Howard Cox, "The Evolution of International Business Enterprise", in John, R (ed.) Global Business Strategy, International Thomson Press: London, 1997, pp.9-46.

Introduction

During the latter half of the 1960s, economic analysts became increasingly aware that the primary engines of growth in many modern industries took the form of multinational companies. The ready identification of this now commonplace finding had been rendered less obvious at the time by the prevailing Keynesian economic methodology. Because this placed the focus of analysis upon national economies it had tended to obscure the growth in importance of extra-national entities such as multinational companies. Even within the realm of microeconomic theory, where models of monopoly and oligopoly had been developed to account for an observed increase in the size of firms, this departure from the traditional assumptions of perfect competition represented a response to growing empirical evidence of rising industrial concentration in product markets which were measured in relation to national output and consumption patterns. Yet in Britain at least, by the end of the 1960s many of these very markets were served, and in some cases dominated, by the local manufacturing subsidiaries of firms whose headquarters lay abroad.

Given this observed tendency for economics to adopt nationally-defined categories of analysis, it is perhaps not surprising to discover that much of the early work relating to the operation of multinational corporations characterised them as a quintessentially American form of business enterprise. The studies of Dunning (1958) and Servan-Schreiber (1968), as well as more theoretical work by Hymer (1960) and Kindleberger (1969) all concentrated on the activities of American companies operating abroad. The work of Hymer was especially influential in promoting a new approach towards analysing multinationals. He achieved this reorientation by linking together what he saw as the two essential features of multinationals; oligopolistic firms who controlled and managed operations located abroad. Hymer's crucial insight was to demonstrate that multinationals, by linking together their know-how in production with overseas-based operations, had created a seemingly new type of foreign investment.

Up until this point, international transfers of capital were viewed as financial transactions in which investors sought the best return available for a given level of risk. Such international capital flows were referred to as portfolio investments; a term which indicated that the investors discharged control for the use of their capital to a third party, as for example when purchasing securities issued by a foreign government. According to Hymer, multinationals generated a different form of foreign investment; foreign direct investment (FDI). These firms who engaged in FDI retained direct responsibility for managing their foreign investments, frequently through the creation of subsidiary companies registered abroad, and hence unlike portfolio investors they did not surrender control of their capital. Foreign investment by these companies consisted not simply of financial transfers, but rather involved transfers of a package of production techniques under the firm's operational control. Thus the modern definition of multinationals, as companies who own and manage productive assets in countries other than the one which constitutes their home base, began to permeate the literature of economics. Moreover, the terms "multinational corporation" and "foreign direct investment" began to become treated synonymously, as two labels for the same phenomenon.

By the 1970s, as confidence in Keynesian policies of national demand management began to wane, multinationals came to be viewed as one of the main forces preventing national governments from successfully controlling the performance of their economies. Books such as <u>Global Reach: the power of the multinational corporations</u> by Barnet and Mhller (1974) began to popularise the view that multinationals represented a pernicious element in the world economic system, developing as alternative centres of power to democratically elected governments and acting to reinforce the unequal distribution of wealth between the industrialised and less developed countries. It also began to be recognised that multinationals had a history that predated the Second World War and that Europe, as well as America, had spawned companies that were engaged in FDI.

Early forms of foreign direct investment

Because they transcended national boundaries, no data had ever been systematically collected on the growth of multinationals over time. To help rectify this omission a vast research project was initiated at the Harvard Business School during the 1960s, under the direction of Raymond Vernon, which traced the development of 187 U.S.-based firms (from the Fortune 500 of 1963/4) that controlled six or more foreign manufacturing subsidiaries. To this was subsequently added data on 209 of the most important non-U.S. industrial corporations which, at one time or another, had controlled at least one foreign subsidiary. Altogether, the study collected information on a total of 28,318 foreign subsidiaries and it remains the single most comprehensive statistical account of the growth of multinationals. The main statistical results from the Harvard study were published by Vaupel and Curhan (1974) and a list of the firms covered by the survey is given at the end of this chapter.

The findings of the Harvard study provided a useful guide to the origins of many of the world's most important multinational companies. However, by adopting the methodology of projecting backwards from the present, the study acted to obscure the fact that other, less enduring, forms of FDI had developed during the nineteenth century. More recent research has clearly illustrated that FDI predated multinational corporations. Moreover, the Harvard database was limited to the study of manufacturing subsidiaries and did not include companies whose activities involved, for example, the provision of services. Thus the study captured the development of manufacturing multinationals but excluded many other forms of FDI.

Until quite recently, it was assumed that foreign investments which preceded the rise of multinational companies invariably took the form of portfolio investments. It is certainly the case that, prior to World War One, many foreign governments took advantage of the London capital market to raise the funds they needed for social overhead capital, and that the foreign investors who subscribed to these issues did so without in any way assuming responsibility for their management.

However, a great many companies were created in the U.K. before 1914 whose operations occurred abroad but which were in practice ultimately controlled by directors based in Britain. For example, a study by Houston and Dunning (1976) showed that of the 13,500 enterprises quoted on the London Stock Exchange in 1914, 3,373 operated exclusively or mainly abroad, of which 78 per cent were registered in the U.K. Wilkins (1988) has termed these enterprises "free-standing" companies. Unlike conventional multinationals, they were set up as operations with no parallel organisation in Britain itself. Although most of the shareholders who subscribed to these joint stock companies did not exert control over the company's activities (for which reason they have in the past been incorrectly categorised as portfolio investments), their affairs were nevertheless frequently managed by a board of directors based in Britain. Hence, given this form of control, free-standing companies did constitute a genuine form of British foreign direct investment. Box 2.1 gives some examples of typical free-standing companies.

Although each of the individual free-standing companies was a nominally independent concern, a number of informal linkages existed between groups of them, drawing them into clusters. Particularly important in this respect were financial institutions in the City of London which developed from commission agencies (supervising the trade of other firms for payment of a commission) into investment houses who promoted a series of free-standing companies during the nineteenth century. These investment houses, as Chapman (1985; 1992) has explained, provided international networks which linked together sources of capital, from London and elsewhere, with investment opportunities abroad. It was this ability to connect together domestic sources of capital and expertise (comprising both technical expertise and financial management skills) with influential contacts abroad that enabled investment groups such as Finlay & Co., Butterfield and Swire, Antony Gibbs & Co. and De Beers to emerge as strategic actors in the growth of FDI during the nineteenth century. Although these institutions were international in their scope, the organisational structures that they used to manage their overseas assets were clearly different to the conventional form of multinational corporation that developed in the U.S.A. Table 2.1 lists some of the major British-based investment groups that were operating around the turn of the nineteenth century.

FDI and managerial capitalism

Portfolio investment and free-standing firms were both forms of foreign investment in which capital was raised in a piecemeal, rather than strategic, fashion. The individual firms remained relatively small-scale businesses and did not develop particularly sophisticated forms of management or extensive internal organisations; family and other personal connections persisted, and mutual trust in partners and colleagues remained important as an organisational mechanism. In America, however, the process of rapid industrialisation after 1870 brought forth organisational methods and structures which were quite novel. Beginning with the organisation of the railways which, often being single track, required precise administrative co-ordination, American firms emerged as pioneers in the creation of large-scale corporations utilising modern management hierarchies. (Chandler, 1977, 1990) This structure delegated responsibility for the functional, day-to-day management of production, sales, purchasing, transport and finance to a newly-created group of non-shareholding middle managers, separating control from ownership, and created a new social group of professional businessmen. Above these middle managers stood the company's top management, for whom long-term corporate strategy and growth became the principal concerns.

