Crosscurrents: American Investments in Europe, European Investments in the United States

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For many years it has been recognized that foreign companies invested in the United States at the same time as US enterprises invested in Europe [23]. There has also been a two-way street between the United States and Canada [24] and more recently between the United States and Japan [48 and 37]. The main crosscurrents have, however, been trans-Atlantic, between the United States and Europe. Often, as Stephen Hymer noted in 1960, in the *same* industries as US enterprises do business abroad, "one of the firms operating in the United States is a foreign firm" [22, pp. 98 and 119].

This paper considers the trans-Atlantic interrelationships and seeks to probe into the extent of symmetrical, or asymmetrical, behavior. My initial idea was to explore the topic over a long period in many industries. Space limitations frustrated such intentions. The result is a four-industry analysis, confined to the years 1860-1914. My approach should highlight significant generalizations. Symmetry, we shall see, did *not* exist. In these years in fact, asymmetry characterized the cross-investments.[1] "Advantage" was crucial to the interactions.

I have chosen to look at the investments according to concepts of "advantage." The first industry selected is one in which the United States started with an advantage (oil); the second is one where the *initial* advantage lay with Europeans (automobiles); the third saw America with the early lead (condensed milk products); and the fourth was one wherein Europeans maintained the advantage between 1860-1914 (colors and pharmaceuticals).

I.

The advantage of Americans in oil was in its physical presence and in the entrepreneurial talent that utilized the raw material. The story of the growth of the American oil industry, the rise of Rockefeller, the activities of the Standard Oil companies, the development of oil refining and marketing, has been well told by

others (for example, [46 and 20]). Standard Oil early moved abroad and included in its international expansion were investments in marketing American oil products in Europe [42].

As is familiar, crucial dates in the American chronology were 1859, the discovery of commercial oil in Titusville; 1870, the first Standard Oil Company (Standard Oil of Ohio); and 1882, the Standard Oil Trust and the formation within it of Standard Oil of New Jersey (now Exxon) and Standard Oil of New York (now Mobil). American refined oil products were exported from the earliest time; by 1871, fully 77 percent went to alien lands. European markets were the largest abroad. In the mid-1880s, oil products from the United States met competition in Europe from Russian oil that was extracted, refined, and sold by western Europeans, the Nobels and Paris Rothschilds included. From the late 1880s, Standard Oil of New Jersey made substantial investments in marketing in Europe, where it sought to hold its sales leadership. The investments were in response to the entry of Russian oil products.

In 1880, Aeilko Jans Zijlker, manager of the East Sumatra Tobacco Company, discovered oil in the Dutch East Indies. A decade later, the Royal Dutch Company was organized in the Netherlands to work these properties. It built a refinery in Sumatra and sold oil products, initially in the Far East. It invested in a marketing network. By 1903, Royal Dutch had begun to sell gasoline in Europe. At this time, Standard Oil led in the Dutch market [14].

Meanwhile, the English firm, M. Samuel and Company, which since the 1830s had been in the Far Eastern trade, began in the 1890s to sell Russian oil in the East; in 1895-96, it invested in producing oil in Dutch Borneo and then in 1897, the "Shell" Transport and Trading Company was organized to acquire the oil business of M. Samuel and Company. By the beginning of 1902, Shell was marketing oil products through its own network in Europe, South America, Africa, and Australia, as well as in its original markets in the East. In England, its home country, a Standard Oil Company was still the market leader [19 and 43].

During much of the 1890s, Standard Oil, Shell's predecessor, and Royal Dutch competed in the Far East. In 1897, Royal Dutch and Shell formed an uneasy alliance, which in 1902-1903 was formalized when Shell and Royal Dutch -- with the Rothschilds -- organized the Asiatic Petroleum Company to sell oil from South Africa to Japan [1]. Four years later, in 1907, Royal Dutch and Shell merged their worldwide business, on the basis of profits, 60 percent to Royal Dutch, 40 percent to Shell. This new Royal Dutch-Shell group faced Standard Oil companies in world markets.

The confrontation was far from pure competition. In 1905, Standard Oil of New York and Asiatic Petroleum made a quota agreement. Standard Oil of New York broke the pact in 1910. Incensed, Henri Deterding, of Royal Dutch-Shell, counterattacked. His firm entered European kerosene markets on a formidable scale with oil from Romania, challenging Standard Oil of New Jersey's position.

