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PART I

Chapter 4

Economic and Other Impacts of Foreign Corporate Takeovers in OECD Countries*

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Cross-border mergers and acquisitions (M&A) are growing rapidly and are changing the industrial landscape in OECD countries. Merger activity is highly cyclical, and the current wave will no doubt recede in rhythm with the business cycle. But each wave reaches new heights and with each new wave, the role of foreign-owned firms in OECD countries and the international operations of domestic firms grow. The questions cross-border M&As raise and the reactions they elicit are not new, but they are clearly growing in importance with the rise in foreign takeovers. The emergence of multinational enterprises from developing countries, notably India and China, has also added a new dimension.

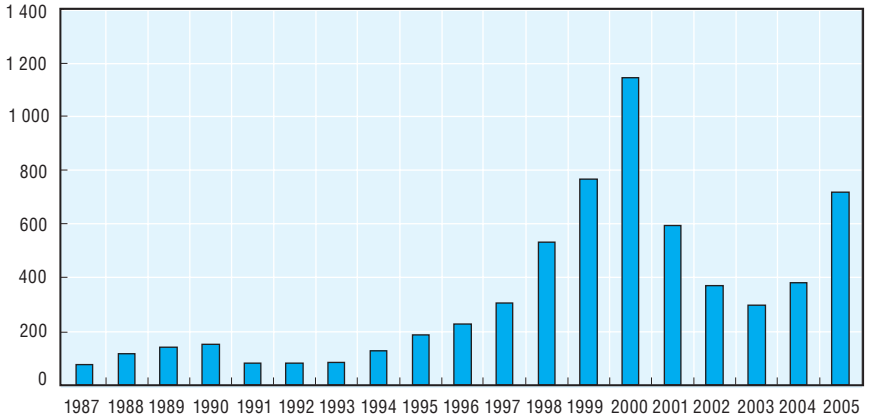
While OECD countries have progressively liberalised their FDI regimes, the rise of cross-border M&As presents a new challenge for policy makers. Foreign acquirers are sometimes perceived of having ulterior motives and of not sufficiently respecting local corporate culture. They also thwart government efforts to create national champions. The very difficulty of establishing what is foreign and what is domestic in this brave new economic world has implications for both industrial policies and for national security. The perceived risks associated with foreign takeovers are discussed below, as are the potential economic and other benefits of inward M&As in a highly developed economy.

The paper begins with a discussion of mergers in general and then looks at whether the benefits typically associated with FDI apply equally well to both greenfield investment and takeovers. Empirical studies which look at the effect of takeovers on employment, wages, productivity and innovation in the acquired firm are reviewed, together with a few case studies of prominent foreign takeovers within OECD countries. The implications for government policies are discussed at the end.

1. Trends in cross-border mergers and acquisitions

Cross-border M&As are growing quickly in absolute terms (Figure 4.1) and as a share of both mergers and foreign direct investment (FDI). In spite of a strong cyclical element and the impact of 11 September 2001, they have been at historically high levels in the past decade. In Europe, the value of M&As in 2005 exceeded one trillion US dollars (USD), with almost one half representing cross-border activity. In the absence of some unforeseen major shock, mergers look set to return to, and even exceed, the historic peak reached in 2000.

Figure 4.1. **Cross-border M&As (USD billion)**



Source: UNCTAD and OECD Secretariat.

Cross-border M&As represent an estimated 80 per cent of total FDI flows among OECD countries and are growing as a share of total national and international mergers. While there are numerous examples of greenfield investments in some OECD countries (e.g. Ireland or Mexico), and in some sectors (e.g. Japanese FDI in the automotive sector), overall values are still driven by acquisitions, especially for the voluminous transatlantic flows.

The importance of acquisitions in total FDI flows is also rising for developing countries. Calderon *et al.* (2004, p. 15) estimate that "[i]n developing countries, the share of cross-border mergers and acquisitions in FDI was about 10 [per cent] in the mid-1980s and increased to more than a third at the beginning of the 2000s". Much of this increase results from privatisations in developing countries, together with the opening of certain service sectors in some countries to foreign investors.

Mergers and acquisitions are often the preferred form of investment to gain entry into a foreign market, particularly in markets which – for one reason or another – present high entry barriers. These barriers vary across sectors and often apply to all new entrants, whether foreign or domestic. In oligopolistic industries, for example, firms might erect barriers to entry for new competitors, or these barriers might arise from the nature of the industry itself where distribution channels are few and selective or where consumer tastes are idiosyncratic. Sometimes the regulatory environment discourages new entrants, either because of its opacity or because of outright restrictions on entry such as a temporary prohibition on new banking licences. Sometimes acquisitions are preferred even in the absence of these barriers when speed of entry is of the essence, such as to exploit a patent or an innovation which is soon likely to be copied or superseded.

Deregulation and liberalisation of services have opened up new markets for ambitious firms, and these are often best satisfied through the acquisition of a local firm with an already-established branch or distribution network. But cross-border M&As are not just about market access. Mergers are often a response to structural change within economies, whether from railroads and electrification in the United States in the late 1800s and early 1900s or, more recently, increased competition through enhanced global integration, supply shocks or the introduction of information technology. As markets become global, restructuring must also globalise, involving mergers between firms from different countries. Another motive for cross-border M&As is the rising cost of research and development, particularly in the pharmaceuticals industry which encourages firms to pool their resources.

2. The benefits of inward direct investment

2.1. Macroeconomic benefits

The potential benefits of inward direct investment do not depend on the form the investment takes. There is nevertheless often a tendency in policy circles and within the public to view greenfield FDI in a more positive light than foreign takeovers. The main reason is that greenfield projects are new investments and hence are perceived to have a positive impact on aggregate employment and, to the extent that the project generates exports, on the trade balance. In economic terms, as Graham and Krugman (1995) have demonstrated for the United States, FDI can only have an indirect and limited effect on aggregate employment and net trade.