These new corporate structures were particularly suited to the needs of high volume production industries generated by the cluster of technical innovations of the late 19th century which constituted the second industrial revolution. The new technologies which engendered this revolution led to rapid changes in many fields of production. They transformed the processing of tobacco, grains, whisky, sugar, vegetable oil, and other foods. They revolutionised the refining of oil and the making of metals and materials - steel, nonferrous metals (particularly copper and aluminum), glass, abrasives and other materials. They created entirely new chemical industries that produced man-made dyes, fibres, and fertilizers. They brought into being a wide range of machinery: light machines for sewing, agricultural and office uses; and heavier, standardised machinery, such as elevators, refrigerating units, and greatly improved printing presses, pumps and boilers. (Chandler, 1990:62)

To be successful, these innovations in technology required massive investments in plant and machinery. In addition, the potential benefits of high volume production also required complementary investments in management and marketing expertise. It was by bringing together all three of these crucial forms of investment (production, management and marketing), within the context of the organisational structure of the corporation, that American firms gained the market positions which enabled many of them to expand from national to multinational concerns from around 1870 onwards.

The corporate structures of American business adapted readily to multinational operations. They had already developed expertise in distribution and marketing across the rapidly expanding market of the United States and these skills could be adapted to other markets. Moreover, their organisational capacity could be replicated in their foreign subsidiaries, giving them the necessary structure to effectively manage the process of vertical integration in those industries where this was an important source of competitive advantage. By the time of the outbreak of World War One, many more American than European firms had developed their own production and marketing organisations abroad; an observation which remained valid until at least the 1960s.

Britain's Foreign Investments, 1865-1914

The period 1815-1914, stretching from the end of the Napoleonic Wars to the outbreak of World War One, is sometimes referred to as "Pax Britannica" to signify the overwhelming supremacy that British naval power held throughout the nineteenth century. This military advantage enabled Britain to administer and enforce the safe maritime passage of goods globally and, where necessary, to force reluctant trading partners such as the Chinese to allow access to foreign vessels for the purposes of trade.

The Napoleonic Wars also saw the City of London emerge as the unrivalled financial centre of world trade. Indeed, economic historians such as Rubenstein (1993) and Cain and Hopkins (1993a,1993b) now argue that it was the financial and allied service industries which developed in the South East of England, more than the manufacturing industries of the North of

England, that served to shape Britain's economic destiny, especially from 1850 onwards. British banks were amongst the earliest of its multinational enterprises, as Jones (1993) has demonstrated.

The institutions of the City were of vital importance in promoting sterling as the linchpin of the free trading system. London's financial institutions provided the sources of funding and the necessary services of accepting and discounting bills of exchange which combined to enable the smooth functioning of the international trading system, while the ability of the Bank of England to provide convertibility of sterling to gold at a fixed rate meant that holding assets in sterling accounts in London offered investors both security and a rate of interest. As a result, sterling became increasingly adopted as the currency of international trade. Thus the gold standard regime which supported the growth of trade during the second half of the nineteenth century was essentially a sterling standard, centred on London and underwritten by Britain's mercantile and military preeminence.

Underpinning its position of hegemony in international trade was the fact that Britain had entered the nineteenth century as the world's first industrial economy. This industrial breakthrough could not have been achieved without the resources and markets provided by the international trading system; the raw cotton required by Britain's expanding textile firms, for example, simply could not be grown in the British climate. As the century progressed, therefore, the majority of economic interests in Britain outside of agriculture became ever more closely identified with the policy of free trade. Trading patterns developed that were increasingly based on an international specialisation of production, as conjectured by Ricardo's model of comparative advantage, which saw Britain develop as an exporter of manufactures and an importer of primary commodities.

Britain's position in the world economy meant that much of its early, portfolio-type investment abroad was directed towards the infrastructure required to support primary production activities. Figures cited by Pollard (1985), reproduced in Table 2.2, show that around 1870 Britain's capital investments abroad, which at that time are estimated at about ,1,000m., focused on transportation, utilities and public works. Many foreign government authorities, both national and provincial, used London during the 19th century to raise finance.

By the outbreak of the First World War, these foreign investments had roughly quadrupled in value compared with 1870, but the composition had changed somewhat. Infrastructural services remained of primary importance, but lending to foreign governments had become relatively less common while investments directly into production (agriculture, mining and manufacturing) accounted for an increased share.

Table 2.3 looks at the changing geographical dispersion of Britain's foreign investments and shows that, between 1860 and 1913, the relative share of capital exports going to Britain's emerging industrial rivals in Europe and America fell (from 52 per cent to 25 per cent) while investments in the largely primary producing regions of the British Empire and Latin America grew in significance.

Clearly, a considerable portion of the investment flowing out from Britain at this time was portfolio in nature. However, the recognition of the role of free-standing companies has led analysts to reconsider the extent to which Britain's foreign investments were actually direct in nature. Recent work by Corley (1994) has suggested that in the period immediately before the outbreak of World War One as much as 45 per cent of Britain's foreign capital holdings may have been direct investments. Of this 45 per cent, Corley suggests that about 35 per cent probably took the form of free-standing quoted companies and the remaining 10 per cent were the overseas investments of those domestic manufacturers who constituted Britain's first group of multinational companies.

How did the nature of Britain's foreign investment vary across these three constituent elements (portfolio, free-standing and multinational)? A breakdown by industry sector of the capital invested abroad by the group of free-standing companies is provided in Table 2.4 for 1907, 1910 and 1913. Compared with the portfolio investments given in Table 2.2 it suggests that these direct investments showed a greater disposition towards extractive industries (mining and oil) and market-based manufacturing activities (food processing, metal manufacturing and other market-based activities), which together account for somewhere in advance of 30 per cent of the total.

The geographical breakdown of the free-standing foreign direct investment given by Corley, excluding railway investments, suggests that for the year 1910 the bulk of this capital (56 per cent) was invested in the countries of the British Empire. Latin America received 16 per cent, China, Japan and Thailand 7 per cent, while the industrialised United States and Europe received only around 10 per cent each. Most of the free-standing investment in railways, however, which is excluded from this breakdown, was directed towards Latin America.

With regard to Britain's early multinational manufacturing companies, evidence from the Harvard study (Stopford, 1974) and from studies by Nicholas (1982) and Jones (1986) all indicate a greater tendency for these firms to invest in the developed markets of Europe and the United States compared with their free-standing counterparts. Another point of contrast between the pioneering multinationals and the free-standing companies lies in the fact that the investments of Britain's early multinational firms displayed a greater tendency to be trade-replacing rather than trade-enhancing. Jones (1986:8-10) found that the most important factors encouraging foreign investment among the group of firms covered by his study were the attractions of the foreign market, the need to avoid tariffs or other forms of host government pressure, and the desire to maintain patent protection. In contrast, the study finds little evidence that the companies were investing abroad in order to exploit lower labour costs for their operations. British manufacturing firms investing abroad before 1914, were thus seeking an alternaive method of access to foreign markets to that offered by exports. The relative cost of factors of production does not seem to have been the primary consideration.

Interestingly, although three-quarters of the foreign investments by domestic manufacturers studied by Jones involved the creation, rather than the acquisition, of a foreign subsidiary concern, the majority of foreign investments by these pioneering multinational companies (71 per cent) took the form of joint ventures; either with local producers, other British firms or third-country partners. Weaknesses in management, the spreading of risks, and the perceived need to deflect nationalistic criticism all seem to have contributed to this tendency of British firms to favour joint ventures, along with the fact that many of the companies engaged in foreign expansion were relatively small scale. The relative smallness of British companies also seems to have encouraged a greater tendency towards the use of international product licensing during the years before the First World War, when compared with American firms. Table 2.5 lists some of Britain's leading manufacturing multinationals which had overseas production in operation before the First World War.