For the first time, the British-Dutch group entered the United States, competing with Standard Oil companies on their home ground. In 1911, two representatives of Royal Dutch-Shell went to California to start a sales organization. The group would sell surplus gasoline on its own account on the West Coast. A Shell tanker in 1912 delivered 1 million gallons of Sumatra gasoline to a new terminal north of Seattle, Washington. However, Shell realized the American market could not be served simply by imports; in 1912, the Royal Dutch-Shell group bought oil-bearing lands, mainly in Oklahoma.

The early history of Royal Dutch-Shell in America is complicated by the existence of different ventures. The group established the American Gasolene Company in 1912, a marketing company to sell in the west. In response to Standard Oil of New Jersey's decision to produce in Sumatra, in Oklahoma and Illinois the group in June 1912 formed a company called the 's-Gravenhage Association, 51 percent of the shares of which were owned by Royal Dutch-Shell, and the rest by London and Paris bankers including the Paris Rothschilds. In July 1912, Shell personnel arrived in Tulsa, Oklahoma, and acquired several properties, to be held by a new company called the Roxana Petroleum Company. In August 1913, the group acquired from the San Francisco office of the British firm of Balfour, Williamson and Company, the Coalinga oil field in California [1 and 19].

Thus in 1912-14, Shell expanded in the United States. Cross-currents existed. American companies, Standard Oil of New Jersey and others as well, had investments in Europe; the European, Royal Dutch-Shell (and before it Balfour, Williamson and Company) had investments in the United States.[2]

The paths leading to these cross-investments had been roundabout and stimulated by worldwide contacts. By the time the Royal Dutch-Shell group "counterattacked" in America it had become a fully integrated international oil company with producing, refining, marketing, and transportation facilities. It had a backlog of marketing, technological, managerial, and organizational techniques. In its global encounters with Standard Oil, it had acquired advantages not dissimilar to those of its larger counterpart. When it entered and grew successfully in the United States, Standard Oil was under domestic antitrust attack. The Supreme Court decision breaking up Standard Oil in 1911 left the American giant vulnerable. Shell arrived in America just as its most serious competition was being bombarded in the courts. Perhaps the internal assault on Standard Oil left it less prepared to cope with the entry of Royal Dutch-Shell. In any case, this arrival furnished the basis for the growth of a substantial American unit, the Shell Oil Company.

The decisions of Royal Dutch-Shell to invest in America were different from Standard Oil's decisions to invest in Europe. The differences were separated by the decades of original investments

and by motivation: Standard Oil sought to sell *American* products in Europe and invested abroad for this reason. Royal Dutch-Shell wanted to confront its rival in its home territory and found an effective means of doing so. Each made the major investments in response to competitive challenges. Each operated from a position of strength or advantage.

II.

The second industry where there were cross-investments was that of automobiles. The first automobiles were invented in Europe. The early European cars were handcrafted vehicles that were exported to the United States and were competitive here. Two Germans, Gottlieb Daimler and Karl Benz in 1885-86, developed greatly improved gasoline engines and automobiles. Daimler's patents were worked in France by Panhard and Levassor [41, p. 8]. In 1888, William Steinway of piano fame visited Europe [28 and 33]. In an agreement witnessed by the US vice-consul in Stuttgart, Germany, on 6 October 1888, Gottlieb Daimler authorized William Steinway to act for him in forming the Daimler Motor Company, to be incorporated in New York. Daimler was to receive 66 shares of the capital stock. This was apparently a token. William Steinway would hold most of the stock. Steinway had carte blanche to act on Daimler's behalf. Daimler agreed to transfer to the Daimler Motor Company "all letter Patent granted to me by the United States of America Patent Office prior to the date of this agreement, and any reissues, renewals of such patents or letter patents granted me by the United States, thereafter" [34 and 35]. Daimler Motor Company was formed on 26 January 1889, with an authorized capital of $200,000 [5].

The company's first products were not automobiles but motors for boats and stationary engines, imported from Germany. By 1889, Daimler motor boats were being operated in New York harbor [30, p. 129n]. In 1891, William Steinway arranged for the National Machine Company in Hartford, Connecticut, to manufacture the first Daimler motors made in America [32, p. 56]. Other Daimler products continued to be imported [33, p. 211]. Soon William Steinway suggested manufacturing be done near the Steinway plant in Long Island. The Daimler Motor Company's factory was in the village of Steinway, L.I., on Steinway Street, two blocks from the Steinway plant [35]. An advertisement in the *American Art Journal* of 2 April 1892, reads "Daimler Motor Company -- manufacturers of Daimler Motor Launches and Gas Engines, 111 E. 14th Street, New York, next door to Steinway Hall."[3] The 14th Street address was the New York City showroom.

