Big Business and the State

Susan Strange

The first puzzle to be addressed is why it is taking so long for the study of international relations to embrace and incorporate big business into the analysis of the international system. Not only is it 20 years since Vernon’s Sovereignty at Bay came out in America: it is 20 years or more since, with the blessing of the London School of Economics’ International Relations department under Geoffrey Goodwin, that I initiated a small graduate seminar on International Business in the International System. I was not even on the staff at the time, but that acorn grew into a sapling — a regular Master’s course with examinations. The only other people at the LSE who were interested in transnational corporations then were Professor Ben Roberts and some colleagues in the Industrial Relations department. Their concerns, however, were narrower and their work more directed at how labour relations with management were affected by the internationalisation of production.

In two decades since then, the LSE’s graduate school has probably produced more Master’s dissertations and doctoral theses on subjects related to international business than any other British university. The Business History Unit has become well-established and an interdisciplinary network of lawyers, sociologists, geographers, political scientists and even economists has grown up. Yet in textbooks and regular courses in international relations, the role of transnational corporations (TNCs) is still no more than an addendum, a kind of appendage to the main body of the subject. I have been convinced for some time that this is quite wrong and that we shall never get to the bottom of other puzzles in international relations unless we put the study of international business at the centre, together with states, instead of at the periphery. My question is why international relations still so resembles an intellectual Procrustean bed, too short to accommodate reality, so that the study of international business is either cut-off altogether, or curled up at the bottom of the bed where it safely can be overlooked.

It all goes back to the question of power, and the rather narrowly conceived answer that many people in international relations still have to the questions: What is power in the world system/international political economy? And who has it? They think of power in terms of the ability to create or disrupt order in the system. Since order is most often — though not always nor only — disrupted by states, it follows that their prime concern is with the relations between states. It is only when you think of power in terms of the ability to create or destroy, not order but wealth, and to influence the elements of justice and freedom as part of the value-composition of the whole system, that it becomes obvious that big business plays a central, not a peripheral role.
Millennium

It does so because large enterprises – the oil companies, the manufacturers of capital and consumer goods, the banks, the trading enterprises and those that control transport and communication – all create wealth – and incidentally affect the who-gets-how-much justice and freedom and economic security. Until the mid-twentieth century, many of these enterprises still operated within a framework of national markets, national law and national finance markets. It is only in the last two or three decades that the majority of major enterprises in all these fields have outgrown national markets, national laws and national financial markets and have begun to produce for a global market according to a global corporate strategy. By operating in this way, they cannot help exercising a major influence on the nature of the international political economy and the distribution within it of benefits and costs, or risks and opportunities.

That is why it seems to me that so many writers and teachers in conventional international relations are like the orthodox theologians in Galileo’s time. They are like Flat Earthers who refuse utterly to recognise that the earth is round and revolves around the sun. Similarly, they refuse to see that the relations between states is but one aspect of the international political economy, and that in that international political economy, the producers of wealth – the transnational corporations – play a key role. To do so would upset too much of their received wisdom – not to mention their claim to special expertise in inter-state relations as a defined, discrete branch of social science. Many of the old dogs are not keen to learn new tricks. In short, it is the self-protecting myopia of those who profess international relations which for too long has stunted the growth of international political economy and kept the study of international business as a mere appendage at the periphery, denying it its rightful place at the centre.

Where the first puzzle was an intellectual one, the second puzzle is a normative one. If these TNCs are so powerful in the world market economy of the 1980s, what are governments to do? How should they respond? Firms, after all, are hierarchies, as Oliver Williamson pointed out. The bosses are in charge, at least for the time being. They are not subject to the popular will and do not have to fight every so often to be re-elected. (Even shareholders nowadays, it is generally agreed, only rarely exercise control over management.) So, if the TNC manager’s power to determine what kind of wealth is created, where and by whom it is created and on what terms, is a power exercised more or less independently of the state, how is the national interest, the class interest, the general public interest – however defined – to be secured?

Sanjaya Lall argues that the state has perforce to use whatever powers it has to regulate and restrict the activities of TNCs within its territorial borders. That view is, broadly, shared in the emerging new democracies of central and eastern Europe as well as in many developing countries of Africa and Latin America. The state has authority to act by virtue of its role as gatekeeper to the territory. The legitimacy of its power to give or withhold access to its internal market, to its natural resources, to its labour and capital is acknowledged by other states. The only trouble is that, though legitimated, these are all negative powers. The gate can be barred, but when open, it is up to the TNCs, not the state to decide whether they should enter. Therein lies the rub. If there is too much restriction, too rigid regulation of the way they operate once they are inside the gate, then
the foreign-owned firm (FOF) will stay away, or leave, or enter only in such a way as to minimise the risk.

Faced with this dilemma, it is true, as Dunning argues (and as the United Nation’s Centre on Transnational Corporations reported some while ago), that the governments of developing countries over the past decade have become much more accommodating to the needs of the FOFs. They have more or less given up nationalisation. They have lowered the barriers to entry and relaxed the restrictions on where and how FOFs may operate. Trade barriers have been lowered and the administration of licensing has been simplified and speeded up. By the 1980s, even countries like Myanmar, Thailand and Albania that had hitherto eschewed collaboration with foreign capital and had stuck faithfully to autarky and self-reliance were changing the direction of policy.

Lall and others might argue that they have only done so under the exigencies of indebtedness, and that the change of direction therefore is only a temporary accommodation to the arm-twisting practised by the IMF and World Bank. Caught unawares at the beginning of the 1980s by the U-turn of the Reagan Administration which sent interest rates soaring and with them the burden of servicing loans from foreign banks, the only escape route for debt-burdened lesser developed countries (LDCs) lay through new inward investment by FOFs. Camdessus at the IMF, Conable at the World Bank, their creditors in the Paris Club, all told them so. In other words, if they have eased up towards foreign firms, it is only from necessity, not conviction. As soon as they possibly can, they will tighten up the rules and raise the barriers once again.

I do not think this is so. The reasons for thinking, on the contrary, that the change in attitude of LDC governments is a permanent one are to be found in the structural analysis of change in the international political economy. The key changes in global structure have been in what I have called the ‘Production Structure’ and the ‘Financial Structure’. In production – the ways, in brief, that wealth is produced – we have all witnessed the key phenomenon: the accelerating rate of technological change. This change is the speeding-up of the process by which new products replace old ones – the word processor for the manual typewriter, the jet engine for the propeller, the cassette and the compact disc for the old 78” records – and equally, by which new processes and new systems of information gathering, storage and dissemination replace and make obsolete the old ones – typesetting in printing, ledgers in accounting, robots in car assembly, containerisation in sea and land transport. The self-evident result is that resource-based, manufacturing and service enterprises have all discovered that this accelerating rate of change does not give them sufficient time to recoup in profits derived solely from local, national markets the costs of developing and/or installing new products or new processes. To keep up with their competitors, who may already be transnational corporations, they are obliged to sell on several national markets at once.

This is where a good deal of the literature on the theory of the firm has gone astray. It offers an inside-out explanation, instead of an outside-in one. That is to say, the explanation for the internationalisation of production is not to be found within the firm, but in the context, in the changing political economy within which the firm operates and competes with others in a global market for goods.
and services. This is why even Vernon had to concede that there were serious limitations to his own product-cycle theory of why firms produced abroad instead of just relying on exports. Part of the reason lay in this accelerating rate of technological change (and, of course, the associated rising costs of capital and of research and development in total production costs relative to land, labour and materials).

But in order to sell in several national markets and to sell with some confidence that trade barriers would not be suddenly and unexpectedly raised against them – TNCs found it prudent (as well as cheaper in many cases) to produce as well as sell locally; thus, the outside-in explanation of the accelerated trend towards the globalisation of production.

The other structural change has been in the international financial system: the integration of capital markets into one, worldwide market for savings and credit. Partial and incomplete as it may be, this integration means that the TNCs enjoy far greater possibilities than smaller local concerns of raising money wherever they operate. They do not even have to transfer funds across frontiers and exchanges. They have longer pockets and far, far better market access – certainly in the affluent markets of America, Europe and Japan, and often even in the local markets of their Third World affiliates. So, while the first structural change has driven enterprises, willy-nilly, to compete on the world market, the second has given them very substantial advantages over small, local competitors when they try to do so. The old ‘national champions’, whether in France or South Africa or Nigeria, have come to be outclassed by the TNCs.

These structural changes are hardly likely to be reversed. The genie of technology cannot be put back in the bottle. And it will be very hard, short of a really catastrophic collapse of the global financial system, to go back to a system of national financial systems linked only by trade and investment flows as they affect exchange rates between national currencies.

With my co-author, John Stopford of the London Business School, I have therefore come to the conclusion that it is structural change that has driven the developing countries into the arms of the TNCs and that the same structural change has driven the TNCs into the arms of developing countries’ governments. Since the structural changes we have tried to describe are, broadly speaking, irreversible, the shift in government attitudes to FOFs are unlikely to change even if their difficulties with foreign debt were to be resolved. John Stopford and I would both question whether Sanjaya Lall is right to advise the governments of developing countries to persist in saddling multinationals with controls. Our joint research into the experience of recent years of three developing countries (Brazil, Malaysia and Kenya) in dealing with foreign firms suggests that the one that had done least to restrict them has done best, and the one that has done most (Kenya) has done worst. This is not to say that promotion of local firms (the bumiputras in Malaysia, for example) is to be avoided, or that protectionist controls that hinder the foreign firms should never be used. It is all a matter of timing, judging carefully the pros and cons. But protectionism is like smoking cigarettes. It is apt to be habit-forming and it does risk damaging your health. This is what Brazil has discovered with its Law of Similars that kept IBM out of the local market and protected local firms and a
few foreign associates from competition. For Brazilian business, the computers they could buy legally became unduly costly and were two years behind the state of the art in the world market.

This is why we believe that the central European politicians who are wondering how to respond to western and Japanese TNCs would do well to make careful studies of the recent experience of the more successful developing countries in terms of economic development. They might conclude, as we do, that the game of diplomacy these days is triangular; just as important as the bargaining processes between governments are the bargaining between governments and enterprises, and that between enterprises. Central Europe’s best brains therefore ought not to be directed to the Foreign Ministry, but to the ministries in charge of trade and investment and industrial policy; and also perhaps to the top management of those local enterprises that will have to negotiate (for new capital, for new technology and for market access) with the managers of foreign firms with whom they contemplate alliance, whether temporary or permanent, general or specific.

The lessons for international business are not less important. The enterprises, too, have to learn diplomacy. Bull-headed disregard for the political constraints upon governments or for the social concerns which are often the main source of political legitimacy will do a company no good in negotiations with a host government. Considerations of cost and short-term profitability can no longer always be paramount in corporate strategy. In short, those in the future with Masters of Business Administration degrees should have some training in international history and international relations. Just as students of international relations, as was implicitly argued earlier, really need to know and understand the processes and the problems of international business.11

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REFERENCES

1. This title is borrowed from Raymond Vernon (ed.), Big Business and the State: Changing Relations in Western Europe (London: Macmillan, 1974).
2. Acknowledgments to the Ford Foundation which, in the early 1970s, funded a research project at Chatham House in London on transnational relations. I was the director and my interest in the role of international business was nourished by collaboration with colleagues Andrew Schonfield, Marcello de Cecco and Louis Turner as well as by others who came to study group meetings in St James’s Square.
3. I prefer the more accurate UN usage of ‘Transnational Corporations’, even though ‘multinationals’ is a shorthand everyone understands. But it is, after all, a misnomer; the enterprises are not truly multinational, though their markets are.
5. For a discussion of how and why social systems, including the world system, should be analysed in terms of the ‘mix’ as well as the distribution of these four basic values, see the prologue and Part 1 of Susan Strange, States and Markets (London: Pinter, 1988).
7. UNCTC, *Transnational Corporations in World Development: Trends and Prospects* (1988). This was the third such report and its contents were the more surprising for coming from a body set up at the insistence of the Group of 77 as a kind of critical watchdog for LDCs over the behaviour of TNCs.