In areas where FDI can have an impact, economic theory usually makes no such distinction between the two methods of market entry. These potential benefits might accrue more quickly in one case than in the other, but in the long run the impact should be the same. These benefits were summarised in OECD (2002), *Foreign Direct Investment for Development: Maximising Benefits, Minimising Costs* as follows:

> Given the appropriate host-country policies and a basic level of development, a preponderance of studies shows that FDI triggers technology spillovers, assists human capital formation, contributes to international trade integration, helps create a more competitive business environment and enhances enterprise development.

Through these mechanisms, FDI promotes economic growth by raising total factor productivity and, more generally the efficiency of resource use in the host economy. Even if FDI has little influence on aggregate employment, it can influence the composition of employment such as by increasing the demand for skilled labour, technicians or scientists. Similarly with trade, inward FDI can influence how much and what a country exports and imports,

even if the trade balance itself is determined by macroeconomic factors. And, inward FDI may have important repercussions for competition that go beyond the sector of investment and in some cases beyond the host country itself (for an overview of such "dynamic competition effects", see DTI, 2006, and Bernard *et al*., 2005).

Technology spillovers are perhaps the most widely discussed potential benefit from inward FDI. Although developing countries are expected to be the chief beneficiaries of such spillovers, it could be argued that developed countries are better placed to benefit because the "knowledge gap" between the investor and local firms is likely to be less among OECD countries (e.g. OECD, 2001, and Little, 2005). The technology transferred should be interpreted in a broad sense to include not only proprietary technologies but also know-how, management techniques and other areas where the investor has a competitive advantage such as distribution and logistics. These spillovers can arise horizontally between competing or complementary firms or vertically between the foreign investor and its local suppliers. Another finding of OECD (2001) was that "backward vertical linkages" from foreign-owned enterprises are a particularly potent source of spillovers, as domestic suppliers upgrade their production processes, quality and delivery methods in response to the demands of an internationally competitive client (see also PA Cambridge Economic Consultants, 1995).

It is possible to argue that spillovers might be greater under M&As since the investor inherits an existing set of local suppliers. This possibility presupposes that local firms are able to meet the more stringent requirements of the new owner. While in many cases in the long run, greenfield investors should build up a similar network over time, some studies have found that the greater spillovers from mergers persist over time. Concerning vertical spillovers, Andersson *et al*. (1996) find that greenfield investors continue to import more intermediate inputs from their home country than do local firms which have been acquired by foreigners.

2.2. National security

Foreign direct investment also holds important potential benefits for the national security of both home and host countries. The current international debate about cross-border takeovers and national security tends to highlight concerns about putting security at risk, for example in case prized enterprises and sensitive technologies are acquired by foreigners. However, it is worth keeping in mind that the linkages between international investment and national security are complex and work both ways.

First, it follows from the previous section that a policy of openness to cross-border mergers and acquisitions may contribute to national security – in

direct consequence of its potential macroeconomic benefits. Breakdowns of security and public order are much more frequent in states where material standards of living are low, or within regions with large disparities in incomes. By contributing to economic progress, and by helping to make the benefits more widely felt, freedom of investment can make an important contribution to security and stability.

Second, a commitment to cross-border openness in certain sectors may in itself be an ingredient in policies of regional or international stabilisation. A widely quoted example is the experiences of the European Union. In early days the European project relied on the cross-border integration of the coal and steel sectors to create a mutual dependency in the "strategic" heavy industries which, while not initially involving cross-border ownership, created incentives for co-operation rather than confrontation. More recently, EU's Single Market has further contributed to economic integration and it also appears to have exerted a stabilising effect on applicant countries across Europe.

Third, cross-border corporate ownership may be an ingredient in a co-operation that aims at more specific undertakings enhancing national security. Examples include intra-European defence cooperation, such as the EADS aerospace conglomerate. Another recent example involves port security, including against terrorism, which is the target of a joint European-Chinese undertaking. A pilot project focuses on sea containers transport between Rotterdam in the Netherlands, Felixstowe in the United Kingdom and the southern Chinese port of Shenzhen. The feasibility of this project is partly in consequence of acquisitions of the ports concerned by international companies that possess and are developing technology to screen, monitor and ensure the physical integrity of seals on container traffic from the point of dispatch to arrival.

Fourth, the survival of individual companies deemed important for national security may depend on cross-border linkups. In many smaller countries defence suppliers – particularly in sectors that are capital intensive or otherwise display important economies of scale – increasingly look for foreign corporate partners to secure their viability. In the air transportation sector, considered an area pertinent to essential security and public order by many adherents to OECD's investment instruments, cross-border acquisitions are also increasingly seen as a strategic option, including within the European Union.

3. The perceived risks from foreign takeovers

If economic theory is neutral as to the form the FDI takes, foreign takeovers nevertheless elicit greater fears among host governments and

hence are often more tightly regulated, whether *de facto* or *de jure*. Evenett (2003) suggests that, in contrast to policies governing greenfield FDI, policies towards M&As potentially became more stringent in the 1990s. While greenfield investors are usually offered generous incentives by central and regional governments, foreign takeovers are sometimes blocked or otherwise thwarted for national security reasons or because they involve "strategic" industries. Questions also arise about the possible lack of reciprocal access for local firms in the market for corporate control in the investing country.

Foreign takeovers can also cause a popular backlash against the sale of state-owned assets to foreigners in the case of privatisation or more generally against foreign control of the local economy. Particularly in the case of hostile takeovers, the foreign investor is sometimes criticised for being insensitive to implicit social contracts and ignorant of the local way of doing things. Fears also arise of possible asset-stripping by the foreign investor. The risks from foreign takeovers, as perceived by host countries, are outlined below.

3.1. Loss of technological capabilities

One of the motives for investing abroad for a firm is to source foreign technology, whereby the foreign investor acquires a local firm specifically for its technological capabilities. Because such know-how is often embodied in the firm itself and not just in patents and trademarks, this kind of trade in technology must be accompanied by control through a change of ownership of the local firm. Technology sourcing can involve either takeovers or greenfield investment. AlAzzawi (2004) finds that for firms from developed countries, "investing in one of the three leading world innovators (the US, Japan or Germany) seems to be the single most important source of knowledge flows for these investing countries".[1]

Examples of this strategy abound, including by government-controlled firms in developing countries which acquire firms in OECD countries. The Malaysian state holding company, Khazanah, which owns the local automobile producer, Proton, acquired the UK company, Lotus, in the 1990s in order to assimilate its technological prowess in certain areas within that sector. While the Malaysian government thus gained access to proprietary technology for its national car company, it also paid a handsome return to UK shareholders and hence helped to raise the returns to innovation in the United Kingdom.