To sum up therefore, Britain's foreign investments on the eve of the First World War embraced three distinct categories. First, portfolio investments, accounting for at least one half of the total, were directed mainly towards trade-related activities in the pre-industrialised world. Second, free-standing companies, accounting for perhaps one third of the total of Britain's foreign investments, were oriented more towards mining and utilities and, like the portfolio investments, were based mainly in the British Empire and Latin America. Since these investments were ultimately managed from Britain, they represented the bulk (around three quarters) of Britain's foreign <u>direct</u> investment at this time. The third category of foreign investment, the overseas subsidiaries of domestic firms, remained relatively small before the First World War, accounting for perhaps as little as 10 per cent of Britain's total stock of foreign investment. These predominantly manufacturing investments showed a much greater tendency to seek market opportunities in the industrialised regions of Europe and the United States compared with the two other categories of Britain's foreign investments.

FDI from the U.S. and Continental Europe before 1914

In Britain, therefore, genuine multinational corporations accounted for a small fraction of the stock of foreign investment which the country had built up by 1914. The pattern of foreign investment which had evolved in Britain reflected the importance of trade and finance to its economic performance. In contrast to this, economic development in the United States and Germany during the late nineteenth century had been founded on the rapid growth of domestic firms in the industries transformed by the innovations of the second industrial revolution. These circumstances materially affected the shape of foreign involvement that emerged in these two economies prior to the First World War.

Figures from Wilkins (1974) estimate that, of a total stock of long-term U.S. outward investment of around \$3.5 bn. in 1914, \$2.65 bn. (roughly three quarters) of this took the form of FDI. This figure stands in stark contrast to the \$6.7 bn. stock of inward long-term foreign investment which had accumulated within the U.S. at this time, of which only \$1.3 bn. is estimated to be FDI. Hence, although the U.S. economy was still a net importer of investment capital by 1914, its corporate sector had helped to make America a substantial net exporter of FDI.

Table 2.6 provides a breakdown of American FDI on the eve of World War One by both sector and region. One striking feature of this pattern of investment is the importance of geographical proximity exhibited by the more traditional forms of foreign investment. The proportion of U.S. FDI accounted for by Canada, Mexico, Central America and the Caribbean as a group is 68 per cent in mining, 90 per cent in agriculture, 77 per cent in utilities and 95 per cent in railroads. Hence, a great deal of American FDI in these activities involved domestic producers "spilling over" the (still relatively arbitrary) national borders into neighbouring regions. Moreover, these more traditional activities were undertaken principally by domestic firms extending their operations abroad, rather than through the medium of the free-standing firm. The success of the mining enterprises under the direct control of the Guggenheims in Chile contrasts with the problems encountered in the free-standing operations managed by the British-based investment house of Antony Gibbs (O'Brien, 1989).

In contrast to the geographical dispersion of FDI in the more traditional activities, American overseas investment in manufacturing, sales and petroleum-related activities focused much more sharply on the markets of Europe. One half of the investment in sales-based activities, and over 40 per cent of manufacturing investments were located in Europe in 1914. American pre-eminence in manufacturing investment at this time is illustrated by the fact that roughly half of the foreign manufacturing subsidiaries set up in Britain before 1920 were of American origin (Bostock and Jones, 1994). These included Singer Sewing Machine, which set up an assembly plant in Glasgow in 1867, Kodak (cameras), United Shoe Machinery (boot and shoe machinery) and Ford, which opened a motor car assembly plant in Manchester in 1911.

American industrial success before the First World War had been particularly marked in food processing, tobacco, drugs and other branded goods, light machinery (especially electrical and electronic equipment) and transportation equipment, industrial chemicals, and vertically-integrated industries of various kinds such as primary metals, rubber goods and, particularly, oil.

Each of these industries had spawned corporations which, by 1914, had made major investments in plants abroad. Examples identified by Wilkins (1970) include American Tobacco, Coca Cola, H.J. Heinz, Quaker Oats and the meat packing enterprises of Armour and Swift in the food and tobacco goods sector, Du Pont and United Drug (later Rexall Drug) in chemicals and pharmaceuticals; General Electric, National Cash Register and International Harvester in machinery; Ford Motor and Westinghouse Air Brake in transportation equipment (motor cars and railway equipment respectively); Alcoa and Gillette (metal goods); U.S. Rubber and Standard Oil of New Jersey (later the Exxon Corporation). Box 2.2 explores the contrasting forms of international growth that American and British tobacco companies adopted following the commercial success of the machine-made cigarette.

In continental Europe, the most important source of corporate FDI prior to 1914 was Germany. Estimates of the stock of German foreign investment (both portfolio and FDI) on the eve of World War One have recently been revised upwards, as new evidence has become available, and is currently placed at around $7.3 bn., of which some $2.6 bn. is calculated to have been in the form of FDI (Schr`ter, 1993a). The success of German companies in the rapidly developing chemical and electrical industries is reflected in the extensive network of foreign manufacturing subsidiaries operated by firms such as Siemens, AEG and Bosch (electrical) and BASF, Hoechst, Bayer, Agfa and Degussa (chemicals) before 1914 (Franko, 1974). In addition to these large scale investments by the firms in Germany's heavy industry, a variety of smaller manufacturers, such as the pharmaceutical firm of E. Merck, also made foreign investments at the beginning of the century (Hertner, 1986). Wilkins (1989) has recently uncovered a great deal of new evidence regarding the investments of German companies in America before 1914 and Schr`ter (1993a) cites a study claiming to have traced 336 German enterprises that were operating in the U.S. before 1914, including those involved in activities such as banking and insurance; indeed a number of Germany's early foreign direct investments were undertaken by financial institutions such as Deutsche Bank and insurance companies such as Allianz and Victoria. German enterprises were also the second largest source of FDI in Britain, after American firms, between 1890 and 1914 (Bostock and Jones, 1994).

Outside of Germany and Britain, the development of European companies engaging in FDI was more limited. French firms, in particular, showed a much greater preference towards exports than with foreign investment. Even in industries where French firms were strong, such as the motor industry, it was left to German (Daimler) and Italian (Fiat) companies to play the role of international pathbreakers. Much of the foreign investment of the leading French motor car producers (Renault, Panhard, Darracq) before World War One was limited to a network of sales agents (Fridenson, 1986). In many cases, France developed more as a market in which foreign firms, particularly American companies, set up their own subsidiaries (Kindleberger, 1974). By 1914, France had emerged as the most popular location for Belgian multinationals (Devos, 1993) and the second, behind Germany, for Swiss FDI (Schr`ter, 1993b). Both the electrical industry and the chemical industry in France fell under the domination of American and German multinational firms before 1914 (Broder, 1986).

Among the smaller European nations, both Swiss and Swedish companies had developed impressive international profiles by the time of the First World War. Schröter (1993b) calculates that, by 1914, 160 Swiss multinational companies had established 265 foreign subsidiaries. Particularly important among these were the chemical firms of Ciba and Geigy, the electrical products manufacturer Brown-Boveri, and the food processing company NestlJ. Between them, these four firms could boast of foreign manufacturing operations in Russia, France, Germany, U.S., U.K. Spain, Austria, Italy, Holland, Norway and Australia by 1914 (Franko, 1974).