11. For the arguments for this synthesis as the next stage in the development of research and teaching in international political economy, see S. Strange, "An eclectic approach", in C. Murphy and R. Tooze (eds.), *The New International Political Economy*, IPE Yearbook, No. 6, (Boulder, CO: Lynne Reinner, 1991).


Mostly, books on globalization fall into two distinct categories. There are those that oppose globalization – either because it is undermining democratic processes and institutions (Held, 1995; Martin and Schumann, 1997), or because it is weakening organized labour, or because it is eroding national cultures, destroying jobs and generating social unrest. I have no quarrel with these authors. They are opening up a serious and important political debate. The only difficult question is about means: How exactly can globalization be stopped?

Then there are those, such as the authors of the three books reviewed here, who fundamentally contest the reality of globalization, arguing that it has been grossly exaggerated. That argument seems worth examining more carefully, not least because there is sometimes a hidden ideological bias behind it.

To determine how much truth there is in the charge of exaggeration, we have first to define what precisely is meant by the loose and woolly word ‘globalization’. From the media and corporate PR, we get a lot of guff about the global village, the transcontinental information highway, homogenized consumer goods, a borderless world and so forth. The evidence is spotty and anecdotal, so is best ignored. We should stick to those aspects of globalization that can be documented.
But which are they? The choice is crucial for it can lead in opposite directions, as we shall see. A useful starting point is the conceptual distinction made by Hirst and Thompson between an inter-national economy and a globalized economy. In the first, the principal entities are national economies. They can be linked together by increasing trade and investment but international events do not directly or necessarily penetrate or permeate the national economy. International policy and domestic policy fields remain separate (Hirst and Thompson, pp. 8–13). In the globalized economy, by contrast, markets and production become global, and states, instead of having control of national economies, have to find ways to cope with the systematic interdependence between firms. When there is a shift from the first ideal type to the second, three consequences follow. There is a governance problem – how does public policy at the national or inter-governmental level cope with the impacts of market forces? Second, the so-called ‘multinational’ company (a nationally based enterprise with offshore operations) becomes a transnational company – losing its national identity – as its management becomes international and its corporate strategy is made independently of its original home-base. Third and last, the shift from international economy to globalized economy alters the relative powers of capital, states and labour, with both governments and organized labour losing power to capital. By monitoring the evidence on each of these consequences, therefore, it should be possible to judge whether there is, or is not, a shift taking place from an international to a globalized economy.

The key question, as Hirst and Thompson themselves assert, concerns markets and production, not trade or the nationality of corporate managers. Are markets becoming global rather than national? And is international production on the increase or not? To the first, most firms would answer affirmatively, though the change is hard to measure (Stopford and Strange, 1991: chs 1 and 5). To the second, there are two ways to measure the increase in international production. One is the proportion of a firm’s production at home and offshore. The other is the proportion of a national economy – its GNP – accounted for by foreign-owned or controlled firms. Other relevant indicators might be the proportion of the national labour force employed by foreign-owned firms (FOFs), the proportion of FOF and national firms’ shares traded on national stock exchanges, and the proportion of national consumption accounted for by FOFs. Unfortunately, these are not figures systematically collected by existing international bureaucracies. We know that the number of cars produced by Volkswagen, for instance, and the number of its foreign employees are greater than the cars assembled and the people employed in Germany – and rising all the time. We do not know what proportion of, say, India’s production of textiles and clothes is directly or indirectly under the control of FOFs. We are
told that 30 per cent of the French labour force works for an FOF, and
that 30 per cent of shares traded in France are shares of non-French
TNCs. The proportions are probably larger in Britain but much smaller
in Germany or Italy. Yet the internationalization of production, in
services as in goods, is recognized in the management literature as a
structural change of major importance to which firms have no choice
but to respond (Dunning, 1993; Vernon, 1971).

That literature clearly identifies the motive forces behind the interna-
tionalization of production as the mobility of technology and the
mobility of capital. (Stopford and Strange, 1991: ch. 1, have also argued
that the accelerating rate of technological change and the accelerating
substitution of capital for labour have played a big part in forcing firms
to compete for market shares, whether they want to or not.) One of
the consequences, evidently, is that firms competing for world market
shares have to engage in bargaining with foreign governments as
well as with their home government. They also have to engage in co-
operative bargaining with other firms, forging strategic or tactical
corporate alliances, exchanging technologies, collaborating in private
protectionism by restrictive agreements of different kinds. This is the
new ‘triangular diplomacy’. The other consequence was observed twenty
or more years ago by Karl Kaiser. It was the increased asymmetry
between states whose domestic policies, whether deliberately or inad-
vertently, had an impact on societies and economies other than their
own, and states which had no such power and were more likely to
suffer and have to adapt to the domestic or foreign policies of the more
powerful governments like that of the United States (Kaiser, 1979).

This rather long introduction was necessary to explain why I funda-
mentally disagree with the common conclusion of the three books
reviewed that globalization is a myth. I do not disagree that there has
been exaggeration. But the exaggeration does not alter the fact that,
underneath it all, there is a grain of important truth: there have been
structural changes in the world market economy, there has been a
perceptible shift from an inter-national economy to a globalized one.
This, for the most part, all the authors deny.

The most policy-oriented and ideological of the three is the American
one. The four co-authors worked for the Office of Technology Assess-
mnt of the US Congress in the mid-1990s, producing a series of reports highly
critical of the Japanese government and Japanese business for lack of
openness to foreign, especially American, competition. The argument, in
essence, is that divergence remains between American, German and
Japanese firms. They have different cultures and corporate strategies,
respond to divergent national industrial policies, legal systems and polit-
cal processes. Nobody would deny that such divergence persists. But so
it does between US firms based in New England, California and the Deep
South. Most directors of Detroit firms live within 100 miles of Detroit. Yet General Motors 1998 is a global player in the world economy in a way it was not in 1938. The authors concede that firms based in small states – like ABB, Nokia, Philips – do behave more like transnational enterprises. But they insist this is not true of firms from the powerful countries which remain essentially home-based and different, both in their investment strategies and their research and innovation policies. US firms invest abroad primarily in manufacturing, they say, Japanese in wholesale trade, German firms in both. Not only does this picture ignore international production in services – probably more important now than manufacturing – it is also hopelessly out of date.

All this is both policy-oriented and ideological. By denying any tendency whatsoever towards convergence of corporate behaviour, and assuming that because firms retain national characteristics, their commitment to serving the national interest is undiminished, the argument justifies US policies on trade and investment that are essentially mercantilist and self-serving. Browbeating and punishing Japan, therefore, is OK. So is arm-twisting China or India to open up their economies to US firms.

No wonder the book is praised by Professors Gilpin and Krasner, and by Senator Rockefeller. Ideologically, it is both anti-liberal and anti-radical. It denies the emergence (or even the slow evolution) of a single global system of industrial enterprise and technological innovation (Doremus et al., p. 142). ‘The global corporation is mainly an American myth.’ It dismisses the idea, popular with neoliberals like Keohane or Kapstein, that international organizations can take the place of national governments. But equally, radical critiques of globalization and its consequences are dismissed. The third consequence noted by Paul Hirst (Hirst and Thompson, chs 8, 9) – a shift in the relative powers of states, organized labour and capital – is ignored. This is not consistent with the conclusion of Pauly’s last book, Who Elected the Bankers? (1997), in which he shows that legitimate authority, especially in the international financial system, is slipping away from states to politically unaccountable actors.

The other two books are both more academic and analytical, even while they agree that globalization should not be – although it often is – exaggerated. Most of Hirst and Thompson’s Globalization in Question seems to have been written by Hirst, especially the two concluding chapters. While sceptical of the extreme claims for economic globalization, they accept that ‘the international economy has changed radically in structure and governance’ over the last twenty-five years (p. 196). This emerging transnational economy has five characteristics, they say:

- most economic relations are between rich countries;
- money and capital markets have been progressively integrated since the 1970s;
trade in manufacturing between industrialized countries has steadily increased, refuting Ricardian trade theories based on comparative advantage;

- the number and variety of internationally active firms has risen: few may be fully transnational but most increasingly deal with a multiplicity of foreign governments;
- regional trade blocs have proliferated, though how many are effective is an open question.

The book concludes that these shifts provoke legitimate concerns which warrant not less but more regulation and better governance.

These concluding chapters are good analytical IPE. They would be useful introductory readings for students. The problem, however, arises with the choice of documentary indicators of globalization. Judging by footnotes and references, this part was the work of the economist, Graham Thompson. He chooses the figures for foreign direct investment (FDI) in relation to GDP, trade and migration to show that there has been little or no significant change in the world market economy in the last two or three decades. This is bunk. In the first place, FDI figures are notoriously misleading. They measure only funds that cross the exchanges. When General Motors borrows from banks or shareholders in São Paulo, it doesn’t count. The accelerating mobility of capital is thus overlooked. So is the mobility of technology. Often, the capital investment costs of innovation are incurred at home, but the production takes place offshore. Thus Table 2.5 compares trade to GDP in five industrial countries in 1913, 1950 and 1973 to show that ratios were either stable or falling over time. Table 2.4 shows the ratio of trade to GDP as not too different in the mid-nineteenth century and the decade 1974–84. Yet it is obvious that when firms produce abroad rather than exporting, trade falls. It is unfortunate that media and other reviewers picked on this ‘no change’ theme as the main contribution of the book. If there has been no change, there’s no need to do anything. Music to corporate ears, and to all the privatizing, deregulating neoliberal ideologues. It just happens to be wrong and in contrast to the judgements of the concluding chapters.

Ruigrok and van Tulder’s The Logic of International Restructuring is both more original, more interdisciplinary and more comprehensive than either of the other two. Both authors come from the Rotterdam School of Management and acknowledge Professor Gerd Junne of the University of Amsterdam as the godfather who first used the mildly puzzling phrase, ‘the logic of restructuring’, back in 1984. They draw on the large literature of international business, as well as on international politics, industrial relations, economics and political economy. Their sources are also amazingly multinational. Although it covers a much wider ground,
it shares with the other two the conclusion that the nationality of firms remains (and will always be) a key factor determining their competitive success in gaining and keeping world market shares. Chapters 5, 6 and 7 are the most relevant chapters for this issue, and students will find here a brilliant digest of rival theories and interpretations of the internationalization of production, from Vernon to Ohmae and Modelski and Michalet to Kobayashi and Nonaka.

But it would be a pity if IR and IPE students were to pick out of this book only the parts that deal with globalization. For its authors have made great efforts to weave a seamless coat of many disciplinary colours, one that includes interstate competition with inter-firm competition and the rival strategies corporations use against each other. Although both address the who-gets-what questions, most business schools and most departments of politics carry on in ignorance and indifference to the other.

Yet whether firms adopt a craft system, a Fordist system or what the book calls a Toyotist system, the power factor built into both government and corporate institutions gives power and control to the bosses. (This should be compulsory reading for American rational choicers who have been known to argue that in a market economy, workers freely choose unemployment or sweatshop conditions.) The book also has many good empirical data on specific firms and their strategic alliances, showing that nationality is not the only variable in corporate strategy. Indeed, the authors are rightly critical of all the vast management literature – in the USA especially – that is prescriptive. ‘We will tell you how to win the competitive game, how to survive and succeed in business in a world market economy.’ Michael Porter, for instance, is criticized for basing his elaborate analytical framework – as did Ray Vernon before him – too much on US firms and US conditions, ignoring some of the fundamental differences between both firms and conditions in Japan (Ruigrok and van Tulder, p. 178; Porter, 1990; Vernon, 1971).