The acquisition of domestic technological capabilities by a foreign firm for use in the home market does not diminish their potential use in the host country. There are nevertheless risks. Once such know-how is acquired and absorbed, the investor may no longer find it expedient to continue the operations of the acquired firm. And, previous competitive advantages of the

acquired firm, or the host economy more generally, may have hinged on the said technologies.

Even in cases where the motive for the investment is not technology sourcing, the possibility that R&D activities in the acquired firm duplicate those performed elsewhere in the multinational enterprise might lead to rationalisation and possibly closure of facilities in the host country. It is often assumed that there is a headquarters effect whereby an MNE prefers to site research and development close to its headquarters. This possibility is often raised in policy circles and might pose a particular problem for smaller countries with only a shallow technological base. It is also possible, given the growing internationalisation and offshoring or R&D, that the parent firm decides to expand host country R&D at the expense of home country facilities. Empirical evidence is discussed below.

3.2. Layoffs and closures

One of the aims of any merger is to benefit from greater economies of scale and scope. For this reason, M&As are an instrument of economic restructuring, originally within countries and now increasingly at a regional or even global level. Host country governments fear that in the event of closures, as discussed concerning R&D, the investor will favour its home production at the expense of the acquired firm. Mergers among firms within an industry are a common means of eliminating excess capacity and are likely to provide a more efficient, market-led outcome than if each firm closed capacity in equal proportion in its home market. It is of course possible that relative political and financial costs of layoffs differ across countries for a given multinational firm, especially if it is partly state-owned. For instance, Unions at a car plant in the United Kingdom which is to be transferred to Slovakia recently complained that they were singled out because of the mother company's reluctance to lay off workers in its home country.

3.3. Fire-sale FDI

Host countries sometimes fear that foreign investors are able to acquire local firms at a bargain, either because of undervalued exchange rates in the host country, underdeveloped local financial markets or because a financial crisis, such as that in Asia in 1997, wipes out the liquidity of otherwise profitable firms. In many cases, the sale of assets to a foreign investor might be the only option short of declaring bankruptcy. These fears can also arise in OECD countries. Fukao *et al.* (2004, p. 1) mention the fears highlighted in the Japanese press that foreign "vulture" funds were seeking to reap quick profits by taking advantage of troubled local firms in Japan. Similarly in the United States, Rohatyn (1989) and others argued in the 1980s that an undervalued

dollar was allowing foreign firms to acquire US assets at an excessively low price.

3.4. Lack of reciprocity

A corollary of the firesale argument concerns the potential for unfair competition based on a lack of reciprocal access to firms in the investing country. Firms which are themselves invulnerable to foreign takeover might enjoy a competitive advantage over local firms, an argument reminiscent of strategic trade theory. This lack of reciprocity might stem from corporate practices which inhibit foreign takeovers in that market, from the fact that the investor is a state-owned entity at home or, as in the case of Volkswagen in Germany, from a legal limit on foreign shareholding of a strategic national company. Thus, as with trade policy where market access is often conditional on reciprocal access abroad, policy makers might be tempted to restrict foreign takeovers in the case of a lack of reciprocity. Although strategic trade theory might provide a theoretical underpinning to the reciprocity argument based on unfair oligopolistic competition, none of the benefits from FDI listed earlier depend on the notion of reciprocal access. A host country can benefit from inward FDI even if it has no outward investment by local firms.

3.5. Anti-competitive behaviour

On the basis of the strategy that "if you can't beat them, buy them", an investor might use its relatively greater financial power to buy a local rival. The high cost of such a strategy will be offset by the enhanced market power of the new merged entity. This possibility clearly exists, as does that of cartels or other forms of collusion, neither of which involve a financial transaction. For these reasons, an active competition policy is essential. In a survey of studies on the competitive effects of domestic and cross-border mergers, UNCTAD (2000) find that the majority of M&As do not have a negative effect on concentration but at the same time there is little evidence that they lead to lower prices – unlike what one would expect if the takeover led to heightened competition. On the contrary, many studies find that prices often rise following a merger.

3.6. Reduced host country exports or increased imports

An analysis of sales patterns of MNEs suggests that most FDI is for the purposes of supplying the local or regional market. Exceptions exist and might be growing, but they are still rare. Foreign takeovers are generally perceived as a means of gaining access to the local market to a greater extent than is greenfield FDI, particularly in services such as banking or infrastructure. The benefit to the local economy from FDI in terms of exports and enhanced integration with the global economy is thus perceived to be less from

takeovers than it is from greenfield projects. At the same time, it is generally assumed that a greenfield project will have a higher import content than an acquired firm because of the long time lag before the greenfield investor can build up a network of suppliers.

A related concern is that the foreign investor will actually reduce exports of the local firm because those markets are already being served by affiliates elsewhere. The possibility certainly exists, as does the more pervasive risk that the exports of any local firm are displaced by more competitive suppliers elsewhere. Given the role of MNEs as international conduits for goods and services, it is equally possible that the acquired firm will see its exports rise as a result of the takeover. The issue is essentially an empirical one and will be discussed below. Whatever the net effect on exports and imports, the policy focus should be on the composition of trade rather than on the trade balance itself. But even more important than a static analysis of exports before and after acquisition is the question of how the acquisition affects the competitiveness of the local firm – or indeed of the host economy more broadly – in export markets in the long run.

3.7. "Strategic" industries

The risks described above were all considered separately, as if they were discrete elements whose impact could be isolated. While some of these risks can be quantified separately, as described in the empirical section below, many of them are interrelated. If a takeover leads to declining technological competence, this will ultimately affect exports and might also impinge on national security if the firm is in a defence-related sector or provides inputs to that sector. Furthermore, from the perspective of many host governments, these combined risks are more than the sum of their parts: there is perceived to be an intangible benefit to the economy from domestic ownership of certain "strategic" sectors.

