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The Routledge Companion to the Makers of Global Business

Edited by Teresa da Silva Lopes, Christina Lubinski
and Heidi J.S. Tworek

THE ROUTLEDGE COMPANION TO THE MAKERS OF GLOBAL BUSINESS

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MULTINATIONAL MANAGEMENT

Robert Fitzgerald

Multinational management and business history

The organization and management of multinational firms have reflected phases in the development of the international economy. Evolving global and national contexts, economic and political, influenced internal company structures, and the external links multinationals formed with governments and other firms. Through historical analysis, we can also show how multinationals contributed dynamically to the expansion and impact of global business. Theories in business strategy and organization imply certainty about global best practice, or they offer a suite of distinct organizational options. Actual choices have been replete with difficulties, implemented tentatively, or constantly adjusted. Furthermore, firms have had to respond to dramatic events, such as expropriations, occupations, policy changes, and economic crashes, while adapting by design or piecemeal to more slowly moving shifts in the global economy. In real time, multinationals have encountered unknowns rather than certainties. The activities and investments of multinationals have been formative influences on national economies and the international balance of power: in the creation of infrastructure, commodity production, and transcontinental trading and finance links in the period before 1914; the growing transfer of technology and management know-how from parent firm to foreign subsidiaries from the 1950s; or in the increasing exploitation of locational advantages since the 1990s through the combination of integrated cross-border production chains and contracting-out.

The first section of this chapter will look at mainstream ideas in business and multinational organization, namely the role of managerial hierarchies in utilizing the core capabilities of large firms, and the role of a parent multinational in utilizing its “ownership” advantages or core capabilities in foreign markets through a cross-border managerial hierarchy. In doing so, this chapter brings in insights from business history. The second section will consider some of the debates around international business theory, specifically multinational subsidiaries, cross-border networks, emerging economy multinationals, and governments, and suggests ways in which business historians might contribute to these issues. The third section looks at trends in multinational business organization since the nineteenth century, indicating similarities and differences between periods, the variety of strategies and outcomes, and their contribution to the development of the global economy.

Foreign direct investment (FDI) theory and business organization

Business history has contributed significantly to theories of internal management, most obviously through Alfred Chandler's writings (1962, 1977). In this well-known canon, technological and market trends favoured strategies of internalizing commercial activities within large-scale manufacturing firms. Business structures enabled strategies to be fulfilled, and managerial hierarchies and divisional structures made policies of mass production and mass marketing effective. Arguing that the success or failure of a national economy depended on the internal management of its large firms, Chandler's *Scale and Scope* (1990) underplayed the importance of government, institutions, finance systems, labour, and skills as alternative or more plausible causes. It ignored, in turn, how these factors shaped the industrial structures of economies, the size of firms, and ultimately internal business organization; they explain, furthermore, variations in the organization of multinational business operating across borders. Chandler extended his model into international enterprise, and described how firms founded international and regional divisions with their own management teams. Through such a division, a parent multinational assumed the major responsibility for controlling, coordinating, and monitoring key resources and capabilities located in different economies (Chandler and Mazlish, 1997). The practice of parental multinational control could be more problematic than the theory. General Electric offers, as early as 1919, an example of a US firm forming an international division, as does Du Pont, in 1958, after which began the historically significant post-war surge in transatlantic investment into Western Europe (Fitzgerald, 2015, 2017). Long-distance management proved partial or just inappropriate for varying market contexts, and so space was created for local decision-making (Jones, 2005a; Fitzgerald, 2015). Cross-border internalization and a tiered management pyramid were only one of several organizational options. Large firms with an integrated managerial hierarchy could in parallel forge external networks, which themselves could be viable alternatives to internalizing production or marketing. Vertical supply and distribution chains, industrial clusters, and cartels necessitated interfirm co-operation and pointed to its advantages. Business groups and holding companies facilitated horizontal and vertical synergies, and served to dilute financial and commercial risks.

European trading firms, for example, were active in developing territories through networks and shared partnerships in Asia, Latin America, and Africa. Several of the largest British houses from the 1890s added a parent holding company to oversee from London their chain of businesses. The Netherlands traders, Internatio and Borsumij, founded headquarters functions to supervise their networks of firms and agents, mostly based in the Dutch East Indies (Jonker and Sluyterman, 2005). Industry-bank cooperation in Germany was extended to the holding-company multinational, Deutsche Überseeische Elektrizitäts-Gesellschaft (DUEG), which financed, built, and managed electrical utilities before the First World War (Jones, 2005a; Fitzgerald, 2017). While the Mitsui and Nissan *zaibatsu* established management teams, they constituted holding companies overseeing multifarious enterprises in China and the Japanese empire during the inter-war decades (Kawabe, 1987; Patrikeff and Shukman, 2007; Yonekawa, 1990; Matsusaka, 2003). By the 1970s, European firms such as Unilever or Ciba-Geigy favoured matrix organizations combining international product, functional, and geographic imperatives, which encouraged national subsidiary decision-making and variation (Franko, 1976; Jones, 2000; Fitzgerald, 2003; Jones, 2005b; Fitzgerald, 2015).

Chandler emphasized how managerial hierarchies were needed to utilize the core capabilities of large firms, and how the headquarters should set the overall company strategy (Chandler, 1962, 1977, 1990). Similarly, mainstream FDI theory has stressed the objectives of the parent multinational and the role of a cross-border managerial hierarchy in utilizing the firm's ownership advantages or core capabilities in foreign markets. Leadership in technology, management

know-how, or brands could overcome the problems of being foreign in host markets. FDI was not just the investment of capital but the transfer of resources that had underpinned success in a home economy, and, it followed, a firm had as a result to learn the lessons of international management and cross-border control (Hymer, 1960; Dunning and Lundan, 2008). For historians, Hymer's ground-breaking thesis (1960) does not indicate why and how strategies and organizational structures might evolve after the initial act of FDI. As capital demands rose, large-scale trading firms in Britain incorporated before 1914 to retain the City of London's confidence; moreover, a headquarters could manage the rising transcontinental flow of imported goods and strengthen the hold on final European markets. The evolving organizational requirements of these resource-seeking multinationals differed from the marketing-seeking manufacturers of a later generation. As sales in foreign markets grew to a critical point, US multinationals in Europe from the late 1960s onwards loosened parental control, and bolstered local management teams and product development through the founding of region-wide subsidiaries (Wilkins, 1974; Jones, 2005a; Fitzgerald, 2015). European economic integration supplied a further motive. Originally motivated almost entirely by tariffs and import quotas, Japanese multinationals such as Toyota, Panasonic, or Mitsubishi Corporation from the late 1990s accepted the need for European-wide operations and more product customization, although they found the transformation away from parental and ex-patriate control difficult to implement (Fitzgerald and Lai, 2015; Fitzgerald and Rui, 2016). Firm strategies and histories as well as market context have been relevant. From manufacturing basic autos in developing markets, Suzuki preferred to retain advantages in the close direction of its subsidiaries, even in the case of joint ventures. With its low-cost production and research base in China, Huawei Technologies emerged as the world leader in telecommunications infrastructure, and gained from the global centralization of research and production (Jones, 2000; Fitzgerald, 2015; Fitzgerald and Rui, 2016).