To sum up, all that these three books say about the overselling of globalization by firms and by observers may be true. But the litmus test which none of them really apply is whether there is, or is not, change. Are there, or are there not, signs that convergence is winning over divergence? If we take the three key aspects of change identified by Hirst and Thompson, can we say that firms are becoming less tied and responsive to their home-base government or not? First, is governance of the market economy becoming more problematic? Second, are multinationals less controlled or constrained than in the past by the policies of particular states, especially home states? Third, has there been a continued decline in the bargaining powers of organized labour? Affirmative answers would suggest a marginal shift from an ‘international’ to a ‘globalized’ economy.

Readers must judge for themselves. But my own sense is that there is enough anecdotal evidence on all three counts to say ‘yes’. On the
first, even the usually uncritical media have noticed the impotence and irrelevance of the Group of Eight when it comes to issues like nuclear proliferation or the breakdown of civil order in a major state like Indonesia. Academic discourse turns to whether substitutes can be found for the Westphalian system, so-called. On the second, the question of firm loyalty, the significant pointers are found not in Britain, Switzerland or the Netherlands, but in Germany and Japan. These are the two countries that all these authors identify as having closest control over ‘their’ multinationals. But Daimler-Benz has conformed to US rules on disclosure since it opted for listing on the New York stock exchange. And now that it controls Chrysler, it surely becomes a US firm as much as a German one, just as Volkswagen or BMW are British (and Mexican, Brazilian, Chinese and Spanish). The flight from home is even more striking in Japan. Not just cheap mainland labour but the search for new markets has led to a massive exodus abroad. Financial troubles have opened the door of the Japanese financial markets to foreign competition, and Japanese firms have had to make strategic alliances with foreign firms; Hitachi’s arrangement with General Electric to exploit GE’s new technologies for street lighting is just one example among many. And finally, there is the plight of organized labour. Watch the weakening links between the British TUC and New Labour, the declining influence of German labour on the SPD, the fading of the once-powerful AFL-CIO, and the sociologists’ loss of interest in neocorporatism. What, indeed, as Stephen Lukes and others asked, is left? Sure, it takes more than one swallow to make a summer. But the moral for researchers may be to pay more attention to the newspapers and less attention to out-of-date and inappropriate statistics.

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Note

1 International production can be defined as the production and marketing of goods and services in a number of national territories.

References

The Globalization of Production

Eric Thun

Chapter contents

- Introduction
- The Rise of Global Production
- Global Value Chains: Governance and Location
- China as the World's Factory
- Conclusion

Reader's guide

Although companies have been investing abroad for centuries, the current era of globalization has created an unprecedented range of possibilities for global firms to reorganize and relocate their activities. This chapter analyses how advances in transportation and technology allow a firm to divide up a global value chain—the sequence of activities that lead to the production of a particular good or service—and how these decisions create new opportunities and challenges both for companies and the societies in which they operate. The first section of the chapter reviews the rise of global production and the forces that have led to dramatic increases in foreign direct investment (FDI) and outsourcing. The central questions for any firm involved in global production involve how to govern the value chain and where to locate different activities. The second section provides a framework for understanding these issues and the implications of the various choices. The third section applies these concepts to the case of East Asia.

Introduction

Multinational corporations (MNCs) are the most public face of globalization. Defined as firms that have operations in two or more countries, MNCs are a source of hope and promise to those who seek...
to harness the power of economic globalization for purposes of development, and a source of fear and opposition to those who view globalization as a threat to national sovereignty. MNCS are pervasive. In 2008, there were some 82,000 parent companies, with over 810,000 affiliates. These affiliates employed approximately 77 million people—more than twice the labour force of Germany—and accounted for one-third of total world exports of goods and service in 2008 (UNCTAD 2009b: 17). MNCS are also very tangible. They are not anonymous buyers and sellers engaged in arm’s-length trade. Through FDI, they own assets and employ people in foreign countries. They are the companies behind the most powerful global brands. To populations that are being buffeted by the invisible forces of globalization, MNCS serve as very visible symbols of forces they cannot control.

Foreign investment on the part of MNCS, however, is only the tip of the iceberg that is the globalization of production. Firms such as Nike and Gap do not own the foreign factories that make their products; they use contractors who work to their specifications. Nike has slightly more than 20,000 direct employees, but its products are manufactured by more than 500,000 workers in over 700 factories in 51 countries (Leckie 2003: 6). Gap bought 1 billion units of clothing in 2004, from 700 suppliers, and these suppliers owned and operated 3,000 factories in 50 countries, but Gap does not own a single factory abroad. These firms control global value chains—the sequence of activities through which technology is combined with material and labour inputs, and then assembled, marketed, and distributed (Gereffi et al. 2005: 79)—and while they wield tremendous power, it is not the result of ownership arising from FDI. Similarly, electronic giants such as Apple, Dell, and Hewlett Packard rely on specialized manufacturing firms to make their products, and focus primarily on design, marketing, distribution, and service. Global value chains are important determinants of who gets what, when, and how in the global economy. There are two sides to the global production coin. From the perspective of ‘home’ countries—where the headquarters of multinational firms are located—the key question is what will be left behind when production moves abroad. Because outward investment from the home economy of a multinational will potentially be moving jobs, technology, and profits beyond national borders, it creates fears of a ‘hollowing out’ effect. Will outward investment and outsourcing lead to an inexorable flow of jobs, technology, and profits to lower-cost countries? Will the competition for high-value-added activities lead to a convergence of economic models? From the perspective of ‘host’ countries—the destinations of FDI and outsourcing—the question is whether they will be able to capture the high-value-added activities, or be trapped into a dependent relationship with multinational firms in which they are limited to low-value-added activities. Will the foreign firms contribute to the long-term development of the local economy, or will they inhibit the development of local firms? Will the foreign firms adhere to the social, political, and environmental standards of the local society, or will they behave in an imperialistic manner and/or engage in practices that would not be allowed in their home societies?

In both cases, the questions revolve around the distribution of resources, the bargaining leverage of the states that ‘host’ foreign investment, and the power of multinational firms to determine who gets which part of global production, and how this influences employment, the locus of knowledge and innovation, and the creation of profits in the world economy. This chapter will analyse how advances in transportation and technology have created new opportunities to divide up a value chain, how this creates new possibilities for global firms to reorganize and relocate the various activities that they engage in, and the opportunities and challenges these changes create both for home and host states and societies.

The Rise of Global Production

There is nothing new about foreign investment or international production. In the sixteenth century, chartered trading companies established foreign production facilities for much the same reasons as firms did centuries later—internalization within the firm was a means of economizing on frequent transactions that inherently had to occur in a particular location, whether in order to access specific raw materials or markets. The Dutch East India Company, for example, established a saltpetre plant in Bengal in 1641, a print works for textiles ten years later, and employed 4,000 silk spinners by 1717. In an era when the full cycle of activity (export, transport, and sale of goods from home to foreign markets, import, transport, and sale of goods from foreign to home markets) could take anywhere from eighteen to thirty months to complete, hierarchical co-ordination within the firm allowed a trading company to evacuate supply and demand more effectively (Carlos and Nicholas 1988: 399, 403, 407).

In the nineteenth century, the Industrial Revolution spurred demand for raw materials, and companies sought to own and manage their sources of raw materials in order to reduce risk. For manufacturing companies, the result was vertical investments upstream and downstream, and a hub-and-spoke model of international production: raw materials were imported from the periphery, manufacturing took place at home, and finished goods were then distributed globally. In response to rising protectionism in the early twentieth century, firms began to make horizontal investments abroad: manufacturing capabilities were duplicated in foreign markets that were increasingly sheltered behind tariff barriers (Palmsino 2006: 128). In the 1920s and 1930s, for example, American companies such as General Motors, Ford, Firestone, Nabisco, General Foods, Hoover, ITT, and Honeywell rapidly increased the numbers of their manufacturing facilities in Europe. These were multinationals in the form that would dominate the global economy for much of the twentieth century. Certain activities, such as research and development, were concentrated in their headquarters, but other capabilities were duplicated in operations around the world. These companies pursued a multi-market strategy.

Numbers and trends

International production is not new, but its magnitude and the degree of fragmentation in global value chains is new. To an unprecedented degree, firms are able to break up their value chains and locate each discrete activity according to competitive advantage rather than geographical convenience. How can we measure the growth of global production?

One relatively straightforward indicator is the rapid increase in FDI prior to the global economic crisis that began in 2008. Between 1982 and 2008, according to the United Nations Conference on Trade and Development (UNCTAD) World Investment Report, the value of FDI inflows (in current prices) increased from $59 billion to $1.697 billion (UNCTAD 2009b: 3). The ratio of world FDI inflows to global gross domestic capital formation (a measure of domestic investment), increased from 2 per cent in 1980 to 12.3 per cent in 2008 (UNCTAD 2000: xv–xvi, 2009b: 255). Two trends are important to note about these massive flows. First, they were highly concentrated. Developed economies received 59 per cent of inward FDI in 2005, for instance, and the top five of these economies received almost 50 per cent of global flows (UNCTAD 2006b: xvii, 4). The major sources of FDI were also frequently the major destinations. Second, and a related point, mergers and acquisitions (M&As) between existing firms rather than greenfield (new) investment were the dominant form of foreign investment. Just as the development of technology, regulatory changes, and new
modes of finance led to a wave of corporate M&As in the United States at the end of the nineteenth century, as firms shifted from a regional to a national focus, so have the same factors led firms to adapt a global focus over the last several decades (UNCTAD 1999: xx). Increasing regional integration and the introduction of a single currency in the EU, for example, created a wave of M&A activity in Europe, and horizontal acquisitions between firms in the same industry (which, in terms of value, accounted for 70 per cent of M&A activity at the end of the 1990s) represented the quickest route to global scale and scope for firms seeking to access new markets and complementary capabilities (UNCTAD 1999: xix–xx). In short, the majority of FDI is the consolidation of corporate activity—large corporations being taken over by even larger corporations—in what is increasingly a global market for firms.

FDI has also become dramatically more important for developing countries. A developing country seeking external capital investment has four choices: official flows (from international development agencies and governments), commercial bank loans, portfolio flows (from institutional investors such as pension funds, insurance companies, and mutual funds), and FDI. Until the early 1990s, official flows were the dominant source of capital for developing countries, often in the form of loans that were made on concessional terms, but over the course of the 1990s there was a dramatic shift from public to private capital flows. This was partly the result of budgetary difficulties in developed countries, which led to a cutback in foreign aid, but it also reflected an ideological shift towards market-based approaches to public policy. By 2005, official flows to the developing world had largely dried up, and over half of the total resource flow to the developing world consisted of FDI ($334 billion). As is the case in the developed world, these flows tend to be concentrated: Brazil, China, Hong Kong, Mexico, and Singapore are consistently the five top FDI destinations in the developing world for virtually every year since 1996, and in some years can account for as much as half of the total inflow to the developing world (UNCTAD 2006b: 4–5). Developing economies increased their share of overall FDI inflows in 2008, as the initial impact of the recession took a particular toll on investment in developed economies. The expectation, however, was that inflows to all economies would decline substantially in 2009, when the full effects of the recession were felt (UNCTAD 2009b: 5–7). Attracting FDI is important for developing countries, not just because it is the most stable form of foreign capital that is available, but as will be explained in greater detail below, because it is thought to have the potential to bring a package of benefits, including technology, managerial skills, and access to new markets.

Although FDI represents a critical element of global production, it only measures global production that takes place under foreign ownership, and neglects the outsourcing of production. Simply defined, outsourcing is the reallocation of a particular task from within one firm to another, and the two are usually separated by having different ownership (Sako 2006: 503). There is overlap between the two categories—an American firm that uses a South Korean manufacturer located in China is both outsourcing (from the perspective of the US firm) and reliant on FDI (from the perspective of the South Korean firm)—but the distinction is important from an analytical perspective, because it points to the wide variety of governance forms in global value chains. And outsourcing need not necessarily be accompanied by any trans-border flows of capital—firms may be linked simply by ‘arm’s-length’ purchase arrangements, or the relationship may involve, for example, the transfer of expertise from purchaser to supplier.