The list of sectors which might be considered strategic varies across countries and over time but could potentially include any industry. Many countries include those industries producing goods and services which embody the latest technologies or where global demand is likely to grow quickly in the future. Others might be chosen for their contribution to employment or if they provide key inputs to many other industries. Many governments at both the national and local levels seek to protect or promote such firms for strategic reasons.[2]

The importance attached to strategic industries is not just an offshoot of defence and industrial policies. Domestically owned firms are deemed to be more easily influenced by the government than foreign-owned firms. Infrastructure firms might be persuaded not to raise their tariffs too quickly

following privatisation, for example, or domestic banks might follow government guidelines in lending to favoured sectors. Local owners might also be more easily persuaded to merge with other domestic firms to form national champions.

While deregulation and trade liberalisation pose long-term threats to the existence of such national champions, a foreign takeover can eliminate domestic ownership almost overnight. Where the articles of association of domestic companies or national legislation do not prevent such a possibility, host governments are left with few means to intervene. The methods applied by governments to protect "champions" have included dissuading remarks from the highest levels of government and public assistance in seeking for a corporate "white knight" or alternative merger partners for the targeted enterprise.

The following sections look at empirical studies which have attempted to assess the economic impact of foreign takeovers on productivity, exports, employment or some other variable related to the target firm or to the host economy more generally. This review of the empirical literature is supplemented by case studies which look at the impact of particular acquisitions on the target firms. Not all of the concerns raised in the previous section can be addressed simply by empirical analysis or case studies. The broader implications of foreign takeovers and of policies to foreign takeovers will be addressed in the final section.

4. Empirical evidence

Empirical studies of the impact of cross-border M&As on host countries fit between two strands of academic work. The first is the vast body of empirical literature which seeks to determine how mergers and acquisitions affect the performance of the combined firm. The second is the equally vast literature on how inward foreign direct investment affects the host economy. Studies of cross-border M&As are broader than the former which is often concerned with share price movements and market shares and narrower than the latter which looks for economy-wide affects. Most studies described below ask how changes in the ownership of a firm from domestic to foreign affects the performance of that firm according to several criteria, including productivity, employment and the demand for different skill levels.

4.1. *Empirical work on domestic M&As*

Empirical studies on mergers have been numerous, controversial and inconclusive. The results depend on the rationale for the merger which tends to vary across countries and industries as well as over time. The outcome also varies according to the benchmark (share prices, profitability, market shares,

product prices, productivity, wages or research and development), the counterfactual (the purchaser and the acquired firm before and after the acquisition or relative to competitors) and the time frame (short or long run). Two effects which tend to hold across studies are that shareholders in the acquired firm benefit handsomely (share prices rise 20-35 per cent) and that prices in the sector and country tend to rise.[3]

Given that the professed rationale for the merger is often to improve efficiency through synergies, it is surprising that such gains are often so elusive in empirical tests. Several possible explanations have been offered for this apparent paradox. One reason for the poor performance of domestic mergers might be because they have often been undertaken from a position of weakness faced with a declining market share. A classic example is that of the UK-owned automobile industry which over several decades merged itself out of existence. According to Davis *et al.* (1993), "[d]omestic merger activity has not provided much of a stimulus to successful domestic performance … Domestic mergers were primarily about creating economies of scale – which as it transpired were illusory – within single markets."[4]

A popular explanation for the inconsistent record of mergers is management hubris, whereby managers have a greater incentive to increase the size of the company than they do to improve performance. While this possibility fits with the current mood of distrust concerning chief executive officers (CEOs), it seems implausible that financial markets could be swayed so consistently by the mirage of efficiency gains, especially when the shares of the acquiring firm tend to show at best a modest improvement following the merger. Another possibility is that, even if the purchaser does not gain much from the merger, it at least removes the threat that a competitor would acquire the target firm. "[I]t is rational for companies to make acquisitions which have a negative impact on profit development in situations when acquisitions are intended to forestall alternative acquisitions which would damage the company's profits even more."[5]

Since *some* studies have found that both firms can benefit from a merger, it is sufficient that investors believe that the merger under consideration will form part of this group for it to go ahead. There is also a tendency to believe that each new merger wave is different from the ones which preceded it. As diversification has moved from product markets to geographical ones, with conglomerates giving way to multinational enterprises (MNEs), it has been argued that cross-border M&As will show better results than traditional domestic mergers because the underlying logic is more sound. To give an example, the study by Davis *et al.* (1993) cited earlier argues that cross-border mergers in Europe following 1992 were more likely to prove successful than national mergers because they "actually create single markets by enhancing the penetration of successful products into previously closed domains".[6]

Table 4.1. **Empirical studies finding the superior performance of foreign-owned firms**

Authors	Year	Country
Doms and Jensen	1998	US
Feliciano and Lipsey	1999	US
Griffith and Simpson	2002	UK
Girma, Greenaway, Wakelin	2001	UK
Girma and Görg	2003	UK
Conyon, Girma, Thompson, Wright	2002	UK
Fukao, Ito, Kwon	2004	Japan
Fukao and Murakami	2003	Japan
Kimura and Kiyota	2003	Japan
Aitken, Harrison, Lipsey	1996	Mexico
Heyman, Sjöholm, Tingvall	2004	Sweden
Almeida	2004	Portugal
Kertesi and Kollo	2001	Hungary
Csengodi, Jungnickel, Urban	2005	Hungary

The jury is still out on the impact of mergers, but it nevertheless possible based on a literature review to present a case for the economic benefits of mergers. In such a review, Norbäck and Persson (2005) reach the following conclusions: 1) mergers play an important role in structural change; 2) they transfer technological and administrative competence between companies; 3) they are important for the introduction of new technologies in the economy; 4) they lead to an efficient consolidation of industries with excess capacity; and 5) they contribute to the movement of capacity from declining sectors and firms to those with strong growth prospects.

The empirical studies of foreign takeovers reviewed below tend to take a different approach from more general studies of mergers. Their interest is not in the performance of the new merged entity but of the local firm which is acquired by the foreign investor, as this is the key welfare implication from the viewpoint of national policy makers. Furthermore, the point of reference is not the share price but the impact on employment, exports, local R&D and even the very survival of the acquired firm.

