world, with results which, right up to the war, still powerfully influenced the economic orientation of all countries participating in world trade.

In the nineteenth century, and particularly in the second half, world trade leaped forward at such a speed that the standards of life and living conditions of Western peoples were changed in fifty years more rapidly than over the previous six thousand years of recorded history. It has been estimated that if the amount of world trade in 1700 is taken as the unit figure, growth proceeded at the rate shown in Table 3.

Table 3 RATE OF GROWTH OF WORLD TRADE

1700	1750	1800	1850	1900
1	2	12	34	152

Why does commercial and industrial development show such a remarkable increase in the latter half of the nineteenth century? In general terms it can be explained by the increase in man's power over Nature made possible by advances in mechanical science,

the mastery of new materials, and a general improvement in communications. Western man had moved into the machine age. Why was it, then, that Great Britain became the centre of this rapid commercial and industrial progress? In part it was due to the essential political stability of Great Britain's democratic parliamentary Government; in part to the fact that the foundations of her trade and prosperity had been laid in the previous three centuries; and in part to the temperament, character and industry of her people.

The year 1850 can be taken as a convenient date to mark the beginning of the modern machine age—and at this time many political, economic and psychological factors contributed to England's readiness to adopt the new way of life. The industrial revolution had been in progress in Britain for a century. Three generations of British workers had been absorbing the traditions of the factory system and had been developing the manual dexterity essential for the new type of mechanical work. British political unity could offer the *entrepreneur* the stability necessary for large-scale, long-term manufacturing and marketing plans. British credit and banking facilities—developed over three centuries of trading—were already those of a mature capitalist economy. British agricultural methods had increased the productivity of the land by the end of the eighteenth century to such an extent that food was available to support a considerable manufacturing population. Great Britain's geographical position placed her at the intersection of all the main sea trading routes. London, for three centuries the largest port in the world, was the logical clearing house for international trade.

The knowledge of the existing merchants, based on ten generations of trading experience, was at the disposal of manufacturers seeking to sell the products that poured from the machines. The great British civil engineers of the eighteenth century—Brindley, the designer of canal systems, Smeaton, the inventor of cement, Telford, Rennie and Macadam, the builders of roads, bridges, aqueducts, harbours and docks—had improved transport by throwing a network of communications over the whole of Britain. These communications linked up the centres of industry with the ports—and these centres, in this small island, with its deeply indented coastline, were nowhere more than 70 miles from the sea. British ships, sailing to America in the west and Asia in the east, carried more merchandise than those of any other country. With the destruction of the French fleet through the victories of Nelson in the Napoleonic war, Great Britain's sea power was finally established, and her Navy could give protection to British merchantmen on all the sea routes of the world. And, perhaps the most important factor of all, Great Britain had abundant supplies of good coal—the very basis of steam power and the essential fuel for the smelting of steel, the material that was to furnish the framework of the new machine civilisation of the West.

Are we, then, to regard Britain's industrial and trade development in the nineteenth century as the result of the interplay of a succession of historical accidents? It is true

that by 1850, the date we have chosen to mark the beginning of the modern machine age, the currents of history had been running strongly in Britain's favour for at least three centuries. But could their accidental convergence at just that time alone have led to the flood tide of prosperity that bore England on to world leadership in commerce before the end of the nineteenth century ?

Surely there must have been some unusual mechanical aptitude and a certain mental and physical energy about a people who could produce the long line of inventors, practical engineers and scientists who contributed so much to the early development of the machine age in England. Hargreaves's spinning jenny, Cartwright's power loom, Watt's steam engine, Stephenson's railways, Maudslay's screw-cutting lathe, Bessemer's steel-making process, Faraday's dynamo, were inventions that helped to change the character of civilisation. Yet many of these men were born in humble circumstances ; some of them were self-educated. George Stephenson—certainly the greatest single name in the history of railways—could not read until he was eighteen and learnt to write his name for the first time a year later. Coming nearer our own day, Henry Royce, who designed the Rolls-Royce car and the aero-engine from which the " Merlin " and " Griffon " engines in to-day's " Spitfires " are derived, had little regular schooling and was practically self-taught. Did not these men show a degree of energy, initiative and inventiveness that must have left its mark on history. And were not the politicians and merchants of that day alive to the great opportunities that were offered to the British people ? It is certain that the great mechanics of the nineteenth century were the founders of an engineering tradition that must endure in the work of British engineers to-day. For no country has produced better weapons of war than the " Griffon " aero-engine, the " Spitfire," the " Mosquito " fighter-bomber, the " Lancaster " heavy bomber or the British 25-pounder gun. And the spirit of scientific inquiry and practical skill that distinguished the Britain of the previous three centuries lives on in the work of the men who have perfected radiolocation and jet-propulsion in this war.

Is it not fair to assume, then, that the British of the nineteenth century, though favoured by historical circumstances, proved a people equal to their opportunity ? The middle years of the nineteenth century are the watershed of industrial history. On the far side technological progress and industrialisation, as we know them to-day, had hardly begun. But after 1850, technological and industrial methods developed with the speed of revolution. In 1851 a great trade Exhibition was held in the Crystal Palace in Hyde Park, London. Perhaps it would not be true to say that Victorian England saw in it a symbol of the new world of trade and industrialisation, or was even aware that it marked the beginning of a new age. But that the Exhibition was held at all is evidence that England's leaders had grasped the significance of the developments that were taking place around them, and the possibilities that lay ahead for the British people.

The great increase that took place in trade after 1850 was due to two main factors—

Factors Influencing Growth of World Trade in Nineteenth Century

World trade, in the volume and complexity to which we have become accustomed in this generation, is of very recent growth in the world's history. Indeed, the intricate international trading network in its present form is the work of only three generations, and springs from the development of the machine, the application of steam power to it, and the consequent improvement in transport and communications witnessed by our grandparents in the latter half of the nineteenth century.

This fact is strikingly illustrated by the series of curves reproduced overleaf.

They trace the sudden upsurge of world trade that took place side by side with the development of railways, steamships and telegraphs; and the increase in the world output of coal and pig-iron—the basic fuel and material of the new machine civilisation which began to emerge around 1850.

Other factors influencing the dramatic uprush after this date were the invention of the Bessemer process for making cheap steel in vast quantities, the improvement in banking practice that centred around the increasing use of the cheque as a credit instrument, the advent of the joint stock companies with limited liability, and the opening up of goldfields in South Africa and California which made it possible for currencies based on gold to be increased in quantity to meet the needs of a rapidly increasing volume of trade.

The choice of the year 1850 on the graph to mark the transition to the machine age is, of course, an arbitrary one, and is made simply to fix attention on the great changes in the economic life of the world that were taking place around that time. It would seem to be justified, however, by the dramatic increase in trading and industrial activity that occurred after that date as shown by the six curves.

If it is possible, among the interplay of so many factors, to select the cardinal influence on the growth of trade in the nineteenth century, it would probably be found in the development of the steam-engine and its application to the machine. It has been estimated that in 1840 the total steam horsepower in the world amounted to 1,500,000. By 1900 it had increased no less than fifty times to 75,000,000. Steam power, in the latter half of the nineteenth century, had become the prime mover of the machine in all its forms.

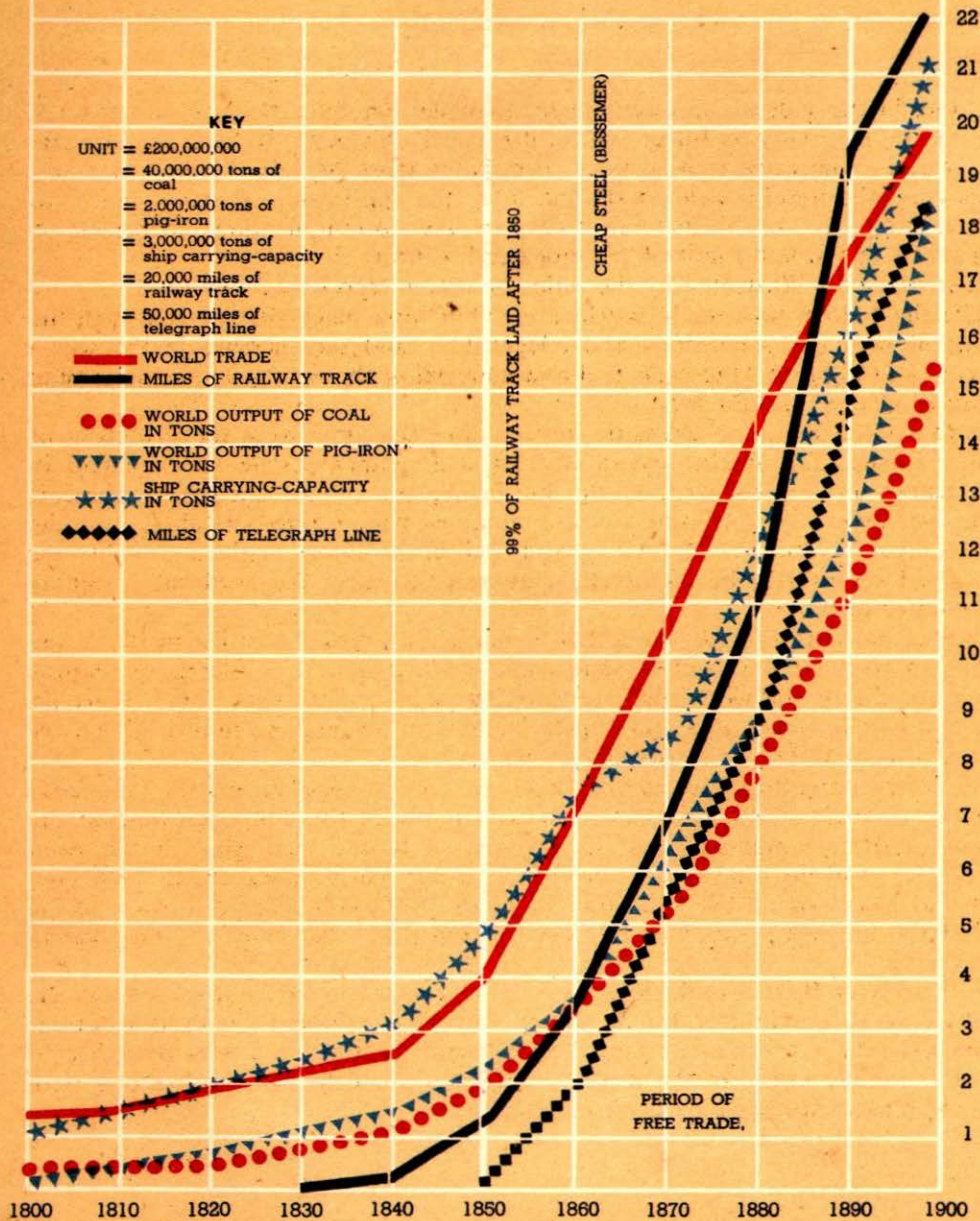
The fact that Great Britain took the lead in the development of the machine and the application of steam power goes far to explain why she was able to exercise a dominating influence in the world economy of the nineteenth century, and why she came to be regarded as the workshop of the world at the time when the Western peoples were moving from an agricultural to a machine economy.

1800-1850

The period of primary invention and the rise of the factory system.

1850-1900

The period of improving technique; organised exploitation of primary inventions; development of steam power; improved transport (RAILWAYS, STEAMSHIPS), better communications (TELEGRAPHS AND CABLES); cheap steel (BESSEMER PROCESS); better world travelling conditions (FREE TRADE); improved business methods generally.



the introduction of steam power as a means of converting the latent energy in coal and the improvement in transport and communications that took place with the building of railways, steamships and telegraph lines.

In the nineteenth century coal was the basis of all machine energy. It has been estimated that a cartload of coal weighing one ton produces more than 2,000 times the energy expended by the horse in hauling it for four hours.

The latent energy in coal, however, could not usefully be applied until the steam engine had gradually been perfected through the latter half of the century. In this period, steam horsepower increased no less than fifty times. Steam power had become harnessed to the machine. In the increase in transport and communications after 1850, the most important factor was the development of the railways. It has been estimated that ten times as much energy was needed to haul a load on the roads by horse in the nineteenth century as was needed to haul the same load by rail. There was, of course, no comparison in speeds—by the end of the century freight trains were travelling at 60 miles an hour. The weight of the load per wheel on the railways, too, was doubled after 1860. For by that year Bessemer—a British industrial chemist—had discovered a process for making steel in great quantities at an economical price. From £60 per ton the price of steel was reduced to £10 12s. per ton. This enabled steel to replace wrought iron on the railways, and steel rails, with their greater strength and wearing qualities, could carry far heavier loads than iron. Steel, too, improved the performance and power of locomotives (hitherto built mainly of wrought iron), allowed stronger bridges to be built, and therefore made possible the construction of wagons with far greater carrying capacity.

Steel and steam-power were also revolutionising the carrying capacity of shipping and by 1900 fifteen times the load of 1800 was being transported by sea. The invention of the telegraph increased the speed of communications out of all knowledge and vastly improved business organisation. Finally, during 1860-1880, the world entered a period of relatively Free Trade. Restrictive tariffs were removed in many countries, and England particularly led the movement for greater freedom of trade between one country and another.

The importance of railways, which were, in the main, a British invention, can hardly be over-estimated. By 1900 between one-fourth and one-third of the whole invested capital of the world was invested in railways; it is doubtful if the whole capital value of all the manufacturing establishments in the world could equal that of the railways by 1900, and the world's whole stock of money circulating at that time could buy only a fraction of its railway system.

In this great upsurge of trade and production, Great Britain was playing a leading part. Table 4 shows the steady growth of her trade over the period of primary inventions, 1800-1850 :

Table 4 ANNUAL AVERAGE TRADE OF GREAT BRITAIN, 1800—1850

ANNUAL AVERAGE OF	IMPORTS	EXPORTS	TOTAL
1801—05	£28,000,000	£33,000,000	£61,000,000
1806—10	£30,000,000	£37,000,000	£67,000,000
1811—15	£29,000,000	£45,000,000	£74,000,000
1816—20	£20,000,000	£40,000,000	£60,000,000
1821—25	£26,000,000	£37,000,000	£63,000,000
1826—30	£33,000,000	£35,000,000	£68,000,000
1831—35	£36,000,000	£40,000,000	£76,000,000
1836—40	£47,000,000	£50,000,000	£97,000,000
1841—45	£57,000,000	£54,000,000	£111,000,000
1846—50	£72,000,000	£60,000,000	£132,000,000

The picture presented in the next half-century, the period of swifter transportation, developing steam power and improved communications, is very different (Table 5).

Table 5 AVERAGE ANNUAL TRADE OF GREAT BRITAIN, 1855—1900

ANNUAL AVERAGE OF	IMPORTS	EXPORTS	TOTAL	RE-EXPORTS
1855—59	£146,000,000	£116,000,000	£262,000,000	£23,000,000
1860—64	£193,000,000	£138,000,000	£331,000,000	£42,000,000
1865—69	£237,000,000	£181,000,000	£418,000,000	£49,000,000
1870—74	£291,000,000	£235,000,000	£526,000,000	£55,000,000
1875—79	£320,000,000	£202,000,000	£522,000,000	£55,000,000
1880—84	£344,000,000	£234,000,000	£578,000,000	£64,000,000
1885—89	£318,000,000	£226,000,000	£544,000,000	£61,000,000
1890—94	£357,000,000	£234,000,000	£591,000,000	£62,000,000
1895—99	£393,000,000	£238,000,000	£631,000,000	£60,000,000
1900	£460,000,000	£283,000,000	£743,000,000	£63,000,000

In this Table a separate column shows re-exports. These were goods routed through Great Britain on their way from one country to another. They represent Great Britain's already growing function as the great clearing house for world trade.