Unfortunately, it is very difficult to determine the value of outsourcing transactions from general trade data. One possible measure (albeit with a regional bias), is the growth of trade in intermediate goods (components that are neither raw materials nor finished products). In Asia, for example, between 1985 and 1996, the value of all parts and component imports increased by 6 per cent, and accounted for 25 per cent of all manufactured imports by 1996. Trade in telecommunications components increased from 3 billion in 1985 to 41 billion in 1996 (when components accounted for 72 per cent of imports in the product group), and the increase in trade in electronic components was only slightly less dramatic (Ng and Yeats 1999: 10). A second measure (albeit with a sectoral bias), is the dramatic rise of specia list contract manufacturers. Electronic manufacturing services (EMS) firms, for example, receive designs for a broad spectrum of electronic products from brand-name firms, import cr manuf acture components, assemble the products, and then export the finished goods. The industry grew from nothing in the early 1980s—when IBM began to look for key suppliers for its personal computers in 1981—to $170 billion in revenue in 2001. Many of these companies have themselves become significant foreign investors. Electronics—an example of one of the five largest firms in the sector—has manufacturing operations in thirty countries on five continents, employs over 50,000 people in China alone, and has revenues in excess of $15 billion. Electronics and its competitors make 100 per cent of desktop computer motherboards, 83 per cent of laptop computers, and 33 per cent of cell phones, according to industry estimates (figures from D oecon 2006). Similarly, in the auto industry, the largest supply firms are now almost as large as the assembly firms they serve. In order to save on development costs, take advantage of supplier knowledge, and maximize economies of scale, auto assembly firms outsource the design and manufacture of entire modules of a car to large supply firms. In 1992, there were only twenty-eight US auto supply firms with annual sales between $1 billion and $5 billion, and five companies with sales higher than $5 billion. In 1998, these numbers were forty-seven and thirteen, respectively (V e los 2000: 16). Although not quite as dramatic as in the electronics industry, the outsourcing of manufacturing was a dominant trend in the auto industry during the 1990s.

Why now?

Politics has played a key role in the expansion of global production. The liberalization of trade was a critical prerequisite for the globalization of production. When trade barriers are high, a multinational firm will invest in production facilities abroad in order to access foreign markets, but it will hesitate to relocate portions of the value chain that must be integrated with other global activities—the fragmentation of value chains requires low tariff barriers. As Gilbert W in ham argues in Chapter 5 of this book, the trade regime is the most prominent example of global co-operation in the era after the Second World War. Chastened by the breakdown of the global economy during the interwar period, the United States began a return to liberalism with the passage of the Reciprocal Trade Agreements Act of 1934 (RTAA). After the Second World War, the trend of increasingly economic liberalism continued with each successive round of the General Agreement on Tariffs and Trade (GATT), and the result was the rapid expansion of world trade. World exports increased by close to 8 per cent per annum between 1950 and 1973, and by 5 per cent for the subsequent twenty-five-year period (Ravenhill, Chapter 1 in this volume).

The move towards a liberal trade regime at the international level had a corollary at the domestic level—a general trend towards market-based policies—and this expanded the range of options for global production. As Anthony M cGrew explains in Chapter 9 of this book, the neo-liberal ideology associated with liberalization, deregulation, and privatization provided the normative infrastructure for economic globalization. In Organization for Economic Co-operation and Development (OECD) states, governments across the political spectrum were instrumental in liberalizing national economies, and creating the policy and institutional frameworks that have enabled the growth of global trade and production.

Governments in the developing world used the expansion of global trade as an engine of growth. No region benefited more than East Asia. Scholars debate the extent to which economic growth in economies such as South Korea and Taiwan was the result of government-led industrial policies (Amsden 1989; Wade 1990) as opposed to
market-conforming policies (World Bank 1993), but reliance on export markets was clear in all these cases. Taiwan, for example, pioneered the use of export-processing zones—industrial parks where foreign firms could enjoy preferential trade and investment policies so long as their output was intended for export markets—at the same time as Japanese manufacturers were forcing American firms to reduce their costs by moving labour-intensive activities offshore. With the encouragement of the Taiwanese government and the United States Agency for International Development (US-AID), General Instruments began manufacturing in Taiwan in 1964, and was followed over the next two years by twenty-four other American firms (Wade 1990: 94). This was in many important respects the beginning of the global manufacturing model that would dominate East Asia in the 1970s and 1980—firms from high-wage economies began to break apart their value chains and locate the manufacturing of each component according to competitive advantage. As the neo-liberal reforms took hold in China, Eastern Europe, India, and Latin America over the decades that followed, the scope of global manufacturing increased in turn.

At the same time as political changes were opening up countries to trade and investment, technology was extending the geographical reach of business, and making possible new forms of business organization. In many respects, this is an old story writ large. In the latter half of the nineteenth century, technology transformed the organization of business in the United States. As Alfred Chandler (1977: 75–80) has described, the spread of iron, coal, and machinery created the possibility of large-scale production in the United States, and the invention of the telegraph and expansion of railways created the means of communication and transportation that would allow these businesses to extend their geographical reach. These changes led to the emergence of the modern hierarchical corporation. Just as the telegraph and the railway allowed firms in the latter half of the nineteenth century to adopt a national rather than regional orientation, the improvement in transportation and technology in the latter half of the twentieth century allowed firms to adopt a global perspective. These changes led to the fragmentation of the value chain.

The first set of changes involved new forms of transportation. An obvious development was the introduction of commercial jet services in the 1950s. Less obvious, but probably even more important for world commerce, was the introduction of standardized shipping containers. Prior to the introduction of standardized steel and aluminum containers in the late 1950s, the process of loading and unloading cargo at the point of origin, at ports along the way, and at the destination was time-consuming and fraught with the possibility of loss and damage. Containers dramatically reduced the friction of transportation in global economy. Marc Levinson (2006: 7) provides a compelling illustration: a 35-ton container of coffee-makens in Malaysia can be loaded into a container at the factory door, taken to a port and loaded onto a ship, and then transported the 9,000 miles to Los Angeles in sixteen days. A day later, the container will be on a truck in Chicago. If the train were to carry the capacity load of one of the new mega container ships—which can carry over 8,000 six-metre-long containers—it would stretch over 37 kilometres. Once in Chicago, the container of coffee-makens is immediately transferred to a flatbed lorry headed to Cincinnati, the distribution centre for the retailer. The process is not only inexpensive—in this case, less than the price of a single first-class air ticket from Malaysia to the US—but it is also completely automated and the transfers at each juncture in the journey are seamless; human hands will not touch the contents of the container between the factory and the destination. In the late 1950s and early 1960s, transport costs were often a higher barrier to trade than were import tariffs (as high as 25 per cent of the cost of some products, according to one study), and the result was that globalization of production was not a cost-effective strategy (Levinson 2006: 9). At the time of writing, when 90 per cent of world trade is transported in shipping containers, transport in many industries is a marginal part of a company’s overall cost structure. From the perspective of transport cost, it almost does not matter if a firm is doing business with a factory on the other side of town or the other side of the world.

If container shipping reduced the hurdle of transport costs, the digital revolution and the shift to modularity made it possible to separate the activities of the value chain and scatter them across the globe (see Box 11.1). The electronics industry has been at the cutting edge of the modular revolution (Baldwin and Clark 2000). Until the 1960s, the designs of the different parts of a computer system were highly interdependent, and, consequently, when any new product was introduced, the design process would have to begin again from the start to ensure that all the component parts were compatible. The result was time-consuming and expensive, because teams of engineers within a single company had to work together on each component; outsourcing was not possible, because the connections between different parts of the product design were complex and varied in arbitrary and non-obvious ways (Baldwin and Clark 2000: 171). Like craftsmen putting together a custom-built piece of furniture, the engineers had to work together, relying not on codified rules to piece together a machine but on tacit knowledge (information that cannot be written or coded in a set of instructions, but must be imparted by people working together).

**Box 11.1 Modular Production**

In the classic work on modularity, Baldwin and Clark (1997, 2000) define a modular system as one that is composed of units (or modules) that are designed independently but still function as an integrated whole (1997: 86). The structural elements of a module are connected powerfully to each other and relatively weakly to elements in other modules of the same system (2000: 63). Every product that consists of multiple modules will have an architecture that specifies what modules are part of the system and what the function of each will be; interfaces that describe in detail how the modules will interact, connect, and communicate; and standards for testing the extent to which a module conforms to the design rules (1997: 86). Sako (2003) specifies how modularity fulfils different roles across the life cycle of a product. In the design phase, the principle purpose of modularity is to reduce the lead-time of the design process, and the costs of design and development. In the manufacturing phase, the objective is to increase operational efficiency by allowing the mixing and matching of standardized components, thus allowing for both the benefits of scale efficiencies and greater customization and variety. Finally, when the product is being used, consumers want a product that is easy to use, compatible with other products, easily upgraded, and easily and inexpensively maintained. The objectives of the different phases are not always compatible. The core concern of product designers, for example, will be to ensure that the design of each module is independent of other modules, and this may lead to tight interdependencies within the module. When the consumer has to make a repair, however, rather than being able to replace an individual component, he or she may find that an entire (and expensive) module must be replaced rather than an individual component.

Modularity does not inevitably lead to outsourcing, but it creates the possibility—it is difficult to source or separate the component parts of an integral product. Prior to the rise of mass production, for example, automobiles were made by craftsmen, and each vehicle had to be made in its entirety in a workshop because the component parts had to be custom fit to each other. The workers were skilled in the principles of mechanical design and experienced with the materials with which they worked. As Womack et al. (1990) explain, production of the cars depended on the tacit knowledge of these craftsmen, and it was difficult to codify this knowledge reliably in a way that would make it readily accessible to outside firms; there was no standard gauging system, and machine tools at this point could not cut hardened steel. Because the craftsmen fitted each piece together individually, no two vehicles were exactly alike. The core innovation of Henry Ford was the development of a system that used a standard gauge and pre-hardened metal that would not warp during the manufacturing process, previously the major obstacle to standardizing the size of parts (Womack et al. 1990: 22–7).
The introduction of interchangeable parts with standard interfaces made it possible for an auto firm to replace skilled craftsmen with unskilled assembly-line workers, and to outsource production of components. The benefits of outsourcing to a supply firm can be numerous, all the manufacturing is done by suppliers (Baldwin and Clark 1997: 87). The ability to codify design information in digital form, particularly when combined with new forms of telecommunication to transmit this information, was a key enabler of globalization. As Suzanne Berger (2006: 76) explains, new software in the 1990s increased the ability of a wide variety of firms to digitize instructions and thus codify the interfaces within a product. This created new options with respect to location. Once engineers are able to specify the “hand-off” between two different modules within a product utilizing software, there is no longer any inherent reason why designers and production staff have to be located within the same facility. The design firm transmits the design specifications electronically to the production facility, and as long as the production facility meets the appropriate standards, it can be located anywhere. The ability to codify design information does not inevitably lead to the fragmentation of the value chain—in some industries and some regions, firms may decide that it makes sense to co-locate distinct parts of the value chain—but it does create a wider variety of possibilities than existed previously.

The ideal type of this new breed of firm, according to Samuel Palmisano (2006: 129), the CEO of IBM, is the globally integrated enterprise. In contrast to the multinational company of old, “the emerging globally integrated enterprise is a company that fashions its strategy, its management, and its operations in pursuit of a new goal: the integration of production and value delivery worldwide.” Whereas the technical changes of the late nineteenth century resulted in a tightening of corporate control—a strict hierarchy was needed to organize rapidly expanding operations—the technical changes of the late twentieth century have resulted in tremendous fluidity. This new breed of firm is being organized by functions rather than products or geography, and every firm must decide which functions it will continue to perform; which functions it will rely on outside partners to perform; and where in the world each function will be located. The results to these decisions, of course, have important implications, not only for the competitiveness of individual firms and industries, but also for the well-being of the societies in which they operate.