4.2. Empirical studies of foreign takeovers of local companies

There is a clear consensus, based on empirical evidence, that foreign-owned firms outperform domestic firms in host economies: they often have higher labour productivity, investment, skill and R&D intensity; they pay higher wages; and they are more profitable. Table 4.1 lists studies of various OECD countries which have tended to confirm at least one of these findings.

At an aggregate level, some of these discrepancies – such as higher wage levels – can be explained by differences in relative size, capital-intensity, age, geographical location and industry of the foreign-owned firm. Globerman *et al.* (1994), for example, conclude that any discrepancy between Canadian firms and foreign-owned establishments in Canada can be explained by these factors. Graham and Krugman (1995) suggest much the same for foreign firms in the United States. But the studies in the table find a persistent discrepancy between the two sets of firms even after controlling for these differences.

Foreign investors might pay higher wages than domestic firms for several reasons: to prevent labour turnover either to reduce potential technological spillovers to other firms in the market or because newcomers might have higher search costs when hiring; because foreign-owned firms are more profitable and hence have a higher 'ability to pay' (assuming imperfect labour markets); rent sharing among oligopolistic firms; higher training levels in foreign-owned firms; higher demand volatility or the greater likelihood of closure of foreign-owned establishments.

One reason why foreign-owned firms might outperform domestic ones is the so-called selection or 'cherry-picking' effect whereby foreign investors acquire local firms which already perform well in the host economy and hence which best match the profile of the investor itself. Many studies confirm that this is indeed the case, but it still only explains part of the discrepancy. The studies presented below all take this discrepancy as the point of departure and look for possible ways to account for the persistent premia offered by foreign-owned firms in terms of wages. Their method is usually to try to isolate the exact impact of a foreign takeover by following the target firm before, during and after the takeover. Such firm-level databases are often lacking for many countries, but the studies presented below provide a good representative sample of OECD country experience.

Calderon *et al.* (2004) explore the causal relationship between greenfield FDI[7] and cross-border M&As and the influence of each on domestic investment and growth for both developed and developing countries. Higher levels of cross-border M&A in an economy leads subsequently to higher levels of greenfield investment, while the reverse is true only for developing countries. Rather than representing a one-off change of ownership, foreign takeovers actually encourage further greenfield FDI in the host country by an amount which is at least as large as the initial increase in M&As and substantially more in developing countries. In terms of the other variables, domestic investment seems to follow FDI, while growth tends to precede it for both greenfield projects and cross-border M&As.

Why might a foreign takeover of a domestic firm lead to higher flows of FDI to the host country in subsequent years? Investment by one foreign MNE

might encourage others, such as suppliers or competitors, to follow suit by establishing their own facilities or might indirectly serve to promote the host country as an investment location. In addition, foreign acquisitions which raise infrastructure quality or indirectly improve the local business climate might also encourage potential investors from all other countries.

Foreign takeovers also often lead to subsequent outlays by the same foreign investor to inject further cash into the local firm beyond the purchase price. In infrastructure, for example, the sale of a state-owned entity to a private investor often leads to substantial subsequent investments to improve quality and expand coverage. In Korea, Yun (2000) finds that foreign takeovers lead to greater subsequent investment outlays than greenfield investment, though only a short period of time was considered. A study of Poland cited in UNCTAD (2000) finds that during privatisation in the early 1990s, foreign-owned privatised entities invested substantially more than firms sold to domestic investors.[8]

Do foreign-owned firms outperform domestic ones because of transfers of know-how from the parent, or were these firms already star performers before they were acquired? In order to distinguish between the selection effect and the actual impact of foreign ownership *per se*, studies have looked at local firms before and after their acquisition by a foreign investor. Almeida (2004) examines foreign acquisitions of firms in ***Portugal*** and finds that foreign firms pay significantly higher wages across all skill levels, even after controlling for the sector, region, size and age of the firm. This wage premium increases with skill levels (measured by years of education). Foreign investors choose local firms that already most closely resemble other foreign-owned firms in the host country in terms of workforce education and wages. At the same time, the acquisition raises slightly both productivity and wages in the target firm – particularly at higher skill levels. It is the acquisition rather than foreign ownership *per se* which causes these improvements, suggesting that domestic mergers could produce the same outcome.[9]

Heyman *et al.* (2004, 2005) look specifically at the effect of foreign acquisitions on individual workers in ***Sweden***. As in other countries, foreign investors in Sweden pay higher wages (20 per cent higher on average) and have a relatively well-educated workforce. Heyman *et al.* (2004) find that much of this difference is a composition effect since foreign-owned firms tend to have a more skilled workforce: foreign firms do not seem to pay higher wages than domestic firms for identical types of workers. Even if wages are higher overall in acquired firms to begin with across all skill levels, they tend to rise more slowly in foreign-owned firms than in local ones over time. Furthermore, foreign-owned firms in Sweden are similar to Swedish firms which are themselves MNEs, suggesting that multinationality matters more than foreign ownership.

Heyman *et al.* (2005) look at employee-level changes across skill levels to ascertain whether foreign takeovers of Swedish firms contribute to increasing wage dispersion among skill levels in Sweden. Foreign takeovers tend to raise wages for high-skilled workers, at least for managers and CEOs, and decrease those for the low skilled. Presumably, foreign investors wish to retain top management following a takeover in order to ensure continuity. The authors also find that wage changes are caused by the acquisition itself rather than foreign ownership, since firms which revert from foreign to local ownership experience the same effect on wage dispersion.

Csengodi *et al.* (2005) look at the effect of foreign takeovers on wages in ***Hungary***. Foreign-owned firms pay a wage premium over local firms of 15 per cent even after controlling for worker and firm characteristics, but even before the takeover, the local firm was already paying wages 11 per cent higher than the average (controlling for employee, location, industry and firm characteristics). Wages in acquired firms drop immediately following the foreign takeover and then rise slowly above initial levels, with the final result that the long-run wage premium of acquired firms is substantially larger than prior to the takeover. Following the takeover, total factor productivity also rises, as does employment (by 11 per cent).