As with the Swiss, limitations in the size of the domestic market encouraged a number of Swedish manufacturers to move abroad in search of customers for their products. When SKF, manufacturers of ball and roller bearings, began production in 1907 it was purely to serve foreign clients; domestic firms preferred the traditional type of bearing produced in Germany. The importance of being physically close to the end users of their products soon led SKF to set up plants abroad. In 1910 the company began production in Britain, and during the First World War it extended operations still further, to the U.S.A. in 1915 and France in 1917. Most of the Swedish firms that invested abroad during the early part of the 20th century were involved in the rapidly growing engineering industries. The limited size of the domestic market for such goods, coupled with the advantages which close proximity to their customers and direct control of the production process gave them, meant that many of Sweden's successful manufacturers around the turn of the century evolved into multinationals. Locating production abroad also made it much easier for these firms to win government contracts, a factor which greatly helped L.M. Ericsson to expand its sales of telephone equipment (Lundström, 1986).

Foreign investment from World War One to the Great Crash

In 1914, the era of international economic stability that had ushered in the rapid expansion of FDI came to an abrupt and violent end. The immediate consequences of the war in Europe for many of the multinational corporations from the belligerent countries was that some of their foreign assets now lay in enemy territory. In most instances, the ultimate result of this situation was a process of repatriation. The Anglo-American cigarette manufacturer BAT, for example, had acquired substantial manufacturing capacity in Germany shortly before the war broke out (Cox, 1989: 54). During the conflict, the company was able to negotiate the sale of its

German assets to the Deutsche Bank, one of the group of large-scale German banks which held interests in a range of industries. After the end of the war, BAT received compensation totalling just over £1 million but did not reinvest in the German economy until 1926. Hence, one direct effect of the war was the nationalisation of many foreign subsidiaries. Whilst this seems mainly to have involved compensation, investors with assets in Russia after the Bolshevik revolution of 1917 were less fortunate. Indeed, the loss of the Russian market was a severe blow for many European firms, notably those from Sweden, who had sought the potential market there as a major location for their foreign activities.

The First World War proved to be a major setback for the international ambitions of firms in Europe. Germany, in particular, was hard hit. During the course of the war, German business interests were seized by the Allied nations, and the assets sold off as part of the reparation payments. Subsidiaries of German multinationals were sold off to domestic interests, forming the basis for companies such as the English Electric Company of Great Britain (formerly Siemens Brothers Dynamo Works) (Panayi, 1990) and Sterling Drug of the United States (formerly the American subsidiary of Bayer) (Chandler, 1990). Threatened to the east by the rise of Bolshevism, stripped of its foreign colonies, and forced to pay reparations by the Allies through the Treaty of Versailles, Germany's foreign investments between the wars fell to negligible levels when compared with the rapid growth before 1914.

Elsewhere in Europe, the period between the wars did witness the international development of some major firms. The Nestlé and Anglo-Swiss Condensed Milk Company grew rapidly and, by 1936, had acquired interests in more than 20 other companies in Europe, North and South America, Australia and Asia (Humes, 1993). The international expansion of the Dutch electrical giant Philips gathered pace after World War One when the need to secure inputs and the opportunities presented by the loss of markets by German competitors led the firm to engage in a policy of vertical and horizontal integration that saw it organise affiliates across Europe and in the U.S.A. (Sluyterman and Winkelman, 1993).

Table 2.7 illustrates the number of new foreign subsidiaries formed between 1920 and 1939 by the 87 Continental European manufacturing firms included in the Harvard study. These 87 firms were drawn from Germany (32), France (21), Belgium and Luxembourg (6), Holland (5), Switzerland (7), Italy (7) and Sweden (9). The identities of the firms concerned are given in the Appendix to this chapter. Table 2.7 shows that this relatively small group of companies created a total of 249 traceable subsidiaries between 1920 and 1929, concentrated largely on inter-European growth. Continental European investors in Britain during this period included Philips from Holland, and the car assembly and manufacturing plants of the French firms CitroNn (1926), Renault (1927) and Michelin who established a tyre factory at Stoke-on-Trent in 1927. Investments were also made in Britain by firms that were not included in the Harvard study, such as the Swedish firm Electrolux and a small Dutch manufacturer of raincoats, N.V. Hollandia Fabriefen Kattenburg. Altogether, Bostock and Jones (1994) have been able to trace 34 new subsidiaries set up in Britain during the 1920s by firms from Switzerland (2), Sweden (5), Germany (6), France (7) and the Netherlands (14). The minor renaissance of German manufacturing FDI which began in the late 1920s was based partly on the re-acquisition of former subsidiaries.

British firms were more inclined than their continental counterparts to resume international growth after the war. The 47 U.K. companies included in the Harvard study were found to have made a total of 118 foreign subsidiary investments during the 1920s, and the majority of these were spread equally between Europe (42, excluding Ireland) and the Empire (41). Particularly striking in Table 2.7, however, is the small number of subsidiaries set up by U.K. manufacturers in the booming U.S. market of the 1920s, lending credence to the argument that British firms in the leading industries lacked a competitive edge. Firms who bucked this trend and did invest in America between the wars included the now U.K.-controlled British-American Tobacco (cigarettes), Dunlop (rubber), E.M.I. (records), Baker Perkins (machinery), Distillers (alcoholic drinks), and Turner & Newell (asbestos) (Stopford, 1974).

The main beneficiary of the war was undoubtedly the United States. Between the outbreak of the war and 1919, America's foreign investment position was transformed, as the figures from Wilkins (1974) demonstrate. During this brief period, the United States' deficit in portfolio foreign investment of $4.6 bn. was turned into a surplus of $1.0bn., whilst its net surplus in foreign direct investment rose from $1.4 bn. in 1914 to $3.0 bn. in 1919. Not surprisingly, the share of this FDI that was invested in Europe fell as U.S. firms moved particularly into South America; but this was purely a relative decline, and American firms continued to invest in Europe even during the years of the conflict.

Over the course of the 1920s the book value of U.S. foreign direct investment doubled and the amount of this FDI devoted to manufacturing grew by a still larger proportion. By the end of the 1920s it has been argued that the size of U.S. investments in both Canada and Latin America exceeded for the first time those of British investors, and that more than 1,300 companies or organisations in Europe were either owned or controlled by U.S. capital (Wilkins, 1974:155). It was during this era that the American multinational truly first came of age. American companies did not simply set up parallel operations in foreign markets, but in addition many actually created international holding companies that co-ordinated production across national boundaries. Among these new "international companies" of the 1920s were American & Foreign Power (1923), ARMCO International (1924), International B.F. Goodrich (1924), Crown Cork International (1928), and Aluminium Limited (1928) (Wilkins, 1974:148).

Between the wars, vertically integrated American multinationals were established across a wide range of industries. Perhaps the most extreme example of these global industries, and one of the few cases in which European firms had developed along similar lines, was the oil business in which seven multinationals dominated world output between the wars (Sampson: 1993). This rapid expansion of vertical integration meant that, by 1929, numerous examples existed of American firms which had developed both supply-oriented and market-oriented investments (although these latter operations often constituted only sales-based investments).

One of the main consequences of the First World War was an increased international dispersion of economic activity. Table 2.8 illustrates that Europe's share of world production and trade between 1913 and 1923/4 each fell by 9 per cent. North America in particular raised its share of world output, but both North America and Asia increased their share of international trade at Europe's expense. In the case of Asia, it was Japan's export industries that took advantage of the withdrawal of European goods from these markets (Hardach, 1977). The large scale industrial conglomerates, the Zaibatsu, and their trading houses the Sogo Shosa, made particular progress in the Chinese market by rapidly expanding Japan's share of textiles there. By the end of the 1920s, Japanese producers had made substantial investments in China, most especially in Manchuria, and had placed Japan as China's joint highest inward investor together with Britain (Remer, 1931). Box 2.3 looks at the organisation and growth of Japan's pre-war Zaibatsu and their trading operations, the Sogo Shosha.