**Key points**

- The globalization of production is not new, but the magnitude with which it takes place and the degree of fragmentation in global value chains is new.
- The increasing levels of global production can be measured in both the dramatic increases in FDI and the increasing importance of trade in components.
- Flows of FDI are heavily concentrated in developed economies, and dominated by mergers and acquisitions between large firms that are seeking the scale and scope that is increasingly necessary to compete in global markets.
- The increase in global production is a result of economic liberalization, improvements in transportation, and advances in technologies that facilitate modularization.

**Global Value Chains: Governance and Location**

In order to understand the implications of global value chains, it is necessary to distinguish between their different forms. For analytical purposes, it is useful to consider global value chains along two dimensions: governance (how to co-ordinate activities); and location (where to locate each activity). Although the two dimensions are closely linked, there are distinct scholarly literatures focused on each.

**Governance**

If a defining feature of economic globalization is that technology has increased the ability of firms to fragment the value chain, one of the key issues that must be understood is how co-ordination of the fragmented parts is achieved. Defined in its broadest sense, governance refers to any means of co-ordinating inter-organizational activities (Jessop 1998: 29). It is useful to think of the governance options for global value chains along a spectrum. At one end of the spectrum are pure market relations with foreign firms (for example, arm’s-length trade relationships), and at the other end is hierarchical control of foreign operations (for example, FDI). Between these two endpoints are various forms of networks.

Traditional explanations of FDI focus on the endpoints of the governance spectrum, and transfer the classic ‘make or buy’ question from the domestic to a global context. As Sven Arntz and Henryk Kierzkowski (2001: 2) write, ‘fragmentation is not a new phenomenon; nor is outsourcing. Both go back to the beginning of the Industrial Revolution or even predate it.’ What is new is the extent to which improvements in technology have
tamed the ‘tyranny of distance’ and made it increasingly possible to consider the global organization of industry in the same terms as domestic. One clear option is to rely on arm’s-length market relationships. As Robert Gilpin (2001: 279) notes, in the ideal world of a neoclassical economist, firms would not invest abroad. If markets are operating efficiently, information is costless, there are no barriers to trade or competition, and there are no advantages to be gained from economies of scale, there would be little reason for a firm to invest abroad because trade would be the logical means of reaching foreign markets and accessing inputs. Markets are efficient, prices summarize all relevant information, and actors are motivated by self-interest rather than coercion—co-ordination is seemingly effortless.

Why does a firm decide to make rather than buy a particular product or service in the domestic context? Economists explain vertical integration and hierarchical co-ordination as a response to transaction costs. As Ronald Coase (1937) argued, there are costs associated with using a market; even for the simplest transaction, a buyer or seller must be found, a product or service evaluated, and a price negotiated. Oliver Williamson (1981: 1,545) added to this explanation the problems inherent in human nature. Bounded rationality makes it impossible for actors to foresee every contingency that might affect an agreement between two actors, hence contracts cannot be complete; the problem of opportunism means that each actor has the expectation to act, not only out of self-interest, but, potentially, with deceit and guile. In light of these assumptions, it is apparent that the costs of some market transactions are higher than others. It is necessary to identify and analyse the key dimensions along which transactions vary—the frequency with which transactions recur, the degree of complexity and uncertainty to which transactions are subject, and the degree of asset specificity—in order to determine whether hierarchical co-ordination (retaining all activities within the organization) is more appropriate than market co-ordination (Williamson 1975, 1981).

The same logic has been used to explain why firms engage in FDI rather than licensing, trade, or contractual relationships. The literature on FDI is large, but within it John Dunning’s eclectic paradigm is one of the dominant strands (Dunning 1981). At its core is a transactional approach: a firm will create operations abroad when the net costs of an internal market (hierarchical co-ordination) are lower than the net cost of using arm’s-length market relationships (Caves 1982). The advantages of internalization within the firm might stem from concerns about the costs and uncertainty of monitoring and negotiating the relationship with a licensee or contractor, or the firm might be eager to ensure that it captures all of the benefits of the advantages that it has over local firms. These firm-specific advantages (Dunning 1981) might involve a trademark, a particular technology or manufacturing process, economies of scale, or marketing power; or a firm might be reluctant to license such advantages to a foreign firm out of fear that it will be training a future competitor. There are costs to operating internationally—a foreign firm will rarely understand the local market as well as a domestic firm does, for example—so, a multinational firm has to ensure that it protects what advantages it does hold.

In addition, there may be location-specific advantages to setting up operations on foreign soil as opposed to establishing trade relations. The foreign firm may gain better access to information on the marketplace, an ability to respond more quickly to changes in the market, access to unique resources or capabilities, and/or ability to avoid protectionist trade barriers. In short, the potential costs of relying on markets and arm’s-length relationships to govern a global value chain are weighed against the difficulty of controlling and operating subsidiaries that are within the firm but spread across great distances and unfamiliar territory through FDI.

Although the distinction between utilizing markets and hierarchy to govern global value chains is an important one, there are a range of possibilities in between these two endpoints. Just as firms within a domestic economy can form long-term relationships that cannot be characterized completely by markets or hierarchy, global value chains can take the form of a diverse variety of networks that are neither pure markets nor hierarchy. In the 1990s, Gary Gereffi and others (Gereffi and Korzeniewicz 1994) developed the framework of the global commodity chain to distinguish between different forms of global value chains (for a comparison of the theoretical concepts of commodity chains and value chains, and the evolution of this research agenda, see Bair 2005). This approach identified different ‘nodes’ in a value chain—pivotal points in the production process (that is, supply of raw materials, production, export, or marketing)—with the intent of analysing how control of various nodes translated into power and profit. Gereffi distinguished between two types of commodity chains: the buyer-driven chain and the producer-driven chain. In a buyer-driven chain, large retailers, brand-name marketers, and trading companies use various combinations of branding, design, marketing, and sales expertise to exert control over a decentralized network of supply firms often located in the developing world.

As any supplier to a large retailer such as Wal-Mart or a brand such as Nike is painfully aware, these customers do not need ownership in order to exert control. In a producer-driven chain, large (and often capital-intensive) integrated enterprises play the key role in controlling forward and backward linkages—the auto industry is a classic example.

Over the following decade, a growing body of research on global value chains identified other forms of networks. Scholars distinguished between ‘commodity suppliers’ (firms that provided a standard product through arm’s-length ties), ‘captive suppliers’ (firms that provide a specialized product using production equipment or processes that are dedicated to a particular customer), and ‘turn-key’ suppliers (firms that produce customized—and often sophisticated—products for customers using flexible production equipment that can be used for multiple customers) (Humphrey and Schmitz 2000; Sturgeon 2002).

There are clearly multiple means of co-ordinating a global value chain that involve neither markets nor hierarchy, and a key question is why one form is chosen rather than another. Gereffi et al. (2005: 87) argue that three key variables determine the organization of a global value chain: (1) the complexity of inter-firm transactions; (2) the degree to which this complexity can be codified; and (3) the extent to which the suppliers have the necessary capabilities to meet the requirements of the buyers. As with traditional attempts to explain FDI, their approach places a heavy emphasis on the nature of the transaction, but with a particular focus on how modern technology allows some transactions to be translated easily into a set of digital instructions, while others cannot. In this respect, the approach reflects the new range of opportunities that are available to firms. Market relations will tend to prevail when transactions are not complex, product specifications are easily specified by the buyer, and supplier capabilities can easily meet these demands. A buyer of inexpensive plastic toys, for example, can easily switch from one supplier to another, and a simple contract will suffice. Modular value chains will occur when the interfaces between complex modules can easily be codified, and there are suppliers capable of providing the sophisticated modules on either side of the interface. Large auto-supply firms or contract manufacturers in the electronic industry are prominent examples. Relational value chains involve complex transactions, product specifications that are not easily codified, and highly capable suppliers. The result is mutual dependence between firms, close relationships that involve the exchange of tacit knowledge, and relationships that are regulated through reputation, geographical proximity, and social, ethnic, and/or family ties. In captive value chains, both the complexity of transactions and the ability to codify this complexity is high, but the capabilities of suppliers are low. The lead firm in these cases must provide the core design elements of product and significant assistance to the supply firm, and because it does not want other customers to benefit from new supplier capabilities that may result, it seeks to lock the supplier into a ‘captive’ relationship. By not providing key design elements or complementary activities, for example,
the supplier firm will remain dependent on the lead firm. Finally, when product specifications cannot be codified, products are complex, and highly competent suppliers cannot be found, a firm will rely on in-house capabilities and hierarchical co-ordination (Gereffi et al. 2005: 86–7).

Why does the form of governance matter? As Raphael Kapinsky notes (2000: 118), if it was clear that the only losers from increased economic globalization were those who did not globalize, the solution would be straightforward—attract more FDI and promote exports. But, economic globalization has not benefited all participants: the trade/GDP of Sub-Saharan Africa increased from 51 per cent to 56.1 per cent between 1985 and 1995, at the same time as its share of global output fell (Kapinsky 2000: 119; 2005; see also Wado, Chapter 12 in this volume). How a country inserts itself into the global economy is as important as whether or not a country does so, and a primary contribution of value chain analysis is to identify the terms under which a firm is participating in the global economy. The governance of value chains is critical, because it is an important determinant of who reaps the gains of globalization in three different respects: the distribution of profits among firms, the capabilities that firms within the chain are able to master, and the leverage points for policy initiatives (Humphrey and Schmitz 2001).

First, the distribution of gains within a value chain is determined to a great extent by barriers to entry (Kapinsky 2000: 127). When barriers to entry are low, increased globalization can lead to a decrease in income, because competition is greater; when barriers to entry are high, a firm has the ability to dictate the terms (that is, the price it will receive and the role it will have) to others within the value chain. To an increasing extent, and in a dramatic shift from an era when manufacturing prowess was the key to successful development, power in the value chain now stems from intangibility (Kapinsky 2000: 127). That is, a firm that depends on low wages to convert physical inputs into a physical product will consistently face downward pressure on its prices because it will face competition from ambitious firms throughout the developing world, while a firm that depends on intangible factors such as design, brands, or marketing is able to protect its position because its skills are not easily copied (Kapinsky 2000: 127; Baiz 2005: 165). A value chain framework highlights the barriers to entry by focusing attention on the switching cost at each link in the chain. Any factor that makes it more difficult for a customer to switch from one supplier to another, whether it be the complexity of the transaction, the ability to codify the transaction, or the unique capabilities of the supplier, will increase the power (and profits) of the supplier. A supply firm that is part of a relational value chain, for example, will have far more power than a firm that is part of a captive value chain, because the relationship with the customer is characterized by mutual dependence—the customer cannot shift easily to another supplier—and this allows it to demand a higher price for its products or services.

Second, the governance of value chains is an important determinant of upgrading prospects. Upgrading is commonly defined as increasing competitiveness by capturing a part of the value chain that involves higher value-added activities. This can be achieved by increasing the breadth of functions a firm undertakes, the complexity of the product that is produced, or improving the process technology that is utilized in production (Bair 2005: 165). From a development perspective, of course, upgrading is very much the central question—what form of insertion to the global economy will provide a local economy with the strongest prospects for upgrading the capabilities, and thus future prospects, of local firms? The value chain literature highlights the benefits that firms in developing countries receive from incorporation into global value chains. The lead firms of these networks demand low cost, high quality, and good service from their suppliers, and often take an active role in transmitting best practice through the network (Humphrey and Schmitz 2001). The extent to which a lead firm within a network is willing to assist a supplier will depend on the form of governance: it is less likely to assist a supplier that can easily begin working for a competitor than it is a supplier that is enmeshed in a relational value chain.