In 1893, Benz established representation in New York [32, pp. 57-58]. That year Gottlieb Daimler visited the United States and was enthusiastic about the prospects for business. But William

Steinway died in 1896 and so did Gottlieb Daimler four years later.

In 1898 a new company, the Daimler Manufacturing Company -- capital $700,000 -- was formed in New York [5]. Its "parent company" was Daimler Motoren Gesellschaft of Untertuerkheim, Germany.[4] Apparently, there was a Steinway family interest in this firm as well. William Steinway's grandson, John Steinway, remembers that his uncle Louis von Bernuth ran the company at one time [35]. The new firm imported Daimlers and Panhard and Levassor units from Europe. It produced motors and delivery trucks at the Long Island factory. In 1905, it built the first American Mercedes. The car was described as "a faithful reproduction in materials, workmanship and design of the foreign car." For its construction, the company imported from Europe chrome nickel-steel that it asserted no American concern could produce. Important drop forgings were also imported, as were castings to achieve high quality. The car was offered at $7,500 -- $3,000 less than the "Foreign Mercedes" [6]. There was a US tariff of 45 percent on imported automobiles that made American construction imperative [16, p. 90]. The Daimler Manufacturing Company produced cars until 1913; there is no record of the number built, but the output was clearly not large. In 1913, production stopped when a fire destroyed large parts of the factory [33, p. 213]. Production never resumed, probably for three reasons: (1) by 1914 Germany was in World War I; (2) the 1913 US tariff on imported cars was reduced; and (3) the American automobile industry had conquered the US market. The Mercedes-Benz historian, Frederick Schildberger, offers the additional explanation that the American Mercedes had been "no match for the German Mercedes" [33, p. 213].

A second European car manufacturer also built automobiles in America in this period, Fiat. Like the Mercedes, Fiat was at that time an expensive car. From origins in 1899, the Italian makers of Fiat established an international business in Europe; in 1909, the Fiat Automobile Company began to produce the American Fiat in Poughkeepsie, New York. The goal was undoubtedly to get behind tariff walls. In 1918, however, the plant was sold to the American, Duesenberg Motor Company [40, pp. 231 and 295].

Daimler and Fiat invested in the United States to meet American demand. They were prompted to produce cars behind the US tariff wall. Their investments were in luxury products.

Meanwhile, the US automobile industry took form and Americans began to export. Because of the Canadian tariff, Ford arranged in 1904 to manufacture in the Dominion. The Ford Motor Company sold in England. Growing sales convinced Ford of the need for an assembly plant there to save freight expenses. Ford's Manchester, England, plant began operations in 1911, assembling the Model T [41, pp. 14-19 and 47].

Thus, we get crosscurrents: European vehicles built in the United States, American units in Europe. But the asymmetry here

is even more evident than in the case of oil. *Luxury* German and Italian cars were made in the United States, while a mass-produced low-priced car was assembled by Ford in England. Only *after* Daimler and Fiat stopped building cars in the United States did American automobile producers build or acquire plants in Germany and Italy. Thus there was geographical as well as production method and product asymmetry. In the period of American car manufacturers' first substantial expansion in Europe, the 1920s, *no* continental European car manufacturers made or assembled vehicles in the United States (British makers did on a small scale produce in America luxury Rolls Royces and in the early 1930s baby Austins) [40 and 9].[5] Americans had achieved superiority in the world's automobile industry. After World War II, continental European automobile manufacturers would again invest in the American car industry -- and then on a new basis.

III.

The third industry to be considered is that of condensed milk products (including condensed milk and a milk-based baby food). The innovator in condensed milk was the predecessor of today's Borden Company, the American firm, The New York Condensed Milk Company, which began to do business in 1857 [3 and 12]. Gail Borden in 1853 had applied for US and British patents on his condensed milk process, obtaining both in 1856 [47, p. 166; and 12, pp. 226 and 229]. In June 1861, the company's factory in Wassaic, New York, was completed. The business prospered during the Civil War, selling practically all its output to the army. Aside from taking out English patents, Borden apparently did nothing there.