International business writers have built on internationalization theory, which argues that the relative costs and risks of conducting an activity inhouse or externally determine the scope and size of firms (Coase, 1937; Williamson, 1975). Buckley and Casson (1985) utilize this transaction cost analysis to explain why multinationals abandon strategies of exporting and licensing in foreign markets for extensive FDI commitments. To safeguard proprietorial knowledge or reputation, or to minimize negotiating and monitoring costs, multinationals might favour the control and coordination of their activities within cross-border managerial hierarchies. Nonetheless, where host country local firms are entrenched, or potential rivals possess advantages, a multinational or its subsidiary might seek to reduce costs or risks through vertical integration, acquisition, alliances, or joint ventures. Through the development of internalization theory and the use of transaction costs analysis, Hennart (1982) provided new insights into the strategies of mining multinationals. Aluminium smelters before 1914 did not integrate backwards with Malayan mines, whose bauxite contained so few impurities that its processing was not asset-specific. The same was true of smelters buying their tin from South East Asia in the inter-war years, while the particularities of Bolivian lode deposits necessitated cross-border vertical integration and organization. Although transportation and Canadian labour costs induced Alcan to build primary smelters in Australia, Britain, Norway, India, and Japan in the 1960s, the main cause was pressure from foreign governments (Rodrik, 1982). Unlike Ford, General Motors from the 1920s onwards preferred to acquire existing firms such as Opel, Vauxhall, or Holden, furthering quick access to the three foreign markets whose sales potential the company believed justified wholly or majority-owned subsidiaries (Wilkins and Hill, 1964; Wilkins, 1974). Fiat from the 1970s based its entry-mode strategy on joint ventures, because it lacked capital, but could exploit its experience of building low-cost cars in foreign markets (Fitzgerald, 2015).

Both the concepts of cross-border ownership advantage and transaction costs are focused on matters of firms, competitors, or markets, and, arguably, location advantages do not give due prominence the impact of national governments on multinational strategy and organization. In general, government policies were the determining factor on entry-mode and joint venture formation. From Brazil in the 1950s to China in the 1990s, usually in resource-rich developing economies and in industrializing nations, entry to the host market was conditional on the founding of joint ventures through which it was assumed, often incorrectly, technology and know-how would be effectively transferred (Jones, 2005a; Fitzgerald, 2015). Transaction cost theory tended to overlook the gains and difficulties of the organizational learning and adaptation implicit in alliances and joint ventures, and the ways in which the interactions between multinational subsidiaries growing in capabilities and the parent business might develop. “New” internalization theory makes a greater attempt to distinguish between non-location-bound advantages, such as technology, and location-bound advantages, such as business networks and political contexts (Rugman and Verbeke, 2001; Buckley and Strange, 2011).

Dunning’s highly influential “eclectic paradigm” or “OLI” framework (2008) incorporates Hymer’s ownership or “O” advantages, and outlines the circumstances in which a firm would transfer those advantages from a home to a host economy. Dunning utilizes transaction cost analysis to propose internalization (I) advantages, by which multinationals achieve security and efficiencies through cross-border control and coordination. He adds the notion of locational (L) advantages, which are required to justify FDI, such as access to research and development (R&D) networks, lower costs, human skills, intermediate inputs, infrastructure, cheaper finance, and nearness to customers and consumer markets, plus tariffs, import quotas, subsidies, and other government policies. As with its predecessors, the OLI framework has given precedence to the transfer of capabilities and the creation of subsidiaries that become mini-versions or extensions of the parent company. FDI theory has in general been influenced by the particular history of the post-war international economy: the rapid expansion of manufacturing multinationals with parent concerns seeking to transfer core capabilities, and the dominance of US companies that possessed leading capabilities in technology, management, products, brands, and capital. Japanese manufacturing multinationals followed these approaches to multinational growth and organization (Fitzgerald, 2015). As we have seen, the role of subsidiaries and their managements has been depicted as too passive, and organizational practice was highly varied, due to industry, national market, and political factors. Dunning, in later writings, saw his eclectic paradigm as a highly flexible framework capable of explaining complex international business networks founded on vertically integrated operations and dispersed capabilities. But others disagree that the OLI framework easily accommodates structures beyond the parent–daughter format (Mathews, 2002). Dunning in later adaptations of his theory acknowledged the influence of the political, economic, and social contexts in both home and host nations, but the OLI framework concentrates on firm-level considerations rather than national and global forces (Dunning and Lundan, 2008).

Subsidiaries, networks, and governments

Amongst recent debates in international business theory, the role of multinational subsidiaries, cross-border networks, emerging economy firms, and national institutions have been prominent in attempting to address acknowledged gaps. Using Chandler’s strategy–structure perspective, Bartlett and Ghoshal (1989) proposed that the local organization of a multinational varied according to the degree it wanted subsidiaries to adopt parental firm practices, fulfil a specialized role, or evolve some optimal hybrid model. But the schema says nothing about which strategic

or organizational factors inhibit the internal transfer of practices (Birkinshaw, 2001). Other critics, wary of parent company strategies, look instead to the duality of the headquarters–subsidiary relationship, subsidiary-level decision-making, and local environment effects on the subsidiary. A subsidiary with its own specific capabilities can in addition contribute positively to the whole multinational and its international competitiveness (Beechler *et al.*, 1998). Admittedly, business historians have instinctively taken the parent business and its strategy as their starting point, and international business history would gain from fuller analysis of subsidiaries and their impact on host economies. The long-term political as well as the economic consequences of multinationals controlling natural resources, key infrastructure, and major industries in developing countries lend themselves to historical investigation. Nonetheless, amongst some of the lessons available from business history are: the effects on political and economic development in Africa and Latin America (e.g. Fieldhouse, 1978; Bucheli, 2005); the adaptation of products, brands, and marketing to different national markets and stages of development (e.g. Fitzgerald, 1995; Cox, 2000; Jones, 2005b; Lopes, 2006); and the politics and managerial challenges of automobile production in developed and industrializing economies (e.g. Wilkins and Hill, 1964; Bonin *et al.*, 2003).