Similarly, the literature on FDI—the hierarchical form of value chain governance—has long analyzed the extent to which foreign investment is 'benign', because it complements local savings and provides management, marketing, and technological skills or 'malignant', because it takes advantage of preferential policies and crowds out local firms (Moran 1998: 19–20). A narrow focus on the different parts of a global value chain is governed is better at highlighting the constraints that local firms may face than it is at demonstrating how these constraints can be overcome, however. Understanding how upgrading takes place requires a perspective that incorporates both the policy environment provided by the state and the local context.

Third, the governance of global value chains gives insight into the degree of leverage that outsider actors have—whether this is a government, international organization, or a non-governmental organization (NGO) to influence the behaviour of firms. An NGO in the United States that is interested in promoting fair labour standards in Nike factories, for example, might have very little leverage over the factories themselves. The factories are foreign-owned, and even if progress is made within one factory, it will inevitably be only a small part of a huge, decentralized network. The real power in this value chain lies with Nike, but this is also the point of vulnerability: the very intangibility of branding that makes it difficult for other firms to imitate the success of Nike also creates a potential danger if the brand becomes associated with sweatshop labour. But as Richard Locke (2003: 7–8), argues, even the power of Nike to effect change within its own supply chain will vary. Because shoe factories tend to be large and capital-intensive—partly a result of the elimination by industrialized countries of quotas on footwear imports in the mid-1980s—Nike has long-term relationships with a relatively small number of large South Korean and Taiwanese suppliers, and the stability of these relationships facilitates the co-ordination of production processes and (sometimes) the implementation of Nike's labour code of conduct. Nike has much looser relationships with its apparel suppliers because product cycles are short, factories tend to specialize in a particular segment, and these factories supply Nike's competitors as well as Nike. According to Locke, the different form of these relationships has the potential to alter Nike's influence with the suppliers and its ability to monitor their behaviour (Locke 2003: 9).

Location

The second key dimension along which value chains vary is location. Decisions about the governance of a value chain—whether it makes more sense to make or buy a particular product or service, for example—do not necessarily relate to decisions about location. If a firm decides that it can rely on market relationships to source a particular input—that it can 'buy' rather than 'make'—it can either outsource production to a firm across the street it can offshore production to a firm overseas (Sako 2006: 503).

Why do value chains become global? One standard explanation is that foreign investment and offshoring are part of an evolutionary process. Raymond Vernon (1971) argued that every product followed a life cycle beginning with development, proceeding to maturity, and culminating in standardization and obsolescence. Over the course of this life cycle, the comparative advantage of a country will shift as the emphasis moves from product innovation and development—a stage when it can be highly beneficial to have designers, suppliers, and customers in close proximity—to a standardized product that competes on the basis of cost. At the time that Vernon was writing, the United States economy was the clear leader in technological and entrepreneurial resources, and it had the most affluent and demanding domestic marketplace. Firms developed new products for the domestic marketplace, eventually began to export to foreign markets, and finally, as the product matured and became standardized, they moved production
The globalization of production

Regional integration, in other words, is a natural impulse of economic growth and development—the leaders move into higher value-added activities as their cost structures rise, and lower-cost followers replicate the industrial structures of those ahead.

These evolutionary approaches captured a key dynamic driving foreign investment in a world in which the forces of technology and product innovation were highly concentrated and the rate of change was slow and predictable, as Mitchell Bernard and John Ravenhill (1995) argue, these approaches have difficulty in explaining the contemporary global economy. First, in a world of rapid technical change and product proliferation, the process of product and technological maturation that is predicted by the industry-life cycle model appears to be less and less common. Product life cycles—for example, for mobile phones—are now matters of months rather than years. Second, it is not an entire production system that an advanced country manufacturer such as a Japanese company simply boxes up and ships to a low-cost labour site, it is only a part of the system that is transferred, and in most circumstances it is the labour-intensive part of final assembly. The forces of innovation and the backward linkages remain behind in the advanced economy, and in the absence of an active state role to promote the development of indigenous industry, and eventually the indigenous industry would advance to the point where it too, would begin to export. As Bruce Cunings (1984: 3) argues in the case of North-East Asia, the cycle in given industries—textiles, steel, automobiles, light electronics—of origin, rise, apogee, and decline has not simply been marked, but often mastered in Japan; in each industrial life cycle there is also an appropriate jumping off place, that is, a point at which it pays to let others make the product or at least provide the labor. Taiwan and South Korea have historically been receptacles for declining Japanese industries.

The technological and innovation systems, and infrastructure; demand conditions (the quality and quantity of the home market); related and supporting industries that are internationally competitive; and the national circumstances and context that influence the strategy, structure, and competitive practices of local firms. The interaction of these four attributes (what Porter calls the 'diamond of national advantage') leads to the creation of geographically concentrated clusters of competitive strengths that are mutually reinforcing. One of the greatest advantages of a multinational firm, according to Porter (1990: 60), is that it has the advantage of being able to combine the strengths of its own home base with other locations in its global network; at every stage of the value chain, a global firm can decide where to locate activities, to maximize the benefits of its global reach. If global value chains are the means of connecting a network of far-flung capabilities, the key then becomes a case of understanding why certain locations will vary in their ability to develop particular capabilities.

The traditional approach of comparative political economy has been to focus on the nation state, and to explain economic outcomes as a result of the relationship between domestic state institutions, patterns of industrial policy, and social actors. Successful generation of this approach analyzed how national institutional structures responded to the challenges of economic adjustment in the advanced capitalist world (Katzenstein 1978, 1985; Schmitter and Lehmbruch 1979; Zysman 1984). The most recent approach in this tradition has focused on systematic differences in the way that national economies are organized (Hall and Soskice 2001). Firms must co-ordinate activities with a range of economic actors—investors, other firms (suppliers and clients), the organizations that represent workers, and their own employees (in particular)—and firms that operate in liberal market economies will have very different characteristics and strengths from firms that operate in co-ordinated market economies (see Hay, Chapter 10 in this volume). This 'varieties of capitalism' approach assumes that the most important institutional structures—notably systems of labor market regulation, of education and training, and of corporate governance—depend on the presence of regulatory regimes that are the preserve of the nation-state (Hall and Soskice 2001: 4). The result is a stark departure from the traditional perspective of economics on comparative advantage because the advantages of a particular location are not endowed by nature, but are the result of a complex constellation of interrelated institutions. Firms in a liberal market economy, for example, may have an advantage in activities that emphasize radical innovation; firms in a co-ordinated market economy may have an advantage in activities that require incremental innovation and manufacturing excellence. The key point from the perspective of global production, is that multinational firms have the potential to access the advantages of all systems, and in doing so they can compensate for weaknesses at home. Although national institutions are clearly important in shaping general patterns of economic co-ordination within an economy, an exclusive focus on the nation state as the unit of analysis can obscure as much as it reveals. There is increasing evidence that, as Anwar Shah and Theresa Thompson (2002: 5) of the World Bank put it, 'nation-states are too small to tackle large things in life and too large to address small things'. National governments do not have the same degree of autonomy to shape their national economies as they did in the past. As Colin Hay explains (Chapter 10 in this volume), the extent to which globalization forces states to converge on a single economic model is the subject of fierce debate. While the resilience of distinct 'varieties' of capitalism is debated, few would question that nation states are increasingly aware of the international constraints on their economic policies. National governments that do not take into account international capital markets and foreign investors before making policy changes, for example, do so at their peril. At the same time as national governments are operating under greater constraints, decentralization—the process of devolving political, fiscal, and administrative powers to subnational units of government (Burki et al. 1999) —has been
China as the World's Factory

There is no better place to analyse the trends in global production than China; the rise of China as an economic power has corresponded with the globalization of manufacturing. In the three decades since China began to make the transition to a market economy, the country has come to dominate world manufacturing, and the impact of this manufacturing juggernaut is difficult to ignore. China has a significant impact on the global prices of the inputs it suck in to fuel its economic growth (even to the extent that manhole covers and highway railings disappear from countries on the other side of the world when Chinese commodity prices create the incentive for thieves to sell scrap metal) and the global price of the outputs it manufactures.

The impact of China on global manufacturing is difficult to overstate. From the perspective of economies that compete with it, the situation is often portrayed as grim. In 2008, the United States recorded a trade deficit of $266.3 billion with China—historically, the largest imbalance with a single trading partner—and when factories close in the United States and workers lose their jobs, China is an obvious target of political wrath.

From the perspective of multinational firms, however, the situation is very different. Although it is not the common understanding of the term, China is the 'world's factory' in the sense that much of the world's factories are operating in China; the impressive numbers that China chalks up in the global economy are thus as much a testament to foreign companies that have invested in manufacturing operations in China as they are an indication of the strength of Chinese-owned companies. The country is one of the leading destinations for global FDI. In 2008, it received an inflow of over US$100 billion in FDI (UNCTAD 2009b: 249; for reasons why Chinese FDI figures may be considerably overstated in official statistics, see Ravenhill 2006a: 661). These foreign-invested factories play a key role in Chinese manufacturing: over half of all Chinese exports are from foreign-invested factories, and over 80 per cent of technology-intensive exports are from foreign-invested factories (Rosen 2003: 22). Multinational firms benefit from Chinese production, both when they invest in manufacturing facilities, and when they source production to factories that produce in China (both foreign- and Chinese-owned). Consumers benefit from the low price of manufactured goods that are exported from China.

Location and global production

The patterns of foreign investment in China reflect the complex interaction of the multiple levels of location within which a multinational firm operates—the regional, the national, and the local—and the efforts of both firms and governments to balance concerns of efficiency, equity, and sovereignty.

First, and most obviously, the investment flows have led to the integration of national economies in the region. In fact, it is more accurate to speak of China as a regional production base than a national production base. When China began to reform its economy at the end of the 1970s, a development approach that emphasized foreign investment had the benefit of allowing the leadership to avoid the ideologically sensitive issue of whether to allow private-sector investment within China, and it created the opportunity for China to acquire technical and managerial skills rapidly from foreign firms. Special economic zones were located initially in the mainland provinces that were across from Taiwan and Hong Kong—the primary sources of investment during the 1980s—and as preferential policies were gradually expanded to include the entire coastal region of China, Japan, and South Korea became important sources of investment as well. These countries did not transfer entire industries to China; they transferred the labour-intensive activities to China, and the subsidiaries established then
imported higher value-added components from their home country.

The extent of regional integration is reflected in a dramatic increase in intra-industry trade. Between 1990 and 2005, for example, the percentage of the electronics trade between Japan and China that consisted of components increased from slightly over 13 per cent in 1990 to almost 60 per cent in 2005 (METI 2006: 25). It is estimated that two-thirds of the inputs for China's processing activities come from Hong Kong, Japan, South Korea, and Taiwan (Ravenshaw 2006a: 670). At the end of 2003, according to Chinese statistics, there were a total of 28,401 Japanese-invested firms operating in China and 27,128 South Korean-invested firms (see METI 2004: 3). In short, the United States trade deficit is with East Asia, as a whole rather than with China: the high-wage economy export components to China for final assembly, and then the finished goods are exported to the United States. In 2003, China had a large trade surplus with the United States (about $125 billion), and an almost equally large deficit with its Asian trading partners (about $99 billion) (Hubbauer and Wong 2004: 3). In trade statistics, a good that is shipped from China to the United States appears as an import from China, even though the value added in China may be as little as 20–40 per cent (Ravenshaw 2006a: 669).

**Box 11.2 Triangular Manufacturing**

Are companies always looking for low-cost labour? Not necessarily. The garment and apparel sector is a classic example of a labour-intensive industry, but actual decisions on where to locate production involves complex calculations of labour costs, quotas, and proximity to market. TW Industries, a Taiwanese garment manufacturer, is a typical example of a triangular manufacturing network (a pseudonym has been used to protect the confidentiality of an actual firm; the example is from Thun 2000). Its major customer is Gap, and because the two firms have a long history of working together, Gap continues to maintain its relationship with TW, even after most Taiwanese garment-manufacturing had relocated to less expensive regions. TW maintains its headquarters and one factory in Taiwan, and has a network of factories in China, Indonesia, and Cambodia.