In 1866, two American brothers, Charles and George Page, built a condensed milk factory in Cham, Switzerland. This was American business abroad, although the enterprise appears to have used British and Swiss capital and in time became totally European-financed. Charles Page was the American consul in Zurich; he planned to make condensed milk from the excellent Swiss milk. Initially, he considered obtaining a license from Borden; but because of the absence of a Swiss patent law, Page did not need a license [31, p. 85]. The brothers could and did copy the Borden process; in fact, they equipped their Swiss plant with machinery purchased in the United States. In 1866, they started Anglo-Swiss Condensed Milk Company to carry on the business. Production began in 1867 [18, p. 29]. By the end of the 1870s, Anglo-Swiss had factories in England (presumably opened after Borden's patent had run its course) and in Bavaria, as well as in Switzerland [18, pp. 28, 39, 43, and 56-59].

Meanwhile, at Vevey, Switzerland, 120 miles from Cham, Henri Nestlé began in the 1860s to produce a baby food -- a milk food -- that used "good cow's milk." His first success was in 1867.

Nestlé soon began to market outside Switzerland. In 1877, Anglo-Swiss developed a baby food based on condensed milk, which brought it into direct competition with Nestlé for the first time. To counteract Anglo-Swiss, in 1878, Nestlé started to manufacture condensed milk. The competition was intense [18, pp. 34, 60, and 64].

In 1882, Anglo-Swiss decided to manufacture in the United States to avoid the high US import duties. (Borden's patent had expired.) George Page bought his first American factory at Middletown, New York, and went into competition with Borden, which firm responded with new products, "low-price fighting brands." Anglo-Swiss expanded, building and buying American factories so that by 1900, it had five factories in the United States. The competition with Borden was, however, too much and in 1902, Anglo-Swiss was prepared to sell its American business to Borden [18, pp. 65-66 and 72-77].

Meanwhile, Anglo-Swiss's *European* competitor, Nestlé, also began to start plants abroad. In time, it too crossed the Atlantic with its "milk food" and its condensed milk. When Nestlé decided to build a factory in the United States, "it was of prime importance that it should be located in a rich grazing country" where it would have access to good milk supplies. In 1900, it selected Fulton, New York, with "rich meadow land and large herds of cattle." According to its 1901 publicity, Nestlé required "the purest and richest milk." The new business advertised Nestlé's Food for Infants and Nestlé's Condensed Milk. The plant at Fulton, New York, was modern by world standards, "with every attention paid to automatic, labor-saving machinery, to insure the perfect product." Thus, just as Anglo-Swiss was considering retreating from the United States market, Nestlé was moving into the very same market [13, p. 65; and 18, p. 78].

In 1902, Borden bought Anglo-Swiss's assets in the United States for $2 million. All Anglo-Swiss employees in the United States joined Borden's. Borden controlled a "large" percentage of the US condensed milk industry, but it had far from a monoply position. At the same time that it purchased Anglo-Swiss's plants, Borden concluded an agreement with that company to obtain exclusive rights to the United States and Canadian markets (Borden had established a plant in Canada in 1899). Borden agreed to withdraw from all other foreign markets [18, p. 77; 29, p 239; 42, p. 213; 21, p. 36; and 38, pp. 156-64].

Three years later, in 1905, the Swiss parent firms of Nestlé and Anglo-Swiss merged to form the Nestlé and Anglo-Swiss Condensed Milk Company. Anglo-Swiss was out of the US market by virtue of its agreement with Borden. Nestlé was not. In 1905, Nestlé's Food Company of New York was established with a capital of $250,000 to manufacture Nestlé baby food and to sell it in the United States. That year, at the time of the merger, a new agreement was negotiated with Borden. Nestlé agreed to withdraw from

the US and Canadian *condensed milk market* and to pay Borden a one-cent-per-can royalty on all baby food sold in these markets! A 1913 City of Fulton guide describes the Nestlé's Food Company as manufacturers of Nestlé's Food for Infants, Children and Invalids. There is no mention of condensed milk [10; 18, p. 117; 21, p. 36; 38, pp. 164-68 contains the 1905 agreement; and 4, p. 33].

