Great Britain: Big business, management, and competitiveness in twentieth-century Britain

GEOFFREY JONES

INTRODUCTION

Britain holds a special place in Chandler's Scale and Scope. In his comparative study of the evolution of large industrial firms in the United States, Germany, and Britain before 1945, it is the latter that is cast as the failure. "The British story," in Chandler's analysis, "provides a counterpoint – an antithesis – to the American experience." "Britain is the place to study enterprises' failures to develop competitive strength." This chapter begins by reviewing the Chandlerian interpretation of British business history before 1945 before turning to a fuller examination of the structure of British big business and management, and its performance, after World War II. A great deal has been written about the British economy in this period, much of it in a search for the "British disease" which explains its apparently inexorable decline. This chapter seeks not to duplicate this large literature, but to offer an interpretative survey, focused on the central Chandlerian concerns of the business enterprise, organizational capability, and competitiveness.

¹ Alfred D. Chandler, Scale and Scope (Cambridge, Mass.: Harvard University Press, 1990), p. 236; and "Response to the Contributors to the Review Colloquium on Scale and Scope," Business History Review, 64 (1990), p. 751.

PERSONAL CAPITALISM BEFORE 1945

"The general failure to develop organizational capabilities weakened British industry and with it the British economy." This is the heart of the Chandlerian view of British business history from the late nineteenth century until World War II. To a great extent, British firms failed to make (or make sufficiently) the three-pronged investment in manufacturing, marketing, and management that brought success to American and German firms in the new capital-intensive industries of the late nineteenth century. In a wide range of such industries, including light and heavy machinery, automobiles, electrical equipment, electrochemicals, and organic chemicals, it was American and German firms that captured the world – and even the British – market. Having missed the opportunity to become first movers, British business faced formidable catch-up problems in subsequent decades. In the interwar years, British business did "catch up" in some industries, notably chemicals and petroleum, but many weaknesses remained to haunt the British after World War II.

The fundamental problem of British business, Chandler suggests, was that British companies failed to emulate the managerial hierarchies pioneered in the United States, and opted instead for "personal capitalism." This was partly associated with the continuing prominence of family-owned firms, but the concept is widened out by Chandler to include personal "styles" of management. The upshot was that many sectors of British industry were dominated by small, highly specialized, firms. Managerial hierarchies were thin, with very few centralized management control structures. British personal capitalism could succeed in industries where the production process was relatively straightforward and offered fewer opportunities for scale economies, such as branded and packaged consumer goods, but it constrained the British ability to compete in capital-intensive industries. Personal capitalism meant, Chandler suggests, a preference for short-term income rather than long-term growth in assets, and a bias for small-scale operations which contributed to failures to invest and modernize.

The managerial and organizational weaknesses of British firms in many of the complex capital-intensive manufacturing industries before 1945 are beyond dispute. The failure of British competitiveness in those industries is also exposed in convincing detail in *Scale and Scope*. Two questions arise, however, which merit consideration, as they will also reoccur when

² There are surveys of the literature in Bernard W. E. Alford, British Economic Performance, 1945–1975 (London: Macmillan, 1988); Nick F. R. Crafts and Nicholas W. C. Woodward (eds.), The British Economy since 1945 (Oxford: Clarendon Press, 1991); Roderick Floud and Donald McCloskey (eds.), The Economic History of Britain since 1700, vol. 3: 1939–1992 (Cambridge: Cambridge University Press, 1994); and Michael Dintenfass, The Decline of Industrial Britain, 1870–1980 (London: Routledge, 1992). The debate is put in perspective in Barry Supple, "Fear of Failing: Economic History and the Decline of Britain," Economic History Review, 47 (1994), pp. 441–458. Excellent surveys of recent business history literature on twentieth-century Britain can be found in Maurice W. Kirby and Mary B. Rose (eds.), Business Enterprise in Modern Britain from the Eighteenth to the Twentieth Century (London: Routledge, 1994), and John F. Wilson, British Business History, 1720–1994 (Manchester: Manchester University Press, 1995).

³ Chandler, Scale and Scope, p. 392.

the post-1945 period is examined. The first concerns what was happening in the British economy beyond the capital-intensive manufacturing industries. The second concerns the relationship between organizational capabilities and competitive performance.

It is useful to begin with a review of Britain's overall macroeconomic performance before 1945. Britain's failure to make the required three-pronged investment in many manufacturing industries did not result in a dramatic economic decline. In fact, although Britain had lost its position as the world's largest industrial economy to the United States by the beginning of the new century, British manufacturing industry and the British economy in general remained giants in both the European and the world economy. Britain's real GDP remained considerably larger than that of Germany or France up to World War II.⁴ Even at the end of the 1930s Germany's share of world exports of manufactured goods was only a little above that of Britain. At midcentury, and after the catastrophic disruption of World War II, Britain accounted for 25 percent of world manufactured exports, compared to 27 percent for the United States, 9 percent for France, 7 percent for Germany, and 3 percent for Japan.⁵

The British problem was one of relatively slow economic growth over the long run, the product of slow labor (and capital) productivity growth. Estimates of growth rates of real output per worker employed from 1873 reveal a picture of low and falling British productivity growth before 1924, as the late Victorian economy, with its low value-added, low-skilled, highly specialized orientation, was unable to deliver the productivity growth performance of economies such as Germany and the United States which had a more "high-tech" orientation. The British productivity performance improved after the mid-1920s, but still left Britain lagging behind the United States, Germany and France.

This picture, however, needs careful interpretation. Table 4.1 gives absolute productivity figures for the whole British economy, rather than

Table 4.1. Real GDP per hour worked, 1870-1986

	United Kingdom	United States	Germany	France
1870	100	97	50	48
1890	100	113	55	49
1913	100	135	65	60
1929	100	158	65	70
1938	100	154	73	82
1950	100	185	54	70
1973	100	156	100	105
1986	100	133	105	119

Source: Nick F. R. Crafts, "Economic Growth," in Nick F. R. Crafts and Nicholas Woodward (eds.), *The British Economy since* 1945 (Oxford: Clarendon Press, 1991), p. 263.

just manufacturing, and adjusts for hours worked. It also gives comparative data for the United States, Germany, and France.

It is evident that Britain had fallen seriously behind the United States in absolute productivity by the late nineteenth century, but it was not until the 1970s that the other large European economies reached British levels. Even in manufacturing the failings of the British economy should not be exaggerated. American industry as a whole was more than twice as productive as British industry by the 1920s, but into the 1930s it seems that German industry had only a slightly higher labor productivity than the British. Moreover, there were significant variations between industries. British productivity performance in comparison with that of Germany and the United States was worse in the heavy industries and much better in the lighter industries. In the interwar years British productivity was above German levels in such light industries as food, drink, tobacco, and textiles. The major period of British decline relative to the rest of Western Europe, including Germany, was in the post-1950 period. **

These data are important because they remind us that the experience

Angus Maddison, "Growth and Slowdown in Advanced Capitalist Economies: Techniques of Quantitative Assessment," *Journal of Economic Literature*, 25 (1987), p. 682.
 Nick F. R. Crafts and Nicholas W. C. Woodward, "The British Economy since 1945. Introduction and Overview," in Crafts and Woodward, *The British Economy since* 1945,

Nick F. R. Crafts, "Economic Growth," in Crafts and Woodward, The British Economy since 1945, p. 261. The British growth rates were 1.2 percent 1873–1899; 0.5 percent 1899–1913; 0.3 percent 1913–1924; and 1 percent 1924–1937. The equivalent rates for the United States were 1.9 percent, 1.3 percent, 1.7 percent, and 1.4 percent; for Germany 1.5 percent, 1.5 percent; 0.9 percent, and 3 percent; and for France 1.3 percent, 1.6 percent, 0.8 percent, and 1.4 percent.

⁷ Stephen N. Broadberry and Nick F. R. Crafts, "Explaining Anglo-American Productivity Differences in the Mid-Twentieth Century," and Stephen N. Broadberry and Rainer Fremdling, "Comparative Productivity in British and German Industry, 1907–37," Oxford Bulletin of Economics and Statistics, 52 (1990), pp. 375–402, 403–421.

Stephen Broadberry, "The Impact of the World Wars on the Long Run Performance of the British Economy," Oxford Review of Economic Policy, 4 (1988), p. 256. This point was made strongly by Sidney Pollard in his review of Scale and Scope, "The World according to Mammon," Times Higher Education Supplement, 27 April 1990, p. 20.

of the British in manufacturing, and more especially in the capital-intensive industries, must not automatically be assumed to be that of British business as a whole before 1945. As Supple has observed, "manufacturing industry has never accounted for as much as 35 percent of British or American, or 40 percent of German, marketed national output."

British business historians have long been aware of the rapid growth of the service sector in the late nineteenth century, a sector in which British entrepreneurs appeared better able to perceive new opportunities than in manufacturing. The significance of this trend for the analysis of the growth of big business has been highlighted by Wardley's data base of the fifty largest British companies (by market value) for 1904–5, 1934–1935, and 1985. This shows that Britain had a considerable number of large companies even before World War I, most of which were engaged in the provision of services. British entrepreneurs could, Wardley suggests, construct large companies. Wardley supports the view that productivity levels were higher in services than in manufacturing, and – more controversially – suggests that if market capitalization rather than nominal capitalization is used as the basis for international comparison, even the perceived difference in size between British and American manufacturing companies is much reduced. 11

British entrepreneurs were also able to construct large-scale enterprises to engage in international business. Chapman examined British-based "investment groups" active overseas before 1914, such as Matheson and Butterfield & Swire in the Far East, and Anthony Gibbs in South America, which undertook diversified trading and industrial activities through a variety of subsidiary enterprises. The result was large business enterprises, whose scale has been disguised by confining attention to the parent company alone. ¹² These business groups, which took the form of complex

⁹ Barry Supple, "Scale and Scope: Alfred Chandler and the Dynamics of Industrial Capitalism," *Economic History Review*, 44 (1991), p. 508.