International firms in depression and war

The growth of Japanese influence in Asia and that of U.S. firms in Latin America which occurred during the 1920s represented the beginning of a process of economic regionalism that was a major characteristic of international business between the wars and which came increasingly to the fore after the Great Crash of 1929. The 1920s had seen the gradual reconstruction of the pre-war gold standard (Britain restored sterling to gold in 1925) and this had been an important factor in stabilising the world economy, encouraging firms to engage once again in international trade and investment. However, the structure was never as secure after the war as it had been before 1914 (Aldcroft, 1977) and when, in 1929, the Wall Street Crash provoked a financial crisis in the United States, the fragile nature of the reconstructed order quickly became apparent. By 1931, the system lay in tatters.

The reconstructed gold standard suffered from a number of structural weaknesses (Drummond, 1987). As was noted earlier, one of the consequences of the First World War had been the emergence of the United States as net exporter of capital. During the 1920s the U.S. ran an almost permanent surplus on its current account and, as a result, built up large stocks of gold. In order for the fixed exchange rates of the gold standard to remain in parity, indeed for the continued stability of the international economy as a whole, it was necessary for America to continuously engage in foreign lending. One result of this was that during the 1920s New York began to eclipse London as the principal source of international investment funds. However, much of this lending, upon which a number of European governments relied for their financial stability, was short term and unreliable. The emergence of New York as the *de facto* international financial centre in the 1920s, therefore, tended to increase the degree of international financial instability. This became particularly clear when in 1928/9 the market for U.S. domestic stocks boomed, squeezing out the funds required to support foreign issues and threatening the stability of the international monetary system.

With the crash in October 1929, a great deal of short term American foreign assets were repatriated. An international effort was made to revive foreign lending from America in the wake of the crash, partly to counter the deflationary pressures caused by the domestic liquidity crisis. A recovery in portfolio lending was engineered during 1930, mainly through the U.S.-sponsored Young Plan. But a crisis of confidence amongst private business had now been provoked by the collapse in U.S. stock prices and the lending effort could not be sustained. Indicative of this loss of commercial confidence is the contrast between portfolio and FDI lending to the countries of Latin America and Asia, Africa and Oceania during 1930. While United States portfolio lending to the "periphery" rose between 1929 and 1930 (from $71 million to $225 million for Latin America, and from $17 million to $77 million for Asia, Africa and Oceania), direct investment declined. In 1929 U.S. firms had invested $205 million in businesses in Latin America, in 1930 this fell to only $41 million; the comparable figures for Asia, Africa and Oceania (taken as a whole) were $65 million and $14 million, respectively (Kindleberger, 1986: 122).

Figures from Wilkins (1974) indicate that a levelling off in FDI on behalf of American firms remained a feature of the 1930s as a whole. By 1940, the book value of foreign direct investments by U.S. firms had actually fallen slightly from its 1929 level of $7.5 billion to $7.0 billion. In fact, manufacturing- and sales-based investments held up quite well during the 1930s. Table 2.7 indicates that the group of U.S. firms included in the Harvard study slightly increased the number of new subsidiaries compared with the previous decade. This finding is corroborated by the study of Bostock and Jones (1994) of manufacturing FDI into Britain which shows 118 acts of FDI by American firms between 1920 and 1929 (from a total of 158) being followed by 110 acts during the 1930s (from a total of 157). Indeed, the activities of American manufacturing and sales subsidiaries, including the Ford Motor Company's massive investment in its Dagenham plant in 1931, represented some of the most dynamic aspects of Britain's economy between the wars.

The sectors which witnessed the main retreat in FDI by American firms during the world depression were mining and agriculture. This fall in investment was undoubtedly linked to the collapse in the value of primary commodities as a consequence of the sharp decline in world demand between 1930 and 1932. Nevertheless, as the 1930s progressed U.S. firms continued to make investments, notably in Latin American industries, switching progressively from export processing to domestic manufacturing (Abel and Lewis, 1985: 285). The extent of the redirection of U.S. FDI in South America can be gauged from the fact that in 1914 U.S. manufacturing-based FDI in South America accounted for barely 2 per cent of the non-oil total invested in that subcontinent; by 1940 this ratio had risen to 25 per cent (Wilkins, 1974: 31;182-3).

The tightening conditions for international investment flows and the tendency for these flows to become increasingly regionalised after the collapse in the volume of world trade after 1929 was particularly marked in the case of Great Britain. The policy of according Imperial Preference in trading relations towards the nations of the British Empire hardened after the decision had been taken to withdraw sterling from the gold standard in 1931. Britain's foreign trade consequently became much more focused on these Empire economies, together with the handful of foreign countries whose currency remained linked to sterling, and who together with the Empire countries formed the so-called Sterling Area.

The same regionalisation was also true of Britain's foreign investments between the wars. Table 2.9 shows that the level of new overseas capital issues both declined in value and became increasingly focused on the Empire. By the mid-1930s, the small trickle of money going to foreigners went largely to those within the Sterling Area (Cain and Hopkins, 1993b: 47). A similar bias can be seen in Britain's foreign direct investment flows. The tightening of the capital market, and a greater tendency towards investment in domestic firms, appears to have considerably slowed down the growth of the free-standing type of FDI, whilst Britain's pioneering multinationals displayed an increasing disposition towards directing their investments at Empire markets between the wars (Nicholas, 1989). In India, for example, the managing agencies that had provided the institutional framework for managing Britain's free-standing foreign investments were largely bypassed in the wave of investments by British-based multinationals which Tomlinson (1986) identifies as having effectively begun in the 1920s.

The impact of the depression was most severe on the international development of firms in Continental Europe. Table 2.7 indicates that the number of foreign subsidiaries created by the sample of manufacturing firms in the Harvard study fell by over one half after 1929. In place of competition, international cartels were instituted between the national firms in many industries, most notably in chemicals, plate glass, iron and steel and electrical goods. Table 2.10 illustrates the extent to which corporations from Continental Europe had subscribed to such international agreements by the late 1930s. According to Casson (1985: 64) "During the 1930s in Europe, laissez faire capitalism was written off in political terms: centralised control was widely believed to hold the key to the restoration of economic stability, and the only questions were how tight the control should be, and whether it should remain in private hands or be vested in the state." These kind of arrangements served to consolidate in economic terms the growing sentiment towards nationalism that became increasingly evident politically during the 1930s. It is hardly surprising that, by the time these political forces culminated in the Second World War, the notion of "global corporations" had receded to the faintest echo of a seemingly bygone age.

American multinationals and the postwar recovery

Six years of global warfare, involving the occupation and seizure of assets together with economic dislocation on an unprecedented scale, left even the most robust of international corporations in a precarious state by the end of 1945. By and large, however, the western hemisphere managed to escape from the destruction inflicted elsewhere, and American firms with investments in Latin America were, certainly relative to European multinationals, enormously strengthened as a result of the war. Moreover, the main bridgehead which these firms had established in Europe, Great Britain, had remained allied and unoccupied throughout the course of the conflict. On these foundations, American corporations consolidated into the position of world leaders across almost the entire range of advanced industries during the 1950s.