The production process at TW begins when Gap uses a computer-assisted design system to send the master garment patterns via the Internet to TW headquarters. The local factory, although high-cost, is maintained to make samples—the workers are highly dependable and turnaround is quicker—and these samples are sent back to Gap via express mail. When the sample is approved, the headquarters must decide where to locate the production run. First, the cost of production is obviously important.

Wages vary considerably in TW factories: the monthly wages for a worker are $600 per month in Taiwan, $100 in a coastal province of China, $30–$40 in Indonesia, and $50–$60 in Cambodia. The cost of production is a combination of labour cost and productivity, of course, and the latter varies as well. Using the Taiwan productivity rate at an index of 100, China is 50, Indonesia 40–45, and Cambodia 55–60. Second, politics plays a key role in location decision. Prior to the elimination of the Multifibre Arrangement (MFA) in 2005, TW had to be sure to locate production in countries that had the quotas necessary for the final markets. Even when those quotas were eliminated, TW seeks to have a geographical distribution of production facilities in order to protect itself from the risk of new tariffs and quotas. Finally, the proximity to market is critical. Because clothing is influenced by fashion and trends, it can be extraordinarily time-sensitive. Much like a fruit or vegetable that will lose its value as it ages on a grocer’s shelves, a piece of clothing that is yesterday’s fashion must be marked down dramatically in price. As a result, speed to market is absolutely critical: saving a few cents on labour costs is a pyrrhic victory if it causes a firm to miss a trend and the product ends up in a discount outlet rather than a department store display case. The calculation will vary by product: it continues to make sense to produce high-fashion items in high-cost areas such as New York or Los Angeles; relatively fashionable items will be produced in regions where they can get to market quickly (Mexico and low-cost regions of Europe are only hours away from major markets); and relatively stable items (such as men’s tee shirts and underwear) will be produced wherever costs are lowest.

Managing the technology of the production network is of critical importance. Given the fashion-sensitive nature of much of the business, retailers want to keep inventories low. In fact, the ideal would be to have a factory behind the store, because this would allow the retailer to make each item of clothing as it is purchased. It would be possible to expand production when it became apparent that an item was becoming popular, and stop production of items that were not selling—discounting would never be needed. Obviously, this is not possible, but retailers try to use information technology to keep their inventories low and their supply chains as lean as possible. The objective of lean retailing is to reduce the risk of selling a perishable good by continuously adjusting the supply of products offered to consumers at retail outlets so as to match the actual level of market demand (Abernathy et al. 1999: 55). Bar code and scanning technology will track sales at a retail store, for example, and this information will be sent to a distant factory at the close of business. The factory will not only manufacture the new clothing, but will place it on hangers, complete with price tags, and then air freight it back to the retail store. In some cases, the buyer is able to use specialized software systems and the Internet to track the progress of an order through each stage of the production process.

The increasingly high-tech nature of the industry creates opportunities for Taiwanese firms because the emphasis of the global network shifts from achieving cost reductions, through savings on labour costs (a primary weakness of the Taiwanese at home), to more effective management of the production network and the consequent ability to match supply to market demand more effectively (a potential strength of Taiwanese firms vs. rivals with lower labour costs).

At the same time that East Asia is emerging as a regional economy with manufacturing networks that cross national borders, local economic clusters are extraordinarily important in China. The factories of particular towns and villages will often specialize in a particular product, and then dominate world markets. For example, 80 per cent of the world’s metallic-shell lighters come from the city of Wenzhou in Zhejiang Province. Not far away, in the town of Qiaotou, 700 family-run factories produce 15 billion buttons and 200 million metres of zippers a year—again, they are the world leaders (China News Digest 2006; Watts 2005). Qingxi Township in the southern city of Dongguan specializes in PC production, and has become so important in the production of monitors, motherboards, keyboards, and PC boxes that the deputy director of IBM Asia remarked that, "If there is a traffic jam between Dongguan and Hong Kong [where the port is located], 70 per cent of the world’s computer market..."
will be affected (Enright et al. 2005: 62). Similar clusters can be found for bicycles, domestic appliances, furniture, plastic flowers, air conditioners, and shoes—virtually any product imaginable. The formation of these clusters is partly the result of a natural tendency on the part of firms to seek agglomeration economies, but government policy also played a key role. Over the course of the reform period in China, the central government gave increasing autonomy to local governments to shape their own economic policies, and gave them fiscal incentives to do so successfully (Oi 1992). The state with which local governments had to work, however, was not a clean one: the economic history, the structure of government institutions, and the types of firms in a region created different sets of possibilities for different places. Small and entrepreneurial firms in Zhejiang Province benefited from a local government that supported (or at least did not obstruct) private-sector firms and the lack of competing state-owned enterprises (Whiting 2001). Firms in capital and technology-intensive industries in Shanghai benefited from a local government that invested heavily in firm development and guided the process of technology transfer from foreign-invested enterprises. Light industrial firms in Guangdong Province took advantage of local policies that favored exporting and foreign investment from ethnic Chinese networks. In a decentralized economy environment, the role of local policy is as important as national policy in shaping the framework of opportunities and constraints within which firms must operate. The competitive pressures that lead to regional integration in East Asia, and the opportunity to access world-class and inexpensive manufacturing capabilities in the various industrial clusters of China creates strong pressure on the national ‘varieties of capitalism’ of multinational firms that invest in China. As Hay points out in Chapter 10 of this volume, there is no topic in the field of global political economy that is more controversial than whether global capital, trade, and investment flows are leading towards a convergence of national institutions. This debate has a corollary in the literature on global production: when multinational firms and their suppliers move abroad, do they preserve certain characteristics of their home country? The characteristics of Japanese production networks, for example, are commonly perceived to be relatively closed when compared to American production networks—a result of the preferential trade relationships and cross-shareholding within Japanese corporate groups and long-term relationships between management and labour—and these characteristics have been seen as surprisingly durable when transferred abroad. The overseas subsidiaries of Japanese companies are less likely to employ local managers, less likely to rely on local sourcing (except when Japanese affiliates were located in the local economy), and less likely to transfer R&D activities to overseas affiliates (Encarnation 1999; Ernst and Ravenhill 2000; Solis 2003). According to this viewpoint, firms involved in global competition begin their lives under very different legal, social and political environments and histories…[and] while firms from different nations may eventually converge on some best practice, convergence may not happen quickly or automatically’ (McKendrick et al. 2000: 9; see also Borrus and Zyman 1997). The durability of national foundations leads to unique corporate strategies, and alternate strategies lead to variation in the form of the production networks that bind regions together.

In China, both the durability of national approaches to investment and the intense pressures on these approaches are visible in the patterns of Japanese investment. When a Japanese firm begins to manufacture in China, for example, there has always been a strong tendency to continue to rely on the same Japanese suppliers. In some cases, these will be suppliers that are part of the same industrial grouping, but it will also be Japanese suppliers that have had long-term relationships with the company in Japan. During the 1990s, the bulk of Japanese investment in China followed a predictable pattern: the objective of Japanese firms was to lower costs, and, in keeping with the concept of a regional hierarchy, production was moved to China but core components and design continued to come from Japanese firms. Because the focus of these firms was on export markets, the drive to lower costs could not be at the expense of quality, and it was easier to maintain quality standards while using tried-and-true suppliers. Dalian, a city in north-eastern China, was a popular investment site because it was close to Japan and relatively easy to find workers there with Japanese-language skills. Within a decade, however, a distinct shift had begun to emerge, as investment trends moved towards the greater Shanghai region in eastern China, and the Guangdong region of southern China. In a 2002 survey of Japanese firms with investments in China, 81 per cent of the firms in eastern China and 80 per cent of the firms in southern China had plans for expansion, compared to 46 per cent in north-eastern China (Marugami et al. 2003: 24). The 2004 survey indicated that only 13 per cent of Japanese firms in north-eastern China had plans for expansion, while the percentages for eastern and southern China were just under 70 per cent and 50 per cent, respectively (although 64 per cent of Japanese electronics firms had plans to increase investments in southern China) (Marugami et al. 2005: 30, 32).

Why has the location of Japanese investments in China been shifting towards eastern and southern China? There are both push and pull elements to the shift. The push stems from competitive pressures and the consequent need to cut costs. First, Japanese investments in China are focused increasingly on access to the growing domestic marketplace—79 per cent of firms listed this as their primary motivation for increasing investment in 2002 (Marugami et al. 2003: 28). It is the world’s largest market for telecommunications devices (wired and wireless) and one of the largest markets for digital consumer and computing devices (Ernst 2006). In this increasingly sophisticated market, it is often Chinese firms that are the key competitors, and they place tremendous cost pressure on foreign competitors. In terms of low-end products,’ commented one Japanese manager, ‘many Chinese companies sell them without taking into account profit margins. We can’t compete with that’ (Marugami et al. 2003: 39). (Chinese state-owned enterprises often focus on market share rather than profit levels, because they receive preferential access to capital from the government-dominated banking system.) Second, the Japanese firms have to compete with multinational firms that are offshore large parts of their manufacturing to low-cost producers in China, and often at the expense of the small and medium-sized enterprises (SMEs) that have traditionally served as suppliers at home. The speed with which American firms have abandoned manufacturing in order to focus on product definition and design, software, and high-end services (Burrus and Zysman 1997; Sturgeon 2002) is perhaps not surprising given the characteristics of a liberal market economy, but South Korea, which retains a focus on manufacturing, has been equally ruthless in opening up its manufacturing networks to non-Korean firms. In 2004, South Korea had close to 3 million SMEs—these firms employing the vast majority of workers in the manufacturing sector—and 86 per cent of these firms were subcontractors to large firms (Hankyoreh 21 2004). According to a survey conducted by the Federation of Small and Medium-Sized Enterprises in South Korea, the large firms demanded price cuts of 5–10 per cent annually, and there was seldom a choice—the large firms simply demanded the price cuts (Hankyoreh 21 2004). The options open to the SMEs are limited: they often do not have the technical ability to upgrade into new product areas, and if they move to China in an effort to cut costs, they have difficulty competing with Chinese firms. Firms such as Samsung, LG, and Hyundai have the classic firm-specific advantages (that is, brands, technology, and/or scale) that can be exploited when they move offshore, but their suppliers are not so fortunate. Although a political desire for balanced economic development and fear of a ‘hollowing-out’ of the South Korean economy led to pressure on the large firms to support the country’s SMEs, there are limits to this benevolence: ‘In an environment in which we compete with global firms,’ commented a member of the Samsung Electronics purchasing team, ‘it is meaningless to
distinguish between domestic and foreign supply firms' (Maelf Eyongjia 2005). LG Electronics has been even more aggressive than Samsung, and has built up R&D capabilities in China partly in order to facilitate the development of local Chinese suppliers. Not surprisingly, given that they compete in the same environment as the Korean firms, Japanese firms find themselves under the same pressure to cut ties to higher-cost suppliers from home.

The primary reason Japanese investments in China are being pulled toward eastern and southern China is because these are the regions with the strongest component firms. As the director of the Japanese trade office in Dalian explained it was no longer enough for Japanese firms simply to seek out low-cost labour and ready access to Japan; they were now being forced by competitive pressures to invest in the locations with the most capable component firms, and, in southern and eastern China, there are not only a wealth of Chinese component firms, but also Taiwanese and South Korean firms (Yabuchi 2000: 1). Even as wages rise in southern China, the benefits of the local industrial clusters endure. In some cities in southern China, wages increased as much as 50 per cent over the previous three years, the president of a Canon factory in Zhuhai commented in early 2007, but because labour contributes only 5 per cent of the total cost of final assembly for a product such as a digital camera, they will not relocate: 'We could go from China to Vietnam to India and then to Africa [in search of lower wages]. But that would be a slash-and-burn approach. In reality, it's not like that' (Pilling and Mitchell 2007: 7).