Coal, as we have seen, was the great source of energy in the period of developing steam-power. Table 6 gives Great Britain's production of coal in the nineteenth century compared with the world production.

Table 6 BRITISH AND WORLD PRODUCTION OF COAL COMPARED IN NINETEENTH CENTURY

	1800	1850	1900
British production ..	12,000,000 tons (approx.)	55,000,000 tons	250,000,000 tons
World production ..	12,000,000 tons (approx.)	81,400,000 tons	610,000,000 tons

Thus in the early part of the century Great Britain was the sole coal producer of the world. By 1900, of course, great deposits were being mined in America and in Germany and other European countries. But even in 1900 Great Britain still accounted for over one-third of total world production.

By 1900, cotton goods accounted for one-fourth of the total value of Great Britain's exports. Great Britain's cotton industry was built on her export trade. Her iron and steel industries—vital to the economy of an industrial nation—also depended in the nineteenth century on the export of steel rails for the fast developing railway systems that her engineers were building all over the world.

At the beginning of the nineteenth century it can be said that Great Britain's foreign trade, though important, was important for the promise it held rather than for its immediate effect on the lives of the people. Tea, sugar, and coffee were the three imports that were most widely distributed—and wheat was necessary to feed the growing industrial population. Trade per head amounted to approximately £7.

By 1900, however, trade had increased to £37 per head despite the fact that the population had trebled.

By 1900 Great Britain alone accounted for about one-fifth of the total world trade, while Great Britain and the Empire together accounted for nearly one-third. Table 7 gives the position of the leading countries in 1900 :

Table 7 WORLD TRADE BY COUNTRIES ABOUT 1900 (in terms of 1938 pounds sterling)

Great Britain	£1,437,000,000	Switzerland	£131,000,000
British Dominions and Colonies	£904,000,000	China	£105,000,000
Germany	£851,000,000	Spain	£97,000,000
United States of America ..	£731,000,000	Argentina	£97,000,000
France	£558,000,000	Sweden	£95,000,000
Holland	£459,000,000	Japan	£82,000,000
Austria-Hungary	£296,000,000	Brazil	£82,000,000
Belgium	£271,000,000	All others	£1,472,000,000
Russia	£222,000,000		
Italy	£197,000,000	TOTAL (World imports plus world exports) ..	£8,087,000,000

Thus, by 1900, the economy of Great Britain, and of much of the British Empire, was largely dependent on foreign trade. The extent of the dependence of Great Britain on foreign trade was defined by the First Census of Production issued by the Government in 1907. In this it was stated that "Approximately 33 per cent of the value (at the place of production) of the output of the United Kingdom as a whole" was exported. Bearing in mind that the greater part of this large volume of production must have been carried overseas in British ships (at this time about half the world's shipping tonnage sailed under the British flag) it can be seen how great a proportion of the capital and energies of the nation was needed for foreign trade by the end of the nineteenth century. It has been roughly estimated that in the case of the U.S.A. and Germany—the next two great exporting nations—10 per cent and 16 per cent respectively were the equivalent proportion of total production absorbed by exports. Over the last half of the nineteenth century Great Britain had become the workshop of the world—building railways, erecting steel plants, equipping factories in every quarter of the globe. Her capital was invested abroad, her capital goods and consumer goods were sold in overseas markets. She was engaged in supplying to other countries the means for their own industrialisation, and therefore for the raising of their own standard of life.

Before the end of the nineteenth century it was clear that Great Britain, through the simple operation of the international division of labour, could best play her part in the world economy as one of the great centres of industry, finance and advanced technology. Because so large a proportion of her people was engaged in industry and trade, she found it convenient to import much of the food needed to feed her hard-working industrial population. It was also necessary to bring in from abroad most of the raw materials that were transformed in her factories.

Thus the very value of Great Britain's industrial and financial contribution to the fast-changing world economy of the nineteenth century depended upon the fact that—in spite of the relative smallness of her population—she had become the world's best customer. In spite of the manifold changes since 1900, she still remains the world's best customer. The contribution that Great Britain can make to the post-war world economy will be conditioned by the extent to which she remains prosperous and able to purchase the surplus products of many other countries in the world.

The growth of Multilateral Trade

Having described Great Britain's historical function as the chief promoter of world trade, an endeavour is made to assess the contribution of world trade to the great material progress of the world over the last three generations. International trade benefited the entire world ; it encouraged the sensible economic use of the world's available material resources, labour power and technical skill. It led to a steady improvement in the material standards of all peoples, in proportion as they were able to participate in the international exchange of primary products, manufactured goods and services. This Chapter gives some account of this process, and in addition considers the effect of the overseas investments of Great Britain, which were the natural sequel to the prosperity she derived from her position as principal world supplier.

By the beginning of the twentieth century an intricate network of trade, much as we know it to-day, embraced every habitable region in the world. Every country had something to sell or buy in the world's markets. The material standards of life of all peoples—agricultural or industrial—were affected by the flow of trade from country to country and between region and region. The direction of the flow, its volume, its concentration and nature in certain areas, were decided by a number of factors and were, in the main, the result of the free play of economic forces. In general it can be said that goods tended to be made, and raw materials to be produced, in the countries and areas where it became most profitable to make or produce them. The uneven geographical distribution of mineral deposits and raw material resources, differences in accessibility to them, and differences in climate, helped to decide the kind and volume of trade to be found in any given area. Equally important were the differences in the distribution of available supplies of labour, the relative skill of that labour, the distribution of capital equipment and the productiveness of land.

Thus, trade in manufactured goods automatically radiated from the great industrial areas—Great Britain, the United States of America, and the most highly industrial nations of Western Europe. Raw materials and food tended to flow into Britain and industrial Europe from the mainly agricultural and tropical areas—India, China, South America, Africa and South-East Asia. At this time there was no general tendency to concentrate on the uneconomic production of substitute materials for war purposes or to impose bilateral trading conditions for political reasons. Developed transport facilities and highly organised exchange and currency systems encouraged production in areas that were—by reason of their capital equipment, degree of labour skill, cheapness of labour or natural resources—the most suitable for that particular type or kind of production.

This meant that trade tended to become multilateral. It rarely happened that one area, with a surplus to exchange in the world market, could find another area with a surplus of just the required amount and kinds of commodities needed to complete a mutually beneficial, perfectly balanced bilateral exchange. South-East Asia, for instance, produced before the war 90 per cent of the world's supplies of rubber. Its trade in rubber, therefore, was split up between many countries, for all industrial countries needed rubber in varying quantities. It was hardly likely that South-East Asia needed the total available surpluses of each of these industrial countries in exact proportion to the value of the rubber exported to each. In practice a picture of the trading operations of any one country would include a picture of a cycle of intermingled and inter-related exchanges with many other countries.

The multilateral system meant that trade balances were adjusted within the orbit of a world system. Trade, like peace, was indivisible.

The history of this multilateral system has yet to be written. Indeed, its steady and almost imperceptible growth was taken for granted up to the world depression of 1929-31. It had become the accepted mechanism for distributing the benefits of the division of labour on an international scale. The uneasy thirties, however, saw an increasing concentration on bilateral trading agreements in Europe, and their use, by Germany, as a means of political pressure on the smaller States. Bilateral trade, and attempts at economic self-sufficiency in preparation for a war of aggression, had the effect of accentuating economic rivalry and inflaming national antagonisms. On the other hand, multilateral trade, in so far as it was allowed to operate freely without discrimination, tended to draw countries together, to increase their interdependence.

No complete picture of the growth of multilateral trade can be given without including a vast complex of economic and political factors affecting the whole field of international relationships over the past century. It is possible, however, to indicate the broad principles on which the system operated. There is, for example, the influence of long-term capital invested abroad by Britain in the nineteenth century; changes in direction of trade as an effect of technological advances; the financing of purchases in one

country through the foreign currency obtained by export surpluses to another ; the change from a favourable trading balance with a country to an unfavourable balance within a few years ; and over the whole picture the gradual building up of a circle of interrelated exchanges between many countries as the purchasing power of a country with an agrarian economy is gradually raised through increasing industrialisation and with the help of the capital and technical skill of more advanced countries.

It must not be assumed that all the economic results of these trading relationships, which we can now see in historical perspective, were clearly anticipated and carefully planned by our forefathers. In those early days the drive for higher profit was the dominant motive behind the export of capital, the building of railways, and the setting up of industrial plant in foreign countries. It is only fair to add, however, that the British *entrepreneur* in Victorian times was encouraged in his overseas ventures by the buoyant optimism that characterised the most prosperous days of *laissez-faire*, and comforted by the doctrine that in seeking his own self-interest he was acting in the best interests of the community. It was a happy coincidence that in that stage of a maturing capitalism, these highly profitable investments had the long-term effect of assisting the economic development of backward areas. We now know that some of the uncontrolled investments abroad that took place in later periods—particularly in the boom years of the twenties following the first world war—have resulted in much ill-balanced, uneconomic and ill-located industrial development. But it is broadly true that the developments fostered by English capital in the early days of multilateral trade did add to the wealth of backward communities. In the long run, too, this capital had the effect of stimulating a flow of international trade that indirectly benefited many countries.

It is broadly true that capital investment has tended to flow from countries with an advanced industrial economy to countries either less advanced, or with a solely agricultural economy. In the former case industrial development has been speeded up ; in the latter, the production of primary products for export has been stimulated. In both cases, the effect of foreign capital investment has been to increase the capacity of the country concerned to take advantage of international exchanges. These exchanges have not consisted in a simple two-way traffic between the country exporting capital and the country making use of it. The direction of merchandise trade follows a country's commodity needs, and does not depend upon its financial relationships. The development of multilateral trade has been a natural growth, answering the needs of many countries coming to the world market with widely differing requirements. The export of capital from Great Britain to many other parts of the world has stimulated the flow of trade through the whole trading network.

A country assisted by foreign capital and technicians to develop its own natural resources, or to increase its degree of industrialisation, is enabled to enter into trading relationships with many countries other than the country exporting the capital.

Great Britain, the first country to reach a high degree of industrialisation, was the

first country to invest abroad on a world scale. These early foreign investments financed improved communications and greater industrialisation in all countries that took advantage of them, and they gave an impetus to the economic development of most regions in the world. Great Britain benefited, of course, from the return in dividends and interests, and from the general increase in world trade. But in the final analysis all countries began to benefit too, as they took an ever greater part in the multilateral trading system.

The world-wide extent of Great Britain's investments, and the part she has played in the building up of international trade, can be judged from Table 8, which gives the estimated figures and distribution of Great Britain's overseas investments in 1930 :

Table 8 ESTIMATED OVERSEAS INVESTMENT OF GREAT BRITAIN IN 1930

AREA	AMOUNT
AUSTRALIA, NEW ZEALAND, BRITISH SOUTH AFRICA	£950,000,000
VARIOUS TROPICAL COUNTRIES	£680,000,000
INDIA, BURMA, CEYLON	£520,000,000
CANADA, NEWFOUNDLAND	£500,000,000
ARGENTINA	£400,000,000
CONTINENTAL EUROPE	£300,000,000
UNITED STATES	£200,000,000
REST OF WORLD	£250,000,000
TOTAL	£3,800,000,000

Through the operation of multilateral trade the available technical skill, natural resources and capital equipment of the world have been made available to all countries. So the material standard of life of all peoples—not only that of the highly industrialised countries—has been slowly, but none the less appreciably, raised. In the development of this system Great Britain has played the leading part. In its maintenance—even during the uneasy thirties—the strength and stability of the British Commonwealth of Nations has been a powerful influence. The international trading relationships of the British Commonwealth, as widespread as the system of multilateral trade itself, have, in the past, helped to bind the world together in one economic system. The economic interests of Great Britain and the Commonwealth are best served by a free, unrestricted international trading system based on an expanding world economy. And as international trade depends on stable, settled world conditions, the whole weight and influence of a strong, united British Commonwealth in the future are always likely to be thrown

in on the side of world peace. Thus a strong British Commonwealth, economically dependent on the smooth functioning of a system of world trade, would inevitably continue to act as a stabilising influence in the arena of world politics.

The extent to which the economy of Great Britain is dependent on the world trading system she has done so much to build up, and the importance of a prosperous Great Britain to world economy, is best realised in a consideration of the position she held in world trade before the war. For in 1938 Great Britain—as the world's greatest single market for the goods of other countries—still maintained the position she has held since the beginning of the multilateral trading system as we know it to-day. In 1938, as in every year before that right back to the earliest years of the nineteenth century, she was the world's best customer.

Great Britain—The World's Best Customer

Over a long period, and right up to the outbreak of the war, the prosperity of a great many countries depended upon one circumstance, their power to find in Great Britain a ready market for their exports. In 1938 Great Britain was the best customer for some 31 countries. She was the greatest single importer in the world of food, raw materials and articles semi and fully manufactured combined. A great many countries exported a greater value of goods to Great Britain than they imported from her. In this Chapter this subject is discussed—
one clearly of great importance in relation to the restoration of world trade, and of prosperous conditions in many countries, in the post-war period.

Throughout the greater part of the nineteenth century industry was based on coal, steam-power and iron. Between 1860 and 1900, a lava flow of cheap steel gushed from the mouths of countless Bessemer converters in Great Britain in an ever increasing stream. Bessemer steel quickly took the place of wrought iron in large-scale structural work; tough and wear-resisting, it spread over the country in a tracery of steel railroads. Coal was the fuel which drove the steam engines, and iron ore fed the blast furnaces which in turn fed the hungry Bessemer converters. At this time Great Britain, with valuable deposits of coal and iron ore, was the fortunate possessor of both the fuel and the essential raw material of the new Machine Civilisation. We have seen how firmly she grasped her opportunity, and how, through the industry, skill and organising genius of her people, she became the workshop of the world.

But the tempo of technological development, rapid though it seemed in the nineteenth century, progressively increases as we come nearer our own time. In the first quarter of the twentieth century two new prime movers appear, neither of which depends upon coal for its motive power—the internal combustion engine and the electric motor. The petrol engine and the diesel engine run on oil. Electric power can be generated

by the force of water pent behind great concrete dams. But coal is still the main source of energy for industry, and it has also become the foundation of a great new industry concerned with synthetic chemicals. Petroleum, however, is becoming very important. Practically the whole of the world's navies and air fleets, and a high proportion of the largest and fastest merchant ships are powered by oil or its derivatives. Some of the greatest battles of the war were fought in Germany's attempts to seize the oil wells of the Caucasus, and to protect her Roumanian oil supplies.