The key to the success of American firms during this period lay in the decisive lead which they had gained in technology. The Second World War spurred technical progress across a wide range of industries. Particularly important were advances in transport (notably the jet engine) and communications, both of which served to make the operation of international business far easier to manage in the post war period. Also after the war, a great deal of progress in electronics was achieved by American firms, based upon the development of semi-conductors (and later integrated circuits) which greatly stimulated the rate of product innovation and heralded the start of the computer age (Auerbach, 1988: 298-310).

The postwar recovery also benefitted from the absence of the international cartel agreements which had served to restrict competition and innovation during the 1930s. Coupled with the liberal reforms in world trade ushered in through the Bretton Woods agreements (see Chapter 2), the 1950s saw a restoration of competition for market share between both domestic producers and foreign firms in many product markets. American producers, technically advanced and competitively more adept than most of their European rivals, quickly increased their market presence in the expanding markets of Western Europe. Beginning with exports, but finding constraints on growth due to the shortage of dollars in Europe, many U.S. firms were encouraged to replace this trade-led competition with overseas branch plants, allowing them both to service foreign markets and to promote their goods more effectively. Reflecting on his survey of American foreign direct investment in Europe in the 1950s, Dunning (1983) has argued that, in the main, U.S. manufacturing subsidiaries at this time were truncated replicas of their parent organisations which, after a brief learning period, tended to operate with the minimum of parental interference. Whilst this may still have been the case for its European subsidiaries, it is important to note, as Chandler (1990) has pointed out, that American corporations were also developing the more flexible multidivisional structure which would enable them to effectively harness the advantages of product diversification that their substantial commitment to research and development had began to generate.

As we will see later in the book, this role of technological leadership promoting foreign investment by American firms was used by Vernon (1966) to develop one of the earliest theories of international production based on the model of the product life cycle. The growth of oligopolistic rivalry amongst U.S. firms was also taken to be a cause of FDI. Knickerbocker (1973) noted a tendency for FDI to be used as part of the competitive strategy of American firms against their domestic rivals. This oligopolistic reaction model of FDI argued that foreign investment by firms within an industrial sector would tend to cluster at a narrow point in time as rival firms in an oligopoly found themselves obliged to follow the lead of the first-mover. Vernon and Knickerbocker's work provide examples of how the American experience heavily influenced the development of theories of international production in the 1960s.

The dominance of American firm in the early postwar growth of FDI and international production in manufacturing is clearly indicated by the Bostock and Jones (1994) study of inward FDI in Britain. Of the 376 new subsidiaries identified in Britain between 1950 and 1962, 303 (81 per cent) represented investments by U.S.-based firms. Given that U.S. firms had exerted almost the same degree of foreign penetration in Britain between the wars, it is hardly surprising to find commentators identifying multinational corporations as an effectively American phenomenon during the 1960s.

Table 2.11 looks at the sectoral breakdown of these predominantly American investments in Britain between 1950 and 1962, and compares them with the pattern of those made between the wars. The most striking feature of this table is the fact that practically half of all the subsidiaries created between 1950 and 1962 were based in two sectors: the chemical industry and mechanical engineering. In fact, these investments were yet more concentrated within the sectors themselves. Foreign companies in chemicals were were heavily clustered in basic industrial chemicals and pharmaceuticals; those in mechanical engineering were concentrated on machine tools and mechanical equipment. However, the apparent decline in electrical engineering after the war is a little misleading because the main boom for FDI in this sector was in the 1960s, and of the 38 subsidiaries noted in Table 2.11, 18 had been created since 1960. Here also, investments were clustered; in telecommunications equipment, electronic capital goods and passive electronic components. It should also be noted that, although numerically small, foreign investments in the motor vehicle industry were of great significance in terms of output and employment; in 1963, 31.1 per cent of sales and 25.6 per cent of employment in the U.K. motor industry were accounted for by these foreign subsidiaries (Bostock and Jones, 1994: 95-9).

The geographical distribution of U.S. manufacturing firms' foreign investments in the early postwar period was highly skewed. The markets of Latin America that had proved of increasing importance between the wars accounted for around 30 per cent, whilst the growing industrial and consumer markets of Canada and Europe accounted for another 50 per cent of the foreign investments for those U.S. firms included in the Harvard study. Equally geographically concentrated were the investments of British manufacturing firms in the study. Based on the

Harvard figures from Vaupel and Cuhren (1974), Dunning (1983) estimates that in 1960, 70 per cent of U.K. multinationals' capital was invested in Commonwealth countries. Compared with British firms, manufacturing companies from Continental Europe displayed a much greater tendency during the 1950s to direct their investments towards other parts of the continent and to the United States.

The threat of domination of European markets by American firms, which emerged as a focus of attention during the 1960s, soon subsided as European firms began to adopt an increasingly multinational form themselves. However, in the less developed regions of the world, the (sometimes justified) hostility towards multinationals grew exponentially during the 1960s (cf. Turner, 1973). Frequently identified as a legacy of colonialism, or agents of neo-colonialism, multinationals found their investments in the developing world subject to increasing political pressure as Third World governments attempted to institute economic planning as the route to development. Supply-based investments came under particular scrutiny as host governments attempted to wrest a share of the monopoly rents and became aware of practices such as transfer pricing being used to reduce the profitability of foreign subsidiaries of vertically integrated firms (Jenkins, 1987). Expropriations of foreign subsidiaries rose steadily through the 1960s, peaking in the wake of the OPEC crisis of the mid 1970s (UNCTC, 1988).

In the early postwar period, therefore, American firms took the lead role in helping to internationalise competition in many industries once again. As European, and later Japanese firms took up the challenge, so the pace of internationalisation accelerated. The extent to which the economic recovery benefitted from liberalisation is indicated by the fact that trade consistently grew more rapidly than the value of world output before the energy crisis of the early 1970s - and that FDI grew more rapidly than both of these. However, difficulties in many developing countries, coupled with a tendency for much international investment to seek out lucrative markets, meant that the activities of multinational corporations in the postwar years tended to increase the polarisation between industrialised and less developed countries. Not until the 1960s was it possible to point to clear examples in which FDI by multinational corporations contained benefits as well as drawbacks for developing countries, and for the concept of a Newly Industrialised Country (NIC), in which FDI frequently played a leading role, to emerge.

Conclusion

The evolution of international enterprise was a far from smooth process. Between 1870 and 1960, two periods of exapansion can be identified. The first, in the years before the outbreak of World War One, saw different forms of foreign investment - portfolio, free-standing companies and multinational corporations - emerge, with Europe, and especially Britain, making the major contribution to international investment flows. The second period of growth commenced during the 1950s, and this time it was American firms who were at the forefront. In between, the expansion of international investment was disrupted by the two world wars and the economic instability of the intervening years.

The late 19th century was a period of international economic and political stability in which both capital and labour were relatively mobile. The free flow of people and resources helped to encourage firms to expand their production activities beyond the confines of their domestic markets. Increasingly well developed capital markets allowed investors in the capital-rich economies of Western Europe to access investment opportunities abroad through the medium of free-standing companies formed specifically for the purpose. This, until recently neglected form of FDI, helps to explain why in 1914 Britain was the world's largest source of

FDI while, at the same time, America played home to most of the world's emerging multinational corporations. Since free-standing companies seem mainly to have linked capital from the industrialised countries with investment opportunities in the peripheral regions, it may also be an explanation for the relatively high level of French FDI in 1914, which seems to have ben directed largely towards the underdeveloped regions of South East Europe and North and West Africa, and for the fact that around one third of Dutch FDI was tied up in the Dutch East Indies (Gales and Sluyterman, 1993) where Royal Dutch pursued its oil production as a free-standing company that had first been floated on the Amsterdam capital market in 1890 (Sluyterman and Winkelman, 1993).