Charles Wilson, "Economy and Society in Late Victorian Britain," Economic History Review, 18 (1965), pp. 183-98; Peter Payne, "Entrepreneurship and British Economic Decline," in Bruce Collins and Keith Robbins (eds.), British Culture and Economic Decline (London: Weidenfeld and Nicolson, 1990), pp. 45-46.

Stanley D. Chapman, "British-Based Investment Groups before 1914," Economic History Review, 38 (1985), pp. 230-251.

networks of companies linked by cross-shareholding and interlocking directorships, possessed considerable organizational capability, even if their management structures were different from those of the integrated managerial enterprises appearing in the United States.

This point focuses attention on the significance of British overseas business activities before 1945. As foreign direct investment became a prominent form of capital export in the late nineteenth century, British business took a leading part in its growth. Britain accounted for around 45 percent of the stock of accumulated foreign direct investment in 1914 – compared with the American 18 percent and the German 10 percent – and it remained the world's largest foreign direct investor before 1945. Direct investment in foreign countries (even in overseas colonies) is a risky business strategy. Such investments are unlikely to be durable without substantial competitive advantages over local competitors and other foreign rivals.

There is evidence that this early British multinational enterprise was afflicted by managerial weaknesses. Before 1914, a considerable proportion of British foreign direct investment took the form of "free-standing" companies. Tiny London head offices (usually no more than a part-time board of directors) controlled the overseas operations of such firms. The result appeared to be a fragile managerial system which, according to Wilkins, led to the disappearance of such firms over time. ¹⁴ Case studies of the more "modern" form of manufacturing multinational enterprise have also revealed managerial weaknesses. Some at least of the large British manufacturing firms which engaged in outward investment before 1939, such as Dunlop and Cadbury, are known to have experienced just the problems identified by Chandler in his critique of personal capitalism. ¹⁵

Nevertheless it is implausible that the enormous British multinational investment of this period could not have survived, and grown, without considerable organizational capabilities on behalf of the enterprises involved. There were more successful British multinational investments than those of Dunlop and Cadbury, as well as many examples of American and other non-British multinationals making problematic forays into foreign

Peter Wardley, "The Anatomy of Big Business: Aspects of Corporate Development in the Twentieth Century," Business History, 33 (1991), pp. 268-296. See also Norman Gemmeil and Peter Wardley, "The Contribution of Services to British Economic Growth, 1856-1913," Explorations in Economic History, 27 (1990), pp. 299-321, and Robert Millward, "Productivity in the UK Services Sector: Historical Trends 1865-1985 and Comparisons with the USA 1950-85," Oxford Bulletin of Economics and Statistics, 52 (1990), pp. 423-436.

¹³ John H. Dunning, Explaining International Production (London: Unwin Hyman, 1988), p. 74

Mira Wilkins, "The Free-Standing Company, 1870-1914: An Important Type of British Foreign Direct Investment," *Economic History Review*, 2nd ser., 61, (1988), pp. 259-282.

¹⁵ Geoffrey Jones (ed.), British Multinationals: Origins, Management and Performance (Aldershot: Gower, 1986).

markets. While German and American electrical equipment provided, in Chandler's words, "light and transportation to the world's growing cities," 16 it was often operated by British-owned utilities in Latin America, Asia, and elsewhere. German manufactured exports to such markets were financed more by British overseas banks than by German banks. 17 Freestanding companies were stronger than they looked when embedded in wider networks of firms. British enterprises active in resource exploitation and related services in the developing world – the bulk of British direct investment before World War II – faced unpredictable and volatile business environments. The use of networks of firms and informal or socialization strategies of control based on strong corporate cultures were probably more rational and effective organizational responses than the creation of bureaucratic hierarchies. 18

There remains much uncertainty about the relationship between organizational capabilities and competitive performance in Britain before World War II. Both the significance and the consequences of the continuing attachment to personal capitalism are debatable. It is still not clear that Britain had disproportionately more family firms than Germany or the United States. Personal capitalism has been a noticeable feature of German business throughout the twentieth century. Comparative studies of the origins and behavior of British and German entrepreneurs in the nineteenth and twentieth centuries show more similarities than dissimilarities.¹⁹

Nor is there a consensus about the behavioral characteristics of owner-managers. British family firms did not all prefer short-term income to long-term asset growth. In some important respects British firms acted in similar ways if they were managerial or personal enterprises. Examples can be found in both types of enterprise of hostility to radical change or, in Coleman's words, an "implicit and unacknowledged obeisance to the god of continuity." Conversely, both types of enterprise were active in

¹⁶ Chandler, Scale and Scope, p. 294.

industrial research and development. The view put forward by Mowery and others that the amount of British R&D before 1945 was deficient rests on uncertain empirical foundations, and is in the process of being challenged. Even if they lacked organizational capabilities, by the interwar years the research outlay of British firms may well have compared favorably to all but a few of the larger American corporations. Producers of branded, packaged goods, often family firms, appear very active in R&D.²¹ An analysis of interwar American patent statistics suggests declining British innovation in the 1920s, but a considerable increase in British-based patenting in the 1930s, which contrasted with declining technological activity in the United States, France, and Germany in that decade.²²

There is evidence also that the adoption of U.S.-style managerial hierarchies did not *automatically* improve competitive performance. The most systematic exploration of this issue has been undertaken by Broadberry and Crafts in an investigation of the productivity gap between British and American industries in the 1930s. A series of case studies of poor-productivity British industries (tin cans, electric lamps, and blast furnaces) and better-performing ones (cement and margarine) led the authors to conclude that it was "incorrect to place a very large weight on corporate structure" to explain the differences in performance. The British tin can industry had a poor productivity performance despite the transformation in the 1930s of Metal Box, the dominant British firm, into a modern industrial enterprise.²³

It is apparent that, however important management structures were to explaining problems in the competitive performance of some British manufacturing industries, there were other factors at work, both external and internal to the business enterprise. Among such external factors,

¹⁷ Geoffrey Jones, British Multinational Banking, 1830–1990 (Oxford: Clarendon Press, 1993), p. 96.

¹⁸ Geoffrey Jones, The Evolution of International Business (London: Routledge, 1996), pp. 35, 161–162; William G. Ouchi, "Markets, Bureaucracies, and Class," Administrative Science Quarterly, 25 (1980), pp. 129–141.

Roy Church, "The Limitations of the Personal Capitalism Paradigm," Business History Review, 64 (1990), pp. 703-710; Harold James, "The German Experience and the Myth of British Cultural Exceptionalism," in Collins and Robbins, British Culture, pp. 115-28. Dintenfass, Decline, pp. 64-65.

Donald Coleman, "Failings and Achievements: Some British Businesses, 1910–80," Business History, 29 (1987), p. 9.

David Mowery, "Industrial Research in Britain, 1900–1950," in Bernard Elbaum and William Lazonick (eds.), The Decline of the British Economy (Oxford: Clarendon Press, 1987), pp. 189–222, and "Finance and Corporate Evolution in Five Industrial Economies, 1900–1950," Industrial and Corporate Change, 1, 1 (1992), pp. 1-36. See also Chandler, Scale and Scope, p. 389. A more favorable interpretation is in David E. H. Edgerton, "Science and Technology in British Business History," Business History, 29 (1987), pp. 84–103; Edgerton and Sally M. Horrocks, "British Industrial Research and Development before 1945," Economic History Review, 47, 2 (1994), pp. 213–238.

²² John Cantwell, "The Evolution of European Industrial Technology in the Interwar Period," in François Caron, Paul Erker and Wolfram Fischer (eds.), Innovations in the European Economy between the Wars (New York: de Gruyter, 1995), pp. 277-319.

²³ Stephen N. Broadberry and Nick F. R. Crafts, "Britain's Productivity Gap in the 1930s: Some Neglected Factors," *Journal of Economic History*, 52, 3 (1992), pp. 531-558; Chandler, Scale and Scope, pp. 316-320.

Broadberry and Crafts have drawn particular attention to the inadequate human capital in interwar Britain, and the problems of collusion and barriers to exit in the economy, fostered by government policy.²⁴ This latter point seems particularly important. Elbaum and Lazonick have criticized the interwar (and later) British governments for not acting as "visible hands" which could force the atomistic small firms in cotton textiles and other industries to merge into larger, managerial enterprises.²⁵ However, the greater problem may well have been the long-term preference in British governments for stability and security, together with a fear of offending vested interest groups, which constantly led British public policy to foster an uncompetitive and collusive business environment.²⁶

Among the factors internal to the firm other than management structure, culture may be the most significant. Unlike Lazonick, with his emphasis on institutional constraints, ²⁷ Chandler in *Scale and Scope* prefers to leave open the "exact reasons" why the British should have preferred "personal capitalism" before 1945. He finds no obvious market or technological explanations for the British failures before 1914 in chemicals, electrical equipment, or other industries, and perhaps we approach at times a "culturist" interpretation of events – the British behaved as they did because their culture was different to that of Germany or the United States. "Since economic reasons cannot effectively explain why the British pioneers failed to make investments necessary to become or compete with foreign first movers," Chandler writes, "one has to turn to broader, more cultural explanations." ²⁸

British economic history has a large literature on the alleged impact of British culture on British entrepreneurship, its "anti-industrial" orientation from the late nineteenth century, and the wide divergence between British and German cultures in this respect. Much of this discussion has been simplistic and misleading, especially in regard to Anglo-German comparisons.²⁹ Nevertheless a far more substantial literature exists in

²⁴ Broadberry and Crafts, "Britain's Productivity Gap."

25 Elbaum and Lazonick, The Decline of the British Economy.

Elbaum and Lazonick, The Decline of the British Economy; William Lazonick, Competitive Advantage on the Shop Floor (Cambridge, Mass.: Harvard University Press, 1990).

²⁸ Chandler, "Response," p. 746.