The development of these two new sources of power has led to other far-reaching technological changes. New raw materials are needed for the industries based upon them. The internal combustion engine, developing its power in a small compact unit, makes possible the motor car; but before the motor car really challenges the railway as a means of transport, the rubber tyre is necessary. So the motor-car industry becomes the consumer of a new raw material—rubber. As the internal combustion engine is improved, certain bold pioneering spirits in the West can see it lifting the heavier-than-air machine into the clouds; but the most rapid advances in flying are not made until aluminium alloys are applied to the manufacture of aero-engines and air-frames. Aluminium is derived from bauxite—and yet another raw material appears in the world markets.

Petroleum, rubber and bauxite—these are typical of the raw materials that have assumed a new importance through the technological changes of the twentieth century. And with these changes Great Britain loses her favoured position as the possessor of the essential raw materials of industry. She does, of course, still possess her valuable coal and low-grade iron-ore deposits—but these are no longer the only key materials of an industrial economy. Indeed, no other great industrial nation now possesses, within its own boundaries, so few of the raw materials on which a modern technology is founded. Table 9 shows thirteen of the most important minerals and basic raw materials and the percentage of total world production (1937-38) found in Great Britain, together with the percentage of total world production absorbed by Great Britain's industries in 1938.

Table 9 PERCENTAGE OF WORLD OUTPUT OF CERTAIN RAW MATERIALS PRODUCED AND USED IN GREAT BRITAIN (1938)

<i>Raw Material</i>	<i>Percentage of World Output produced in Great Britain</i>	<i>Percentage of World Output used by Great Britain</i>	<i>Raw Material</i>	<i>Percentage of World Output produced in Great Britain</i>	<i>Percentage of World Output used by Great Britain</i>
Coal ..	18.9	15.5	Wool ..	2.7	2.0
Iron ..	4.8	11.5	Rubber ..	—	15.0
Petroleum ..	—	4.5	Bauxite ..	—	5.5
Nickel ..	—	27.0	Lead ..	1.6	20.5
Manganese ..	—	9.5	Zinc ..	0.6	7.5
Tin ..	1.3	35.0	Copper ..	—	13.5
Cotton ..	—	10.0			

It is significant that despite the shift from coal and iron, to coal, oil, steel and electricity as the basis of industrialisation, Great Britain has retained her position as a great industrial nation. Her imports of the new raw materials necessary to the most advanced technology are evidence of the fact that she had kept abreast of modern technological developments. No longer favoured by raw material supplies—indeed, at a great disadvantage in comparison with many other industrial nations—she is still the traditional home of outstanding technical achievements. Few people over the last thirty years can have thought it possible to own a better motor car than a Rolls-Royce; any air force in the world to-day would think itself well equipped with fighters if it flew the latest “Spitfires”; the naval ratings of any Power would feel confident in action on the deck of a British battleship. Great Britain’s strength to-day, as in the last century, is in the industrial skill of her people. And during the war the industrial output per head of her population proved to be one of the highest in the world. It is true, however, that to-day, far more than in the past, she must draw upon the resources of far-distant countries for her essential raw material supplies.

The extent of her purchases on the world’s markets is one measure of the power of her industrial machine. Table 10 gives the value of her raw material purchases in 1938.

Table 10 GREAT BRITAIN’S GROSS IMPORTS OF RAW MATERIALS AND ARTICLES MAINLY UNMANUFACTURED IN 1938 (to nearest £1,000,000)

Iron ore and scrap	£11,000,000
Non-metallic mining and quarry products	£5,000,000
Non-ferrous ores and scraps	£16,000,000
Wood and timber	£43,000,000
Raw cotton and cotton waste	£30,000,000
Raw wool, waste and rags	£43,000,000
Raw silk	£2,000,000
Other textile materials	£12,000,000
Oil seeds, nuts, oil, fats, resins, etc.	£31,000,000
Hides and skins	£18,000,000
Paper-making materials	£16,000,000
Rubber	£12,000,000
Miscellaneous raw materials, etc.	£10,000,000
Total (corrected to nearest £1,000,000)	£253,000,000

In addition to raw materials, Great Britain imports large quantities of semi-processed materials which are given final form in the factories. And, of course, a large quantity of goods that are wholly manufactured. Table 11 gives the purchases of articles mainly or wholly manufactured, excluding machinery, electrical goods and vehicles.

Table II GREAT BRITAIN'S GROSS IMPORTS OF ARTICLES MAINLY OR WHOLLY MANUFACTURED, IN 1938
(Excluding Machinery, Electrical Goods and Vehicles)
(To nearest £1,000,000)

Earthenware, glass, etc.	£7,000,000
Iron and steel and manufactures thereof	£15,000,000
Non-ferrous metals and manufactures thereof	£41,000,000
Cutlery, hardware, implements and instruments	£7,000,000
Manufactures of wood and timber	£6,000,000
Cotton yarns and manufactures	£3,000,000
Woollen and worsted yarns and manufactures	£4,000,000
Silk and silk manufactures	£5,000,000
Manufactures of other textiles	£5,000,000
Apparel.....	£8,000,000
Footwear	£3,000,000
Chemicals, drugs, dyes and colours.....	£13,000,000
Oils, fats and resins, manufactured	£44,000,000
Leather and manufactures thereof	£6,000,000
Paper cardboard	£15,000,000
Rubber manufactures	£1,000,000
Miscellaneous manufactures	£22,000,000
TOTAL (corrected to nearest £1,000,000)	£205,000,000

It will be seen that this list includes many categories of consumer goods that are products of the industrial machine. Yet Great Britain is the most highly industrialised country in the world. Why does she need to import goods that apparently could be made in her own factories? It is emphasised in another section of this book that even the most highly industrialised countries find it worth while to take advantage of the international division of labour through the exchange of manufactured articles. As a result of long experience, one country may enjoy a reputation for the making of certain classes of goods. Such goods may show a certain superiority of design; or, through the experience gained in making them over many years, or through some local advantages such as the supply of skilled labour, may better suit the requirements of a buyer deciding on the score of quality or price. Many examples spring to mind where a country enjoys an international reputation for certain types of goods: French clockwork, Swedish gauges; Swiss watches and precision instruments; American mass-produced automobiles and certain classes of machine tools; British textiles, pottery, aero-engines and ships; German optical instruments and certain classes of electrical goods and so on. International trade makes it possible for the whole world to benefit from the specialised industrial and scientific skill and experience of any one nation. It is not surprising, therefore, that Great Britain, though herself the founder of great engineering traditions

and the possessor of long industrial experience, should purchase many types of industrial capital and consumer goods on the world's markets.

Table 12 shows Great Britain's purchases of certain categories of industrial goods in the making of which she enjoys a world-wide reputation.

Table 12 GREAT BRITAIN'S GROSS IMPORTS OF MACHINERY, ELECTRICAL GOODS, SHIPS, VEHICLES, ETC., IN 1938
(To nearest £1,000,000)

Machinery	£22,000,000
Electrical goods and apparatus.....	£3,000,000
Vehicles, ships, locomotives and aircraft.....	£5,000,000
TOTAL (corrected to nearest £1,000,000)	£30,000,000

Great Britain, of course, exports vastly more goods in these categories than she imports. But the fact that she imports such goods at all is an indication that no nation has a monopoly of the world's special skills, and that all can benefit from the international division of labour.

Great Britain is not only a buyer of raw materials to feed her industrial machine. She is, although so highly industrialised herself, an important market for the most elaborate industrial products.

We have seen how the whole course of Britain's historical development, and the native genius of her people, have led inevitably to her emergence as a great industrial nation. No other industrial country is so densely populated ; in no other country is so high a proportion of the population engaged in commerce and industry. In Great Britain, only 7 per cent of the workers are employed on the land. In peace time, Great Britain grows only about 34 per cent of the food she needs. For nearly a century, she has been far and away the greatest importer of food in the world. The economy of great areas of the earth's surface has been based on Great Britain's ability to absorb large quantities of primary products. As a consumer of food, therefore, she has always played a major role in the economy of the primary producers. She is likely to do so in the future. Table 13 gives Britain's imports of Food, Drink and Tobacco during 1938.

Table 13 GREAT BRITAIN'S GROSS IMPORTS OF FOOD, DRINK AND TOBACCO IN 1938
(To nearest £1,000,000)

Meat	£91,000,000
Dairy produce	£80,000,000
Grain and flour	£74,000,000
Beverages (including tea, coffee and cocoa)	£47,000,000
Fresh fruit and vegetables	£38,000,000
Feeding-stuffs for animals	£11,000,000
Animals, living, for food	£9,000,000
Other food	£57,000,000
Tobacco	£23,000,000
TOTAL (corrected to nearest £1,000,000)	£430,000,000

The importance of Great Britain as a buyer of food in the world's markets is emphasised by a consideration of the percentage of the world's total exports of certain foods that were imported into Great Britain during an average pre-war year (Table 14).

Table 14 PERCENTAGE OF TOTAL WORLD EXPORTS OF CERTAIN FOODS BOUGHT BY GREAT BRITAIN EACH YEAR

Pork	81 per cent of total amount entering into trade purchased by Britain
Beef and mutton	80 per cent of total amount entering into trade purchased by Britain
Butter	78 per cent of total amount entering into trade purchased by Britain
Tea	53 per cent of total amount entering into trade purchased by Britain

If we bring together the various categories of goods considered above, and add to them animals not for food, and the parcel post, we shall have a broad picture of Great Britain's total imports in a typical year before the war (Table 15).

Table 15 GREAT BRITAIN'S GROSS IMPORTS IN 1938
(To nearest £1,000,000)

Food, drink and tobacco	£430,000,000
Raw materials and articles mainly unmanufactured	£253,000,000
Articles wholly or mainly manufactured	£233,000,000
Animals not for food	£3,000,000
Parcel post	£4,000,000
TOTAL (corrected to nearest £1,000,000)	£923,000,000

All figures in Table 15 refer to Great Britain's gross imports, i.e. the total amount of merchandise consigned to Great Britain from abroad. From the point of view of any single country seeking to sell in the world's markets, gross figures are more nearly representative of Britain's purchasing power than figures making allowance for re-exports which, in 1938, amounted to £62,000,000.

The great volume of purchasing power reflected in these gross figures is a measure of the importance of a prosperous Great Britain to the world economy. For over a hundred years Great Britain has been the world's best customer.

If we now consider British imports in relation to the exports of the rest of the world, we shall be able to gauge more accurately how great an influence her population of 47,500,000 people exercises in the direction and flow of world trade. The fact is that in 1938, Great Britain, with 2 per cent of the world's population, purchased no less than 21 per cent of the exports of the rest of the world. A comparison can be made between the purchases made in the world's markets by Great Britain, the United States (the world's second greatest importer), and France, a highly industrialised country with a population not far short of that of the British Isles. (Table 16).

Table 16 COMPARISON OF NET IMPORTS OF GREAT BRITAIN, U.S.A. AND FRANCE IN 1938

<i>Country</i>	<i>Population</i>	<i>Imports in 1938</i>	<i>Imports per Capita</i>	<i>Imports as Percentage of Exports of rest of world</i>
Britain ..	47,500,000	£858,000,000	£16·3	21
U.S.A. ..	132,100,000	£447,000,000	£3·3	10·9
France ..	42,000,000	£270,000,000	£6·3	7

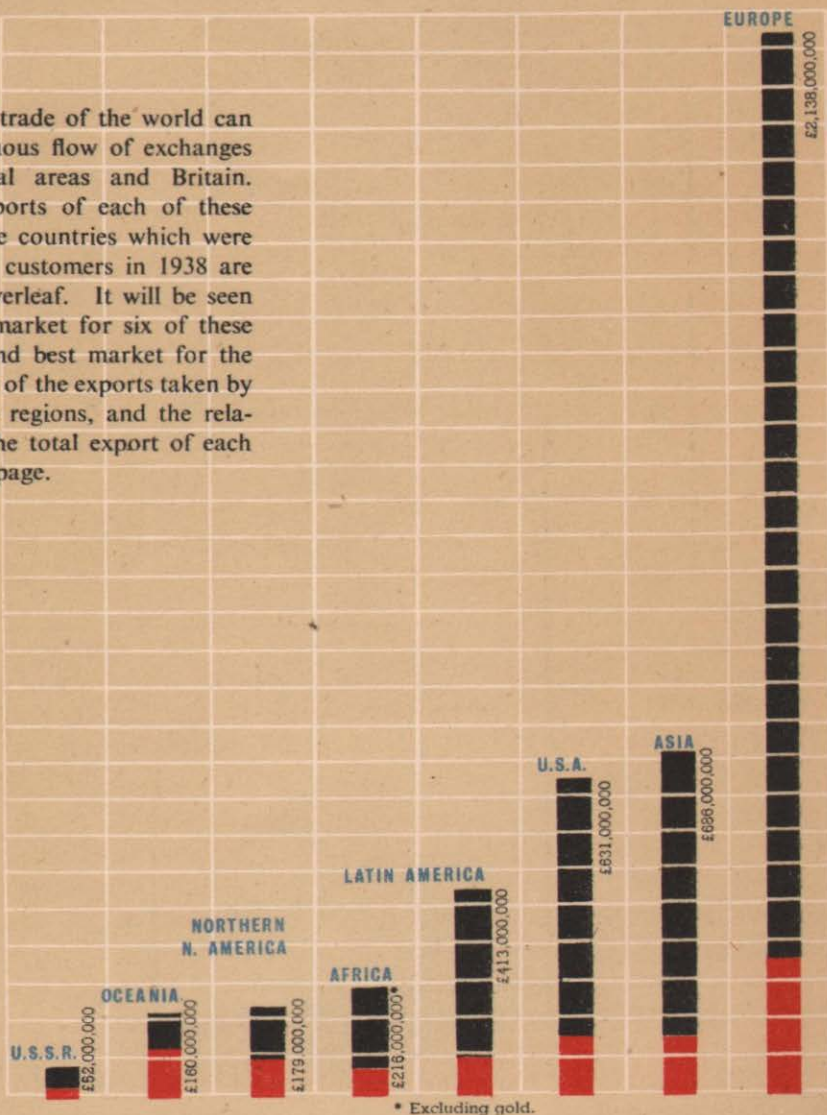
The figures for 1938 would be roughly paralleled by those of any recent year. Thus, Great Britain, year by year, absorbs easily the greatest absolute quantity of the rest of the world's exports and far and away the greatest amount per head of population of any of the Great Powers.

Her position in 1938 as the greatest trading nation in the world, and the relative position of other nations, are given in Table 17. It invites comparison with Table 7 giving the relative positions in 1900. Over this lapse of time, and if we except the rise of Japan from sixteenth place to seventh, not many fundamental changes have taken place. This prompts the reflection that the network of world trade, in spite of the first world war in 1914-18, and the world-wide depression in 1929-31, has shown a constant pattern over the last 40 years. And it is certain that nothing that has happened since 1939 has lessened the importance of the part that Great Britain and the British Commonwealth are likely to play in the post-war world economy.