Higher wages help to explain why labour turnover drops after the acquisition. While this suggests that the takeover is an advantage for employees, the lack of turnover limits spillovers to the rest of the economy through worker mobility and, as a result, there is little evidence of productivity gains for local firms in the rest of the economy following the takeover.

Foreign takeovers have a more powerful effect on wages than foreign ownership itself (which includes greenfield investments). Wage effects also differ according to worker skills. Those workers with vocational training or less do not experience any significant wage premium change following a takeover, unlike other workers. In the authors' model, this outcome arises because the foreign investor has less need to prevent turnover among lower skilled workers since they are much less likely to contribute to spillovers to other firms in the economy.

Among OECD countries, Japan has one of the lowest penetration ratios of foreign involvement in the domestic economy, and it is commonly argued as a justification that there is little technological gap between foreign and Japanese firms which could translate into a greater local presence of foreign firms. It is therefore interesting to consider whether the results obtained for smaller and less developed OECD member countries also pertain to Japan. Fukao *et al.* (2004) consider foreign acquisitions of Japanese firms. As in other countries, foreign-owned firms in ***Japan*** are more productive and pay higher wages than local firms. They also enjoy five per cent higher total factor

Box 4.1. **Case study: Renault (France) – Nissan (Japan)**

Cross-border mergers are common in the automobile industry, with the target firm often in poor financial condition or judged to be too small to compete on its own in the global market (Daimler-Chrysler, Ford-Volvo, Ford-Isuzu, GM-Daewoo, BMW-Rover, Renault-American Motors). Many have failed to live up to early expectations. An exception is the alliance in 1999 between Renault (France) and Nissan (Japan). Rather than a straight merger, Renault paid USD 5.1 billion for a 44 per cent stake in Nissan while Nissan took a 15% stake in Renault. Nissan was the eighth and Renault the tenth largest producers at the time.

In spite of the alliance structure, Renault was clearly in the driving seat as Nissan had underperformed for much of the 1990s and had accumulated over USD 20 billion in debts. In this sense, the alliance was more of a rescue mission and hence had more in common with domestic Japanese mergers than with other foreign takeovers in Japan. But at the same time, it seems unlikely that a domestic merger with another Japanese producer – even if it had been permitted under competition laws – could have achieved the same result.

Prior to the alliance, Nissan had been suffering from poor management and the interlocking ties with suppliers known as the keiretsu system. Many of these suppliers were run by former Nissan employees, making it difficult to cut costs by introducing competition into the supply chain. Although it was widely recognised that changes were necessary, it seems unlikely that Japanese management could have dismantled the keiretsu system which has characterised much of Japanese industry in the post-war era or enacted the other draconian changes which were to come.

Carlos Ghosn of Renault already had a reputation as a cost-cutter. When he arrived to head Nissan, he reduced the number of cross-shareholdings from 1 400 to four, closed five factories and eliminated 21 000 out of 150 000 jobs through attrition and early retirement. Some of the existing suppliers faced bankruptcy. These measures would previously have been regarded as taboo in Japan, and yet, somewhat surprisingly, Mr Ghosn has achieved almost cult status.

Nissan began to earn a profit again in 2001. It had always been respected for its advanced engineering and technology, its productivity and total quality management. But it was badly run and the structure which has served so well for decades no longer worked. What Renault provided was management. This example shows how takeovers can play a vital role in corporate restructuring. Existing management sometimes finds itself unable to implement the reforms which are widely deemed – including by management itself – to be necessary. In some cases, restructuring occurs between two domestic firms, but in this case it is possible to argue that the foreign element was crucial because so many of the changes required were still relatively alien to Japanese business culture.

Box 4.1. **Case study: Renault (France) – Nissan (Japan)** *(cont.)*

Ironically, it had been Japanese investment in Europe and North America in the 1980s and 1990s which had done so much to spread the Japanese production culture of just-in-time and lean production to competitors in those markets. The growing overcapacity in the sector in OECD countries has now allowed traditional western strengths in cost-control to reassert themselves and to be transferred through FDI in the other direction.

Postscript: In the first six months of 2006, group operating profit at Nissan fell 15 per cent, representing the first decline in eight years. Domestic and overseas output both fell, along with domestic sales and exports, at a time when Toyota and Honda were expanding rapidly in the US market. "Analysts today are questioning whether Mr Ghosn put too much of a focus on short-term 'commitments', or sales targets, at the cost of longer-term profitability and growth."

productivity (TFP), higher returns on capital and R&D density and are both more capital-intensive and more profitable than Japanese firms. In a dynamic context, foreign takeovers are found to improve both TFP and profitability in the target firm, even if target firms are already more productive than the average Japanese firm. Employment levels do not increase following the takeover. In a more detailed follow-up study, Fukao *et al.* (2006) distinguish between manufacturing and services and find that the improvement in TFP is greatest in the latter – perhaps not surprisingly given that the sector is generally considered to be less dynamic than the manufacturing sector.

These two studies on Japan also look at mergers among local companies. Unlike with foreign takeovers where the targets are often already among the best-performing companies, domestic mergers tend to involve firms that are underperforming and hence are more in the nature 'rescue missions'. The discussion of the Renault-Nissan alliance in the next section suggests that foreign takeovers can also sometimes be rescue missions.

Girma and Görg (2003) ask what happens to domestic plants' survival and employment prospects after foreign acquisitions in the ***United Kingdom*** in the food and electronics sectors. In terms of employment growth, there is little change for skilled labour in either sector but a significant decline in the growth of unskilled labour in the electronics sector but not in the food industry. The authors suggest that this result is "mainly due to the increase in labour productivity outstripping output growth rather than from job destruction linked to declines in production".[10] Concerning plant survival, the regressions reveal that a foreign takeover reduces the lifetime of the acquired

plant in both sectors, although the results are sensitive to the specification of the model. One possible reason is that the multinational investor is more interested in the distribution network or technology and know-how or other resources of the target company such as brand names than in its productive capacity in that market. Another possibility is that, even if the acquired firm performs relatively well compared to other local firms, it may still be an underperformer relative to foreign establishments. Perhaps the investor

Box 4.2. **Case study: Vodafone (UK) – Mannesmann (Germany)**

At the time of the takeover, Mannesmann was an illustrious German conglomerate and the second largest company on the DAX share index. The company was founded in 1890 but had only entered the telecommunications market in 1990 although by 1999 the sector accounted for largest share of the company's turnover. Vodafone was not even two decades old, having started mobile services in 1986. Unlike all other major telecoms companies, Vodafone offered only mobile services and, through such focus, had become the world's largest firm in the sector. While Mannesmann had opted mainly for a European focus – Europe being the largest mobile communications market – Vodafone was present in 24 countries.