²⁹ James, "The German Experience."

organization theory and sociology which has yielded considerable empirical evidence on how organizational structures and – perhaps especially – managerial behavior may be influenced by cross-cultural differences, along with many other factors. For example, Hofstede's contention that Germans are less "individualistic" and manifest stronger "uncertainty avoidance" than the British might well provide one element of an explanation why German firms were better able to construct larger and more centralized business enterprises in the new capital-intensive industries of the late nineteenth century. The low uncertainty avoidance of British culture would incline Britishers more than Germans to risky, entrepreneurial activities.³⁰

Also of relevance is the work of Casson on the impact of culture on transactions costs. "High trust" societies, he argues, are able to economize on transactions costs because fewer resources need to be used to monitor behavior. It follows that there will be differences in governance structures and patterns of interfirm interaction between countries according to their "trust" levels. A particular national culture may, as Casson suggests, yield competitive advantages, but it is not really sensible to say that entrepreneurs failed to adopt organizational structures inappropriate to their culture.³¹

This is not the place to rehearse the numerous methodological problems faced by research into the impact of national cultures and business organizations.³² It may simply be observed that any movement toward the Hofstede hypothesis that "organisations are culture bound"³³ puts in doubt the view that organizational forms developed in one country can be transferred to another with the same effectiveness. British-style management cannot necessarily be judged a failure simply because it did not develop on American lines. However, culture may also explain the problem raised by Chandler: it still remains a puzzle, even after all other explanations are taken into consideration, why British businessmen in a range of manufacturing industries continued to prefer not to adopt the latest machinery, or adopt more formal training for their staff, or change other

33 Hofstede, Cultures Consequences, p. 252.

²⁶ Geoffrey Jones and Maurice Kirby, "Competitiveness and the State in International Perspective," in Geoffrey Jones and Maurice Kirby (eds.), Competitiveness and the State (Manchester: Manchester University Press, 1991), pp. 4-6. The evolution of British competition policy is examined in Helen Mercer, Constructing a Competitive Order (Cambridge: Cambridge University Press, 1995).

³⁰ Geert Hofstede, Culture's Consequences (London: Sage, 1984). Cautious support for this hypothesis for the contemporary period is given by Andreas Budde, John Child, Arthur Francis, and Alfred Kieser, "Corporate Goals, Managerial Objectives, and Organizational Structures in British and West German Companies," Organization Studies, 3 (1982), pp. 1–32.

Mark Casson, The Economics of Business Culture (Oxford: Clarendon Press, 1991).
 See the "Conclusion," in Steven Tolliday and Jonathan Zeitlin (eds.), The Power to Manage? Employers and Industrial Relations in Comparative-Industrial Perspective (London: Routledge, 1991), pp. 273-324.

traditional practices, even when such ideas and innovations "enabled foreign enterprises to win customers in markets around the globe and in Britain too." One speculative answer is that British managerial decision making drew on a personal value system which favored financial, entrepreneurial, and trading business activities (such as many services), and was unfavorable to the kind of skills and mental outlook needed to succeed in activities involving complex tasks and long-time horizons (such as the new capital-intensive industries).

To summarize, British economic decline before 1945 needs careful definition. The real problem was the productivity gap between Britain and the United States, which was particularly great in certain industries. Personal capitalism handicapped British enterprise in the capital-intensive industries, but the British created more effective business organizations in some services, and when they invested abroad. The problems of defective management structures within manufacturing firms were made worse by an uncompetitive and collusive environment, caused in part by defective public policy. Managerial performance in the complex capital-intensive industries may also have been handicapped by personal value systems inherent in British culture.

BRITISH BUSINESS AFTER 1945: PERFORMANCE AND STRUCTURE

There are various paradoxes about the performance of British business and the British economy after World War II. In terms of its own past history, this was perhaps the most successful period ever for the British economy, yet in an international perspective the half century after the end of the war witnessed a worse "failure" than anything seen before 1939. The period saw the decline and fall of a range of British industries, from shipbuilding to motor cars. Yet there were some sectors with strong international competitiveness, such as chemicals and – more latterly – pharmaceuticals.

During the 1950s and 1960s British productivity grew at a much faster rate than for decades, but it grew much faster still in most of Western Europe and in Japan. Britain missed the "economic miracle" era of fast growth between the 1950s and 1973, when most of Western Europe and Japan narrowed the large technological gap which had existed between

Table 4.2. Output per person-hour in manufacturing, 1951-1988

	United Kingdom	United States	Germany	France
1951	100	270	68	71
1964	100	268	117	90
1973	100	234	133	101
1979	100	243	163	129
1988	100	224	138	122

Source: Nick F. R. Crafts, "Economic Growth," in Nick F. R. Crafts and Nicholas Woodward (eds.), The British Economy since 1945 (Oxford: Clarendon Press, 1991), p. 262.

themselves and the United States in 1950. Britain closed this gap much more slowly.³⁵

The declining competitiveness of British manufacturing industry lay at the heart of the poor British performance. As Table 4.1 shows, the productivity of the British economy as a whole was not too bad in its European context even in the 1980s. This helps to explain why British income levels remained around the Western European average through the 1990s. However, the performance of British productivity in manufacturing was weak. Table 4.2 gives estimates of absolute levels of productivity in manufacturing at various benchmark dates.

Throughout the period from 1951 to 1979 German and French productivity growth in manufacturing steadily exceeded that of the British, with obvious consequences for the latter.

The problems of the manufacturing sector were reflected in Britain's external trade. Although Britain still accounted for 25 percent of world exports of manufacturers in 1950, by 1975 the proportion was 9 percent. Conversely, there was a sharp rise in import penetration. In 1951 manufactured goods comprised 20 percent of imports. Forty years later they were over 60 percent. In 1983, for the first time since the Industrial Revolution, Britain imported more manufactured goods in value than it exported. Such import penetration was typical of advanced industrial economies. In the 1980s Germany, for example, had a higher level of import penetration of manufactured goods than Britain. The British problem

36 Alford, British Economic Performance, p. 15.

³⁴ Dintenfass, Decline, p. 71.

³⁵ Nick Crafts, "The Assessment: British Economic Growth over the Long Run," Oxford Review of Economic Policy, 4 (1982), p. viii.

was its poor export competitiveness. The British share of world exports of manufacturing fell to almost 7 percent in the mid-1980s, before recovering to 9 percent in the early 1990s.

In some industries the extent of import penetration was striking. The old British staple industries finally succumbed. The cotton textiles industry lost most of its export markets and, from the 1960s, faced large-scale import penetration. In 1950 Britain accounted for over a third of world shipbuilding output, but thirty years later British shipbuilding was a marginal force in the world industry.³⁷ The British automobile industry showed the same trend. In the immediate post–World War II period, with the German car industry in ruins, Britain was a major car exporter. In 1950 the country was the world's greatest car exporter, exporting three times as many cars as the United States. But over the next decade export markets were steadily lost, and this was followed by growing import penetration. In 1965 only 5 percent of British demand for vehicles was met by imports. Ten years later the figure was 33 percent and in 1990 it was over 60 percent.

The process of continuous relative economic decline was interrupted in the 1980s. The discovery of North Sea oil played some role in sustaining British income levels. Britain became self-sufficient in oil in 1980 and then a substantial net oil exporter, and for a time this removed the persistent British balance-of-payments problem. There was also a revival in British labor productivity growth, as Table 4.2 indicates. Uncharacteristically for Britain, the productivity growth was concentrated in the manufacturing sector. In some industries, the improvement was almost miraculous. British aerospace companies, for example, improved their labor productivity by over 60 percent on average between 1980 and 1989. The data generated by O'Mahony in a study of productivity levels in British and German manufacturing industry suggest that the British performance sharply deteriorated against Germany in the 1970s, but considerably improved in the 1980s. She estimates that, by 1987, German output per person-hour in manufacturing was about 22 percent higher than British - still significant, but much less than earlier estimates reflected in Table 4.2. There continued to be marked differences between industries, however. British productivity (per person-hour) was higher than Germany in 1987 in

chemicals and textiles, very similar in food, drink, and tobacco and electrical engineering, and very much lower in vehicles, instrument engineering, and timber and furniture.³⁸ Van Ark has also suggested a more considerable narrowing of the productivity gap between British and American manufacturing between 1968 and 1989 than that indicated in Table 4.2. The van Ark data shows quite a marked British catch-up – even though the American overall productivity leadership remains strong – with a particularly strong British performance in textiles, chemicals, and basic metals.³⁹

The interpretation of the productivity trends of the 1980s is difficult. It was associated with a sharp fall in employment rather than an expansion of the British manufacturing base. As O'Mahony notes in her Anglo-German comparative study, between 1968 and 1987 German manufacturing increased its output by 40 percent and decreased its employment by 7 percent, or 600,000 workers. Over the same period British manufacturing output increased by 10 percent while employment fell 37 percent, or 3 million workers. Improved British productivity was largely the result of shedding labor, mostly in the 1980s, when manufacturing fell by 2.1 million between 1979 and 1989. 40 The deep recession of the early 1980s, which virtually all accounts correlate with the subsequent productivity performance, resulted in a major depletion of Britain's capital stock. The shrinking manufacturing output led to a sharp shift in the structure of the British economy. In 1979 manufacturing accounted for 28 percent of GNP and services 55 percent; by 1990 the proportions were 22 and 64 percent respectively.41 Even the British productivity performance looked comparatively impressive mainly because of a slowdown in productivity growth rates elsewhere.42

The improved British performance in manufacturing was in part associated with the growing role of foreign multinationals in the British economy. Britain had a long history as a host economy for foreign – and

³⁷ Clive H. Lee, The British Economy since 1700: A Macroeconomic Perspective (Cambridge: Cambridge University Press, 1986), pp. 204-212; Elbaum and Lazonick (eds.), The Decline of the British Economy, especially the chapters on shipbuilding and motor vehicles. Alford, British Economic Performance, p. 15.