World Exports by Geographical Regions in 1938

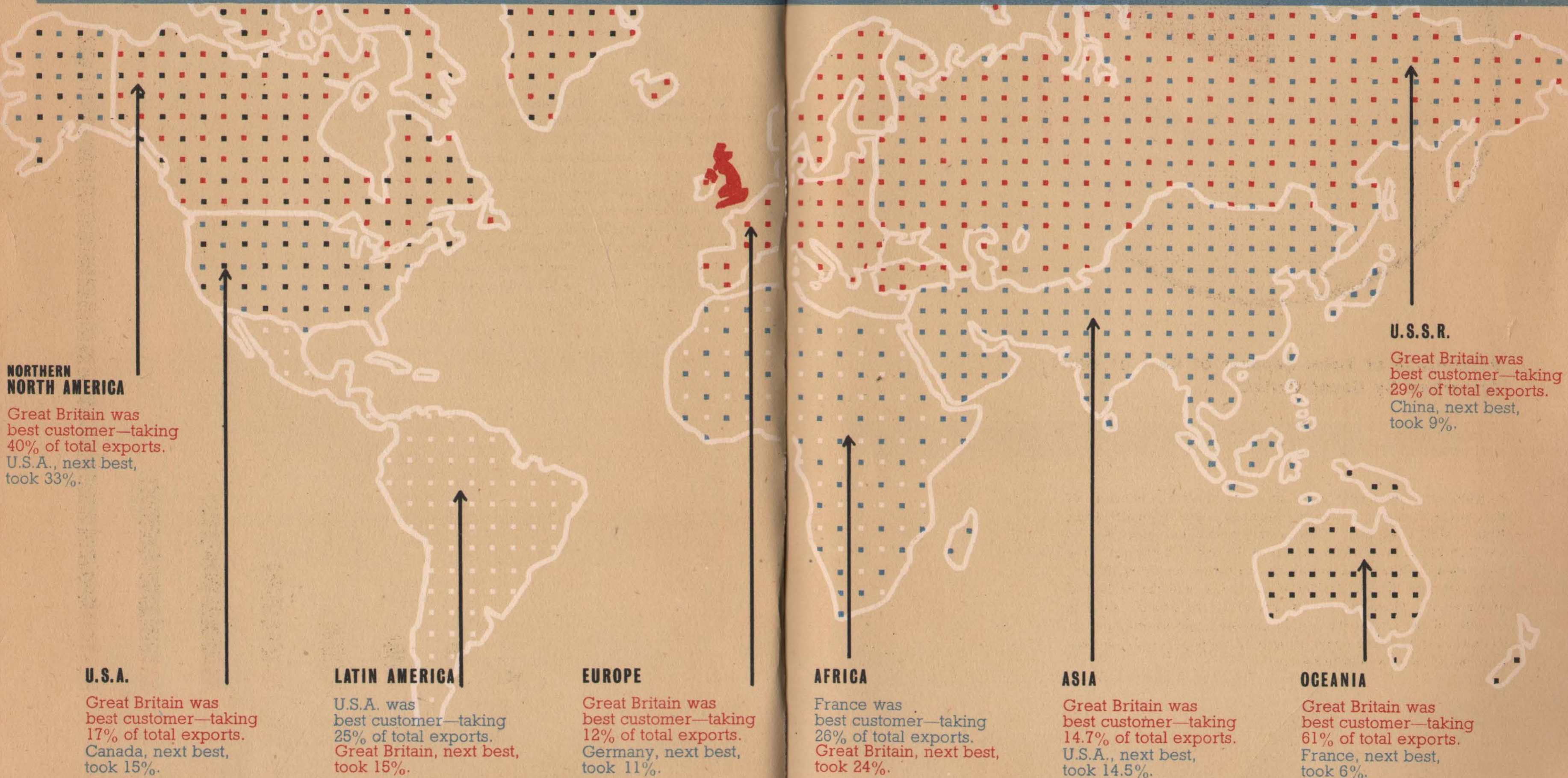
Amount from each area bought by Great Britain shown in red.

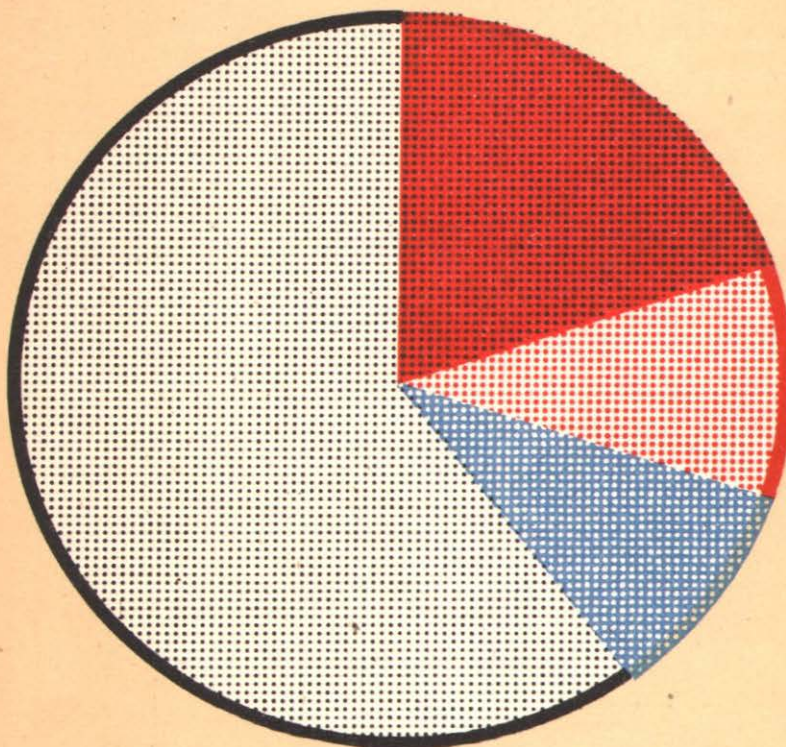
For convenience, the total trade of the world can be considered as a continuous flow of exchanges between eight geographical areas and Britain. The percentage of the exports of each of these eight areas absorbed by the countries which were their best and second best customers in 1938 are given on the world map overleaf. It will be seen that Britain was the best market for six of these eight regions and the second best market for the other two. The actual value of the exports taken by Britain from each of these regions, and the relation of these amounts to the total export of each region, are shown on this page.



Great Britain as the world's best customer in 1938

(All figures for 1938. Based on returns given in *The Network of World Trade* issued by the League of Nations, Geneva, 1942.)





GREAT BRITAIN, as the world's best customer, bought £886,000,000 of the exports of the rest of the world—or 21%.

GERMANY, as the world's second best customer, bought £453,000,000 of the exports of the rest of the world—or 10.9%.

U.S.A., as the world's third best customer, bought £447,000,000 of the exports of the rest of the world—or 10.9%.

TOTAL WORLD EXPORTS—1938—£4,475,000,000.

Percentage of Total Exports of Rest of World Absorbed by Great Britain

In considering the figures given above the relative populations of the world's three best customers should be borne in mind. Thus, Britain, with 2 per cent. of the world's population, purchased no less than 21 per cent. of the exports of the rest of the world. The population of Britain, the world's best customer, is only 47,500,000, compared with the 132,000,000 of the U.S.A. and the 66,000,000 of Germany. Great Britain absorbs easily the greatest absolute quantity of the rest of the world's exports; and she imports far and away the greatest amount per head of the population compared with any of the other Great Powers.

Table 17 **WORLD TRADE BY COUNTRIES 1938**
(Exports and Imports)

	<i>1938 pounds</i>
British Dominions and Colonies	£1,522,000,000
Great Britain	£1,314,000,000
United States of America	£1,032,000,000
Germany	£895,000,000
France	£449,000,000
Belgium	£345,000,000
Japan	£332,000,000
Holland	£274,000,000
Italy	£231,000,000
Sweden	£201,000,000
China (including Manchuria)	£186,000,000
Argentina	£180,000,000
Denmark	£140,000,000
Switzerland	£135,000,000
Czechoslovakia	£132,000,000
Brazil	£121,000,000
U.S.S.R.	£107,000,000
Norway	£98,000,000
Poland	£95,000,000
Austria	£95,000,000
Rest of world	£1,526,000,000
Total world imports plus total world exports	£9,410,000,000
<p>(NOTE.—It is interesting to compare this Table with Table 7 giving world trade in 1900 in terms of 1938 pounds. During the intervening period the rapid technological advance in industry (such as flow production methods) and agriculture (increasing use of fertilisers and machinery) has resulted in a greater output of goods per unit of money. We can say, therefore, that the quantum of world trade in 1938 does show a definite increase over that of 1900, but it is not possible to give anything like an accurate estimate of the amount of that increase.)</p>	

The gradual spread of industrial skill over wider and wider areas of the earth's surface and a general increase in population have resulted in a gradual increase in the necessity for the international exchange of goods and services. It will be seen that the share of world trade enjoyed by the British Commonwealth and Empire has remained remarkably constant. In 1900 it was 28·9 per cent of the total of world trade ; in 1930 it had risen slightly to 30·1 per cent. Thus it is true to say that the British Commonwealth—regarded as one trading system closely linked by political ties—retains its importance in the world economy. This would suggest that, broadly speaking, the political ties between Great Britain and the Dominions and Colonies have had the effect of encouraging the economic development of this association of nations as a whole. While Great Britain's own earlier overwhelming lead in world trade naturally was reduced by the general spread of industrial self-sufficiency and her total trade decreased 9 per cent in the period under review, there is reason to suppose that her lead would have been reduced still further had it not been for the markets which she found among the members of the British Commonwealth. On the other hand, Great Britain has provided throughout the largest single market for each of the other sister nations of the Commonwealth—Canada, Australia, New Zealand and South Africa.

While world trade as a whole in the period mentioned above has increased by 16 per cent, the trade of the British Dominions and of the British Colonies has increased by no less than 68 per cent. Only four countries in the world can show a greater increase. And while the absolute amount of trade enjoyed by Great Britain in 1900 was greatly in excess of that of the remainder of the British Commonwealth as a whole, in 1938 the trade of the British Dominions and Colonies—considered together—was larger than that of Great Britain herself.

We can, with the help of some further facts and comparisons, give a rather more detailed picture of the importance of Great Britain as a buyer in the world's markets. First, in Table 18, is a comparison of the purchases made by the world's three best customers in 1938.

Table 18 THE WORLD'S THREE BEST CUSTOMERS IN 1938

<i>Country</i>	<i>Imports</i>	<i>Imports as a percentage of the Exports of the rest of the world</i>
1. Great Britain ..	£858,000,000	21·0
2. Germany	£453,000,000	10·9
3. U.S.A.	£447,000,000	10·9

The importance of Great Britain as a market to the twenty-one principal exporting countries of the world is shown in Table 19.

Table 19 GREAT BRITAIN AS A MARKET FOR PRINCIPAL EXPORTING COUNTRIES OF THE WORLD IN 1938
(All countries exporting more than approximately £40,000,000)

Country	Total Exports	Best Customer	Amount taken by Best Customer	Amount taken by Great Britain (if not Best Customer)
	£		£	£
U.S.A.	631,000,000	Britain	106,000,000	—
Germany	441,000,000	Netherlands ..	37,000,000	29,000,000
France	179,000,000	North Africa (Colonies)	32,000,000	21,000,000
Canada	172,000,000	Britain	69,000,000	—
Japan	168,000,000	Manchuria ..	58,000,000	8,000,000
India (including Burma and Ceylon) ..	155,000,000	Britain	60,000,000	—
Netherlands ..	116,000,000	Britain	26,000,000	—
Italy	112,000,000	Africa (Colonies)	20,000,000	6,000,000
Australia ..	107,000,000	Britain	58,000,000	—
Sweden	94,000,000	Britain	23,000,000	—
Argentina ..	89,000,000	Britain	29,000,000	—
South Africa ..	81,000,000*	Britain	63,000,000*	—
Netherlands East Indies ..	77,000,000	British Malaya ..	17,000,000	4,000,000
Czechoslovakia ..	72,000,000	Germany ..	12,000,000	7,000,000
Denmark ..	68,000,000	Britain	38,000,000	—
British Malaya ..	67,000,000	U.S.A.	20,000,000	10,000,000
Switzerland ..	61,000,000	Germany	10,000,000	7,000,000
Brazil	60,000,000	U.S.A.	21,000,000	5,000,000
Venezuela ..	55,000,000	Curaçao	42,000,000	1,000,000
U.S.S.R. ...	52,000,000	Britain	15,000,000	—
New Zealand ..	46,000,000	Britain	39,000,000	—
Poland	45,000,000	Germany ..	9,000,000	8,000,000

* Including Gold.

The total exports of the 23 countries listed above amount to 66 per cent of the total world exports. In eleven cases Britain is the best customer ; in four (Germany, Poland, Switzerland, British Malaya) the second best ; in three (France, Czechoslovakia, Brazil) the third best.

One further analysis (Table 20) covering 68 per cent of Great Britain's total imports in 1938, brings out the fact that in 1938 Great Britain was the best customer of no fewer than 31 different countries, including eleven of the principal exporting countries listed above.

Table 20 COUNTRIES FOR WHOM GREAT BRITAIN WAS THE BEST CUSTOMER IN 1938
(To the nearest £1,000,000)

Country	Total Exports	Percentage of Total Exports taken by Britain (approximate)	Country	Total Exports	Percentage of Total Exports taken by Britain (approximate)
	£			£	
U.S.A. ..	631,000,000	17	Chile	28,000,000	24
Canada ..	172,000,000	39	Nigeria ..	10,000,000	49
India	122,000,000	34	N. Rhodesia ..	10,000,000	40
Australia ..	107,000,000	54	Latvia	9,000,000	43
New Zealand .	46,000,000	84	Trinidad ..	6,000,000	52
Denmark ..	68,000,000	56	Uruguay ..	12,000,000	26
Argentina ..	89,000,000	33	Lithuania ..	8,000,000	38
Netherlands ..	116,000,000	22	Anglo-Egyptian		
Sweden ..	94,000,000	24	Sudan ..	6,000,000	48
Eire	24,000,000	93	Jamaica ..	5,000,000	58
Finland ..	37,000,000	45	Palestine ..	6,000,000	43
U.S.S.R. ..	52,000,000	29	Nyasaland ..	4,000,000	55
Norway ..	39,000,000	28	S.W. Africa ..		
South Africa ..	81,000,000*	78	Portugal ..	10,000,000	22
Curaçao ..	37,000,000	29	Estonia ..	6,000,000	36
Egypt ..	31,000,000	31	Dominican		
Iran	31,000,000	26	Republic	3,000,000	40

* Including Gold.

It is clear that the purchasing power of Great Britain, and her capacity to absorb a high proportion of the surplus products of many nations, were major factors in the pre-war system of multilateral world trade. But we have seen that the pre-war network of world trade was a growth of many years and its pattern was decided by each nation's commodity needs.

International exchanges took place only because they answered the requirements of countries with vastly different resources, kinds and amounts of capital equipment and degrees of labour skill. It seems certain, therefore, that most countries' needs will best be satisfied in the post-war world by the re-establishment of the long-standing trading connections that have served the world so well in the past. This means that the economic interests of many countries will demand that Great Britain should continue to play her historic role as an international centre of finance, industry and technical services. The prosperity of many countries whose economies are dependent upon a flourishing export trade will be bound up with the prosperity of Great Britain as the world's best customer.