The distinction between free-standing FDI and the activities of multinational corporations was much less important in the U.S., where the latter form tended to dominate foreign investment. In America, most of the industries that were transformed by the second industrial revolution underwent a process of horizontal integration through mergers and takeovers which led to the creation of large-scale firms, or trusts, in a range of industries. To effectively manage such large organisations, the trusts developed a hierarchical managerial structure which Chandler (1977; 1990) has termed the multiunit, multifunctional enterprise. The principal benefit of such a structure lay in the fact that an administrative hierarchy could perform the coordinating role between different functions which, up until this point, had either been performed by the market mechanism or had simply not been required given the relatively simple methods of production. The advent of such a hierarchical managerial structure enabled large firms in America to control much more extensive production processes. Hence, not only horizontal, but also vertical integration could be taken much further than had previously been the case. Before the First World War, American firms in the oil industry (Standard Oil), industrial chemicals (Du Pont), the rubber industry (U.S. Rubber, Firestone, Goodyear), primary metal production (Alcoa, Anaconda, Kennecott, American Smelting and Refining - the Guggenheim's concern), and in industrial materials (Pittsburgh Plate Glass) had utilised managerial hierarchies to achieve vertical integration of the production process.

Vertical integration by firms in many of these industries, and others such as United Fruit in fruit processing, meant that the coordination of production extended over national boundaries. Rather than simply using a foreign subsidiary to substitute foreign production for exports, American firms began to internationalise the production process itself. In contrast, few European firms had developed the same kind of organisational structure as American corporations. The operations of their foreign subsidiaries were held on a much looser rein and relatively little international vertical integration was successfully undertaken.

1914 represented a high-water mark of foreign investment. Following the disruptions created by the First World War Britain's international economic leadership was undermined and, with it, the stability of the world economy. The optimism engendered by the restoration of the gold standard in the latter half of the 1920s did serve to stimulate firms to engage in foreign investment again. This proved to be a brief hiatus, however, and the U.S. stock exchange crash in 1929 quickly led to further economic retrenchment by the industrialised economies and a collapse in international trade and investment flows. Taken as a whole, the inter-war period can be characterised as an era in which the prevailing forces of international economic growth were predominantly political in nature, with colonialism (both formal and informal), regionalism and, particularly after 1929, state-sponsored industrial cartelisation, representing the norm.

Efforts aimed at international economic reconstruction following the end of World War Two, this time under U.S. leadership, were far more successful than those which followed World War One. The Bretton Woods agreements served to created a stable economic environment among the non-communist industrialised countries, and American firms in particular seized upon the opportunies which this climate provided in order to expand their field of operations. Intially based on trade in goods, American balance of payments surpluses and the dollar shortages in Europe soon encourged American firms to make productive investments abroad in support of their foreign market expansion. By the end of the 1950s, American multinational corporations, many of whose origins were to be found in the burst of corporate growth engendered by the Second Industrial Revolution of the late nineteenth century, had emerged as the leading force in the post-colonial international economy.

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Table 2.1: Activities of Selected British-Based Investment Groups, 1900-1914

Group	**Overseas Base**	**Activities**
FAR EAST		
Finlay & Co.	Bombay 1862	Banking, Cotton Mills, Coal Mines, Shipping, Silk Mills, Tea Estates
Jardine, Skinner	Calcutta 1840	Indigo Mills, Jute Mills, Paper Mills, Coal Mines, Sugar Mills, Tea Estates
Butterfield & Swire	Shanghai 1867	Harbour & Docks, Shipping, Silk Mills
M. Samuel & Co.	Yokohama 1878	Banking, Petroleum, Shipping
LATIN AMERICA		
Antony Gibbs	Lima 1822	Banking, Railways, Shipping, Soda Factories, Nitrates
Dreyfus & Co.	Buenos Aires 1880	Banking, Shipping, Warehousing
Knowles & Foster	Rio de Janeiro 1886	Banking, Coal Mines, Flour Mills
RUSSIA		
Knoop	Moscow 1840	Banking, Cotton Mills
Rodocanachi	St Petersburg 1851	Banking, Breweries, Cotton Mills, Iron Works, Flour Mills, Shipping
SOUTH AFRICA		
Wernher Beit	Kimberley 1873	Banking, Diamond Mines, Gold Mines
Barnato Bros.	Kimberley 1873	Banking, Diamond Mines, Gold Mines
De Beers	Kimberley 1874	Diamond Mines, Gold Mines, Railways

Note: Overseas base refers only to the earliest or principal overseas location; in fact almost all investment groups operated simultaneously from several overseas centres of trade.

Source: Chapman, S.D. (1985) "British-based Investment Groups before 1914", Economic History Review, 2nd Series, 38, p.248.

Table 2.2: Percentage Distribution of British Portfolio Investment Abroad, 1865/73-1909/13

	1865/73	1909/13
Agriculture	1.7	5.6
Mining	5.2	9.3
Manufacturing	0.7	4.8
Transportation	47.6	46.6
Utilities	5.5	6.4
Public Works	17.8	17.3
Other, incl. Defence	21.5	10.0

Source: Pollard, S. (1985) "Capital Exports, 1870-1914: Harmful or Beneficial?", Economic History Review, 2nd Series, 38(4), Table 1.

Table 2.3: British Investments Abroad (by Region), 1860-1913

	1860-70	**1911-13**
British Empire	36.0%	46.0%
Latin America	10.5%	22.0%
U.S.A.	27.0%	19.0%
Europe	25.0%	6.0%
Other	3.5%	7.0%

Source: Hobsbawm, E.J. (1987) The Age of Empire 1875-1914, London: Weidenfeld and Nicholson, Table 8.

Table 2.4: Quoted British Overseas Companies, Industry Groups (%)

	1907	1910	1913
Resource-based	**29.1**	**27.2**	**25.2**
Of which: Mining	(25.1)	(21.0)	(18.5)
Oil	(1.4)	(1.9)	(2.6)
Plantations	(2.6)	(4.3)	(4.1)
Market-based	**9.3**	**11.2**	**12.6**
Of which: Food(a)	(1.7)	(1.4)	(1.2)
Metals(b)	-	(1.7)	(2.0)
Other	(7.6)	(8.1)	(9.4)
Railways	**27.4**	**28.9**	**29.5**
Banking & Insurance	**5.3**	**4.8**	**4.8**
Utilities & Services	**28.9**	**27.9**	**27.9**
Of which: Tramways	(3.5)	(4.4)	(5.0)
Electric Power	(0.8)	(1.1)	(1.8)
Gas & Water	(2.2)	(1.9)	(1.9)
Telegraphs	(3.4)	(3.1)	(2.9)
Shipping, Docks etc.	(0.6)	(0.3)	(0.5)
Land and Other	(18.4)	(17.1)	(15.8)
Total	**100.0**	**100.0**	**100.0**

Notes: (a) especially brewing
(b) including motor traction and manufacturing

Source: Corley, T.A.B. (1994) "Britain's Overseas Investments in 1914 Revisited", Business History, 36(1), Table 2.