³⁸ Mary O'Mahony, "Productivity Levels in British and German Manufacturing Industry," National Institute Economic Review no. 139 (February 1992), pp. 46-63. Comparisons with Germany may be misleading because that country has an abnormally high percentage of its work force in manufacturing.

³⁹ Bart van Ark, "Comparative Productivity in British and American Manufacturing," National Institute Economic Review, 142 (1992), pp. 63-73.

⁴⁰ Ibid., p. 55.

⁴¹ E. Davis, S. Flanders, and J. Star, "British Industry in the 1980s," Business Strategy Review, 3 (1992), pp. 45-69.

⁴² Howard Vane, "The Thatcher Years: Macroeconomic Policy and Performance of the UK Economy, 1979–1988," National Westminster Bank Quarterly Review (May, 1992), pp. 26-43; "Legacy of the Curate's Egg," Financial Times, 13 March 1992, p. 8.

especially American - multinationals, which had achieved prominent positions in certain British manufacturing industries by World War II. They were particularly clustered in parts of electrical and mechanical engineering, metal goods, motor vehicles, chemicals, and some food products, such as breakfast cereals and canned soup. The significance of foreign-owned companies expanded rapidly from the 1950s. 43 In 1967 inward direct investment represented 7.2 percent of British GDP. By 1990 the ratio was 21.2 percent. The average for all developed market economies in 1990 was 8.1 percent (the German percentage was 8.9, the American 7.3, and the Japanese 0.3).44 Most of the British motor industry, electronics, and other technologically advanced sectors came to be owned by foreign companies. Between 1986 and 1993 the share of manufacturing output accounted for by foreign-owned companies rose from 18 percent to 25 percent, while over the same period the number of foreign-owned companies among the 100 largest manufacturers increased from 18 to 35. In some sectors foreign-owned companies were quite dominant. By the mid-1990s almost three-quarters of all computers manufactured in Britain were made by foreign-owned companies.

The productivity increases since the 1980s were particularly strong in the foreign-owned sector, whose productivity level was far above the average for the United Kingdom. In 1987 foreign-owned enterprises accounted for 17.9 percent of gross value-added in British manufacturing, but only 12.8 percent of employment. If productivity is defined as gross value-added per person employed, foreign-owned firms had a 48.6 percent "productivity advantage" over domestically owned firms. The size of this "advantage" increased during the 1980s, and although some of it was explained by the pattern of industry distribution, more efficient management appeared to be indicated. Foreign multinationals promised the reindustrialization of the British economy, which reemerged in the late 1980s as, for example, a large exporter of electronics products such as color televisions.

The transformation of the British automobile industry by foreign

multinationals was remarkable. The loss of export markets followed by growing import penetration led to a precipitate fall in British automobile production from 1.9 million to 880,000 passenger cars between 1972 and 1982. Thereafter a renaissance occurred as the British lost control over the industry and new foreign companies - outstandingly the Japanese invested in the country. A licensing agreement between British Leyland and Honda in 1978 began a process whereby Britain's largest car maker was revitalized first by Japanese technology, and later by German ownership. During the 1980s Nissan and Toyota built huge greenfield factories in Sunderland and Derbyshire. The favorable consequences of their transfer of Japanese-style lean production methods into Britain encouraged Ford and General Motors to revitalize their long-established British manufacturing operations. By the mid-1990s U.S., Japanese, German, and French multinationals completely owned the British automobile industry, except for a handful of specialist producers such as Vickers-owned Rolls-Royce, while the majority of Britain's largest component makers were also foreign-owned, again with a few exceptions such as GKN and T&N. The resulting improvements in productivity and quality under foreign ownership made the United Kingdom once again a large automobile manufacturing country. By 1994 British production had recovered to 1.4 million passenger cars, and while in 1984 only 20 percent of British output was exported, ten years later the figure was over 40 percent. 46

Meanwhile, the degree to which British-owned firms, and even the British economy as a whole, have undergone a renaissance since the 1980s remains much in dispute. Matters look best if profitability or productivity performance are emphasized. British companies usually featured disproportionately in listings of Europe's most profitable businesses. There was strong evidence that overall productivity had improved, but this measure – and others – indicated that while Britain possessed some firms whose performances were equal to the best international levels, it also possessed a considerable tail of far less efficient firms.⁴⁷ Studies which focused on international market share typically emphasized the continued deterioration in British competitive performance.⁴⁸

⁴³ Frances Bostock and Geoffrey Jones, "Foreign Multinationals in British Manufacturing, 1850-1962," Business History, 36 (1994), pp. 89-126; Geoffrey Jones and Frances Bostock, "U.S. Multinationals in British Manufacturing before 1962," Business History Review, 71 (1996), pp. 67-116; John H. Dunning, American Investment in British Manufacturing Industry (London: Allen & Unwin, 1958).

John H. Dunning, The Globalisation of Business (London: Routledge, 1993), p. 290.
 Stephen W. Davies and Bruce Lyons, "Characterising Relative Performance: The Productivity Advantage of Foreign Owned Firms in the UK," University of East Anglia, Economics Research Centre, Discussion Paper no. 9106 (1991).

^{46 &}quot;Clapped-out Wreck Is Transformed," Financial Times, 31 August 1995, p. 12; "Japanese Style Sparked Revival of Car Industry," Financial Times, 1 September 1995, p. 10.

⁴⁷ Peter E. Hart, "Corporate Governance in Britain and Germany," National Institute of Economic and Social Research, Discussion Paper no. 31 (1992), p. 3. Phil Hanson, Chris Voss, Kate Blackmon, and Bryan Oak, Made in Europe: A Four Nations Best Practice Study (Warwick: IBM Consulting Group, November 1994).

⁴⁸ Michael E. Porter, The Competitive Advantage of Nations (London: Macmillan, 1990).

Table 4.3. The share (%) of the 100 largest enterprises in manufacturing net output, 1935–1970

	1935	1949	1958	1970
United Kingdom	24	22	32	41
United States	26	23	30	33

Source: Barry Supple (ed.), The Rise of Big Business (Aldershot: Edward Elgar, 1992), introduction, p. xi.

In the postwar world the structure of British business changed radically. Family firms and family directors progressively disappeared off the corporate scene. By 1970 it would make little sense to talk of British personal capitalism. If British manufacturing industry was characterized by too many small units before World War II, this was certainly not the case subsequently. Concentration increased at a rapid pace in the 1950s and 1960s. There was a major merger wave in the 1960s, associated with the new acceptability of contested takeover bids, which led to the restructuring of large sections of British industry and a very substantial increase in the size of British corporations. Britain emerged, as shown in Table 4.3, with a higher level of concentration than the United States. In the postwar world, it became the classic big-business economy.

Merger activity continued at a high level in the 1970s, 50 although the effect on the concentration level was modest, with the average level of concentration increasing only slightly between 1975 and 1979.51 In the 1980s the apparent inexorable rise in industrial concentration finally ended, and there would appear to have been a substantial fall over the course of the decade, despite a continuing high level of merger activity. Some of the sharpest falls in concentration were in the high technology electrical and instrument engineering sectors. 52 Despite this important new trend, however, large corporations remained a more prominent feature

Table 4.4. Distribution of Europe's 500 largest companies by country (companies ranked according to sales), 1989

the 500	companies)	Number
130	(41)	2.28
103	(42)	1.68
72	(27)	1.29
24	(9)	0.42
_	103 72	130 (41) 103 (42) 72 (27)

Source: Growth and Integration in a Nordic Perspective (Helsinki, 1990), p. 56.

of the contemporary British economy than that of the other large European economies, as shown in Table 4.4.

Postwar large British companies gave more attention to their organizational structures than had their predecessors. They generally moved to adopt American structures, quite frequently as a result of employing the services of management consultants, notably McKinsey's. 53 Many British firms knew they had competitiveness problems and looked toward the American model to solve them. Channon's much-cited study traced the evolution of the M-form of organization for a sample of the ninety-two largest British companies from 1950 to 1970 (and ninety-six companies for the period 1960-1970). In 1950 he found only twelve companies in his sample had adopted a multidivisional structure, of which eight were foreign-owned and a further one was the Anglo-Dutch group Unilever. By the end of the 1950s some 30 percent of the firms in the sample had such a structure, and by 1970 the M-form was the dominant organizational form, with sixty-eight of the ninety-six sample large British corporations adopting it. The spread of the M-form signaled the rapid expansion of product diversification in large British companies. The number of singleproduct companies fell from 34 percent in 1950 to 6 percent in 1970. By 1970 the M-form was almost as widespread in Britain as in the United States and, given that this organizational form only became common among American corporations in the 1940s and 1950s, the scale of the

⁴⁹ Leslie Hannah, The Rise of the Corporate Economy (London: Methuen, 1983), chapter 10.

George A. Luffman and Richard Reed, The Strategy and Performance of British Industry, 1970-80 (London: Macmillan, 1987), p. 163.

Peter E. Hart, "Recent Trends in Concentration in British Industry," National Institute for Economic and Social Research, Discussion Paper no. 82 (1985).

Unpublished research. For the extensive merger activity in this period, see "Takeover Activity in the 1980s," Bank of England Quarterly Bulletin, 29 (1989), pp. 78-85.

⁵³ Terence R. Gourvish, "British Business and the Transition to a Corporate Economy: Entrepreneurship and Management Structures," *Business History*, 29 (1987), p. 35; Tolliday and Zeitlin, "Conclusion."