Great Britain in the Post-War World Economy

Chapter Four made clear that the prosperity of many countries dependent upon a flourishing export trade was, in peace time, closely connected with the prosperity of Great Britain. The question must arise : To what extent can Great Britain continue after the war as the world's greatest importer ? This Chapter considers the effect of the war-time liquidation of so much of Great Britain's overseas investments, which formerly accounted for much of her income ; and concludes that Great Britain can regain her pre-war purchasing power only by a strenuous effort to increase the value of her exports.

Enough facts have been given to show that the economy of Great Britain is shaped and conditioned by international trade ; and that the prosperity of many countries depends upon Great Britain's purchasing power in the world's markets.

Will Great Britain retain that purchasing power in the post-war world ? It is a question of vital interest to countries seeking export markets. Trading connections which have been the growth of centuries would be broken if Great Britain, as a result of her exertions and sacrifices in the war, could not provide the market many countries require for their surplus products. New connections, new markets, could not be established quickly if Great Britain were not able to purchase freely the raw materials that keep her factories running and the food she needs for her people. Indeed, it is difficult to see what areas or combination of areas could replace Great Britain as a market in the post-war world. And looked at from another viewpoint, the very capacity of Great Britain to supply the world with many of the consumer and capital goods she knows so well how to make, and which so many countries will need in the post-war years, is dependent upon the extent to which she can enter the world economy as a buyer of raw materials and food on a large scale.

There is, of course, another side to the picture of Great Britain as the world's biggest buyer ; she is a great seller as well. Indeed, for at least a hundred and fifty years she was the world's greatest exporter as well as importer. After the first world war, however, the United States took first place as an exporting nation ; but in 1938 Britain was a good second.

Great Britain's exports of merchandise, however, have not equalled her imports for over a hundred years. In 1938 she bought, in goods, nearly twice as much as she sold. This is explained by the fact that international exchanges take place in services as well as goods. Great Britain, for instance, could sell to the rest of the world her services as a carrier of goods in her great merchant shipping fleet. She insured the goods in transit. Her vast experience of world trade, and her centuries-old trading connections, had led to the growth of an international centre of finance in the City of London. Credit facilities are an important factor in international trade. Merchants all over the world had reason to depend upon the probity, the knowledge and the skill of London discount and acceptance houses, bill-brokers and bankers. The arranging of credits, the discounting of bills of exchange, and the provision of foreign currencies were valuable services rendered by the City of London to importers and exporters in many countries as well as in Britain itself. Finally, Great Britain derived a considerable income from her overseas investments. As we have seen, these investments were used to provide the necessary capital for the development of many backward areas of the world. The return on the overseas capital, therefore, can be looked upon as a payment for services rendered in the past. The income on all these services—or "invisible exports" as they are usually called—together with exports of merchandise, practically balanced expenditure on imports in pre-war years. The small deficit of some £40 million that appeared was adjusted by movements in gold and silver and the sale or repatriation of overseas assets. Table 21 gives the average figures of Great Britain's balance of payments in trade for 1936-38. Imports and exports are shown less the £66 millions annually of re-exports.

Table 21 GREAT BRITAIN'S TRADE BALANCE (Average of 1936-38)

Imports	£866,000,000	Merchandise Exports	£478,000,000
		"Invisible Exports"—	
		Shipping Services	£105,000,000
		Interest and Dividends on Over-	
		seas Investments	£203,000,000
		Other Financial Services	£36,000,000
		Net Liquidation of Investments ..	£44,000,000
	£866,000,000		£866,000,000

It can be seen that Great Britain's pre-war "invisible exports" were essential to her economy—without the foreign currency they brought in she could not have purchased abroad the amount of food and raw materials needed to feed her people and keep her factories working. But these "invisible exports" will show a sharp fall in the post-war years. Great Britain has not been able to carry on her usual export trade—much of which, of course, was with Europe. To buy the raw materials for the war factories and the food for her working and fighting population, therefore, she has been forced to sell overseas assets. The position was immediately eased by the adoption of Lend-Lease by President Roosevelt. But, as shown in Table 22, great inroads had been made into her overseas assets by the spring of 1944.

Table 22 GREAT BRITAIN'S OVERSEAS ASSETS—1938 and 1944

1938 (estimated total nominal capital investment)	£3,725,000,000
*1944 (estimated total nominal capital investment)	£2,725,000,000
* Estimated, April 1944.	

Thus, by April 1944, Great Britain had liquidated no less than £1,000,000,000 worth of her overseas assets with the most stable yield to finance her war operations. In addition, many countries are building up sterling balances in Great Britain on account of war supplies and food. It was estimated by Lord Keynes that these would be likely to stand at about £3,000,000,000 by the end of 1944.

And here it can fairly be said that the very magnitude of this external indebtedness is a measure of Britain's war effort. It is evidence that the whole of Britain's resources, without counting the cost, were thrown into the struggle.

These balances will doubtless have to be liquidated gradually in the post-war years—perhaps for the most part by means of exports for which Great Britain will not receive payment or goods in exchange. There is reason to think that no further liquidation of assets is likely to take place. But it is obvious that she cannot look forward to anything like the net return, in the form of interest and dividends, that proved so essential to her economy in peace time. Although her merchant fleet is being re-equipped with finer and faster merchant ships, she will be prudent to reckon on a somewhat smaller return from shipping services. From these facts there is but one conclusion. To pay for her normal peace-time imports of food, raw materials and manufactured goods, Great Britain must increase the value of her export trade in manufactured goods. Most economists estimate that this increase will have to amount to between 50 per cent and 75 per cent of the 1938 total—if she is to prove as good a customer to the world as in pre-war days.

That is the problem facing Great Britain in the post-war world. But it is not Great Britain's problem alone. The world-wide ramifications of Great Britain's trading connections, her position in the world economy as the greatest buyer, mean that this problem, taking the long view, can only be solved through international co-operation and agreement. The network of world trade has grown up naturally as an essentially multilateral system in an expanding world economy. Restriction of production by international cartels, narrow nationalistic trade policies, high tariffs, exclusive bilateral trading agreements, and currency depreciations in the pre-war period were the results of a growing economic nationalism—the attempt to solve trading problems on national, rather than international, lines. Even Great Britain, historically dependent on developing trade in an expanding economy, introduced import duties in 1932 and signed the Ottawa Agreements in that year. About the same time bilateral trading agreements were concluded with Norway, Sweden, Denmark, Finland, Latvia, Lithuania, Estonia, Argentina and the U.S.S.R. The effect of these agreements on the British trade in coal—one of Britain's most important exports—is of interest in demonstrating that gains in one market are usually followed by losses in another when restrictions on the free flow of trade are imposed. The market for British coal was increased in the Scandinavian countries—and the collieries of Scotland and North-East England serving these markets accordingly benefited. But the gains made by Great Britain in these markets were made at the expense of Polish and German exporters. Polish and German competition, therefore, was intensified in Mediterranean and other markets not subject to trade agreements and the gains made in Scandinavia were largely offset by losses in these markets served by the coalfields of South Wales. Such results are a reflection, on a small scale, of what is likely to happen internationally—of what in fact did happen in the immediate pre-war years—under the impact of bilateral agreements and restrictive production policies.

Perhaps it is not out of place here to point out that were Great Britain forced, by the breakdown of the international machinery of co-operation in the post-war world, to fight for export markets, she would have a powerful bargaining weapon in the making of bilateral agreements through the markets she can offer to many countries whose internal economies depend on the finding of outlets for export surpluses. That Great Britain sees no solution for her export problems in such agreements—however superficially attractive—is emphasised by the statements of her leaders. Great Britain's economic interests will best be served by multilateral trade in an expanding world economy. Lord Woolton, then British Minister of Reconstruction, stated in a speech dealing with Great Britain's post-war problems: "I personally believe that it will be in a multilateral policy that we should probably restore our commercial and economic position overseas". Britain can only maintain her prosperity in a world of rising standards of living in all countries. Sir William Jowitt, the British Minister assisting Lord Woolton in the co-ordinating of Great Britain's post-war economic policies, stated: "We must realise this simple truth: the more prosperous nations are, the more pros-

Great Britain: The Nation's Balance Sheet 1800 to 1938



The graphs reproduced overleaf give a broad picture of Great Britain as an importer and exporter over the last century and a half. In particular they emphasise Britain's dependence on her "invisible exports." It will be seen that for a hundred years Britain has imported a greater value of goods than she has exported. In other words, her expenditure on merchandise bought has been greater than her income from merchandise sold. How this has been possible, and how her financial position has been radically changed as a result of her liquidation of overseas assets in the war period, is explained in Chapter Five.

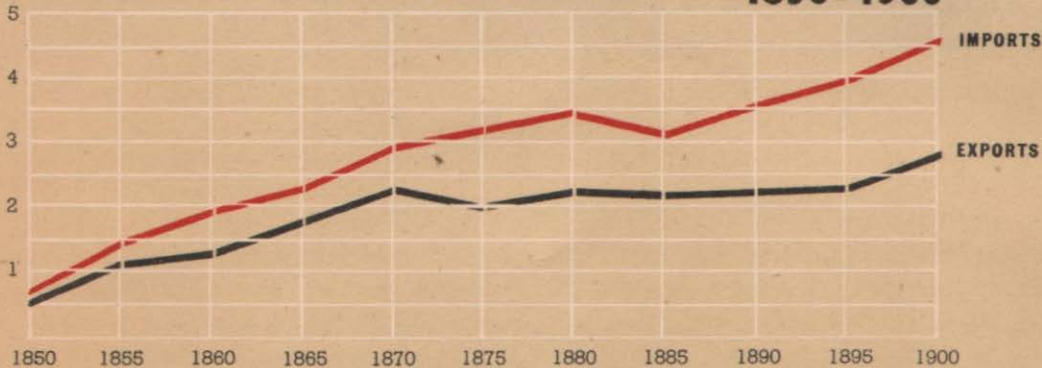
(*Note.*—The figures given for Britain's income from "invisible exports" are based on Treasury estimates, which are not available for consecutive years before 1922. The graphs, therefore, give no detailed information before that year. But Britain was deriving a considerable income from her "invisible exports," and enjoying a balance of income over expenditure which was available for overseas investment, right back into the latter half of the nineteenth century. There was a sudden rise in the value of exports and imports in current sterling values around 1920. This was due to a world rise in prices of primary products and manufactured goods, and unadjusted sterling values cannot be taken as an accurate index of the quantum of goods entering into world trade. In the graph overleaf (1900-1938), therefore, the quoted annual values of trade in pounds sterling have been adjusted to changing prices on the basis of the general level of wholesale prices prevailing in Britain in 1913. This adjustment gives a better balanced picture of the actual amount of goods moving.)

£ hundred millions

1800 - 1850

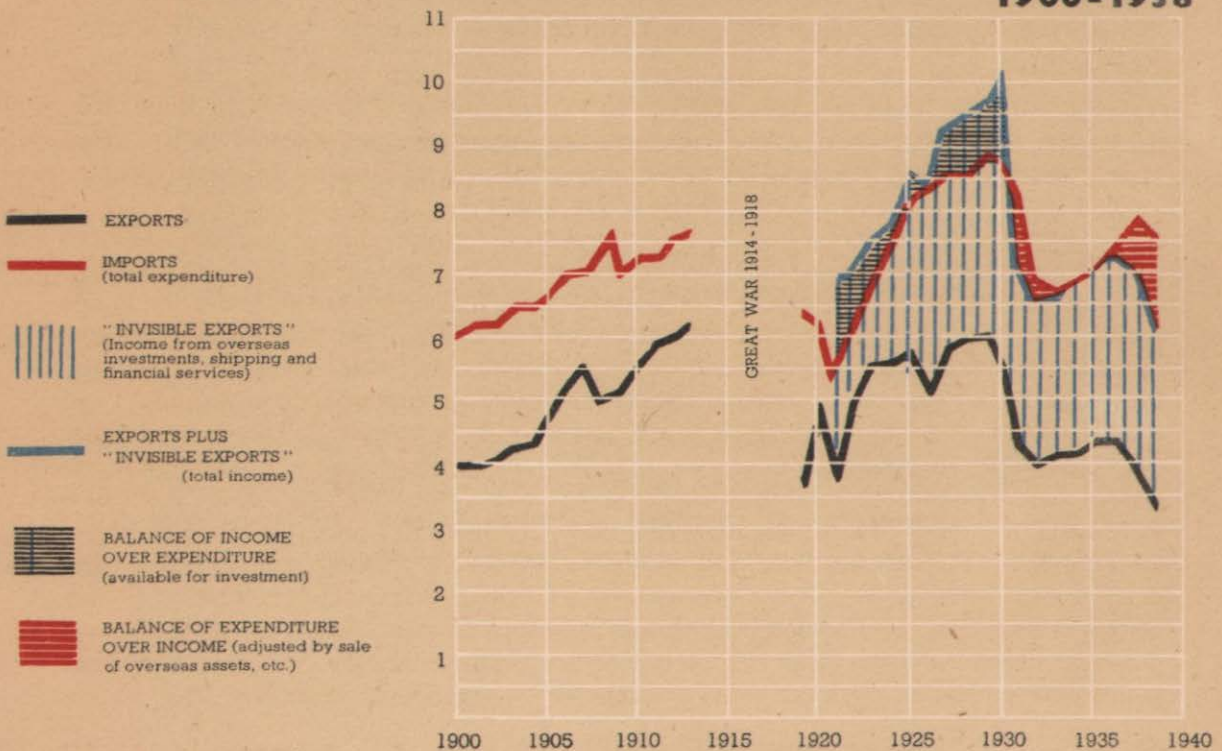


1850 - 1900



£ hundred millions

1900 - 1938



Annual values of trade in Pounds Sterling adjusted on basis of wholesale prices prevailing in Great Britain in 1913.

perous we shall be ourselves. We must aim deliberately at improving the standard of living not only in this country, but throughout the world, in order that consumers abroad may be able to buy that which we produce ”.

President Roosevelt, in an address to Congress in 1944, stated : “ It has been shown time and again that if the standards of living in any country go up, so does its purchasing power—and that such a rise encourages a better standard of living in neighbouring countries with whom it trades ”. Mr. Cordell Hull, United States Secretary of State, dealing with the lessons of the years immediately before the war, said : “ Another guide-post for the future which our common experience before and during this war has raised is in the economic field. Out of our experience of our association in peace and in war, we have learned that the expansion of material well-being can only come with an expansion of production and trade and hence an increase in consumption. We have learned, too, that no one nation can solve its problems by itself. International co-operation in the economic field is . . . the opposite of economic nationalism by which each nation seeks to live unto itself ”. In a broadcast to the American people, Mr. Hull made more specific references to the steps necessary for the restoration of international trade after the war. He said : “ Production cannot go forward without arrangements to provide investment capital. Trade cannot be conducted without stable currencies in which payments can be promised and made. Trade cannot develop unless excessive barriers in the form of tariffs, preferences, quotas, exchange controls, monopolies and subsidies and others, are reduced or eliminated ”.