When Vodafone launched its bid for Mannesmann, it represented one of the first hostile takeovers in Germany and the world's largest proposed merger up to that time. The bid was ostensibly triggered by the entry of Mannesmann into the UK market. According to press reports quoting Vodafone's chairman, Mannesmann's move "contravened a gentleman's agreement not to compete on each other's territory". The offer was initially rejected by Mannesmann's chairman. According to Höpner and Jackson (2001), "[he] never questioned that the shareholders alone should decide the fate of the company". Fully 60 per cent of shareholders were not German, and two thirds of these were either British or American. Mannesmann did not have the same degree of cross-shareholdings and ties to banks as many other major German companies. Employee representatives on the supervisory board were satisfied by the condition that there would be no dismissals. The chairman eventually acquiesced, and Mannesmann's shareholders gained 100 million euros from a rise in the share price of 120 per cent over four months.

The struggle over Mannesmann was essentially one of divergent commercial visions. Vodafone argued that what was needed was a strategy focused only on mobile subscribers combined with a global presence. In direct contrast, Mannesmann's strategy centred on the European market and was based on being "a single supplier of fixed lines, wireless, and Internet activities … based on a belief that integrated products best satisfied customer demand and increased average revenue per user".

Box 4.2. **Case study: Vodafone (UK) – Mannesmann (Germany)** *(cont.)*

While both countries had good share price performance before the takeover, owing to the rapid growth of the industry, financial markets seemed to be betting on Vodafone's approach. According to the Economist, "[Vodafone's] strategy was bold, brilliant, and wildly successful" for over 20 years. It is now being called into question by the markets, and Vodafone's share price has underperformed the FTSE 100 since the beginning of 2005. Both its global strategy and its focus only on mobile services are now seen as weaknesses: scale economies in equipment are limited by different specifications in major markets; the price of mobile services is expected to drop; and voice calls, broadband, television and wireless services are all converging.

In an industry which is evolving so rapidly as a result of deregulation and technological change, the star performer in one period could be the laggard a few years later. Vodafone is still betting that convergence will not greatly alter demand for its services. Financial markets are starting to think otherwise. These markets gave Vodafone the financial power to undertake its global expansion, including the takeover of Mannesmann which was paid for entirely with shares.

As for Mannesmann, the telecommunications division was renamed Vodafone AG and the other parts of the firm were quickly sold off to Bosch and Siemens. According to Hüpner and Jackson (2001), employee morale in the year after the merger was low and employees were leaving to join competitors, though the Financial Times reported that "[e]ven the sceptics admit that employees of Mannesmann's mobile telephony operation … generally feel they have been treated fairly".

decides that the market can be supplied more cheaply from affiliates in other countries.

DTI (2004), among other things drawing on evidence by Hubert and Pain (2000), found evidence that the benefits of foreign takeovers may go beyond not only the targeted enterprises but the sector concerned. This study suggests both intra- and inter-industry spillovers from foreign-invested enterprises are important. Foreign investors may design strategies to prevent spillovers of knowledge to their closest competitors, but they have no incentive to impede the broader societal benefits of their presence.

4.3. Foreign takeovers and local exports

One reason why host governments court foreign greenfield investors so assiduously is in the hope that such projects will increase local exports. In

contrast, cross-border M&As are often expected to have the opposite effect, such as when the parent decides that export markets can best be served by an affiliate elsewhere. UNCTAD (2000) reviews studies of the Central and Eastern European experience with foreign investment and exports. The results are mixed: in Hungary greenfield investors appeared to export more than acquired firms, while in the Czech Republic there was no significant difference between the two, although following the acquisition of Skoda in the Czech Republic by Volkswagen, its exports as a share of sales increased from 34 per cent in 1990 to 80 per cent in 1999.

A recent in-depth study of multinational enterprises in the United Kingdom may shed further light on the export strategies of foreign-owned enterprises. Girma *et al.* (2005) found that, first, foreign investors are significantly more likely to acquire UK companies with an established prior export experience. Secondly, the authors used firm level information to investigate the impact of foreign acquisitions upon the export intensity of manufacturing companies. They concluded that not only are foreign-owned companies more likely to export than domestically owned enterprises, when they do export they are more export-intensive than domestic firms.

Exports by foreign-owned firms are part of the broader issue of the trade impact of inward FDI. While the overall effect might be difficult to quantify, it is at least plausible that the fact that foreign-owned firms are routinely found to outperform domestic firms implies a greater ability to compete in export markets.

4.4. The effect of foreign takeovers on local R&D

Empirical work on the question of the effect of foreign takeovers on existing R&D capabilities provides no definitive answers. As reported in UNCTAD (2000, p. 177), "R&D in several acquired enterprises in Latin America has been wound up or downscaled as production was reoriented towards less technology-intensive activities". But in other cases cited, R&D was expanded in the acquired firm. For example, the ailing construction equipment division of Korea's Samsung was given a world product mandate after its sale to Volvo in 1998. The same occurred with the GE-Tungsram merger which ultimately expanded the Hungarian firm's R&D capabilities (see case study). Table 4.2 lists the results of several studies of developed and developing countries.