The evolution of vertically integrated cross-border networks since the 1990s has increased the opportunity for subsidiaries to play major roles within a global organization (Dorrenbacher and Geppert, 2003; Forsgren *et al.*, 2007). The spread of manufacturing and deregulation has given impetus to FDI strategies of out-sourcing, off-shoring, export-orientated subsidiaries, and efficiency-seeking on labour, transport, or production costs (Dunning and Lundan, 2008; Fitzgerald, 2015). Many multinationals have adopted an organizational model of cross-border vertical production and marketing chains mixing direct control and contracting-out. The classic definition of a multinational in having ownership control of at least one subsidiary capable of undertaking or replicating that firm's main commercial operations simplifies the diversity of multinational organizational arrangements and requirements. The influence of multinationals goes extensively beyond its directly owned or controlled subsidiaries. Planning and contracting by the parent firm has, to an important extent, replaced ownership as the main means of coordinating over productive resources. As well as being well placed to extricate lessons from comparisons with the pre-1914 international economy, business historians can through case studies assess how far reaching organizational changes have altered from the period before the 1990s. The concept of the global factory envisages a strategic role for subsidiaries within flatter organizational hierarchies and cross-border value chains. But there are Japanese examples of core value-added and strategic activities being centralized and cross-border value chains reducing local management autonomy. Historical continuity is hidden amongst more apparent historical change (Buckley, 2009; Fitzgerald and Lai, 2015).

Emerging economy multinationals have been distinguished by their use of international inter-firm networks and alliances as a means of expansion. Where the exploitation of home-grown capabilities does not explain multinationalization, as assumed in mainstream FDI theory, strategic alliances and the acquisition of subsidiaries have acted to enhance the competitiveness of the parent business (Mathews, 2002). The Linkage, Leverage, and Learning or LLL model proposed by Mathews hints at different organizational needs and abilities for developing economy multinationals, and at the formation of business networks different from hierarchical parent–subsidiary relationships. Taiwanese firms such as Acer, Foxconn, or TECO have shown a high capacity for working through cross-border networks in which finance, ownership, production, and marketing are geographically dispersed for reasons of strategic advantage or political necessity (Mathews, 2002; Fitzgerald, 2015). Business historians have employed the late development framework to explain the rapid industrialization of continental Europe and subsequently East Asia. State ownership is another distinguishing feature of many emerging economy multinationals. Institutional

perspectives have so far focused on inward FDI and the organizational tensions created by pressures for internal cross-border and external local alignment (Morgan *et al.*, 2001). They have also sidelined entrepreneurship, managerial agency, and firms in driving economic change, and downgraded transnational forces and the global economy's long history.

Kojima and Ozawa took national and international factors as their starting-point for exploring the link between outward FDI, economic development, trade, and government policy (Kojima, 1978; Ozawa, 1991). The Japanese state, from the 1950s, supported FDI that secured the raw materials and components needed for industrialization; to promote industrialization at home, other forms of FDI were prohibited. Once Japan had reached an advanced stage of economic development, the government loosened capital controls, and, with rising tariff and quota barriers overseas, manufacturing firms sought to transfer their leading capabilities in production, products, and technology to what were preferably wholly owned subsidiaries (Fitzgerald and Lai, 2015; Fitzgerald and Rui, 2016). Better known for identifying management as a key source of firm growth, and influencing both Chandler and the resource-based view (or RBV) of business strategy, Penrose (1959, 1968) wrote a major study of the international oil industry. She notes its managerial bureaucracies, and she describes the importance of cross-border coordination in extracting natural resources from territories that were not the dominant final markets. Above all, she recognized the formative interactions of multinationals and governments, and the impact of these interactions on ownership, internal structures, and networks. Penrose recorded too the practical difficulties of operating in developing economies. With many newly established, decolonized states being highly dependent on the commodity exports foreign firms controlled, the post-war period was marked by clashes between the international property rights of multinationals and national sovereignty. More generally, government policy has historically been a main motive for joint ventures and local ownership participation, and especially so in developing economies. Federal regulations in the US have limited FDI in certain sectors such as real estate and media, just as anti-trust laws have made US multinationals comparatively wary of international alliances and agreements. The relationship between states and multinationals has fundamentally shaped government policies and company strategies, pointing to the need to be wary of privileging firm-centric calculations. The historical importance of government policy meant that FDI was never entirely footloose, despite periods of low regulation before 1914 and since the 1990s (Jones, 2005; Fitzgerald, 2015).

International business theory has paid too much attention to entry mode and strategies, and spent less time discussing how strategies are developed and implemented; it has focused on home-grown capabilities, but less on how capabilities are reconfigured through entrepreneurial processes, market creation in host economies, and learning processes; and it has emphasized the role of the parent multinational, and overlooked subsidiaries and the impact of multinationals on host economies. Investment in governance and management can be conceived as part of strategic implementation. Organizations are not an outcome or solution in themselves, but as part of a continuous process responding to firm-centric, national, and global factors. Where they can be guided by theory or explicit frameworks, business historians have the case-based methods and the contextual, comparative, and complexity approaches to investigate issues of international business, and to assess trends in continuity versus change.