The economic experts of the United Nations are unanimous in advocating an expanding economy and the lifting of trade restrictions which result in a diversion of trade from its natural channels. Reference has already been made to the “ Keynes ” Plan which mentioned “ the difficulties and complications of a large number of bilateral arrangements ” and recommends an international clearing system “ so that blocked balances and bilateral clearings are unnecessary ”, and the “ White ” Plan which pointed out that a Stabilisation Fund should be established “ to help eliminate bilateral exchange clearing arrangements, multiple currency devices, and discriminating foreign exchange practices ”. In “ The United States in the World Economy ”, an analysis of the international transactions of the United States during the inter-war period, published by the U.S. Department of Commerce in 1943, bilateral arrangements, “ swapping ” and trade-balancing between countries are referred to in these terms : “ The disadvantages of such trading mechanisms as compared with open multilateral trade have been emphasised many times ”. An American view of great interest is expressed in *Britain's Post-war Trade and World Economy*, published by the Foreign Policy Association. After an analysis of Great Britain's post-war export problem it concludes : “ All these matters obviously involve American as well as British interests. No one in Britain or this country expects that vital American interests will be sacrificed to solve Britain's post-war problems. But it may be to the national advantage for the United States to adopt policies which, over the short-run, appear to involve sacrifices but, in the long-

run, will be of benefit to the nation as a whole. *To force Britain—the world's greatest importing nation—into a position where it must adopt a bilateral trade policy to survive would not be in either the political or economic interests of this country*".

It might be added that it would not be in the economic interests of any other country in the world either, and Great Britain is well aware of the fact. These considered views, coming from the economists of the world's greatest exporting nation, are worth noting by every nation with a flourishing export trade.

Taking the broad view it is in the economic interests of every country, and not only of Great Britain herself, that Great Britain should be prosperous and able to purchase freely in the world's markets. And as a corollary, it is equally important that Great Britain should, through the ordinary channels of multilateral trade, be able to sell freely the products of her industrial machine, in order to pay for those purchases.

Moreover, Great Britain must sell an amount of goods roughly between 50 per cent and 75 per cent greater by value at 1938 prices if she is to be able to buy as much in the world's markets in the post-war years as she did in, say, 1938. This, as we have seen, is due to the loss of dividends brought about by war-time disinvestment, and the necessity for liquidating sterling balances built up in Great Britain on account of war supplies.

Will Great Britain be able to expand production sufficiently to play a leading part in the expanding economy of the post-war world? Will she be able to produce sufficient goods and provide enough in services to exchange for the raw materials, food, semi-manufactured and manufactured goods that other countries will be anxious to sell her?

Great Britain's Post-War Economic Strength

This Chapter discusses the question, so important not only to Great Britain but to all those countries which look to her as a purchaser, of Great Britain's power to increase the value of her pre-war exports, in order to compensate for her reduced income from overseas investments. It emerges fully that there is reason to expect a vigorous post-war expansion in all those fields in which Great Britain has traditionally specialised, together with the establishment of many new types of industry. The war has shown in striking fashion the vigour and adaptability of Great Britain's industrial machine, and has proved that the resource and inventiveness of her people are undiminished.

The part Great Britain can play in the post-war world economy will be decided by her economic strength. And it would appear, from the facts printed in this book, that one of the most valuable and effective contributions to the restoration of international trade and the revival of world prosperity is likely to be made by a strong and prosperous Great Britain. How will Great Britain be equipped to face the problems of the post-war world?

We have seen that Great Britain is certain to suffer a considerable reduction in her "invisible exports", and that to buy freely in the world market she must be able to supply a far greater volume, in comparison with pre-war years, of the capital and consumer goods the world will need. After the long struggle, how will the industrial machine be running, and how smoothly can it be switched over from war to peace-time production?

Economists will readily agree that the ability to wage total war is a test—some might say the supreme test—of the strength of a nation's economic resources and the efficiency and flexibility of its industrial machine.

A nation's industrial achievements behind the fighting fronts can—in the last analysis do—decide the issue of battles that are now fought with some of the most elaborate mechanical equipment and most delicate scientific devices that have ever been made for any purpose.

Britain's early land battles in the second world war were lost. Yet the courage and fighting qualities of British soldiers have never been in question. They went down before mechanised armies, with weapons in their hands that were pitifully inadequate—both in design and numbers—for the forces they were called upon to meet.

In the air, it is true, British pilots more than held their own in the Battle of Britain ; at sea Britain's Navy proved equal to the stupendous task it had to face after the fall of France ; but for land warfare after 1940 whole armies had to be completely re-equipped with weapons which, in the words of the Minister of Production “ did not exist before the war except in the imagination of their inventors ”. Yet, by April of 1943, one-third of Great Britain's total weapon production consisted of equipment that had not gone on to the drawing board until after the outbreak of war.

After the defeats of 1940 there were only 200 light tanks armed with machine-guns and 50 infantry tanks left in Britain. Yet within two years a reserve of over 12,000 modern tanks existed in the country, and in addition large numbers had been sent to Russia and to the British Army in North Africa. In 1942, tanks, armoured trucks and fighting vehicles were streaming from British factories at the rate of 257,000 a year.

From the beginning of the war to the middle of 1944, Great Britain had produced nearly 100,000 tanks, armoured cars and carriers, and almost 1,000,000 wheeled vehicles of unarmoured types.

In the Battle of Britain, British machines were rarely able to fight at odds of better than four to one ; but by the end of 1943 Great Britain alone was building more aircraft than Germany. Over 100,000 aircraft, including 10,000 heavy bombers and 38,000 fighters, had been built by the middle of 1944.

By September of 1942, British workers had made good all the losses of capital ships, aircraft carriers, cruisers and destroyers sustained by the Royal Navy in two and a quarter years of sea warfare. Naval vessels constructed up to the middle of 1944 included 722 major warships with a total of 1,333,961 standard displacement tons. In addition, British shipyards had turned out 6,750,000 deadweight tons of new merchant ships.

Many factories have been built and tooled up since 1940. So great has been the call on Great Britain's labour power that factories have even been laid out and new processes have been devised so that “ green ” labour and women could be rapidly trained and employed.

How have these remarkable objectives been achieved, and what bearing have they on Great Britain's post-war industrial production ?

They point to an industrial machine that has developed, under the impact of war, an

unusual degree of flexibility and adaptability. Even industries such as shipbuilding and steel-making, with long-established craft traditions, have revolutionised methods and improved processes in order to meet production schedules that would have been dismissed in peace time as "impossible".

The sociologist may think it a melancholy reflection that war is a great forcing-house of technological development. And though it can be argued that "pure" research—if such a term can be used—suffers an interruption through a long concentration on war problems, it is certainly true that the industrial chemist and the scientist make many war-time discoveries that have important peace-time applications. War, too, places a new emphasis on economic planning, industrial rationalisation, modern capital equipment and managerial efficiency. Finally, the very high degree of co-operation between labour and management that is called for by long working hours and the waiving of trade union rights, and better technical training of the industrial worker, results in a high level of production over the whole field of industry. All these are factors which have had the effect of raising the productive capacity of Great Britain's industrial machine—and that increase in productivity will be reflected in Great Britain's economic and industrial strength in the post-war years.

Limitation of space makes it difficult to give specific examples of these industrial advances achieved under pressure of war-time demands. Here, however, is some evidence that Great Britain has emerged from the struggle with her sinews of industry strengthened and her economic muscles braced to meet the demands of the post-war world.

First in importance, perhaps, is the fact that Great Britain set up a kind of Economic General Staff to act as a central planning organisation to direct the total national effort and to decide labour and raw material priorities as between the three fighting Services and civilian requirements. This joint War Production Staff, as it was called, consisted of representatives of the Navy, Army and Air Force and members of the Ministry of Production. It was their function to gear industrial production to the war strategy. Thus, early in 1942, to meet the threat of an intensive U-boat offensive, a higher allocation of raw material was given to shipbuilding than to tanks, which enjoyed priority in 1941, and to aircraft which had priority in 1940. This is typical of the kind of planning decisions made at a high level in war time that may well foreshadow a far greater integration of peace-time industries, and a better alignment of peace-time raw material and labour resources with the needs of the national economy.

The steel industry provides an interesting example of rationalisation, the benefits of which are not likely to be lost in peace time. Before the war there were something like 2,000 different grades of alloy steel made in Great Britain. In view of the tremendous increase in the demands for specially hardened steel—by 1943 demand was three times as great as in 1937, a peak year for British steel output—it was necessary to exercise the strictest economy in the use of all hardening elements. By a painstaking and exhaustive overhaul of specifications, the number of grades was reduced from over 2,000 to 58 major categories. Designers and users of steel were also urged, in the words

of the official order, "to consider most carefully the combination of properties, i.e. strength, ductility and notch toughness in making their selection of steel".

From the steel industry, too, comes an example of new needs leading to the development of a new process that is likely to represent a considerable advance in steel technology. To meet the demand for steel bomb castings when the R.A.F. bombing offensive was launched, a great British factory was erected costing over £1,500,000. Here, for the first time in the history of the industry, steel castings were manufactured on a flow production basis. Steel chemists and foundry experts, familiar with casting work, will appreciate that great technical difficulties had to be overcome before the process could be operated successfully. It is worth noting, too, as a commentary on the skill and ingenuity of British steel chemists and production experts, that whereas castings of the nature required are usually made from 50 per cent haematite ore and 50 per cent selected steel scrap, the castings at the factory are made from 100 per cent steel scrap. An entirely new method of pre-heating the metal in a rotary furnace had to be developed before the charge of scrap would yield steel of the requisite quality for casting. Improvements in the capital equipment of many industries have been carried out to secure the greatly increased production demanded under stress of war. In the ship-building industry, for instance, development schemes in hand or authorised for British shipyards are estimated to cost £10,000,000. Improvements include automatic welding plants, new and heavier cranes, better machine tools and redesigned shipyard layouts. Prefabrication has been introduced on an extensive scale throughout the industry. In these modernised yards, new types of fast cargo ships are being built which will add to the resources of Britain's Mercantile Marine. One such type, with a deadweight capacity of 12,000 tons, can maintain 15 knots.

It may be argued, however, that obsolescence and deterioration of capital equipment—much of which, of course, could not be renewed while the full productive resources of the country were employed on essential war requirements—will prove a handicap during the transition from a war to a peace-time economy. Against this must be set the fact that in the very act of renewing capital equipment on a large scale in the immediate post-war years it will be possible to install the most up-to-date plant and even to relocate industry where it may be necessary in the interest of efficiency. It is interesting to recall that Professor Bowley, the distinguished British statistician, writing on the speed at which physical reparation of capital equipment was completed after the first world war, said: "In about two years' time the physical destruction of capital was repaired, and the equipment as a whole was perhaps superior to that in 1914 in the United States, the United Kingdom, France and Belgium". There seems little doubt that in post-war Great Britain, given the necessary sacrifices of consumption goods by the population, the replacement of capital equipment will take place at least as quickly. In certain industries improvements have already been effected. For there has been a concentration of capital equipment and machinery during the war involving the weeding-out of the less economic units.

Although, as has been earlier pointed out in this book, coal, with which Great Britain is so richly endowed, has declined relatively in importance as a source of energy, it is acquiring a new significance as a basis for synthetic chemicals, plastics and other materials. Great Britain has for many years carefully studied the possibilities of the transformation in the use of coal : she maintains the most up-to-date research facilities. It was recently stated (by Mr. J. G. Bennett, Director of the British Coal Utilisation Research Association) that when security permitted publication of all the results of British research into the uses of coal, it would be found that in this respect Great Britain was ahead of all other countries.

The co-operation between labour and management has been brought to a very high level by the setting up of Production Committees in all large factories. These committees act as a channel through which the suggestions of the man at the bench can reach the ears of the manager. In the same way, the difficulties of the management can be explained to the men ; it is rare that co-operation does not follow as soon as the men are taken into the confidence of the management. Here is an extension of the democratic principle to a field where, in the past, it can be frankly admitted that it has been too often lacking. In some ways the Production Committee can be regarded as a modern mechanism for securing those friendly loyal relationships between management and men that so often characterised the great family businesses of the nineteenth century in Britain. It will be remembered that the engineering traditions of industrial Britain were forged by the great mechanics—the men who rose from the bench to the direction of huge factories.

There has always been a wealth of practical common sense and mechanical skill among the rank and file of the British industrial workers. The Production Committee system, or something growing out of it in peace time, will tap that valuable reservoir. In the engineering trade, over 2,000 firms employing a total of 2,000,000 workers set up Production Committees. It was a vigorous war-time growth and it is extending rapidly to even the smallest plants and businesses.

Side by side with the Production Committee must be put an increase in welfare schemes for the worker. The works canteen, though by no means an innovation, can now be found in even the smallest factory. On premises employing 250 persons or over, 10,400 canteens were installed. It is certain that this improvement, adding to the comfort and health, and therefore the efficiency of the worker, will be retained.

The demand for skilled industrial workers has led to a great increase in facilities for technical training. Twenty-six Government training centres and over 150 Technical Colleges and Industrial Training Establishments had, by March 1943, trained over 250,000 persons for engineering work. In many categories a high degree of skill was necessary to satisfy the passing-out tests. The Government is well aware of the need for technical training in the post-war world—and is planning now for further increases of such facilities. Mr. Butler, President of the Board of Education, introducing the new Education Bill in the House of Commons, said : “ When the war is over we shall

depend more than anything else on the skill of our people. I therefore welcome this opportunity to say that we must concentrate upon producing the most highly skilled technologists the world can show”.

The readiness of industry to make every possible use of scientific research has been demonstrated by the number of new British weapons that have been developed over the war years. As an example, it is well known that the pioneer work on radiolocation—perhaps the greatest single advance in the technique of warfare—owes much to the work of British scientists. Jet-propulsion for aircraft has developed to the stage of successful practical application at British research stations. British researches have led to advances in the industrial technique of many industries.

It is a settled policy of the Government to make funds available for, and to encourage in every way, the development of scientific research. Mr. Attlee, then Lord President of the Council, stated: “In the preparation of plans for the organisation after the war of scientific research in the national interest, special consideration will be given to improving the existing ways in which the results of scientific research can best be made known and applied to the development of industry and the Fighting Services”.

The British Government went a step further in introducing, in April 1944, special taxation concessions designed to encourage and assist research expenditure by business concerns. The remarks of Sir John Anderson, Chancellor of the Exchequer, in announcing these new measures, are worth quoting: “. . . we ought not to depreciate our own efforts in the field of research. When the time comes, there will indeed be a remarkable story to tell of industrial and applied scientific developments in this war. In the application of research to the problems set to the scientists, we have shown ourselves at least equal to any other belligerent. Industry has responded to the compelling urgency of war, and a magnificent team of research workers has met that urgency. . . . I think that the industrial research worker should be encouraged to regard himself not only as serving the organisation which pays him, but as contributing to the sum of available knowledge, and enlarging the horizons of the material world. We must provide our research workers not only with the physical apparatus which supplies their needs, but with the motive which evokes their latent powers”.

An interesting commentary on the war-time improvements in British industrial technique is provided by a report of the Foreign Policy Association, published in the United States. Examining the post-war prospects for British exports, the writer says: “Expansion is expected in the field of engines and engineering supplies, rayon textiles, plastics and chemicals, and even more in industrial specialities such as precision machinery, electrical and radio apparatus and optical goods—all products in which the labour content is high. In the production of these goods, the British feel the efficiency gained during the war will stand them in good stead. They believe the nation that produces the ‘Spitfire’ at one-third the production cost of a comparable plane in the United States should have no difficulty in competing on the world’s markets”.