British "lag" was modest. The M-form had been more widely adopted in Britain than in any other large European economy by 1970.⁵⁴

The new British concern with improved management structures was found even – or rather especially – in the nationalized industries. During the late 1940s a considerable slice of British nonmanufacturing industry, including coal, gas, electricity, and railways, had been taken into public ownership, most of which had had a dismal performance under private ownership. After a difficult period of reorganization and rationalization in the 1950s, the coal, railways, and electricity industries in particular underwent a veritable "managerial revolution," often pioneering the introduction of improved management methods such as investment appraisal techniques and corporate planning. The productivity performance of the British publicly owned sector compared favorably both to British privately owned manufacturing, and to equivalent American industries, in the period between the 1950s and the 1970s. However, most of the state-owned sector was privatized by the post-1979 Conservative governments. The state-owned sector was privatized by the post-1979 Conservative governments.

In the 1970s British business continued to evolve along the trends identified by Channon. A study of the top 1,000 British firms in that decade established that product diversification progressed further, if at a slower rate. Diversification, however, only exceptionally led to British firms changing their industry completely, and typically it was based on existing market or technological skills.⁵⁷

There were also radical changes in another area of British management – its education. British companies before 1945 showed none of the American enthusiasm for employing university graduates as managers, and no enthusiasm whatsoever for any form of management education, and these sentiments continued for a time after the end of World War II. When graduates were recruited as future senior managers, the best educational background in the 1950s remained an arts degree from Oxford

or Cambridge, preferably combined with attendance at a public school. British universities also showed little interest in management education, but as firms would not employ any graduates from such programs, or offer any financial support, this was not very surprising. ⁵⁸ An additional problem was that a career in British industry generally carried low esteem, with the result that graduates with good degrees rarely considered an industrial career.

In the 1960s this situation also began to change. Graduate recruitment to management began on a large scale. In the 1960s Britain's first two business schools were established, offering MBA programs closely modeled on the American pattern. In the 1980s there was an enormous expansion of the number of MBA courses. The number of British students graduating with MBAs from British business schools rose from 1,100 in 1980 to 4,500 in 1991, by which date around sixty-five different schools in Britain offered MBA programs. The same period also saw an enormous proliferation of other management training schemes.⁵⁹

Given the British historical legacy, it is unsurprising that British managers continued to be shown in any comparative study as exceptionally undereducated. A 1987 survey showed that only 24 percent of top British management had a degree, a low level compared with management in France or Germany. When British managers had degrees, it was still rarely in engineering and often in arts subjects. "It remains true to say," Lane concluded in a comparative study of British, French, and German management in 1989, "that the promotion to top level posts of 'gifted amateurs' remains a uniquely British phenomenon." Comparisons between British and Japanese managers were even more striking. At the end of the 1980s a paired study of middle and senior managers in similar British and Japanese engineering companies, banks, retailers, and newly privatized utilities established that almost all of the Japanese managers (94 percent) had either undergraduate or postgraduate tertiary qualifications, compared with less than half (42 percent) of their British

⁵⁴ Derek F. Channon, The Strategy and Structure of British Enterprise (London: Macmillan, 1973), chapter 3; Hannah, Rise, chapter 10; Hannah, "Strategy and Structure in the Manufacturing Sector," in Leslie Hannah (ed.), Management Strategy and Business Development (London: Macmillan, 1976), pp. 184-202.

Gourvish, "British Business," pp. 35-39; William Ashworth, The History of the British Coal Industry, vol. 5, 1946-82 (Oxford: Oxford University Press, 1986); Leslie Hannah, Engineers, Managers and Politicians (London: Macmillan, 1982).

James Foreman-Peck and Robert Millward, Public and Private Ownership of British Industry, 1820-1990 (Oxford: Clarendon Press, 1994), pp. 300-339.

Luffman and Reed, Strategy and Performance, chapter 4; Michael A. Utton, "Large Firms Diversification in GB Manufacturing Industry," Economic Journal, 87 (1977), pp. 96-113.

⁵⁸ Chandler, Scale and Scope, pp. 291-294; Channon, Strategy and Structure, pp. 43-45; Shirley Keeble, The Ability to Manage (Manchester: Manchester University Press, 1992); Howard Gospel and Reiko Okayama, "Industrial Training in Britain and Japan: An Overview," in Howard Gospel (ed.), Industrial Training and Technological Innovation (London: Routledge, 1991), pp. 26-8.

⁵⁹ Charles Handy, Making Managers (London: Pitman, 1988); Saxton Bampflyde International, The MBA Question: Perspectives and Reality in the UK (London: Saxton Bampflyde, 1990).

⁶⁰ Christel Lane, Management and Labour in Europe (Aldershot: Edward Elgar, 1989), pp. 91-92.

counterparts.⁶¹ Nor was there any sign that the MBA would assume the status of a senior management prerequisite that it secured in the United States. The majority of British MBAs since the 1960s have gone into the financial services, and more recently also into management consultancy, while their impact on manufacturing industry remained muted.

Thus, the international competitive performance of British business, and more particularly the manufacturing sector, was relatively weak after 1945. British manufacturing was undermined by low productivity growth. British industries lost world market share, and experienced substantial import penetration. The British productivity gap with both the United States and the rest of Western Europe began finally to narrow, at least in some sectors, in the 1970s and the 1980s. This postwar period saw the replacement of personal capitalism by American-style managerial capitalism. British industry became dominated by large corporations using an M-form of organization.

ORGANIZATIONAL CAPABILITIES AND COMPETITIVENESS AFTER 1945

As before 1945, the explanation for poor British performance in certain manufacturing industries is multicausal, but two general tendencies are observable. The first is the continuation of some of the problems associated with personal capitalism. The second is the acquisition of a new set of problems following the adoption of American-style managerial capitalism.

Much of the story of British corporate success and failure after 1945 can be written in terms of the continuing British failure to make the necessary three-pronged investment in manufacturing, marketing, and management to build successful modern industrial enterprises. The British computer industry in the 1950s and 1960s, for example, demonstrated an inability to build organizational capabilities sufficient to exploit Britain's initial pioneering role in computer technology. The disadvantages of personal capitalism formed a part of this story. The British electronics firm Ferranti built and installed the first commercial computer in 1951, but the Ferranti family "refused to commit greater resources to both production and marketing," and followed a risk-averse strategy, eventually divesting from the computer business in 1963. In the 1950s

Ferranti was almost a caricature of a British family firm, with business strategy being discussed between directors over "'high table'... with each (director) daily taking turns to carve the joint of meat."⁶²

However, there was more to the story than simply entrepreneurial failure to become first movers, and to build organizational capabilities on the lines of an IBM. The huge American defense market gave the United States companies an enormous competitive advantage over their British counterparts. Equally important, in Hendry's analysis, was the educational environment. The growth of the early American computer industry was made possible by high mobility of engineers between firms, universities, and defense establishments. Such mobility of ideas and information was absent in Britain. Inadequate public policy was a further handicap.⁶³

The problems of the British-owned motor industry also provide spectacular evidence of the continuing British difficulties in organizing large manufacturing enterprises. During the interwar years the leading British car makers Morris and Austin captured a substantial share of the British domestic market away from Ford and General Motors, whose subsidiaries had initially dominated it. But the British-owned industry developed with a substantial number of plants which handicapped the achievement of economies of scale. A series of mergers – notably that between Austin and Morris in 1952 which created the British Motor Corporation (BMC) - failed to deliver rationalization in the postwar decade. After the merger, BMC maintained sixty different plants in Britain and kept separate dealerships for Austin and Morris cars. A preference for paying dividends to shareholders resulted in the lowest level of spending on new capital equipment per worker in Europe in the 1950s. This was a classic failure of organizational capability of the kind diagnosed by Chandler for pre-1945 Britain.

During the 1960s, as the British car industry began to lose its export markets, a series of defensive mergers of smaller companies culminated in the British government's encouragement of the acquisition of BMC by Leyland, a successful truck maker, in 1967. The senior management of the new British Leyland Motor Corporation, which at the time of its creation was Britain's largest single employer, had no knowledge of volume carmaking, and remained unable to rationalize production, or to confront

⁶¹ John Storey et al., "Managerial Careers and Management Development: A Comparative Analysis of Britain and Japan," *Human Resource Management Journal* (1991), pp. 33–57.

⁶² Geoffrey Tweedale, "Marketing in the Second Industrial Revolution: A Case Study of the Ferranti Group, 1949-63," Business History, 34 (1992), pp. 96-127.

⁶³ John Hendry, Innovating for Failure: Government Policy and the Early British Computer Industry (Cambridge, Mass.: MIT Press, 1990), especially chapter 13.

inherited inefficiencies in human resource management, especially the "piecework" method of wages. Catastrophic management failures in marketing and product design and quality led to the surge of import penetration into Britain, and finally to BL's bankruptcy and nationalization in the mid-1970s. The following fifteen years saw the dramatic shrinkage of British Leyland, and its eventual privatization as the Rover group. However, it was not privatization but foreign companies which saved the enterprise. During the 1980s Rover was revitalized by Honda, which acquired a minority shareholding and provided new technology and design, and in 1994 it was purchased in its entirety by Germany's BMW.⁶⁴ Under German ownership, Rover's British management believed they could pursue a long-term strategy without short-term pressures for dividends.⁶⁵

A new set of problems arose as British capitalism sought salvation in the American corporate model. In essence, British companies suffered from many of the same defects that Chandler has argued undermined American industrial competitiveness from the 1960s. The diversification which was made possible by American-style managerial hierarchies led eventually to diseconomies, as top management became divorced from knowledge about the products they made. Financial criteria became the key factor in many business decisions. The numbers of mergers, hostile takeovers, and divestitures accelerated as financial institutions became the owners of industrial enterprise, and companies became commodities that were bought and sold. Managers had, perforce, to focus on short-term time horizons, the daily movements in share price, or else face acquisition by predators.⁶⁶

The effect of such factors on the erosion of competitive capabilities in British industries after 1945 was probably magnified because the British gave distinctive glosses to the American system which they imported. They adopted, for example, a particularly decentralized form of organization, in which finance was king. The headquarters of the "typical" large British company by the 1980s was notably decentralized. Headquarters

were often primarily concerned with financial matters; in other matters, managers in divisions were given considerable autonomy, with most production and sales decisions delegated to subsidiaries. The fact that many British companies had grown over the previous thirty years through mergers rather than organic growth encouraged such a structure, ⁶⁷ although this was an obvious continuity with the British traditional practice in this regard.