Trends in multinational business organization

What distinguishes multinational business organization is the particular need to deal with cross-border transactions and the economic and political environments of distinct territories. Numerous inter-related factors affect the internal organizational options and adjustments of firms, and

include the required or preferred degree of home nation or headquarters control over subsidiaries; the strategic intent, ability, or need to transfer technologies and other capabilities across borders; the initial role and subsequent evolution of subsidiaries, and host environments; global, regional, or industry determinants of cross-border ownership, supply, distribution, product development, human resource, and production integration, or their decentralization; and the strengths and failings of entrepreneurs, managers, and deal-makers (Fitzgerald and Rui, 2016). Differing levels of economic development, the market, and institutional circumstances of home and host nations, diplomatic and power relations between polities, and industry-specific factors are all external influences on trends and patterns in multinational strategies and structures, meaning that outcomes are never uniform. Multinationals tend to respond to broad trends in international political economy, while being key players in their formation. Drawing on a historical perspective, the following sections review the relationship between FDI patterns, multinational organization, national politics, inter-state relations, and economic development. It considers the period to the First World War, and the links between trade, FDI, developing economies, and colonialism; the disruptions to trade between 1914 and 1948, noting new developments in multinational activity; the increase in manufacturing FDI in developed economies during the decades of post-war recovery, the division of the international economy during the Cold War, and the effects of decolonization on multinationals, from 1948; and the period of deregulation, off-shoring, and contracting-out from the 1980s onwards during which multinationals adopted or adapted new organizational forms.

Trade and empire: 1850 to 1914

International trade in merchandise quadrupled between 1850 and 1880, and tripled between 1880 and 1913, when it was equal to 8.7 per cent of global GDP. Levels of accumulated FDI rose markedly throughout the latter half of the nineteenth century to reach between 9.0 and 11.1 per cent of global gross domestic product (GDP) by 1913 (Maddison, 1999; Dunning and Lundan, 2008; Fitzgerald 2015). With international trade driving global business, European and North American multinationals emerged. They forged flexible networks that could transfer the capital, people, knowledge, and technology needed in the production of commodities; coordinate diverse commercial activities in developing territories; and create the essential infrastructure and international transport systems through which goods passed. Two heavily related and dynamic aspects of nineteenth century history were the growth of the international economy and imperialism. Multinationals were active participants in the process of colonization and economic transformation, as well as eventual beneficiaries of imperialism (Jones, 2000; Fitzgerald, 2015).

Industrialization and rising consumption in advanced economies relied on foreign investment in commodity production in less developed territories. Trade-related FDI and the international division of labour between industrialized or developed nations and commodity producers in developing territories were foundations of the period's international political economy. Trading firms emerged as leaders in multinational enterprise, and they organized the finance, personnel, technology, processing, and transportation of commodities required by manufacturers and consumers in Europe and the United States. They could face in undeveloped locations enormous logistical problems, lack of infrastructure, and institutional gaps, and they responded entrepreneurially and flexibly to regional and local contexts by undertaking banking, finance, shipping, processing, plantation management, mineral and oil extraction, insurance, agency management, and other commercial activities through networks and inter-locking partnerships. Trading firms replaced monopolistic chartered companies, which had administered territories. But colonization in Asia and Africa significantly reduced the commercial risks of

Western investors. European and US trading firms brought investments in plantations, mines, oil wells, ports, shipping lines, railways, and processing, and they transferred key personnel, technology, and management know-how. But they also gained organizationally and commercially from their networks with local Asian and Latin American enterprise. They gained disproportionately from the exploitation of natural resources in foreign and colonized lands (Jones, 2000, 2005a; Jonker and Sluyterman, 2005; Fitzgerald, 2015).

Trading, banking, mining, infrastructure, and utility multinationals during this period registered in Europe, where the capital for ventures was raised, yet the operational activities of these “free standing companies” occurred almost entirely in foreign or colonial markets. These multinationals forged commercial networks with each other and with local traders and businesses, including plantation and mine owners in Latin America, and notable Chinese and Indian investors and merchants in Asia. Connections within the governments and ruling elites of Latin America were as important as commercial networks, as were links with the governments of China, Japan, or Siam, and numerous colonial administrations such as the Dutch East Indies or Nigeria. The largest trader, Mackinnon, MacKenzie, operated in Europe, East Africa, the Middle East, India, Australia, and Japan, and, as we have noted, many of the biggest founded corporate headquarters to coordinate their global businesses. The Japanese trading companies which emerged in the last quarter of the nineteenth century gained responsibility for managing Japan’s import and export trade, and they had to supplant established European and US networks in Asia and worldwide. For both reasons, with government support, they established large managerial companies. Their overseas offices, nonetheless, created networks of business partners, shippers and agents, involving Western and Chinese enterprises. Internationalized clusters and economically developed zones – such as London’s finance and commodity markets, Singapore, Hong Kong, Shanghai, Suez, Panama, Calcutta, Valparaiso, Sao Paulo, or the Rand – improved returns to scale and scope, networking, and deal-making. Multinationals were key players in financing and building much of the infrastructure in these enclaves, and in creating and expanding the local, regional and global dimensions of these transnational nodes (Jones, 2000, 2005a; Jonker and Sluyterman 2005; Fitzgerald, 2015).

By 1914, perhaps 55 per cent of total FDI stock was invested in natural resources, both renewable and non-renewable; some 20 per cent in railways; 10 per cent in trade, distribution, public utilities, and banking; and about 15 per cent in manufacturing. Approximately 64 per cent of FDI was located in developing economies (Fitzgerald, 2015). The free standing company was prominent for trading, banking, utility, and mining multinationals, but not for manufacturers. Multinational organization for most sectors in this period ran counter to the idea of parent firms transferring, through a managerial hierarchy, capabilities developed in a home economy to foreign subsidiaries. Power and economic relations between territories, calculations of commercial and political risk, and relations with governments and colonial administrations all shaped the internal and external dimensions of firms. Some multinationals did not adopt the free standing company model when expanding in search of supplies. Examples include United Fruit which managed plantation, railway, and shipping interests in Central America, US miners in Mexico, food and soap manufacturer Lever Brothers with its palm oil estates in the Belgian Congo, and Dunlop which owned rubber sources in South East Asia (Fieldhouse, 1965; Wilkins, 1974; Bucheli, 2005; Fitzgerald, 2015).

There existed, too, early pioneers in multinational manufacturing, where companies adopted marketing-seeking strategies in developed economies for their products. The Swiss-based Nestlé needed to sell in larger markets; Courtauld sought to exploit its rayon technology; Singer sewing machine, Ford automobile, and Westinghouse wanted to exploit their distinctive products or

technologies; and armaments producer Vickers won government orders by founding joint ventures (Wilkins, 1974; Coleman, 1969; Trebilcock, 1977; Bucheli, 2005; Jones, 2005a; Fitzgerald, 2015, 2017). The creation of these subsidiaries involved the transfer of technologies and know-how from the parent company, but the subsidiaries for practical reasons exercised high levels of autonomy, with management adapting ownership advantages and evolving locally specific capabilities. British Westinghouse – later part of Metropolitan-Vickers and Associated Electrical Industries – provides a clear case of how leading technologies and management systems failed until adapted to host market contexts (Fitzgerald, 2017). Specially formed overseas banks were integral to the international economy, while European and US-based banks maintained corresponding partners in foreign markets and avoided FDI. Marine and fire insurance as well as reinsurance did internationalize. The aim was to spread risks, but regulations and differentiated markets meant that subsidiaries were effectively autonomous. Complex regulations and high capital ratios blocked the internationalization of life insurance (Jones, 1993, 2005a; Fitzgerald, 2015).