The British Coalition Government's White Paper on Post-War Employment Policy is, for the most part, outside our present scope ; but it is interesting that some of its chief points underline the argument of the present work. The White Paper maintains that the prosperity of Great Britain, after the war, will depend, more than ever before, on the volume of her exports : that since exports cannot expand without prosperity abroad, the Government are anxious to co-operate with other nations to re-establish general economic stability and to pave the way for the progressive expansion of trade : and that exports cannot expand without initiative, flexibility and resilience at home. Export industry will be given high priority in the allocation of raw materials, labour and factory spaces. The Government will also use every means possible to encourage industrial efficiency.

Is it possible to calculate the likely increase in the productivity of Great Britain's industry in the post-war period ? One calculation, based on a possible net increase of the national income, has been attempted by a leading economist. Allowance has been made for the decreases in income due to reduction of home investment during the war, and the loss of return in "invisible exports" consequent upon the liquidation of overseas assets and possible loss of shipping income. The results of this calculation are given in Table 23.

Table 23 ESTIMATED NET INCREASE OF POST-WAR NATIONAL INCOME COMPARED WITH 1938
(Post-War Income Changes calculated at 1938 Prices)

INCREASES OF INCOME RESULTING FROM	£ per annum
Greater productivity of labour per man-hour (due to all factors making for efficiency such as new technological processes, rationalisation, improved managerial technique, better technical training, higher level of management—labour co-operation, etc.)	+575,000,000
Smaller volume of unemployment (not more than 10 per cent of insured population)	+150,000,000
Increase in occupied population (based partly on assumption that not all women who have entered industry during the war will leave it)	+175,000,000
Total ..	+900,000,000
DECREASES OF INCOME RESULTING FROM	£ per annum
Reduction in home investment during war	-150,000,000
Loss of "Invisible Exports"—	
(a) Liquidation of foreign investment during the war	-100,000,000
(b) Loss of shipping income due to reduction of available shipping in tonnage	- 50,000,000
Total ..	-300,000,000

As the net national income in 1938 was officially estimated at £4,575,000,000, this gives a post-war income at 1938 prices of £5,195,000,000, a real rise of 13 per cent.

In a highly industrialised country such as Great Britain, after making allowance for income from overseas investments and services sold abroad, and making the necessary adjustments for change in the purchasing power of money, a comparison of the national income in different years gives a rough measure of the level of industrial productivity in these years. Thus, the calculation given above indicates that the general rise in productivity of Great Britain's industrial machine in post-war years will more than compensate for economic losses sustained during the war. In other words, Great Britain should be well able to produce the consumer goods to satisfy internal demands, subject to the limitation on consumption made necessary by the replacement of worn out or obsolescent capital equipment.

In addition, the more efficient and more flexible industrial machine will also be well adapted to produce the consumer and capital goods which will be in so much demand by other countries after the war. A general rise in productivity of the order indicated should allow her, while meeting all internal demands, *to produce those goods for export in sufficient quantity to close the gap in her balance of payments opened by the loss of income during the war period.*

In the words of Mr. Churchill, the improvements brought about by war-time changes in Britain's industrial machine, and by the experience gained in managing a planned war-time economy should "increase her power to serve other countries with the goods they want".

Does more Industrialisation mean less International Trade?

Technological progress during the war has been very great. Many countries have advanced rapidly along the road of industrialisation. In some countries self-sufficient economic systems have appeared to offer attractive results. The question naturally arises as to whether the post-war world will call for less rather than more international trade. After a careful analysis, it would appear that the answer must unhesitatingly be : "No." Among the most important considerations is the fact—proved time and again by economic history—that a greater degree of industrialisation in a country, with a consequent higher standard of living, leads to an increased demand for trade outside the frontiers of that country. In the following Chapter examples are quoted of this process, and the various facts which bear on this extremely important issue are marshalled in detail.

Some are asking to what extent the economic machinery of pre-war days needs to be rebuilt, and whether war-time advances in technology and the success of apparently self-sufficient war economies have not proved that less, and not more, international trade may be the solution of the world's post-war trading problems.

To that question there is an easy answer. The machine civilisation of the world to-day depends on the international division of labour. Not even in the U.S.S.R. has technological progress, great as it has been during the war, reached the stage where large areas of the world can remain self-sufficient and still maintain and improve the material standards of life expected by the inhabitants under peace-time conditions. Many raw materials, vital to an industrial economy, are concentrated in remote parts of the world, often far from the highly organised industrial centres that depend upon them. These raw materials, and the labour skill necessary to process them, can only be brought together through an exchange of real wealth between one region and another. Nothing that has happened during the war has decreased the need for these regional interchanges. Indeed, the increasing degree of skill needed in advanced industries makes

a sensible division of labour more important than ever if the standard of life in all countries is to be raised to the level where "freedom from want" can become a reality. Of course, some substitute materials have proved successful and have come to stay. Experience, however, shows that substitute materials do not do away with the need for raw materials. They are in themselves really new materials. But technological progress has been a feature of the world's economy over the last hundred years—and so far such progress has not in the least diminished the necessity for international trading exchanges. The industrialisation of backward areas still takes years of steady development. And even when countries have moved from a mainly agricultural or raw material to a mainly industrial economy, this does not mean that they have become self-sufficient—able to provide themselves with all the capital goods and consumer goods necessary to a higher standard of living. The most effective use of a country's available labour power, material reserves and capital equipment can only be decided in relation to total economy.

If it is "cheaper" (i.e. more economical in terms of labour power, use of available capital equipment and material resources) to obtain goods by exchange rather than to throw the total internal economy out of balance in an effort to produce them at home, and if the social welfare and ideals of this country warrant the procuring of them by exchange, then there is a good case for making that exchange. This explains why increased industrialisation has led in the past to more, not less, trade between countries. An increase in industrialisation—in other words, greater use of machine power—leads to an increase in a country's real wealth. It can also increase demand for raw materials that may not be found within that country's borders—raw materials that are needed to keep the machines busy. It certainly has never yet meant that *everything* of a manufactured nature that was previously brought from abroad can be made profitably in the country with its new industrial equipment. Industrialisation takes place in stages; a country moving towards a machine economy makes increasing demands on more advanced countries—particularly for capital goods. While a country's trade is often influenced by considerations of a non-economic character—the desire for security for instance—it is true nevertheless that the increased industrialisation of a country has generally led to an increasing volume of exchanges with other countries; a greater participation in the international division of labour in fact.

Although technological improvements undoubtedly will alter the demand for certain raw materials and increase productivity in areas now undeveloped, it is in the highest degree improbable that any country will ever be able to provide an entire range of manufactured goods more profitably by home production than by overseas exchange. Uneven distribution of vital mineral and raw material resources, variation in the fertility of land will remain and, despite any technological advances that we can envisage, will continue to lead a demand for international exchange. Location and costs of power and transport are also vital. Moreover, the increasing developments of world industry with a consequently increasing industrial specialisation lead to an increasing call for exchange at different levels of the manufacturing process.

The argument for less international trade, based on the technological changes which tend to remove differences of productive efficiency, does not give full weight to the degree of labour skill necessary to an advanced technology nor to the increasing number of stages at which that labour still can be applied. It is true to say that improved machine tools make it possible for precision operations to be carried out by relatively unskilled labour. And to that extent it is true that most countries can produce many of the consumer goods, and some of the capital goods, that are needed for a high material standard of living. But the machine tools do not design, build and repair themselves; the organisation of mass production is the work of men; the control of technical processes and their improvement begin in the laboratory and the research station.

The application of scientific methods to industry and agriculture demands a higher level of skill on the part of an ever larger section of the world's population. Skilled chemists, designers, research workers, executives, managers, technicians and mechanics at the highest levels are usually the product of an industrialisation that has been the tradition of generations.

It is in the stable, closely integrated societies with a long industrial tradition that the machine has been developed. It is from such societies, and the U.S.S.R., that improved technique is most likely to come for many years—certainly for as long as it is possible to see or plan ahead. The machine, the essential tool of man seeking an improved material standard of life, has been the outcome of the division of labour in these societies. And in turn its development, and the improvement of machine technique, call for still greater specialisation and still greater division of labour within them.

This increased division of labour is likely to take place internationally, as well. Looked at in its broadest light the mainly industrial countries have been able to reach a sensible balance in their internal economy through an exchange of manufactured goods for the surplus food of the mainly agricultural countries. The exchange was mutually beneficial or it would never have been made. Yet international division of labour takes place, not only between the industrial countries and the agricultural countries, but between countries that have developed economies based on the fullest application of machine power. The evidence of the last seventy years—roughly the period over which the existing multilateral trading and international financial systems have grown up—proves that there is a natural tendency for trade between countries to increase as their degree of industrialisation increases. The ability of a country to make its own consumer and capital goods increases rather than decreases its necessity to trade with other countries also making consumer and capital goods. In normal times to-day, by far the greatest volume of such exchanges of manufactured goods (the products of an advanced technology) take place between the industrial countries themselves, rather than between industrial countries and agricultural countries.

This fact is strikingly brought out by an analysis of trade between the highly industrialised and the mainly agricultural countries of Europe. For the purposes of this analysis, Europe can be divided broadly into two groups. Group 1 includes the ten highly

industrialised countries ; Group 2 a number of others which depend upon a relatively undeveloped industrial, or a mainly agricultural, economy. (See Table 24.)

Table 24 EUROPEAN COUNTRIES ; DIVISION BETWEEN HIGHLY INDUSTRIALISED COUNTRIES AND OTHERS*

GROUP I	GROUP II	
<i>Highly Industrialised</i>	<i>Relatively Undeveloped Industrial, or Mainly Agricultural, Economy</i>	
United Kingdom Germany France Belgium Netherlands Italy Sweden Switzerland Czechoslovakia Austria	Denmark Spain Norway Poland Ireland Hungary Finland Roumania Yugoslavia Greece	Portugal Turkey Bulgaria Latvia Lithuania Estonia Iceland Albania Various minor areas

* Classification as given in "Europe's Trade," issued by League of Nations at Geneva, 1941.

The intra-trade between the highly industrialised countries in Group I (representing a population of 247,000,000) and the trade between Group I and the other European countries less developed industrially (representing a population of 158,000,000) is set out in Table 25. In case it should be thought that the findings of this analysis are likely to be changed in any way by broadening its scope, it should be noted that the amount of trade covered in it embraces 51 per cent of the total amount of world trade by value.

Table 25 ANALYSIS OF TRADE OF TWO GROUPS OF EUROPEAN COUNTRIES IN 1935 (INTRA-TRADE AND TRADE BETWEEN THE GROUPS)

GROUP I			
HIGHLY INDUSTRIALISED (as classified in Table 24)		Exports	Imports
Population .. 247,000,000	Trade among themselves	44%	34%
Total Trade of Group I = 100%	Trade with Group II	16%	15%
	Trade with rest of world	40%	51%
		100%	100%
GROUP II			
RELATIVELY UNDEVELOPED (as classified in Table 24)		Exports	Imports
Population .. 158,000,000	Trade among themselves	10%	9%
Total Trade of Group II = 100%	Trade with Group I	75%	65%
	Trade with rest of world	15%	26%
		100%	100%

Thus the ten most highly industrialised countries of Europe traded among themselves to a far greater extent than with the eighteen or so less industrialised countries. For instance, they consigned 44 per cent of their total exports to each other—and only 16 per cent to agricultural Europe.

On the other hand, the agricultural countries consigned only 10 per cent of their export to each other, but sent 75 per cent into the highly industrialised countries.

The 44 per cent of exports exchanged between the ten highly industrialised countries were mostly manufactured goods. It is clear that a higher degree of industrialism means an increase in the desirability for international exchanges—and exchanges of the products of the machine as well as of the fields. Again, the more highly industrialised a country the better market it becomes for all goods—manufactures, raw materials and foodstuffs—because of its higher standard of living. Thus the ten most highly industrialised countries of Europe with a total population of 247,000,000 absorbed 48 per cent of the total exports of the rest of the world. The eighteen or so less developed countries, with a total population of 158,000,000 (considerably more than half as much) absorbed only 9 per cent of the total exports of the rest of the world.

An analysis of the trade of two typical industrial countries in 1938, Sweden and Switzerland, shows how the bulk of their exports were taken, in each case, by the nine other highly industrialised countries in Europe. The greater part of their imports, too, were derived from these countries. (See Table 26.)

Table 26 DIRECTION OF TRADE OF TWO TYPICAL INDUSTRIAL COUNTRIES IN 1938

EXPORTS TO AND IMPORTS FROM	SWEDEN		SWITZERLAND	
	<i>Exports</i> (Total value £94,450,000)	<i>Imports</i> (Total value £106,000,000)	<i>Exports</i> (Total value £61,400,000)	<i>Imports</i> (Total value £74,000,000)
The Nine Other Highly Industrialised European Countries	57%	60%	60%	65%
Rest of Europe (18 less industrialised and mainly agricultural countries)	22%	16%	11%	9%
Rest of World	21%	24%	29%	26%
	100%	100%	100%	100%

Thus, the trade of Sweden and Switzerland shows the same characteristics as the trade of the group of highly industrialised countries to which they belong. The greater the degree of industrialisation of a country, the higher the general standard of its labour skill, the more developed its capital equipment, and the better, therefore, its standard of living, the more advantage it appears to find from an international interchange of goods, raw material and services.

The one exception to this general rule is the U.S.S.R.—a vast area, rich in raw material resources, rapidly developing reserves of technical skill and to a large extent self-sufficient. But signs are not wanting that the leaders of the U.S.S.R., having a declared policy of political collaboration with the other members of the United Nations, are also prepared for a greater degree of economic co-operation in the post-war world.

If we now consider the broad distribution of the world's trade in relation to its total area and total population, we shall see how great is the concentration of trade in Europe—the most highly industrialised part of the world's surface. (See Table 27.)

Table 27 PERCENTAGE DISTRIBUTION OF FOREIGN TRADE, POPULATION AND AREA OF THE WORLD

REGION	TRADE	POPULATION	AREA
Europe (excluding U.S.S.R.)	52%	19%	4%
Asia (excluding U.S.S.R.)	14%	53%	20%
North America	15%	7%	15%
Latin America	9%	5.5%	16%
Africa	6%	7%	23%
Oceania	3%	0.5%	6%
U.S.S.R.	1%	8%	16%
	100%	100%	100%

Thus, the figures show that Europe (including the highly industrialised and the less advanced countries—Groups 1 and 2, Table 25) accounts for 52 per cent of total world trade, and this trade is concentrated in the hands of only 19 per cent of the world's population and takes place over only 4 per cent of the world's area. These figures are a measure of the task implied in raising the standards of life of all peoples through greater industrialisation—and a measure, too, of the opportunities for the expansion of world trade as industrialisation spreads. Even within the 19 per cent of the world's population represented by Europe (excluding the U.S.S.R.) there is a considerable sector—embracing the less developed countries of Group 2 above—which must inevitably move towards greater industrialisation and will, for many years to come, be growing purchasers of capital and consumer goods in the world's markets. Broadly speaking it is true to say of the population of the world that the benefits of industrialisation and the application of machine power are still confined to one-fifth of the total. Four-fifths have hardly taken more than the first steps along the path that leads to a higher material standard of living.