Many of the studies reviewed in Table 4.2 find that FDI lead to a decrease in R&D in the acquired firm. This by itself is not proof that the foreign investment weakened domestic R&D capabilities overall. In some cases, particularly within state-owned enterprises, the quality and efficiency of the research undertaken might not justify the amount of money spent on it. By closing down facilities in this case, the foreign takeover frees up resources which can then be devoted to

Table 4.2. **Studies of the impact of foreign investment on domestic R&D**

Authors	Countries or region studied	Findings
Cassiman *et al.* (2004)	EU	R&D activities were reduced following takeover or became more focused. Greater tendency for key employees to leave.
Velho (2004), Cimoli (2001)	Latin America	R&D was reduced or moved to the home or a third country.
Costa (2005), Queiroz *et al.* (2003)	Brazil	One acquired firm with a high level of technological competence saw its R&D increase while another saw it eliminated. Several large MNEs initially reduced their R&D but later built it up in order to boost their competitive position in the market
Kalotay & Hunya (2000)	Central & Eastern Europe	Growth in R&D expenditure in 23 major privatised companies fell and R&D spending as a share of sales dropped significantly.
Griffith *et al.* (2004)	United Kingdom	Foreign acquisition had little negative effect, with very few closures of R&D facilities.
Munari & Sobrero (2005)	Eight European countries	R&D spending as share of sales fell but R&D outputs in terms of patent numbers and quality grew.
Rugman & D'Cruz (2003)	Canada	In the chemicals industry, two large foreign investors closed their local R&D while one expanded it.

Source: Studies reviewed in UNCTAD (2005), p. 191.

more productive R&D elsewhere in the economy. The ultimate welfare effect will depend upon whether the existing R&D had positive spillover effects on the rest of the economy even if it was relatively inefficient.

5. Summary and policy lessons

It makes little economic sense for policy makers to differentiate between "good" FDI (e.g. greenfield investment) and "problematic" FDI (cross-border acquisitions of large enterprises). The empirical evidence suggests that the supposed advantages of greenfield investment over M&A – such as net job creation and the building of export capacities – do not figure among the main benefits of FDI. The main benefits of FDI, as enumerated in OECD (2002), include productivity gains and apply generally regardless of investors' mode of entry.

This does, however, not imply that every individual investment project is necessarily in the public interest. Among the concerns for host country authorities is the risk of a loss of technological capabilities or, where technology is not actually transferred out of the host economy, a loss of the competitive advantages that these capabilities used to confer. There is moreover a risk that in transferring a company from an independent entity to a subsidiary less R&D and fewer high-value jobs will be retained in the host location. Authorities need also guard themselves against anti-competitive effects of cross-border M&As, not just in terms of final output but regarding all aspect of the merged companies' value chains. At the political level, governments may be unwilling

to consider cross-border acquisitions by companies based in home jurisdiction that do not grant reciprocal access. The question is whether these potential drawbacks outweigh the benefits of cross-border M&A.

According to a large body of empirical evidence the effects on the enterprises that are themselves the target of cross-border M&A are largely beneficial. Although empirical studies are not unanimous in their conclusions – reflecting in part the difficulty in ascertaining what might have happened to the targeted enterprise in an alternative scenario – they suggest that the acquired firm mostly benefits in terms of productivity. Following a cross-border takeover, most target companies are found to enjoy a significant increase in operational efficiency and, as a corollary, in international competitiveness. Probably in consequence of the higher productivity cross-border takeovers also tend to have a positive impact on wages in the acquired companies, particularly for skilled workers.

Still, even if cross-border M&As are beneficial to the acquired enterprises, policy makers need to ask themselves whether the effects on the host economy as a whole are also positive. Few if any empirical studies of macroeconomic impacts focus directly on mergers and acquisitions, but as already noted M&A have impacts on the host economy that are in most cases equivalent to those of FDI more generally.

A comprehensive review of the evidence by the Investment Committee a few years ago (OECD, 2002) concluded that the macroeconomic benefits of inward FDI in most cases outweigh the costs. Based on empirical studies so far it is fair to conclude that inward direct investment generally help host countries raise total factor productivity and, in consequence, their GDP. The main channels through which this takes effect are, first, direct impacts through (1) enhanced access to international trade through the link-up with the investor's international networks; (2) corporate restructuring and enhanced governance in the targeted enterprises; and (3) the effect on host country competition. Most of these impacts are present in empirical evidence of the effects of M&As on individual companies. Secondly, important indirect effects ("externalities") are possible, chiefly in the form of (4) technology spillovers; and (5) the diffusion of human capital and knowledge. OECD (2002) not only found evidence of each of these channels but also concluded that inward direct investment generally leads to a higher economy-wide factor productivity and, in consequence, GDP.

However, the benefits do not materialise automatically. Host countries' policies are of vital importance. All aspects of the enabling environment for investment, as for instance outlined in the Policy Framework for Investment, play a role in this respect. Regarding some of the specific concerns alluded to above, sound national policies to maintain high educational and scientific

standards make relocation of R&D and other knowledge intensive activities out of a host location much less likely. And, the maintenance of strong competition policy frameworks ensures that the benefits of foreign market entry are brought to bear while guarding the host economy from undesirable degrees of market concentration.

A second-order economic policy consideration relates to impact mitigation. Notably, the efficiency gains from cross-border takeovers may be accompanied by a shakeout of labour in the acquired enterprises. From a macroeconomic viewpoint this offers a valuable opportunity to put parts of the labour force to more productive use. However, if structural rigidities in labour and product markets are such that the resources thus freed are likely to remain unemployed for a long time the macroeconomic and social consequences can be grave. The implication is that a policy of openness toward cross-border M&As needs to go hand-in-hand with a sustained effort at structural reform. In the interim there might also be grounds for government measures to ease the process of restructuring which follows mergers.

Notes

1. See Thomsen (2006) for a review of studies of technology sourcing.
2. The government of Yukon in Canada, for example, has created the Strategic Industries Development Fund to help identify and assist the development of industries and strategic projects in the Yukon with the potential for broad-based economic benefits.
3. For a good review of empirical studies, see Röller *et al*. (2000).
4. Davis *et al*. (1993), p. 346.
5. Norbäck and Persson (2005), p. 1.
6. Davis *et al*. (1993), p. 346.
7. Greenfield FDI in this study is defined as the residual when the value of cross-border M&As is subtracted from total FDI inflows. It should not necessarily be construed as investment in new plant and equipment.
8. For other examples, including developing countries, see UNCTAD (2000), pp. 170-171.
9. Data on local mergers and acquisitions were not available to the author at the time of her study.
10. Girma and Görg (2003), p. 8.

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