War and economic setbacks: 1914–1948

The First World War inevitably disrupted capital and trade flows, and brought about the sequestration of German overseas assets. These losses and those following the Russian Revolution were the first recorded examples of governments permanently seizing FDI. Yet the international business system that re-emerged in the 1920s had notable similarities to the period before the conflict. Imperial control remained, and European colonization was expanded to the Middle East. The decline in commodity prices hurt the activities and profitability of traders, but Western firms extended their investments in natural resources, such as rubber, cocoa, or oil (Dalton, 1965; McCann, 1976; Galey, 1979; Grandin, 2009; Jones, 1981; Ferrier, 1982; Sluyterman *et al.*, 2007; Fitzgerald, 2015). To further local industrialization and economic development, radical and nationalist governments in Latin America sequestered mineral rights, or placed restrictions on multinational utilities, traders, and insurance businesses, altering their governance and reducing parent company control. The multinational organization and business approaches of multinationals in most sectors remained intact (Fitzgerald, 2015).

In 1938, developing economies were the location for nearly 66 per cent of FDI stock (Fitzgerald, 2015). Nonetheless, we can see the growth in manufacturing FDI during the 1920s and 1930s, in which US firms particularly transferred home-grown technologies, systems, or products to subsidiaries in Canada and Europe. Ford preferred to develop greenfield sites in Ontario, Cologne, or Dagenham, UK, while General Motors converted Opel (Germany), Vauxhall (UK), or Holden (Australia) into subsidiaries (Fitzgerald, 2015). Mining and oil businesses grew rapidly too in the inter-war period, and transferred capital, technology, and personnel. The Great Depression of 1929–1931 was the significant turning point. Tariffs hurt trading firms, but encouraged manufacturing FDI. Multinational activities in public utilities declined in favour of national government and municipal initiatives. Policies of nationalism and autarky in Germany and Japan reduced the control that parent firms could exercise over their subsidiaries. Manufacturing, oil, and mining showed the higher incidence of cross-border management and parent–subsidiary relationships, while networks continued to be more operationally significant in the service sectors. On the whole, international cartels tended to be undermined by external price competition, except where collusion had legislative backing as in the cases of tin, rubber, and tea (Jones, 2000, 2005a; Fitzgerald, 2015).

Cold War and decolonization: 1948–1980

Exports grew markedly during the post-war decades: they amounted to 10.2 per cent and 12.5 per cent of world GDP in 1980 and 1990 respectively, and, by 2006, the figure had reached 29.3 per cent. Multinationals controlled in 2000 approximately two-thirds of merchandise and service exports, much of it through intra-trade within their cross-border organizations. Outward FDI stock in 1993 at 11.3 per cent of global GDP finally overtook the previous high point of 1914 (Maddison, 1999; WTO, 2000, 2007, 2010; UNCTAD 1991, 2000; Fitzgerald, 2015). The impact of FDI and especially US multinationals established, by the 1960s, the idea of the multinational as a business distinct from purely domestic firms. Once the multinational had been defined, theorists looked to explain which strategies or organization obtained success in foreign markets, and how firms might transfer their capabilities in the creation of competitive subsidiaries. The work of theorists reflected growing political and popular awareness of multinationals in the international economy and of their impact upon individual states (Hymer, 1960; Vernon, 1966; Buckley and Casson, 1985; Dunning and Lundan, 2008).

As in the inter-war years, the common strategy of post-war manufacturing multinationals was market-seeking within developed economies, and firms sought overseas customers for goods in which they had a price, product, production, or marketing leadership. After the Second World War, US oil and chemical firms led the surge in FDI, and they were followed by manufacturers generally. Corporations in the US had made breakthroughs in mass manufacturing and marketing, and built teams of managers and technicians to deal with increasingly large and complex operations. They evolved organizational hierarchies with a strategic headquarters at the top, but they devolved in principle major responsibility for products or geographical area to a layer of divisional management, which in turn oversaw departments in charge of business functions such as production or marketing. The emergence of large firms with competitive resources and capabilities increased the likelihood of FDI. Where host market sales justified investment, US manufacturers preferred wholly owned or directly controlled subsidiaries that safeguarded and better utilized technological and managerial know-how transferred from the parent company, although political and economic contexts necessitated variations (Wilkins, 1974; Jones, 2005; Fitzgerald, 2015).

To facilitate international expansion, some large US firms could use their multidivisional model of devolved management, and formed an overseas division to supervise national subsidiaries. Goodyear, for example, created the Goodyear International Company in 1957, and expanded from Latin America and South Africa to France, Italy, and Germany over the course of ten years. Marketing-seeking manufacturers transformed world investment patterns and the homogenization of consumer tastes. The figure for FDI stock located in developing territories had fallen to 32.3 per cent by 1960. Manufacturing was responsible, in 1978, for 52 per cent of world FDI stock, services 26 per cent, and natural resources 22 per cent (Wilkins, 1974; Jones, 2005; Dunning and Lundan, 2008; Fitzgerald, 2015).