It is reasonable to suppose, then, that advancing technology will continue to call for an international division of labour on an increasing scale if the post-war world is to make the fullest use of its available material resources, labour power and technical skill. And the speed with which the world moves towards "freedom from want" for all people will depend upon the way in which this necessary division of labour is facilitated by international trade.

The British Commonwealth and World Trade

Could the countries of the British Commonwealth and Empire ever be fitted into a powerful and self-sufficient economic bloc? Did not such unification—even to a partial extent—exist in pre-war days? These are questions which have occurred to foreign observers of Britain, and they have a natural place in any book purporting to deal with the future restoration of world trade. In this Chapter the facts are reviewed and the conclusion reached that the British Empire could not be isolated, even if its leaders so desired, from the effects of a fluctuating world trade. In pre-war days, exports and imports of the British Commonwealth rose and fell remarkably consistently with world imports and exports. A strong and prosperous Commonwealth can indeed act as a stabilising influence in the world economy.

The picture of Great Britain as the world's greatest importer is often set against the background of a powerful, self-sufficient Empire enjoying exclusive trading advantages and able to isolate itself as an economic unit from the rest of the world. Great Britain, it is suggested, can wield political influence in order to exact favourable trading agreements from the Commonwealth countries and her Colonies. From the conception of a powerful, self-sufficient economic unit, it is but one step to the picture of a series of interlocking, exclusive trading agreements that have succeeded in maintaining British and Commonwealth prosperity in a world of falling values and general trade depression. But nowhere is it more evident than in a consideration of trade figures that the problem of the prosperity of all great peoples and empires is an international problem. The volume of multilateral world trade is a pointer to the prosperity of all peoples—and certainly to that of the peoples of the British Commonwealth. Thus, the trade of the Commonwealth has risen and fallen with the rise and fall of world trade over the past twenty years. And though it is true that certain areas within the Commonwealth have

made more rapid economic progress than others, the trade of Great Britain and the Commonwealth and Empire countries combined has remained a remarkably constant proportion of total world trade. The fact is that the British Commonwealth is in no sense a self-sufficient economic unit, and could not be isolated, even if its leaders so desired, from the effects of a fluctuating world trade. The figures in Table 28 show how exports and imports of the British Commonwealth rose and fell with world exports and imports in the pre-war period.

Table 28 BRITISH COMMONWEALTH TRADE AS A PROPORTION OF FLUCTUATING WORLD TRADE

EXPORTS (In terms of 1938 pounds sterling)			
	World	British Commonwealth	British Commonwealth Exports as Percentage of Total
1928	11,300,000,000	3,075,000,000	27.2
1935	3,892,000,000	1,075,000,000	27.6
1937	5,200,000,000	1,455,000,000	27.9
1938	4,475,000,000	1,199,000,000	26.7
IMPORTS (In terms of 1938 pounds sterling)			
	World	British Commonwealth	British Commonwealth Imports as Percentage of Total
1928	12,300,000,000	3,675,000,000	29.8
1935	4,310,000,000	1,375,000,000	31.9
1937	5,765,000,000	1,872,000,000	32.4
1938	5,028,000,000	1,647,000,000	32.8

Thus, there have been great fluctuations in the value of world trade over the period between the height of world prosperity in 1928 and the immediate pre-war period. And because the trade of Great Britain and the British Commonwealth is an integral part of world trade, these fluctuations are almost exactly reproduced in the figures of the Commonwealth considered as one great economic unit.

The complete answer to those who think it possible to maintain prosperity within the Commonwealth apart from general world prosperity is found in the figures showing the dependence of Great Britain and Commonwealth countries on foreign markets. Any attempt at autarky within the Commonwealth considered as one economic system would be disastrous. Indeed, Great Britain, the Commonwealth countries and the colonial territories find a far larger market outside the "family circle" than they find within it. In the same way the Commonwealth as a whole draws largely upon the rest of the world for all categories of goods, raw materials and services to supplement the economies of many of its main regions. Table 29 shows that a far greater volume

of trade takes place between the British Commonwealth countries and the rest of the world than among the Commonwealth countries themselves.

Table 29 BRITISH COMMONWEALTH AND WORLD TRADE, 1929—38

<i>Year</i>	<i>Inter-trade among Commonwealth Countries (including Britain)</i>	<i>Trade of British Commonwealth with Rest of World</i>	<i>Year</i>	<i>Inter-trade among Commonwealth Countries (including Britain)</i>	<i>Trade of British Commonwealth with Rest of World</i>
1929	25.7%	74.3%	1934	29.7%	70.3%
1930	26.1%	73.9%	1935	30.4%	69.6%
1931	25.7%	74.3%	1936	30.6%	69.5%
1932	29.5%	70.5%	1937	31.5%	68.5%
1933	29.5%	70.9%	1938	33.2%	66.8%

It is clear that the trade of the British Commonwealth cannot be kept “in the family circle”.

It is true that in the Ottawa Agreement of 1932 certain tariffs and quota agreements were arranged that favoured the flow of trade between Great Britain and many territories of the Commonwealth. But it is important to remember that this “Imperial preference” was reluctantly adopted in the face of growing restrictions and tariffs throughout the world. The Ottawa Agreement could fairly be called a “defensive” tariff policy and its origin can be traced—as can those of many countries throughout the world—to the Hawley-Smoot tariffs introduced in the United States in 1930. Britain herself imposed import duties in 1932—a departure from her historic free trade policy. Here is clear evidence of the vicious circle of rising tariff barriers that always results from the attempt to deal with the problems of international trade on a narrow, national basis.

It can be seen that from the time of the Ottawa Agreement inter-trade between Commonwealth countries did increase up to 1938. Unfortunately without an expanding economy it could do so only at the expense of the Commonwealth’s trade with the rest of the world. Taking a long-term view no advantage can ultimately be gained by a simple diversion of trade within the existing system. Particularly is this true in the case of Great Britain and many Commonwealth countries that depend so largely on foreign markets for the sale of exports. The British Commonwealth enters the multilateral network of world trade at so many points that its own prosperity is necessarily bound up with world prosperity. It is significant that only two years after the signing of the Ottawa Agreement the Hawley-Smoot tariffs were modified in effect by the passing of the Reciprocal Tariff Agreement Act of May 1934 in the United States. The Ottawa Agreement itself was modified in 1937 and by the end of 1938 it would be true to say that new trade agreements signed between the United States, Canada and Great Britain represented yet another step away from the Ottawa policy.

Even if it is conceded that the British Commonwealth, from the economic point of view, can only exist within the framework of a world system, it is sometimes argued that Great Britain holds a specially favoured position within the Commonwealth itself. And it is suggested that by virtue of this position, Great Britain is able to maintain a prosperous overseas trade even in times of world depression. The facts are that Great Britain has always imported more from the rest of the world than from Commonwealth countries, and that she finds as great a market for her exports outside the Commonwealth and Empire countries as within them. Table 30 shows how Great Britain's exports and imports are shared between Commonwealth and Empire countries and the rest of the world.

Table 30 GREAT BRITAIN'S TRADE WITH THE COMMONWEALTH AND THE REST OF THE WORLD, 1938

IMPORTS		EXPORTS	
<i>From British Commonwealth and Empire Territories</i>	<i>From Rest of World</i>	<i>To British Commonwealth and Empire Territories</i>	<i>To Rest of World</i>
40.4%	59.6%	49.9%	50.1%

An analysis of the trade of British Commonwealth and Empire territories brings out the fact that many of them buy far more from the rest of the world than from Great Britain. Similarly many of them sell more to the rest of the world than to Great Britain (Table 31).

Table 31 TRADE OF BRITISH COMMONWEALTH COUNTRIES WITH GREAT BRITAIN AND REST OF THE WORLD, 1938 or 1938-39

<i>Country</i>	IMPORTS		EXPORTS	
	<i>From Great Britain</i>	<i>From Rest of World</i>	<i>To Great Britain</i>	<i>To Rest of World</i>
Canada	17.5%	82.5%	39.1%	60.9%
Australia	41.6%	58.4%	54.5%	45.5%
South Africa* ..	43.3%	56.7%	38.1%	61.9%
New Zealand	47.8%	52.2%	84.5%	15.5%
India	31.4%	68.6%	34.2%	65.8%
Colonies and Protectorates	26.6%	73.4%	35.4%	64.6%
Mandated Territories .	26.7%	73.3%	37.5%	62.5%

* *Excluding Gold*

The dependence of Great Britain, the Commonwealth countries and the Colonies on foreign markets points to one main conclusion that must inevitably influence policy making in the post-war world. It is that the prosperity of the British Commonwealth is linked with world prosperity. Any measure that can contribute to the prosperity—and therefore the purchasing power—of areas outside the Commonwealth will ultimately be in the economic interests of the Commonwealth.

The British Commonwealth, strongly linked by political ties and economic interests, carries no threat to the economic interests of any other country. Indeed, the very existence of the Commonwealth as a well-knit political unit, able to agree on the broad lines of policy in the post-war world, can act as a stabilising influence in the world economy. The political development of Great Britain and the very growth of the British Commonwealth have been part of the result of, part of the reason for, the growth of the multilateral system of world trade. The economic future of Great Britain and the Commonwealth is bound up with the successful working of that system. Its development, in a form that will bring the benefits of the international division of labour to all alike, is a major objective of the post-war economic planning of the United Nations.

Conclusion : World Trade and International Planning

The restoration and development of international trade would undoubtedly be in the interests of Great Britain. It is maintained that they would be in the interest of most other countries, too, and in this book considerable evidence is presented on behalf of this view. What do the statesmen and economists think ? What lead are they giving in a matter so important, not only to the maintenance of a high standard of living among all peoples, but to the secure preservation of a lasting peace as well ? The concluding Chapter features some of the most important war-time pronouncements, and attempts a general summary of informed opinion.

There is general agreement among the leaders of the United Nations that future planning on an international basis must cover the economic and financial as well as the political fields. "Freedom from want" for all peoples is recognised as essential to a settled peace, and a necessary condition for effective world rebuilding. The Atlantic Charter mentions the problem of world trade, and points to the necessity of producing an economic policy that has as its objective the raising of standards of life of *all* peoples. Articles 4 and 5 read :—

4. "They will endeavour, with due respect for their existing obligations, to further enjoyment by all States, great or small, victor or vanquished, of access, on equal terms, to the trade and to the raw materials of the world which are needed for their economic prosperity."
5. "They desire to bring about the fullest collaboration between all nations in the economic field, with the object of securing for all improved labour standards, economic advancement, and social security."

The generous aspirations of the Atlantic Charter are being given a more specific form, and the prerequisites of a sound, prosperous world economy have been indicated in Article 7 of the Lend-Lease "master agreements" signed by the United States, Great

Britain and many other Allied nations. This Article mentions, as desirable objectives of planning for the restoration of world trade :

1. "The expansion, by appropriate international and domestic measures, of production, employment, and the exchange and consumption of goods, which are the material foundations of the liberty and welfare of all peoples."
2. "The elimination of all forms of discriminatory treatment in international commerce."
3. "The reduction of tariff and other trade barriers."

There is a wide measure of agreement among the world's leading economists on the broad policies which must be followed if the post-war return of world trade is not to suffer the disastrous breakdown that was one of the causes of the growth of economic nationalism in the immediate pre-war years. And there is also agreement that until these economic problems are solved, there can be little hope of enduring peace in the political arena. The setting out of these broad principles can serve as a convenient summing up of the main conclusions reached in this book. In general, economists are agreed that :

1. International trade, like peace, is indivisible. The prosperity of one depends upon the prosperity of all. It is only through an approach to the world's trading problems in a truly international spirit that their solution can be found. Economic nationalism or "self-sufficiency"—a dangerous growth that flourished in Germany, Italy and Japan in the inter-war years—is the sure road to future wars.
2. The needs of all peoples can best be met, and the ultimate raising of the standards of life of all peoples can best be achieved, in an expanding world economy. Restrictions in trade or production alike are a threat to world prosperity. Speaking for Great Britain, Lord Woolton has declared it to be his "considered judgment, based on some practical experience both as a banker and as a man engaged in commerce . . . that an expansionist policy is the right and proper policy for this country to pursue".
3. Industrialisation of backward areas does not operate as a threat to the trade of advanced countries. Rather does it raise the standard of life in these areas and thus increases demand for the capital and consumer goods advanced countries want to sell. We have seen that four-fifths of the population of the world do not yet enjoy the material benefits of a machine civilisation. In the words of the writers of *The United States in the World Economy*, "Beyond the critical necessities of the early post-war years lies a great task of economic development throughout the world in general and especially in areas that hitherto have enjoyed few of the benefits of progress. . . . In the long run the increase in industrialisation and living standards abroad should provide a strong and enduring demand for our producers' goods and also for the wide variety of American-manufactured consumers' goods so attractive to people with rising incomes". What is true of America is true of Britain and all other countries with manufactured goods to export. In their own interests, therefore, the advanced countries must encourage increased industrialisation and a higher standard of living throughout the world.

4. World trade will best answer the needs of all countries if it is possible to restore it on a multilateral basis—and free from the restrictions imposed by bilateral clearing arrangements, high tariffs, quotas and discriminatory trade agreements.

5. The successful working of a multilateral system will depend upon the international currency system that can be evolved to operate with it.

6. The development of backward areas will demand some mechanism of control over international investment so that the world's resources of raw material and labour power can be used for the benefit of all.

Plans to implement these broad principles are now being discussed by the economic experts of the United Nations. It is recognised that the restoration of something like the multilateral system of international trade, which served the world so well in the days of its most rapid advance towards material prosperity, must be a major objective of world reconstruction. But whereas in the past the growth of the multilateral system was largely the result of the interplay of uncontrolled economic forces, the post-war system is likely to be modified by conscious planning.

As a result of the experiences over the last twenty years, and particularly during the war, completely unregulated and unplanned economics are certain to give way to a greater measure of governmental control and planning in most countries. This tendency must inevitably lead to planning on an international scale. Already the signs are clear. The United Nations Monetary and Financial Conference, held at Bretton Woods in July 1944, drew up plans for the establishment of an International Monetary Fund and an International Bank for Reconstruction and Development. These plans are now being submitted to the Governments and peoples of the countries represented at the Conference for their consideration. The former is a scheme to promote exchange stability and to assist the establishment of multilateral payments facilities on current trading transactions. Through the International Bank nations would co-operate to increase the volume of foreign investment for reconstruction and development.

Yet another international organisation designed to promote an expanding world economy is the United Nations Food and Agriculture Organisation. The Interim Commission established by the Hot Springs Conference on Food and Agriculture has drawn up a constitution for this permanent organisation. Its objects will be to increase the average purchasing power of the agricultural populations and to raise general nutritional standards throughout the world.

Is it too much to hope that these developments foreshadow a greater readiness on the part of sovereign powers to surrender some part of their sovereignty in economic fields in the post-war world? Have we, in the words of Mr. Cordell Hull, "learned that no one nation can solve its problems by itself"? Certainly it is true of Great Britain and the British Commonwealth of Nations that, on no higher ground than their own economic self-interests, they are ready for that measure of international co-operation in the post-war world which, to quote Mr. Hull again, "in the economic field is the opposite of economic nationalisation by which each nation seeks to live unto itself".