In 1914 there were *no* cross-investments in condensed milk or milk food. Borden respected its agreement with the Nestlé and Anglo-Swiss Condensed Milk Company and did not invest in Europe until 1928, and then with a new product [44, p. 495, n. 4]. The Pet Milk Company (founded in the United States by a Swiss exemployee of the Anglo-Swiss, John B. Meyenberg) and the Carnation Milk Company (to the predecessor of which Meyenberg contributed technology) would eventually invest in Europe -- but after World War I, that is beyond this time period [21, pp. 14, 15, and 37; 44, p. 63; 25, pp. 74-75, 79, and 91-92].

In the condensed milk products industry, there were substantial trans-Atlantic interactions of men, product ideas, production methods, and capital. Gail Borden, an American, had first developed the condensed milk technology. There had been cross-investments. It was Americans, the Page brothers, who established the initial Swiss factory of Anglo-Swiss. But the Nestlé and Anglo-Swiss Condensed Milk Company was a Swiss multinational enterprise by the end of this period. The Swiss had gained the advantage. American direct foreign investments existed in Europe in other food products, but not in competition with the merged enterprise.

It was a European-based firm in condensed milk products that by 1914 was taking the initiative internationally; it was in the US market, as part of its international business, having the advantage of experience and expertise. Borden's initial innovative advantage was nipped in the bud by imitative technology adopted at first by Americans abroad.

IV.

The fourth industry, dyestuffs, began with colors and moved into pharmaceuticals. Until the mid-19th century, colors to dye textiles came mainly from animal or vegetable sources: indigo from America and India, crimson cochineal from Mexico, and safflower from China and Japan.

In 1856, W. H. Perkin, a student of German professor August Wilhelm Hoffmann at the Royal College of Chemistry in London, attempted to produce quinine from coal tar; accidentally he prepared a lilac-colored dye ("aniline purple"). With the financing of his father and assisted by his older brother, Perkin quit college, improved on the product, and developed an artificial dye to substitute for natural dyestuffs. His success prompted others

to perfect new colors: red, yellow, blue, and deep purple aniline. Factories sprang up in England, France, Germany, and Switzerland. In 1860, Frederick Bayer and Company built the first German aniline factory. During the next 40 years, the leading German and Swiss dyestuff firms were organized: Basf (Badische Aniline-und Soda Fabrick); the predecessor of Höchst, Agfa (AG fur Anilin-Fabriken); Sandoz; and Ciba (Chemische Industrie zu Basel). J. R. Geigy (founded in 1758) moved into aniline production in 1864; E. Merck, which emerged from an 18th century apothecary shop, began to make pharmaceuticals [2].

Germany took the lead in the coal tar industries, surpassing England. By 1879, the German dyestuff industry was producing four times that of the British [7, p. 274]. Pharmaceuticals as well as dyes were produced. Many reasons have been given for Germany's advantage. Some attribute it to the high quality of German training in chemistry and to their ability to apply the scientific knowledge [2]. Some point to the careful character of the business, appropriate to disciplined German workmen [17]. F. W. Taussig argued the advantage came because employers could hire highly skilled chemical workers at very low wages [36].

By 1913, Bayer was the largest German chemical company [15, p. 128]. Bayer, initially, had entered the American market through exports. In 1865, Bayer built a small aniline factory in Albany, New York [45]. In Germany, Bayer moved from colors to pharmaceuticals. In 1903, industrial chemist Carl Duisberg and his colleague, Frederick Bayer, Jr., traveled to the United States to establish a larger factory to manufacture Bayer's pharmaceuticals. Frederick Bayer and Company decided to manufacture drugs in the United States because high tariffs (up to 100 percent) made exports from Germany expensive; moreover, Bayer's patents in the United States on phenacetin (a forerunner of aspirin) had expired, and competitors might move into Bayer's markets if Bayer did not manufacture [2, pp. 124-25[. Not until 1906 did Bayer form an American subsidiary, the Bayer Company of New York [44, p. 82]. Bayer by 1913 had two plants in New York State in Rensselaer and Albany. The company made dyes, phenacetin, and aspirin [15, p.180].

Meanwhile, in 1887, German-born Theodore Weicker went to the United States on behalf of E. Merck and Company. He established an American, Merck and Company in 1891. George Merck joined him in the new enterprise. Merck and Company started business as an importer of drugs and chemicals, bringing in products from its German parent. Soon it began to manufacture [26 and 17]. Other German firms operated as repackers and distributors of German products [15, p. 180]. The Germans took out patents on dyestuffs and pharmaceuticals. As is well known, during World War I the properties and patents passed to American companies.