With US multinationals possessing 7500 subsidiaries in 1950, and 23,000 in 1966, they faced a huge organizational challenge. An immediate strategic objective from the 1950s was to build a cross-border organization to facilitate the flow of superior resources and capabilities from the parent firm. The second task in practice was to allow subsidiaries enough operational freedom to meet the specific needs of a national market. The clash between headquarters control and decentralization increased where a subsidiary grew in size and importance within a multinational. Headquarters control and monitoring had limitations, and international coordination could depend on the subsidiary having expatriate managers or staff loyal to and familiar with the parent firm. The sharing of senior personnel also assisted the transfer of capabilities or defined

best practice, and at the parent business aided understanding of a subsidiary's circumstances. While ownership and management were international, the cross-border integration of production remained minimal. Manufacturing subsidiaries tended to serve national markets, even if they coordinated with the parent in general management or product development. Mining and oil companies similarly transferred personnel, technology, and know-how, but government policies and notably in developing economies, the political and logistical advantages of local support and participation, and risk-sharing meant that joint ventures were more common than in manufacturing, as indeed was nationalization. Geology determined resource-seeking strategies and the locale of production. Mining and oil firms were less likely than manufacturers to produce and sell in the same country, and therefore their international coordination was organizationally important, although levels of extraction, processing, and marketing integration varied between mineral types. Distribution subsidiaries tended to be directly owned by the multinational, unlike over time production facilities. Multinationals operating in developing nations faced different organizational challenges from those carrying out main-line activities in developed economies. Case studies show the effective transfer of technologies and management know-how by multinationals to their foreign subsidiaries in developed countries, although the effects on national economies as a whole are less clear. In developing economies, with FDI biased to mining, oil, and plantations, the benefits to host nations appear limited to political and business elites and geographically to particular enclaves (Wilkins, 1974; Jones, 2005a; Fitzgerald, 2015).

Progressive General Agreement on Tariffs and Trade (GATT) rounds, European Economic Community (EEC) policies, and falling transport costs all encouraged gains from cross-border interaction and undermined the autonomy of subsidiaries. From 1965, trade barriers for automobiles between the United States and Canada ended, and "continentalism" increasingly affected a wide swathe of goods and commodities. The EEC established internal free trade from 1968. The founding of Ford Europe the year before signalled the response of multinationals to cross-border interaction and production (Fitzgerald, 2015). Regional headquarters and structures were a trend of the 1970s and 1980s, although some multinationals preferred worldwide product divisions. They drew control from both the parent firm and individual national subsidiaries, simultaneously centralizing and decentralizing managerial decision-making, and converging and diverging products and systems. Over time, regional and international product divisions might evolve into matrix organizations accommodating the two organizational imperatives of product and geography. Matrix structures that additionally incorporated support services such as accounting, personnel or R&D were rarer, and became associated with slow decision-making and internal conflicts. Traders Cargill-Tradax supplies one illustration (Broehl, 2008). In mining and oil, centralized functional organizations found less value in founding a separate international division, since upstream extraction, processing, downstream sales, technology, capital, personnel had to be coordinated globally (Chalmin, 1990; Jones, 2005a; Fitzgerald, 2015).

British multinationals, like their US rivals, tended towards parent-subsidiary structures and international divisions, but there are suggestions of less monitoring by the parent and greater subsidiary autonomy in practice. Multinationals from continental Europe were more inclined to form holding companies that incorporated nationally based subsidiaries and the main business, and such holding companies exercised minimal direct managerial control or monitoring over formal subsidiaries. Federal antitrust law moved US firms away from holding-company structures, but their lead in technology, management, products, production, or marketing explained the greater concern of US multinationals overall for organizational integration. Many European firms relied on the head of the parent firm exercising control or coordination through personal relationships with the heads of subsidiaries. Anglo-Dutch Unilever and Nestlé viewed national

consumer markets as distinct, with their own products and brands, and cross-border coordination brought seemingly few returns to scale or other efficiencies. Unilever's organization continued to be essentially multi-domestic, while Procter and Gamble from the United States had a more international cross-border approach. Unilever's attempts in the 1970s at product standardization in Europe brought mixed results. Swiss pharmaceutical Ciba and Dutch electronics producer Philips record how managers returning from the United States brought the latest ideas on organization back to Europe. Ciba adapted the multi-divisional form by introducing divisional boards, and its merged successor Ciba-Geigy founded a matrix structure in which overseas divisions reported to product and area heads at the main firm. Philips' matrix plotted overlying lines between product divisions and national firms, and between line management and technical support (Franko, 1976; Jones, 2005a, 2005b; Fitzgerald, 2015).

Deregulation and cross-border production: from 1980

The production, human resource management, and technological achievements of manufacturers underpinned the rise of the Japanese economy in the post-war decades. The lifting of Japanese capital controls, the increasing value of the yen, and the imposition of tariffs and import quotas in Europe and the United States explain their move from exports to FDI from the 1980s onwards. As well as staffing newly found subsidiaries with expatriate managers, the parent firm and its production departments maintained a centralized control of international operations, in order to transfer as much as practicable what were perceived as best practice capabilities. The founding of European-wide headquarters by Japanese multinationals from the late 1990s hinted at the need for decentralizing to some extent decision-making and product development, although arguably Japanese multinationals found this organizational shift difficult to achieve (Fitzgerald and Rui, 2016).

If the post-war decades had been characterized by the spread of manufacturing FDI and directly controlled subsidiaries, the period from the 1990s saw across all sectors movement towards joint ventures and business alliances in order to share R&D, production, or marketing costs. The lowering of investment barriers and privatizations encouraged international mergers and acquisitions (M&As), and transformed entry mode strategies and the speed by which firms could internationalize. International M&As reached their peak in 2000 when they accounted for 99.5 per cent of all FDI (UNCTAD, 2001). They stimulated, too, a greater tendency amongst multinationals to engage in asset-seeking approaches by multinationals. Contrary to established theories of FDI, multinationals did not need ownership advantages or competitive capabilities to overcome the disadvantage of operating in foreign markets, but could buy foreign firms that already possessed advantages and capabilities. The fall of the Berlin Wall and the Communist bloc, the reduction of controls over utilities and services by nation states, and the creation of the European Single Market opened up opportunities for both FDI and international M&As from the 1990s onwards. The spread of industrialization to developing economies and especially to Asia established firms with cost advantages which could buy an established technology, product, or brand. For example, Tata from India acquired Jaguar Land Rover, in the UK, just as the private Chinese firm of Geely became the owner of Sweden's Volvo. Organization building proved inevitably more difficult than acquisitions, and it was unclear to what extent technological or managerial know-how was effectively fed back to an acquiring multinational or could upgrade performance in its home economy (Fitzgerald, 2015).