The impact of the finance-driven decentralized organizational form favored by the British is debatable, but it does appear unlikely to promote sustained innovative capacity. An extreme form of the finance-driven model of British capitalism was the diversified conglomerates which grew rapidly in the 1970s and 1980s. These enterprises – of which the largest included BTR, Hanson, Williams Holdings, and Tomkins – grew by take-overs in Britain and, later, the United States. They were able to finance acquisitions by borrowing from the financial markets and banks, and maintained a self-sustaining earnings growth by the constant accumulation of companies. The supporters of such conglomerates pointed to their role in disciplining inefficient managements, but their critics questioned both their interest in, and their ability to sustain, long-term strategies centered on innovation rather than the payment of high dividends to shareholders.

BTR, Britain's eleventh largest company by market capitalization in 1992, grew rapidly from the 1970s from a modest firm in the rubber industry to a diversified industrial conglomerate. BTR's growth was based on a series of acquisitions of once-famous names in British industry, including Thomas Tilling in 1983, Dunlop in 1985, and Hawker Siddeley in 1991. It also tried, but failed, to acquire over the same period the U.S. abrasives manufacturer Norton and the British glass manufacturer Pilkington. Acquired companies had their costs forced down, usually by large-scale redundancies, and were subjected to a highly centralized system of financial control operated from a very small head office. Each subsidiary was given an annual profit plan based on return on sales – a ratio preferred to return on net assets in order to place the highest emphasis on profits. Subsidiaries were also required to file monthly financial reports, which were closely monitored to see if annual targets were being achieved. There was also rigorous supervision of working capital controls. In contrast, the

⁶⁴ Stephen Tolliday, "Competition and the Workplace in the British Automobile Industry, 1945-88," Business and Economic History, 17 (1988), pp. 63-78; Karel Williams, John Williams, and Coliz Haslam, The Breakdown of Austin Rover (Learnington Spa: Berg, 1987).

 ^{66 &}quot;Clapped-out Wreck Is Transformed," Financial Times, 31 August 1995, p. 12.
 66 Alfred D. Chandler, "Managerial Enterprises and Competitive Capabilities," Business History, 34 (1992), pp. 29–39; "Corporate Strategy, Structure and Control Methods in the United States during the 20th Century," Industrial and Corporate Change 1 (1992), pp. 263–284; and "The Competitive Performance of US Industrial Enterprises since the Second World War," Business History Review, 68 (1994), pp. 1–72.

⁶⁷ Lane, Management and Labour, chapters 4 and 5; Jacques Horovitz, Top Management Control in Europe (London: Macmillan).

responsibility for the overall strategic plan for each subsidiary and other managerial matters devolved away from the head office.⁶⁸

Hanson, the ninth largest British company by market capitalization in 1992, was another variant of the finance-driven conglomerate. Hanson grew from being an insignificant company called Wiles in the 1960s - it was renamed Hanson Trust in 1969 - by buying undervalued companies, breaking up and selling parts of them, and keeping some noncapital intensive parts as cash cows. During the 1980s the company made a series of spectacular acquisitions, including the Imperial Group in Britain and SCM in the United States, which demonstrated remarkable financial acumen. The Imperial Group was bought in 1986 for £2.5 billion, of which Hanson recouped £2.4 billion in subsequent asset sales, leaving Hanson in control of Imperial's large and profitable tobacco operations. Hanson's activities, which were almost entirely in Britain and the United States, came to include tobacco products, forest products, coal mining, chemicals, and bricks and construction. Hanson's strategy was strictly focused on maximizing "shareholder value" as its primary goal, an aim which was certainly achieved through the 1980s.

During the 1990s the growth of the British conglomerates faltered. The bigger these companies became, the harder it was to find acquisitions large enough to maintain earnings growth, especially as there was a decline in the number of poorly managed targets. The conglomerates experienced falling share prices as business strategies based on focus gained ground, and as innovation and investment in new-growth areas began to be regarded as more important than improving the performance of long-established but poorly managed industrial firms. In response to these trends, in 1996 Hanson broke itself up into four separate companies focused on tobacco, chemicals, energy, and building materials. The last retained the name "Hanson," and was ranked as Britain's largest brickmaker. Meanwhile, during the same period BTR initiated a new strategy to sell off many peripheral activities and restructure itself around four principal global product groups in which the firm held an advantage, either in superior technology or low cost production.

The consequences of the Hanson strategy in the 1970s and 1980s for British industrial competitiveness are ambiguous. The battery industry serves as an example of one outcome. In 1981 Hanson acquired Berec, better known as Ever Ready. This British company was then Europe's largest manufacturer of dry cell batteries. At the time of the acquisition it showed evidence of management failure. Its American competitor, Duracell, had developed a long-life battery which had been very successful, but the British firm had continued to produce cheaper shorter-life batteries. After the acquisition, Hanson closed most of Ever Ready's R&D operations and, in 1982, sold almost all of its overseas operations. The German and Italian factories were sold to Duracell, the main competitor. Under Hanson, the firm developed longer-life products, but was trapped within the small British market, and in 1992 Hanson sold Ever Ready to Ralston Purina of the United States. ⁶⁹ The upshot of Hanson's policy was the elimination, in a decade, of a British-owned battery industry.

There seems little doubt that British companies suffered from many of the same problems as American ones as a result of excessive reliance on increasingly irrelevant management accounting methods.⁷⁰ However, the British carried the preoccupation with accountants even further than the Americans through their employment at all levels of the management hierarchy, which was typically preoccupied with financially related goals. "British managers think industry is about making money," Lawrence observed in 1980, "Germans that it is about making three-dimensional artefacts."71 The finance function became extremely important within British firms. British managers, in contrast to German ones, attached relatively greater importance to profits and satisfying shareholders' interests. 72 They were encouraged in this orientation by the growing practice of linking managerial compensation with financial indices of performance, something which was much rarer in the rest of Europe. In the 1980s Britain had thirty times as many qualified accountants as Germany, and an accountancy training was the single most common qualification of British managers. It was the British equivalent of the American MBA or the German engineering degree.⁷³

There were several reasons for British business's preoccupation with accountants. The lack of formal management education until recently made

⁶⁸ "A Culture Shock That Won Ardent Converts," Financial Times, 13 January 1987, p. 14; "'Magic Dust' Loses Glitter," Financial Times, 15 September 1990, p. 8; "God Father Get Control," Financial Times, 11 March 1992, p. 10.

⁶⁹ "Ever Ready: Set Fair for a Longer Life?," Financial Times, 19 July 1987, p. 11; "Take-over Put Spark into Battery Maker," Financial Times, 14 April 1992, p. 12.

⁷⁰ H. Thomas Johnson and Robert S. Kaplan, Relevance Lost (Boston: Harvard Business School Press, 1987).

Peter Lawrence, Managers and Management in West Germany (London: Croom Helm, 1980), p. 142.

⁷² Budde et al., "Corporate Goals," p. 13.

⁷³ Jean-Louis Barsoux and Peter Lawrence, The Challenge of British Management (London: Macmillan, 1990), pp. 60-61.

accountancy one of the few qualifications available for aspiring British managers, while the fact it was an external professional qualification was attractive in a culture with a high degree of job mobility. The importance attached to financial data and their interpretation reflected the British corporate reliance on external equity finance as opposed to debt financing or the internal financing seen in France. The unstable British macroeconomic environment after 1950 probably obliged the managers of British firms to focus on financial matters. The distinctive British preoccupation with finance and an accountancy-trained managerial elite provides one explanation for the alleged "short-termism" of British industry.

The emergence of an institutionalized market for corporate control, the growth of hostile takeovers, and the phenomenon of transactionoriented mergers and acquisitions have been identified by Chandler as some of the influences on declining American competitiveness in the 1970s and 1980s. 75 British capitalism evolved in similar directions as American in this respect, and with some similar consequences, Takeover activity was high in Britain from the 1960s, and one-quarter of takeovers of publicly listed firms in the two decades after the early 1970s were hostile. One immediate result was that a good deal of senior British management time was spent planning or resisting takeovers, but there was also an impact on the time horizons in investment and other decisions. A distinction has been made in this context between the "outsider" system of corporate control which came to prevail in the United States and Britain, where ownership was dispersed among a large number of individual and institutional investors, and the "insider" systems of Japan and continental Europe, where ownership of individual firms was concentrated in the hands of a small number of other firms, banks, or families. Both systems have different merits, but it is evident that the insider systems facilitate longterm relationships with suppliers, customers, and employees of kinds that yield competitive advantages in contemporary manufacturing processes. 76

The British emulation after 1945 of another aspect of the American model – the creation of large corporations – failed to enhance British

competitiveness as much as might have been expected. British business historians have long expressed skepticism that increased concentration or size necessarily led to improved efficiency, 77 a point of view which would be shared by conventional economists and others concerned with the costs of monopoly.⁷⁸ It became apparent, especially from the 1970s, that there were limits to the efficiency gains of large M-form firms, whose performance deteriorated with excessive product diversification.⁷⁹ Research by British industrial economists has generally concluded that British mergers since the 1960s have not contributed materially to improvements in industrial performance, and rather that there have been real welfare losses. 80 Part of the problem, as Kogut has argued, was that British companies grafted the M-form onto their preexisting decentralized holding-company structures. The British versions of the M-form failed to achieve the clear distinction between strategic and operating responsibilities seen in American corporations.81 However, even a full adoption of the M-form was unlikely to solve all the managerial problems arising from large size. The recent American business school literature pointing to the loss of entrepreneurship within large American corporations is applicable to their British counterparts. 82 It is certainly interesting that the improvement in Britain's productivity performance in the 1980s coincided with falling concentration levels - though the link between the two factors has yet to be demonstrated.