Table 2.5: U.K. Enterprises with Production Facilities in at Least Four Countries in 1914

Industry/ Firm	Later Identity/Owners
Oil	
Royal Dutch Shell	
Mining and Metal Manufacture	
Consolidated Gold Fields	(Hanson Trust)
British South Africa Co.	(Charter Consolidated)
Borax	(RTZ)
Household Goods, Food, Tobacco	
Lever Bros.	(Unilever)
British American Tobacco	(BAT Industries)
Bryant and May	(Wilkinson Match)
Liebig Extract of Meat	(Brooke Bond/Unilever)
Reckitts	(Reckitt and Colman)
Union Cold Storage	(Western United Investments)
Textiles	
J and P Coats	(Coats Viyella)
Bradford Dyers Assoc.	(Coats Viyella)
Calico Printers	(Tootal)
Courtaulds	
English Sewing Cotton	(Tootal)
Fine Spinners & Doublers	(Courtaulds)
Linen Thread	(Lindustries/Hanson Trust)
Other Materials	
Assoc. Portland Cement	(Blue Circle Industries)
Dunlop	(BTR)
Pilkington Bros.	(Pilkington)
Vanesta (tea chests)	(CarnaudMetalbox S.A. France)
Engineering, etc.	
Vickers	
G & J Weir	
Claudius Ash	(Amalgamated Dental Ind.)
Gramophone Co.	(Thorn EMI)
Minerals Separation	(Burmah Castrol)
S. Pearson & Son	(Pearson)

Sources: Houston, T.M. and Dunning, J.H. (1976) U.K. Industry Abroad, London: FT, Table 2.3

Table 2.6: Estimates of U.S. Direct Foreign Investments, 1914 (book value in million U.S. dollars)

Country/ Region	Total[1]	Manufacturing	Sales[2]	Petroleum[3]	Mining[4]	Agriculture	Utilities	Rail-roads
Europe	573	200	85	138	5	-	11	-
Canada	618	[5]221	27	25	159	[6]101	8	69
Mexico	587	10	4	85	302	37	33	110
Cuba & W.Indies	281	20	9	6	15	144	58	24
C.America	90	-	1	-	11	37	3	38
S.America	323	7	20	42	221	25	4	4
Asia	120	10	15	40	3	12	16	10
Africa	13	-	4	5	4	-	-	-
Oceania	17	10	5	2	-	-	-	-
TOTAL[7]	2652	478	170	343	720	356	133	255

Source: Wilkins, M. (1974) The Maturing of Multinational Enterprise, Cambridge, MA: Harvard University Press, Table I.3.

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[1] Total includes the sum of columns 2-8 plus miscellaneous investments
[2] Excludes petroleum distribution
[3] Includes exploration, production, refining, and distribution.
[4] Mining and smelting.
[5] Includes investments in paper and pulp ($74 million in 1914)
[6] Includes speculative investments.
[7] Total includes banking investments of $30m.

Table 2.7: Establishment or Acquisition of Foreign Subsidiaries by U.S., U.K. and Continental European Firms included in the Harvard Study (by number of subsidiaries), 1920-29 and 1930-39

	1920 - 1929			**1930 - 1939**		
	USA	UK	Europe	USA	UK	Europe
U.S.A.	-	8	27	-	3	7
Canada	84	10	0	69	6	1
Mexico	7	1	1	19	0	1
Cent America & Carib.	3	5	3	15	0	2
South America	29	8	11	33	6	13
America Sub Total	**123**	**32**	**42**	**136**	**15**	**24**
U.K.	48	-	18	53	-	14
Germany	24	14	30	18	8	7
France	25	4	11	20	3	7
Italy	6	2	28	5	1	2
Belgium & Lux.	5	2	13	7	2	3
Netherlands	5	2	5	6	5	8
Scandinavia	8	6	14	6	9	10
Austria	4	2	9	4	3	6
Spain	9	1	12	4	0	8
Switzerland	1	2	8	3	2	3
Europe Sub Total*	**141**	**46**	**186**	**131**	**42**	**78**
South Africa	5	6	0	13	4	0
British Africa[1]	0	7	0	0	5	0
French Africa[2]	0	3	1	0	0	0
Egypt & Mid. East[3]	2	1	0	1	1	2
Africa Sub Total*	**7**	**17**	**4**	**14**	**10**	**5**
Japan	3	0	3	2	0	1
China	2	0	2	0	0	2
India	3	5	3	2	8	1
Philippines	5	1	0	2	0	1
Asia Sub Total*	**15**	**10**	**10**	**9**	**14**	**5**
Australia & N.Z.	**13**	**13**	**7**	**25**	**18**	**0**
Total	**299**	**118**	**249**	**315**	**99**	**112**

Source: Vaupel, J.W. and Curhan, J.P. (1974) The World's Multinational Enterprises, Geneva: CEI, Tables 1.17.2, 1.17.3, 1.17.4.

Notes to Table 2.7:
* includes investments in countries not listed separately
1. includes Rhodesia, Zambia, Tanzania, Kenya, Nigeria
2. includes Morocco, Algeria, Tunisia
3. includes Libya

Table 2.8: Production and World Trade, 1913-24 (regional distribution in percentages)

	Share of World Production		Share of World Trade	
	1913	1923	1913	1924
Europe	43	34	59	50
North America	26	32	14	18
Asia	20	21	12	16
Latin America	7	8	8	9
Africa	2	3	4	4
Australia	2	2	3	3

Source: Hardach, G. (1977) The First World War 1914-1918, Harmondsworth: Penguin, Table 36.

Table 2.9: New Capital Issues in Britain: Empire and Foreign, 1900-38 (Average per Year)

	Empire		Foreign		Total	
	£m.	%	£m.	%	£m.	%
1900-14	53.5	39.1	83.9	60.9	137.4	100
1919-23	65.4	66.4	27.9	33.6	93.3	100
1924-28	72.5	58.8	50.8	41.2	123.3	100
1929-33	44.0	69.6	19.2	30.4	63.2	100
1934-38	25.6	86.2	4.1	13.8	29.7	100

Source: Cain, P.J. and Hopkins, A.G. (1993) British Imperialism: Crisis and Deconstruction, 1914-1990, London: Longman, Table 3.7

Table 2.10: Number of International Cartel Member Corporations by Country, 1937

	Number	of	Participants
Country	Direct	Indirect/ Partial	Total
France (and colonies)	67	2	69
Germany	57		57
Great Britain	31	9	40
Switzerland	25		25
Holland	20		20
Belgium	20		20
Czechoslovakia	17	3	20
Norway	16	1	17
Sweden	16		16
Austria	15	3	18
Italy	15	1	16
Poland	13	2	15
Finland	10	1	11
Yugoslavia	9	1	10
Hungary	8	3	11
United States	8	3	11
Japan	2	2	4

Source: Kudō, A. and Hara, T. (1992) International Cartels in Business History, Tokyo: University of Tokyo Press, p.3.

Table 2.11: New Manufacturing Subsidiaries in the U.K. by Sector, 1920-39 and 1950-62

	New Subsidiaries Created	
Activity	**1920-39**	**1950-62**
Mineral Oil Processing	3	0
Production & Distribution of Oil and Gas	3	0
Metal Manufacturing	13	15
Manufacturing of Non-metallic Mineral Products	7	8
Chemical Industry	66	93
Production of Man-made Fibres	3	8
Manufacturing of Other Metal Goods	27	17
Mechanical Engineering	41	91
Manufacture of Office Machinery	5	7
Electrical and Electronic Engineering	40	38
Motor Vehicles and Parts	12	4
Other Transport Equipment	3	2
Instrument Engineering	16	21
Food, Drink & Tobacco	38	32
Textiles	5	1
Leather & Leather Goods	9	5
Timber & Wooden Furniture	3	0
Paper & Paper Products	7	10
Rubber & Plastics	10	10
Other Manufacturing	4	7
TOTAL	315	376
Number from U.S.	228	303

Source: Bostock, F. and Jones, G. (1994) "Foreign Multinationals in British Manufacturing", Business History, 36(1), Table 1.