The worldwide spread of industrialization, the lowering of investment barriers, and the evolution of internationally connected and export-orientated clusters furthered strategies of offshoring, cost-cutting, and economy-seeking FDI (UNCTAD, 2001). By 2005, natural resources

accounted for nearly 8 per cent of world FDI stock, manufacturing nearly 30 per cent, and services approximately 61, with 1–2 per cent unspecified. Developing economies, the locale for just over 1 per cent of world FDI stock in 1990, could claim nearly 10 per cent by 2005. Levels of FDI assets reached in 2009 the remarkable figure of 35 per cent of global GDP, although trends in growth, trade, and investment turned downwards thereafter in the wake of the global financial crisis for which multinational banks bear the main responsibility (UNCTAD, 2007, 2010; Fitzgerald, 2015). But this impressive measure underestimated the importance of major multinationals since they could not capture trends in the organization of international business since the 1990s: focusing on core operations, companies increasingly coordinated or controlled cross-border networks of contracted suppliers and allied firms, and their importance to the international economy went beyond fully owned subsidiaries or joint ventures. Post-1990 trends had parallels with the organization of the international economy before 1914. Broad transformations in international political economy induced multinationals to reconsider the scope of parent–daughter structures in favour of global value chains and contracting-out. Multinationals increasingly combined full equity, partial equity, strategic partners, and networks of contracted partners, suppliers and distributors. Multinationals became more deeply engaged in the cross-border organization of production chains in addition to international ownership and management (Dunning and Lundan, 2008). Federative structures utilized the vertical control of major products, technologies, key production stages, or brands within an integrated organization alongside the horizontal coordination of contractors and business partners through networks. International production prompted the notion of the global factory, in which subsidiaries could operate as world production hubs and contribute to production chains within a comparatively flat hierarchy. Taiwan’s Foxconn and Singapore’s Flextronics in electronics, Japan’s Denso Corporation in auto-parts, and Hong Kong’s Li & Fung in fashion emerged as significant multinationals by undertaking contracted production and coordinating complete product lines on behalf of other companies. Organizational forms of contracting-out and off-shoring have spread manufacturing and support services internationally, but, through deregulation and the extension of low-skill, low value-added production chains, it has become more problematic for host nations to capture the benefits of global business (Jones, 2005a; Fitzgerald, 2015; Fitzgerald and Rui, 2016).

Conclusion

Through their research, business historians have widely acknowledged the role of multinational enterprises in the making of global business. They have the methodological tools to provide empirically grounded cases of multinationals, which shaped as well as responded to complex economic, political, social, international, and comparative contexts. Multinationals must balance external consistency with local environments alongside internal consistency through cross-border organization, and business historians could usefully explore this dilemma and its commercial, political, and cultural consequences more explicitly. There was never a single managerial approach suited to all contexts and industries, and strategic and organizational imperatives evolved over time. The development of global business organization, capabilities, products, and services was a necessarily contingent and negotiated process, and business history’s situated approach is well suited to understanding the many factors involved. Business organization deals with the creation, transfer, monitoring, and utilization of key capabilities that underpin economic growth, and multinationals have controlled the resources in finance, technology, management knowledge, personnel, skills, and products required by nation states. Business history has provided insights into the impact of multinationals on the evolution of the global economy,

and, when theory has indicated narrower options, into the variety of organizational forms that multinationals have adopted. But much is left to research on the relationship between multinationals with both home and host governments, on the barriers to transferring and utilizing the resources and capabilities owned by multinationals, and on the wide-ranging effects of multinationals on host economies and economic opportunities.

References

- Bartlett, C.A. and Ghoshal, S. (1989), *Managing Across Borders* (Cambridge, MA: Harvard Business Press).
- Beechler, S., Bird, A., and Taylor, S. (eds) (1998), *Japanese MNCs Abroad: Individual and Organizational Learning* (New York: Oxford University Press).
- Birkinshaw, J. (2001), "Strategy and Management in MNE Subsidiaries", in Rugman, A.M. and Brewer, T. (eds), *The Oxford Handbook of International Business* (Oxford: Oxford University Press), 380–401.
- Bonin, H., Lung, Y., and Tolliday, S. (eds) (2003), *Ford, 1903–2003: The European History*, 2 vols (Paris: Editions P.L.A.G.E.).
- Broehl, W.G. (2008), *Cargill: From Commodities to Customers* (Lebanon, NH: University Press of New England).
- Bucheli, M. (2005), *Bananas and Business: The United Fruit Company in Colombia, 1899–2000* (New York: New York University Press).
- Buckley, P. (2009), "The Impact of the Global Factory on Economic Development", *Journal of World Business*, 44, 2, 131–143.
- Buckley, P.J. and Casson, M. (1985), *The Economic Theory of the Multinational Enterprise* (London: Macmillan).
- Buckley, P.J. and Strange, R. (2011), "The Governance of the Multinational Enterprise: Insights from Internalization Theory", *Journal of Management Studies*, 48, 2, 460–470.
- Chalmin, P. (1990), *The Making of a Sugar Giant: Tate and Lyle, 1859–1989* (Chur: Harwood Academic Publishers).
- Chandler, A.D. (1962), *Strategy and Structure: Chapters in the History of the American Industrial Enterprise* (Cambridge, MA: MIT Press).
- Chandler, A.D. (1977), *The Visible Hand: The Managerial Revolution in American Business* (Cambridge, MA: Harvard University Press).
- Chandler, A.D. (1990), *Scale and Scope: The Dynamics of Industrial Capitalism* (Cambridge, MA: Harvard University Press).
- Chandler, A.D. and Mazlish, B. (eds) (1977), *Leviathans: Multinational Corporations and the New Global History* (Cambridge: Cambridge University Press).
- Coase, R.H. (1937), "The Nature of the Firm", *Economica*, 4.
- Coleman, D.C. (1969), *Courtaulds: An Economic and Social History*, vols 1–2 (Oxford: Clarendon Press).
- Cox, H. (2000), *The Global Cigarette: Origins and Evolution of British American Tobacco, 1880–1945* (Oxford: Oxford University Press).
- Dalton, G. (1965), "History, Politics, and Economic Development in Liberia", *Journal of Economic History*, 25.
- Dorrenbacher, C. and Geppert, M. (2003), *Politics and Power in the Multinational Corporation: The Role of Institutions, Interests and Identities* (Cambridge: Cambridge University Press).
- Dunning, J.H. and Lundan, S. (2008), *Multinational Enterprises and the Global Economy* (Aldershot: Edward Elgar).
- Fieldhouse, D. (1965), *Colonial Empires: A Comparative Survey from the 18th Century* (New York: Delacorte Press).
- Fieldhouse, D. (1978), *Unilever Overseas* (London: Croom Helm).
- Ferrier, R.W. (1982), *The History of the British Petroleum Company*, vol. 1 (Cambridge: Cambridge University Press).
- Fitzgerald, R. (1995), *Rowntree and the Marketing Revolution, 1862–1969* (Cambridge: Cambridge University Press).
- Fitzgerald, R. (2003), "Corporate Governance, Business Organization and Competitiveness: British and Japanese Business in the Inter-War Period", in Fitzgerald, R. and Abe, E. (eds), *The Development of Corporate Governance in Japan and Britain* (London: Gower Press), 58–96.
- Fitzgerald, R. (2015), *The Rise of the Global Economy: Multinational Enterprise and the Making of the Modern World* (Cambridge: Cambridge University Press).