The organizational defects of large corporations were probably made worse in the British context. A particular problem after 1945 was the uncompetitive home market of British industry. In the early 1950s between 50 and 60 percent of manufacturing output was regulated by cartels. The advent of a more assertive British competition policy led to their dismantling,

⁷⁴ Eltis et al., "Lessons," p. 18.

⁷⁵ Chandler, "Corporate Strategy, Structure and Control."

Julian Franks and Colin Mayer, "Corporate Ownership and Corporate Control: A Study of France, Germany, and the UK," Economic Policy (April 1990), pp. 191–231; Tim Jenkinson and Colin Mayer, "The Assessment: Corporate Governance and Corporate Control," Oxford Review of Economic Policy 8, 3 (1992), pp. 1–10. See also, from a different perspective, John Kay and Aubrey Silberston, "Corporate Governance," National Institute Economic Review (August 1995), pp. 84–97.

Payne, "Entrepreneurship and British Economic Decline," pp. 30-31; Leslie Hannah, "Visible and Invisible Hands in Great Britain," in Alfred D. Chandler and Herman Daems (eds.), Managerial Hierarchies (Cambridge, Mass.: Harvard University Press, 1980), p. 71.

⁷⁸ Richard B. Duboff and Edward S. Herman, "Alfred Chandler's New Business History: A Review," *Politics and Society*, 10 (1980), reprinted in Supple, Rise.

⁷⁹ Mowery, "Finance and Corporate Evolution," pp. 26–27.

Sigbert J. Prais, The Evolution of Giant Firms in Britain (Cambridge: Cambridge University Press, 1976); Keith Cowling et al., Mergers and Economic Performance (Cambridge: Cambridge University Press, 1980). For the United States, see Morton I. Kamien and Nancy L. Schwartz, Market Structure and Innovation (Cambridge: Cambridge University Press, 1982).

⁸¹ Bruce Kogut and David Parkinson, "The Diffusion of American Organizing Principles to Europe," in Bruce Kogut (ed.), Country Competitiveness (New York: Oxford University Press, 1993), pp. 179-202.

⁸² Elizabeth Moss Kanter, When Giants Learn to Dance (London: Unwin, 1990); Richard Pascale, Managing on the Edge (London: Viking, 1990).

only to be replaced by mergers leading to growing concentration. ⁸³ British governments between the 1940s and the 1970s continued to encourage and support actively collusive agreements in sectors as diverse as banking and agriculture, while in the 1960s and 1970s there was a series of ad hoc attempts to create "national champions" in manufacturing industry. Only against such a background can we understand the seemingly bizarre view held by some British economists that the Thatcher government's incompetence in creating such a deep recession in the early 1980s made a positive contribution to British industrial performance. The creation at this time of an exceptionally hostile environment which bankrupted a quarter of British manufacturing industry, so this line of argument goes, acted as the spur which finally stimulated British companies – or those which survived – to improve their competitiveness. ⁸⁴

Public policy before the 1980s and the lack of strong domestic rivalry meant that barriers to exit for inefficient British firms and even industries remained high. They tended to linger rather than "die" and release resources elsewhere. This is the thrust of Singleton's analysis of the post-1950 Lancashire cotton industry which, he argues, hoarded "labour which was sorely needed elsewhere. The British economy would have benefited from a speedier rather than a more prolonged period of contraction in the cotton industry."

The British also failed to gain some of the benefits from the creation of larger firms and more modern management structures because of their continued underinvestment in human capital. If managers often remained "gifted amateurs," so did their workers, for few British firms showed interest in training them. Britain, like Germany, possessed an apprentice-ship system, but this declined in importance, especially in the 1980s. Technical training throughout the post-1945 period was very low compared with that in Germany. The upshot was that British manufacturing industry became distinguished by low skill levels, especially at the intermediate level of technician and foreman. The majority of foremen in British industry were recruited from manual jobs and received little or no formal training. Table 4.5 shows the striking differences in the levels of skill in the British and German manufacturing labor force in 1987.

Table 4.5. Qualification proportions and relative wage rates of the British and German manufacturing work force, 1987

	Qualification proportions		Wage rates relative to unskilled	
	United Kingdom	Germany	United Kingdom	Germany
Higher level	6.7	6.0	1.7	2.2
Upper intermediate	4.4	8.2	1.3	1.7
Lower intermediate	26.3	56.4	1.2	1.2
No qualifications	62.6	29.4	1.0	1.0

Source: Mary O'Mahony, "Productivity Levels in British and German Manufacturing Industry," Na.

Since the 1970s a series of comparative studies of matched British and German plants have shown very clearly how the low skill levels of the British work force explain much of the productivity differences. The low skill levels of British workers greatly constrained flexibility in periods of rapid technical change and acted as an obstacle to the introduction of new technology. From the perspective of the 1990s, it was this low skill level which served as the greatest constraint on any sustained productivity increase.

The neglect of training by British companies had several explanations. Before World War II the small sizes and weak governance structures of British manufacturing firms in many industries may have discouraged investment in training. British firms chose to externalize the management of labor in the nineteenth century, and only slowly and painfully changed their labor management practices from the 1960s. ⁸⁷ The low level of training within British business also cannot be divorced from the public policy context. British government policy over a long period was characterized

87 Howard Gospel, Markets, Firms and the Management of Labour in Modern Britain (Cambridge: Cambridge University Press, 1992). See also Andrew Pettigrew and Richard Whipp, Managing Change for Competitive Success (Oxford: Blackwell, 1991), chapter 6.

B. C. Elliot and J. D. Gribben, "The Abolition of Cartels and Structural Change in the United Kingdom," in Alexis P. Jacquemin and Henry W. de Jong (eds.), Welfare Aspects of Industrial Markets (Leiden: M. Nijhoff, 1977), pp. 345-65.

Geoffrey Maynard, The Economy under Mrs. Thatcher (Oxford: Basil Blackwell, 1988).
 John Singleton, Lancashire on the Scrapheap (Oxford: Oxford University Press, 1991),
 p. 232.

Structure: A Statistical Study of Manufacturing Industry in Britain, Germany and the US (Cambridge: Cambridge University Press, 1981); A. Daly, D. M. Hitchens, and K. Wagner, "Productivity, Machinery and Skills in a Sample of British and German Manufacturing Plants," National Institute Economic Review (February 1985), pp. 48-61; O'Mahony, "Productivity Levels"; Geoff Mason, Sigbert J. Prais, and Bart van Ark, "Vocational Education and Productivity in the Netherlands and Britain," National Institute Economic Review (May 1992), pp. 45-63.

by an extreme voluntarist attitude whereby education and, especially, training were left to the voluntary action of individuals and organizations. 88 Until the mid-1960s the British government denied all responsibility for training. In 1964 a system of industrial training boards was set up with the aim of encouraging training and spreading the costs between firms, but these had only a limited effect, and were abolished by the government in the 1980s. In that decade the government largely used publicly funded training to reduce unemployment rather than to raise skills. A confused variety of schemes was introduced, but only in the context of declining state funding, a reinvigorated belief that voluntarism was the solution, and the virtual demise of traditional apprenticeships. 89

There remains the problem that (as before 1945) general criticisms of the organizational capabilities and competitive performance of British business, especially manufacturing, have to take into account British success stories as well as failures.

The invention and exploitation by Pilkington of float glass in the 1950s - a process which completely transformed the world glass industry stands as a warning against blanket criticisms of personal capitalism. Pilkington was a private family company until 1970. The inventor of float glass, Alastair Pilkington, was recruited to, and promoted in, the firm after World War II, because he had the family name, even though the two branches of the family had separated at least fifteen generations previously. Chandler cites the recruitment of Alastair Pilkington as a prime example of the continuing British attachment to personal capitalism which "made industrial capitalism less dynamic in Britain than in the United States and Germany."90 However, although the incident was eccentric, it did have dynamic results and, moreover, it showed some of the advantages of family firms. The development of the float glass process was costly and prolonged. The historian of the company argues that it was the fact that Pilkington was a family company which was "probably an important ingredient in ultimate success," because the firm was able to pursue a long-term development strategy in secrecy and without pressure for immediate profits from shareholders.⁹¹

There were major British examples of organizational learning over rime, as firms in chemicals, petroleum, and pharmaceuticals "caught up" to first movers elsewhere. Britain became a strong competitor in global chemical markets after ICI, created in 1926, rationalized much of the industry.92 In the same period the Anglo-Persian Oil Company (British Petroleum in 1955) became one of the world's largest vertically integrated oil corporations. 93 Together with Shell, jointly owned with the Netherlands, and a number of smaller companies, Britain possessed a major stake in the world oil industry. In pharmaceuticals, the British learning process was much slower. In Scale and Scope, pharmaceuticals is correctly idenrified as one of the new science-based industries of the late nineteenth century in which British entrepreneurs failed to establish enterprises which could match those of Germany or the United States.94 The failure to gain first mover advantages had a long-term impact, and through the 1960s the British industry - which had four main firms by that date (Wellcome, Beecham, ICI, and Glaxo) - was of only modest international importance.95

Subsequently an internationally competitive British pharmaceutical industry developed. Glaxo was the moving force. The firm was still only just in the top-100 British firms at the end of the 1970s, but a transformation followed the invention of Zantac, the antiulcer drug launched in Britain in 1981 and the United States three years later. During the 1970s Glaxo was able to take advantage of advances in understanding the biochemistry of the human body by developing methods of reducing the time-consuming stages of drug development. Skillful marketing then led to Zantac displacing SmithKline's Tagamet, and establishing itself as the "world's best-selling drug." By 1992 Glaxo was ranked as the largest British company by market capitalization and had become Europe's largest pharmaceuticals group. Glaxo's growth was not in isolation, for a cluster of fast-growing and large British pharmaceutical enterprises developed, including SmithKline Beecham (the product of an Anglo-American merger) and Wellcome. The takeover of the latter by Glaxo in 1995 created the world's largest pharmaceuticals company.