While the German firms invested in the United States, no American dyestuff enterprise invested in Germany. On the other hand, US concerns producing "colors" from other than dyestuffs --

the Sherwin-Williams Paint Company, for example -- did invest abroad, in Canada and England [42, p. 212]. Likewise, US drug companies *not* based on coal tar derivatives or sophisticated chemistry moved into Europe, or at least into England. Thus, Pond's Extract Company, which sold a "pain destroying and healing" remedy, organized a London subsidiary in 1872 to sell the extract in England and on the Continent; Wyeth and Bros. sent a representative to England in 1877 to market its products [42, p. 60]. By the turn of the century, American patent medicines were produced in England and, according to a contemporary source, "the trade in patent American drugs manufactured in this country [England] probably very largely exceeds the import trade" [27, p. 137]. The important British firm, Burroughs, Wellcome and Company had American origins [42, p. 60]. Here again we find asymmetry. If we define the industries as "colors" or "drugs" we see cross-investments; on the other hand, if we talk about the dyestuff industry and its derivatives we have none. There was also geographical asymmetry. While American paint and drug makers went to England, they did not invest in Germany in these years. German enterprises, *not* British color and drug firms, came to the United States.

V.

In conclusion, these four cases hopefully bring out how the trans-Atlantic movements of the direct foreign investors were part of a larger international fabric. These examples touch the surface in indicating the multifaceted interconnections between US business in Europe and European business in the United States. Superficially, we see Americans invested in oil, automobiles, condensed milk, and colors and drugs in Europe, while Europeans invested in the oil, automobiles, condensed milk, and colors and drug industries in America. Yet the apparent symmetry disappears as we look at (1) the time of initial investments (in oil and condensed milk); (2) product details (luxury versus mass-produced cars; coal-tar-based colors and drugs versus noncoal-tar-based colors and drugs); and (3) geographical locales in Europe (German and Italian autos in the United States, American cars in England; German colors and pharmaceuticals in the United States, and US paints and drugs in England).

In every case that I have explored the cross-investments involved more than simple trans-Atlantic investments. Royal Dutch-Shell confronted Standard Oil worldwide before it entered the US market. The German automobile pioneers invested in the United States first to sell, then to manufacture. American makers invested in Canada before they invested in Europe. Americans carried US innovations in condensed milk into European production. Then Europeans, who invested first in other European nations, turned to confront Americans in the domestic US market. With

dyestuffs, the British invention spread to the continent. German firms made US investments. US paint and nondyestuff-based drug concerns invested abroad, in Canada as well as England. In these four cases there is the common element that the *initial* foreign investor went directly across the Atlantic. The "counter-investor" -- the cross-investor -- tried out the market in one or more foreign countries *before* crossing the Atlantic. In each case of foreign investment, the investor had some element of superiority. In the case of oil, the initial advantage was American -- and Americans still rank first in the international oil industry. The invention of automobiles was European. Europe invested in the United States before Americans invested in Europe. *Then*, we get Americans in Europe. Though Americans are still foremost in the world automobile industry, Europeans (Volvo and Volkswagen) are in the 1970s again investing in building cars in the United States. With condensed milk products, the invention was American. American men started manufacturing in Europe. *But* eventually European capital and men take the initiative in the United States. With colors and pharmaceuticals, Germans invested in the United States; Americans in Europe in different product lines. Since World War I and especially since World War II, there has been a vast internaional expansion of American, German, and Swiss companies. Colors are no longer of prime importance. Drugs -- prescription drugs -- have taken precedence, with each firm having its own offerings, its own products, and its own advantage.

In sum, cross-investments existed -- but the pattern was one of asymmetry, *not* symmetry.

NOTES

1. I join with Lawrence G. Franko, who has recently studied European multinational corporations [11], in accepting the idea of asymmetry. Stephen Hymer's work [22] suggested symmetry.

2. On other US investments in Europe, see [42, pp. 64 and 86]. On Belgian, Dutch, and French oil stakes in the US, see [39, p. 96]. See also [8, pp. 99-100] on Balfour, Williamson and Company's investment in 1901 and subsequent British, French, and Dutch stakes in the United States.

3. This advertisement was discovered by Cyril Ehrlich.

4. A 1906 brochure for the American Mercedes [6] describes the Daimler Manufacturing Company as "closely affiliated with the parent company" and "operating under the American patents and shop rights."

5. My thanks go to Robert Croll for data on Rolls Royce and Austin. The investment of the British parent Austin was very small.

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