- Fitzgerald, R. (2017), "International Business and the Development of British Electrical Manufacturing, 1886–1929", *Business History Review*, 91, 31–70.
- Fitzgerald, R. and Lai, J. (2015), "Strategic Capabilities and the Emergence of the Global Factory: Omron in China", *Asia Pacific Business Review*, 21, 3, 333–363.
- Fitzgerald, R. and Rui, H. (2016), "Whose Fall and Whose Rise? Lessons of Japanese MNCs for Chinese and Emerging Economy MNCs", *Asia Pacific Business Review*, 22, 4, 534–566.
- Forsgren, M., Holm, U., and Johanson, J. (2007), *Managing the Embedded MNC: A Business Network View* (Montpellier: Edward Elgar).
- Franko, L. (1976), *The European Multinationals* (Stamford, CT: Greford Publishers).
- Galey, J. (1979), "Industrialist in the Wilderness: Henry Ford's Amazon Venture", *Journal of InterAmerican Studies and World Affairs*, 21.
- Grandin, G. (2009), *Fordlandia: The Rise and Fall of Henry Ford's Forgotten Jungle City* (New York: Picador).
- Hennart, J.-F. (1982), *A Theory of Multinational Enterprise* (Ann Arbor, MI: University of Michigan Press).
- Hymer, S. (1960), "The International Operations of National Firms: a Study of Direct Foreign Investment" (MIT: PhD thesis).
- Jones, G. (1981), *The State and the Emergence of the British Oil Industry* (Basingstoke: Edward Elgar).
- Jones, G. (1993), *British Multinational Banking, 1830–1990* (Oxford: Clarendon Press).
- Jones, G. (2000), *Merchants to Multinationals* (Oxford: Oxford University Press).
- Jones, G. (2005a), *Multinationals and Global Capitalism: From the Nineteenth to the Twenty-First Century* (Oxford: Oxford University Press).
- Jones, G. (2005b), *Renewing Unilever: Transformation and Tradition* (Oxford: Oxford University Press).
- Jonker, J. and Sluyterman, K.E. (2005), *At Home on the World Markets: Dutch International Trading Companies from the 16th Century to the Present* (Montreal: McGill Queen's University Press).
- Kawabe, N. (1987), "Development of Overseas Competition by General Trading Companies, 1868–1945", in Yonekawa, S. and Yoshihara, H. (eds), *Business History of General Trading Companies* (Tokyo: Tokyo University Press), 71–103.
- Kojima, K. (1978), *Direct Foreign Investment: A Japanese Model of Multinational Business Operations* (London: Croom Helm).
- Lopes da Silva, T. (2006), *Global Brands: the Evolution of Multinationals in Alcoholic Beverages* (Cambridge: Cambridge University Press).
- McCann, T.P. (1976), *An American Company: The Tragedy of United Fruit* (New York: Random House).
- Maddison, A. (1999), *Monitoring the World Economy* (Paris: OECD).
- Mathews, J.A. (2002), *Dragon Multinationals: A New Model for Global Growth* (Oxford: Oxford University Press).
- Matsusaka, Y.T. (2003), *The Making of Japanese Manchuria, 1904–1932* (Cambridge: Cambridge University Press).
- Morgan, G., Kristensen, P.H., and Whitley, R. (eds) (2001), *The MNC Firm: Organizing Across Institutional and National Divides* (Oxford: Oxford University Press).
- Ozawa, T. (1991), "Japan in a New Phase of MNC-ism and Industrial Upgrading: Functional Integration of Trade, Growth and FDI", *Journal of World Trade*, 25, 1, 43–60.
- Patrikeff, F. and Shukman, H. (2007), *Railways and the Russo-Japanese War: Transporting War* (New York: M.E. Sharpe).
- Penrose, E. (1959), *The Theory of the Growth of the Firm* (Oxford: Oxford University Press).
- Penrose, E. (1968), *The Large International Firm in Developing Countries: The International Petroleum Industry* (New York: Praeger).
- Rodrik, D. (1982), "Changing Patterns of Ownership and Integration in the International Bauxite-Aluminium Industry", in Jones, L.P. (ed.), *Public Enterprise in Less Developed Countries* (Cambridge: Cambridge University Press), 182–214.
- Rugman, A.M. and Verbeke, A. (2001), "Subsidiary-Specific Advantages in Multinational Enterprises", *Strategic Management Journal*, 22, 3, 237–250.
- Sluyterman, K.E., Howarth, S., Jonker, S., and Van Zanden, J.L. (2007), *A History of Royal Dutch Shell*, vols 1–4 (Oxford: Oxford University Press).
- Trebilcock, C. (1977), *The Vickers Brothers* (London: Europa).
- United Nations Conference on Trade and Development (UNCTAD) (1991, 2000, 2001, 2007, 2010), *World Investment Report* (Geneva: UNCTAD).
- Vernon, R. (1966), "International Investment and International Trade in the Product Cycle", *Quarterly Journal of Economics*, 95.

- Wilkins, M. (1974), *The Maturing of Multinational Enterprise: American Business Abroad from 1914 to 1970* (Cambridge, MA: Harvard University Press).
- Wilkins, M. and Hill, F. (1964), *American Business Abroad: Ford on Six Continents* (Detroit, MI: Wayne State University Press).
- Williamson, O.E. (1975), *Markets and Hierarchies: Analysis and Antitrust Implications* (New York: Macmillan).
- World Trade Organization (2000, 2007, 2010), *International Trade Statistics* (Geneva: WTO).
- Yonekawa, S. (ed.) (1990), *General Trading Companies: A Comparative and Historical Study* (Tokyo: Tokyo University Press).