How was Britain - of all countries - able to challenge the American, German, and Swiss first movers in a science-based industry dependent

⁸⁸ Howard Gospel, "Industrial Training and Technological Innovation: An Introduction," in Gospel (ed.), Industrial Training, p. 6.

⁸⁹ Lane, Management and Labour, pp. 72-74; "An Urgent Need to Turn the Tide of History," Financial Times, 26 November 1990, p. 10.

⁹⁰ Chandler, Scale and Scope, pp. 591-592.

Theodore C. Barker, "Business Implications of Technical Development in the Glass Industry, 1945–1965: A Case Study," in Barry Supple (ed.), Essays in British Business History (Oxford: Clarendon Press, 1977), p. 204.

⁹² William J. Reader, Imperial Chemical Industries: A History, vol. 2 (London: Oxford University Press, 1975).

⁹³ Jim H. Bamberg, The History of the British Petroleum Company, vol. 2 (Cambridge: Cambridge University Press, 1994).

⁹⁴ Chandler, Scale and Scope, pp. 278-279, 374-375.

⁹⁵ Richard P. T. Davenport-Hines and Judy Slinn, Glaxo: A History to 1962 (Cambridge: Cambridge University Press, 1992).

upon expensive long-term research and development? The story has to be related in part to the new opportunities caused by the antibiotic revolution and the advent of the prescription drug industry. In the United States firms such as Pfizer, Eli Lilly, Upjohn, Squibb, and Merck took advantage of the new opportunities to become first movers. Glaxo was successful because of an entrepreneurial willingness to build organizational capabilities. Glaxo's finance director from 1968 and CEO during the 1980s, Paul Girolami, was an accountant by training, but highly vocal on the need for the "long-term" view in decision making. He was also Italian born. The firm made a long-term commitment to basic research, invested substantial resources in building large businesses in both the United States and Japan, divested from noncore activities such as the firm's traditional baby food business, and avoided mergers and acquisitions in favor of internally generated growth.

A number of factors favored the growth of a British pharmaceuticals industry at this time. The National Health Service provided a large home market. The presence of American pharmaceutical companies in Britain from the 1950s stimulated a research climate in the industry. The existence of several competing British companies was also a stimulus. This domestic competitive rivalry was sustained by the British regulatory authorities in 1972 when they ruled against proposed mergers between Glaxo and Beecham, and Glaxo and Boots.

A further area of British business success came in the food and drink industries. For most of the twentieth century these industries had less complex and capital-intensive production processes than their more high-tech counterparts, but over the past two decades technical change and other factors have led to a considerable growth in their capital-intensity. The British had traditional strengths in branded food and drink products. In the first half of the century the family firms active in the sector performed better than those in heavy industry. However, British enterprises also responded well to the new conditions prevailing toward the end of

⁹⁶ I owe this point to Alfred D. Chandler, Jr. in a letter to the author, 30 December 1992; see reference to the therapeutic revolution in Chapter 3.

Ohandler, Scale and Scope, pp. 366-378; Robert Fitzgerald, Rowntree and the Marketing Revolution, 1862-1969 (Cambridge: Cambridge University Press, 1995), provides a study of the British chocolate manufacturer which developed innovative marketing strategies in the 1930s.

the century. By the 1980s the food and drink industry groups accounted for 12 percent of total net output of the British manufacturing sector, and around 10 percent of total exports. The sector included some of Britain's largest firms, including Guinness (8th largest in 1992), Allied-Lyons (24th largest), Bass (28th), and Cadbury Schweppes (38th). These British firms achieved substantial rises in labor productivity during the 1970s and 1980s, and pursued successful strategies of product differentiation and product diversification. They possessed considerable capabilities in brand management and distribution, which they employed both in extensive exporting activity and through extensive multinational investments. During the 1980s the British food companies acquired a number of large American food groups; one example was Grand Metropolitan's purchase of Pillsbury. The food and drink enterprises, together with the tobacco industry, accounted for 30 percent of the total stock of British foreign direct investment in this period.

As in the case of pharmaceuticals, the British competitive performance in food and drink contradicts the general image of British enterprise lacking organizational capability in manufacturing industry. Indeed, research by Balasubramanyam on the determinants of British foreign direct investment in food and drink specifically identifies their main advantage was "in their managerial and organizational abilities," which were superior to those of the American firms they acquired, even though the American firms had superior productive efficiency. Many of the large British corporations in food and drink also had extensive operations in food distribution chains, real estate, hotels, and leisure activities. Their competitive strengths appeared to be in highly developed management skills in financial management and marketing - rather than in production management. Balasubramanyam suggests that such entrepreneurial and trading skills may have been inherited from the family-firm tradition.⁹⁹ Alternatively the "culturist" hypothesis suggested earlier might explain the good British performance in such kinds of management skills.

The food and drink industries raise a final question about the organizational capability of British business after 1945. Even in 1995 the United

Michael Brech and Margaret Sharp, Inward Investment, Policy Options for the United Kingdom (London: RIIA, 1984), pp. 41-62. L. G. Thomas, III, "Implicit Industrial Policy: The Triumph of Britain and the Failure of France in Global Pharmaceuticals," Industrial and Corporate Change, 3 (1994), pp. 451-489.

⁹⁹ V. N. Balasubramanyam, "Entrepreneurship and the Growth of the Firm: the Case of the British Food and Drink Industries in the 1980s," in Jonathan Brown and Mary B. Rose (eds.), Entrepreneurship, Networks and Modern Business (Manchester: Manchester University Press, 1992), pp. 144-160; Balasubramanyam and Mohammed A. Salisu, "Brands and the Alcoholic Drinks Industry," in Geoffrey Jones and Nicholas J. Morgan (eds.), Adding Value: Brands and Marketing in Food and Drink (London: Routledge, 1994), pp. 59-74.

Kingdom held the second largest stock of foreign direct investment in the world after the United States. Throughout the postwar period and into the 1990s the British were the largest direct investors in the United States, a position maintained by extensive acquisition activity. British multinational investment must have involved considerable organizational and management skills, or else it could not have been sustained. This suggests that a distinction must be made between the competitiveness of British firms and the competitiveness of the British economy. As in the case of the United States more recently, British companies have shifted production and other value-added activities offshore over quite a long period, presumably in part because of deficiencies in their domestic economic environment. The discussion of the "deindustrialization" of the British economy can mislead if it fails to take account of the continued international competitiveness of British-owned business enterprise.

Thus, British business moved much closer to American managerial capitalism after 1945, but to some degree this only resulted in acquiring a new set of weaknesses. British competitive capabilities were eroded, as in the United States, by "short-termism," financially driven mergers and acquisitions, excessive diversification, and the creation of predatory conglomerates. The large managerial firm had advantages, especially in capital-intensive industries, but it also had difficulties in sustaining innovation and entrepreneurship within its boundaries. The collusive domestic market and the general reluctance to invest in human capital magnified such problems. Nevertheless the analysis of the organizational capabilities of British companies needs to incorporate British successes in certain industries as well as the continued British preeminence as a multinational investor.

CONCLUDING REMARKS

The problem about modern British business history, like that of Japan, is the constant temptation to resort to caricature. British business performance is no more a record of sustained failure than Japanese is one of

age of U.S. Multinationals 1957-1984," Banca Nazionale Del Lavoro Quarterly Review

40 (1987), pp. 147–164.

unmitigated success. A number of stylized facts can be agreed. First, British performance throughout the twentieth century was weaker in manufacturing than many other business activities. The overall effect was the relative decline of the British economy in a world context, although this decline was by no means as rapid or as dramatic as a focus on manufacturing alone would suggest. Second, Britain was slower than the United States and Germany to develop most of the new capital-intensive industries of the late nineteenth century. It later "caught up" in some of them, such as chemicals. In others, such as motor cars, British-owned firms caught up only to collapse subsequently. Third, Britain was slower than the United States to develop large corporations with managerial hierarchies in manufacturing, but after 1945 became a big-business economy par excellence. Fourth, British business engaged in extensive multinational investment throughout the twentieth century.

The interpretation of these stylized facts does not lend itself to straightforward generalizations. It does seem that British companies, with notable exceptions, experienced long-run problems in maintaining competitiveness in manufacturing industries with complex production processes requiring the coordination of flows of goods, and with long time-horizons needed in investment and other decisions. This problem was evident with pre-1945 British personal capitalism, when the fragmented, family-owned firms in a range of industries lost competitiveness through their persistence with craft production and labor-intensive methods. However, British weaknesses in this direction persisted when American-style managerial capitalism was adopted after World War II. The fact that industries such as automobiles and electronics could flourish in Britain, but only under foreign ownership and control, pointed to British-style corporate capitalism - rather than (say) British workers or managers - as the major handicap in many (if not all) capital-intensive manufacturing industries. Possibly British business would have done better after 1945 if it had moved toward continental European or Japanese models of corporate governance rather than looking to the United States. The British may also have fared better if industrial concentration levels had not become so high, and if a dynamic small and medium-sized enterprise sector had coexisted with the giant corporations.

Long-term continuities in aspects of British business conduct suggest that the concept of organizational capability should incorporate not only corporate structures, but also value systems deriving from nationspecific cultures. Short time-horizons and coordination problems feature

Jones, Evolution of International Business, pp. 46-47, 52-54, 194-200; Geoffrey Jones, "British Multinationals and British Business since 1850," in Kirby and Rose, Business Enterprise in Modern Britain, pp. 172-206; Robert E. Lipsey, "Foreign Direct Investment in the United States: Changes over Three Decades," in Kenneth A. Froot (ed.), Foreign Direct Investment (Chicago: University of Chicago Press, 1993), pp. 113-72.
 Robert E. Lipsey and Irving B. Kravis, "The Competitiveness and Comparative Advant-