The industrial clusters of China represent a particularly pure version of globalization of production—they consist, not of local firms that have developed slowly over time, but primarily of highly competitive foreign firms that have co-located in China and feed off of each other's strengths—and this puts pressure on ties that were formed in the less competitive context of the home country. The large Japanese firms have slowly been opening up their networks to take advantage of the world-class capabilities that are available in China, and this puts pressure on Japanese SMEs. In the past, a parent company was forced to maintain a certain level of business with its subcontractors, and a 'treacherous' act could hinder its business with other firms, but overseas expansion to regions with highly capable supply firms creates new capabilities (ISBRI 2003: 187). According to a 2001 survey of Japanese SMEs, the parent company strategy has been the most negative impact on their operations was overseas expansion (ISBRI 2003: 187). The extent to which Japanese production networks open to non-Japanese firms varies both by firm and industry, and they continue to be far more closed than other national networks, but the trend is an important one. As Dieter Ernst argues (2006: 183), it signals the end of an unequal division of labour in East Asia, one in which the higher value-added activities and technology remain in Japan, and only the labour-intensive activities move offshore, the beginning of a complex process of 'hybridisation' of national production networks (Ernst and Ravenhill 2000: 242).

It is worth noting that it is not only less competitive firms that lose out in this process, but also less competitive countries in the developing world. China contains the potent combination of a large market, low-cost labour, and a highly developed supply sector, and for many countries, this is a difficult combination with which to compete.

Governance and upgrading

The quantity of FDI that flows into China might make it the envy of the developing world, but it is increasingly a point of controversy within the country. Although advocates of openness argue that foreign investment would ultimately increase self-reliance, as Chinese firms gained technology and managerial capabilities, sceptics claim that Chinese firms have found it difficult to capture the gains from their participation in global production networks. In the wake of the rapid increase in inward FDI flows in the mid 1990s, the Economic Daily (Jongji Ribao), an authoritative economic paper in China, ran a series of articles that were highly critical of the impact that foreign investment was having on Chinese firms. Openness was not inherently bad, the commentary argued, but looking across the countries of the world, [we see] that opening up definitely cannot be without certain principles and certain limits. It is important to 'pay attention to protecting national industries', the paper concluded (Frewsmith 2001: 173–4). Academics have similarly argued that discrimination against entreprenurial private-sector firms in China and in favour of foreign firms and inefficient state-owned enterprises has handicapped the development of Chinese companies, Yasheng Huang and Tarun Khanna point to Wal-Mart shelves sagging with Chinese-made goods, and make the point that relatively few products with the 'Made in China' label are made by indigenous Chinese firms. 'That is because China's export-led manufacturing boom is largely a creation of FDI,' they argue. 'During the last 20 years, the Chinese economy has taken off, but few local firms have followed, leaving the country's private sector with no world-class companies to rival the big multinationals' (Huang and Khanna 2003: 74).

To what extent have Chinese firms benefited from foreign investment and integration with global production networks? The automotive industry is a good test case because it is a sector that the Chinese government targeted for development in the early 1980s, and FDI has been the primary means of promoting it. The barriers to entry in the industry are also high for a developing country. The high cost of product development in the industry and the rapid advance of technology create strong incentives for assembly firms to share development costs with global suppliers. The assemblers group products around common underbody platforms, outsource the design and production of large modules of the car to global suppliers, and then rely on these firms to supply the modules wherever in the world they decide to assemble the vehicles. Global platforms spread the costs of development more widely by creating greater economies of scale for each model, and outsourcing passes a good portion of the design burden for individual modules on to the supply firms. These same characteristics, however, make it very difficult for a local supply firm to become an upper-tier supplier in the network of a multinational firm ( Humphrey and Memedovic 2003). Tier one global suppliers (for example, firms such as Bosch, Denso, and Visteon) are often as large and powerful as their customers, and they must be able to co-operate on the design of new models with the assemblers.

The intention of the Chinese government is forming joint ventures with multinational auto firms was clear—FDI would allow the domestic auto firms to gain access to technology and managerial skills—and because of the large potential of the domestic marketplace, it was also clear that China had an enviable amount of leverage over multinational firms: foreign firms were not allowed to have a majority stake in an assembly joint venture (JV), they were often pressured to transfer large amounts of technology to their China projects, and until China joined the World Trade Organization (WTO) they were forced to rapidly increase the percentage of components that were sourced from within China.

Despite these advantages, none of the Chinese partners in these JVs projects has emerged as a major auto manufacturer in its own right. Not only do the JVs still dominate automobile production in China, but the only two Chinese firms that were in the top ten auto producers in 2006 were independent firms (Chery and Geely) that had never formed joint ventures with foreign firms. The failure of the Chinese partners in JV projects to develop capabilities independent of their foreign partner would seem to support those who argue that foreign investment is not the most effective way to develop strong indigenous firms, or, at the very least, indicates that capturing the gains of foreign investment cannot be taken for granted.

But state policy clearly does matter. Local governments were generally the key actors in formulating the policy environment for firms in the auto sectors, and they pursued a variety of approaches (Thun
Chinese partners have no aspirations to develop independent capabilities. The recent success of independent firms is also not necessarily a repudiation of the JV strategy that dominated the industry for so long. In many respects, the new, independent firms are building on the base that the JVs created in China. Part of this strategy involves the strategic use of the supplier capabilities that the joint venture projects have developed, particularly in the greater Shanghai region. This involves the utilization, not only of suppliers having a range of technical capabilities that the independent assemblers do not, but also of designers who were trained at the JV projects and then created their own design firms. Part of this strategy involves luring Chinese engineers with long experience on the JV projects to work for a genuinely Chinese firm. The joint ventures served as a training ground for the auto sector and created a range of possibilities that did not exist prior to their formation. In short, the benefits of FDI do not necessarily flow directly to the Chinese partners at the JVs, but they, nevertheless, increase the local capabilities of the sector overall.

**Key points**

- Since the early 1980s, China has become a manufacturing powerhouse, and one of the world’s leading destinations for FDI.
- China is a regional production base in the sense that a large proportion of its exports involve the processing trade. China imports higher-value goods from its more advanced neighbors, assembles these components into finished goods, and then exports these goods to final markets.
- Both the intensity of competition within China and the presence of highly capable supply firms from many countries have led to the weakening of national production networks.

**Conclusion**

Firms have long been a product of their immediate geography. They have always been shaped strongly by the regulatory and legal institutions of the states within which they are formed, the inputs available to them (human capital, raw materials, and components), and the nature of the markets within which they compete. The intensity of these constraints has varied over time, however. As early as the seventeenth century, firms were looking to distant countries for raw materials not available at home. In the early twentieth century, they began to relocate (and replicate) manufacturing activities in major foreign markets in order to escape protectionist trade barriers. Foreign production has been commonplace for centuries. What is new in the current era of globalization is that geographical dispersion no longer precludes global integration. Firms are able to break up their value chain in ways that were not previously possible, make a decision about where each particular activity should be located, and then integrate these far-flung activities with advanced technologies.

The globalization of production creates opportunities and challenges for both developing and developed economies. From the perspective of developing economies, the massive flows of foreign investment and the increased willingness of multinational firms to outsource production have created a range of opportunities that were not previously present. Under the right circumstances, multinational firms are willing to take offshore, not only the labor-intensive activities that have traditionally gone to the developing world, but also the higher value-added activities. There are two significant caveats, however. First, the flows of FDI are highly concentrated (and multinational firms often display a strongly herd-like mentality). Countries that have laboured to create a conducive political and legal context for investment can find themselves, through no fault of their own, with very few investors. They might be too small; there might be a shortage of supporting industries and suppliers; they might not be easily accessible; or they might be located in what is otherwise a rough and dangerous neighbourhood. This problem is particularly harsh, of course, because private investment flows have largely replaced official sources of investment capital. In this environment, the poorest countries may easily find themselves worse off than in the past. Second, in those cases that are blessed with high rates of inward FDI, the gains for the domestic economy are far from guaranteed. Few countries are in as favourable a position as China to cope with the challenges of FDI, and yet even China continues to struggle with maximizing the benefits of foreign investment for indigenous firms. Indigenous Chinese firms often find themselves locked in a downward competitive spiral: because they usually compete in areas with low barriers to entry, competition is intense and profit margins thin, and they often have little to invest in research and development. State policy is critical, particularly the support that is given to local firms, but it must be more nuanced than in the past—investment that flows in can just as easily flow out when host governments impose conditions that are too onerous. Rather than strong-arming multina tional firms into transferring technology and utilizing local suppliers, it is far more effective (and more difficult) to create a policy environment that will support the development of the capabilities that multinational firms are seeking in their supply base.

From the perspective of developed economies, the globalization of production allows firms to choose a la carte from a global menu of production sites. No longer constrained by the limitation of having to conduct all activities in one particular geographical setting, the parts of the value chain can be broken up and located separately, according to the competitive needs of any particular activity. This allows a firm to compensate for weaknesses in their home base without completely abandoning it. Although the hope is always that the higher value-added activities will remain at home, the danger is that the outflow will be too great and a hollowed-out economy will be left behind. In the case of the regional production networks of East Asia, the fears of hollowing-out in the advanced economies that surround China have not yet been realized. Quite the contrary, in fact—the combination of the growing Chinese market and the increase of imports of high value-added components into China has been an economic engine for the region. The gains, however, are not evenly distributed. It is the small and medium-sized enterprises in an economy that have the most difficulty
in adjusting, and these are often the firms that provide the bulk of employment at home. Trading relationships that appear to be mutually beneficial in the aggregate can mask significant dislocation and, as in the developing countries, public policy must focus on increasing the capacity of smaller firms to take advantage of the potential gains of globalization. In the absence of balanced growth, the possibility of a backlash against globalization is all too real.

Key points

• The rise of global production creates new opportuni-
ties for developing countries, but also real risks: first, for those that are unable to attract FDI; and second, for those able to attract FDI but unable to maximize the benefits for indigenous firms.

• Similarly, in developed economies, the gains from globalization are not evenly distributed, and in the absence of effective public policy this imbalance creates the possibility of a backlash against globaliza-
tion.

Questions

1. What have been the drivers of the globalization of production since the 1980s?
2. Why do multinational firms invest in equity stakes in foreign operations rather than form trading relationships with foreign firms?
3. What is modularity, and how does it increase the opportunities for global production?
4. How does the governance of a global value chain affect the prospects for upgrading in a developing country?
5. What factors does a firm need to consider when deciding where to locate production facilities?
6. What are the benefits of industrial clusters, and why do they form?
7. Why has China emerged as the world’s factory, and what are the implications of this trend?
8. From the perspective of a developing country, is a heavy reliance on FDI good or bad?
9. From the perspective of an advanced capitalist economy, is the offshoring of production good or bad?

Further reading


• Berger, S. (2006), How we Compete: What Companies around the World are Doing to Make it in Today’s Global Economy (New York: Currency Doubleday). A highly readable and knowledgeable analysis of how different companies and countries are coping with the challenges created by the globalization of production.


• Kaplinsky, R. (2005), Globalization, Poverty and Inequality: Between a Rock and a Hard Place (Cambridge: Polity Press). This book provides a cogent analysis of why many countries have difficulty in capturing the benefits of globalization.


Web links

• The primary source of data on global investment flows is the United Nations Conference on Trade and Development (UNCTAD). Its publications are available at www.unctad.org. For academic research on global value chains in a variety of industries and countries, see www.ids.ac.uk/ids/global/index.html and www.globalvaluechains.org/.

Online resource centre

For additional material and resources, please visit the Online Resource Centre at: www.oxfordtextbooks.co.uk/ravenhills/