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MERGERS AND ACQUISITIONS

A NEW PERSPECTIVE ON MERGERS AND ACQUISITIONS: EVIDENCE EXPLAINED, POLICIES PRESCRIBED

JOHAN STENNEK*

Why do mergers occur in waves? Why do so many mergers occur despite substantial empirical evidence that they often fail and lead to lower profits? Why do share prices rise at the same time as profits decline? To answer these questions, the traditional framework for understanding mergers must be abandoned.

Mergers and acquisitions: a new approach

We cannot study mergers one by one – each viewed in isolation. For instance, merger waves may arise when suitable targets are relatively scarce, and firms must rush to be first. Thus, to understand the causes and consequences of mergers, the alternatives must be examined. That goes for competition authorities too.

To understand mergers, the alternatives must be examined

The traditional perspective on mergers is to only study the effects of single mergers, viewed in isolation. The traditional perspective is useful for understanding how mergers influence the prices customers have to pay, and how the profits in the industry are affected compared to the situation before the merger.

But many other questions, such as when to expect international takeovers and when to expect national firms to merge instead, why we need to control mergers, and why the competition authorities only care about the consumers, cannot be answered by traditional research.

To understand the firms' incentives to merge, the analysis must be broadened; individual mergers must be put into context. There are often alternatives to any specific deal: other mergers for instance, but also internal growth.

Not only are there many different alternatives, with different consequences for the merging parties, but all the different alternatives also affect the firms outside the merger. Externalities may be positive, as when some firms join to reduce competition in the market. Externalities may be negative, as when a new combination of assets makes the merging firms more competitive. Recall the European Commission's worries that a merger between GE and Honeywell would "bundle" engines and avionics in packages that other firms couldn't match.

Mergers are also interdependent. Some are mutually exclusive, giving rise to takeover battles, as when Cingular and Vodafone both bid for AT&T Wireless. Other mergers are complementary: If one buys another, the acquisition of a third company by a fourth may be more profitable, leading to a merger wave.

For many questions on mergers a new approach is needed

The firms and their owners fare better if they consider all possible alternatives, and if they take into account the possible moves and countermoves that their rivals may take. To delineate the firms' incentives in such a highly interactive environment, one cannot focus on any particular merger, or any particular firm's situation. The incentives of one firm are very much influenced by what it believes its rivals will do. The incentives of the rivals will, in turn, depend on what they believe their competitors will do. The situation must be examined as a whole.

The new framework

In recent times, a new framework has emerged to study these problems. The so-called endogenous merger theory takes the results from traditional theory as a stepping stone. Equipped with an idea of how different mergers would affect the profits of the firms in an industry, the fundamental questions are: which firms will merge, when will they make their

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bids, and how will the parties split the surpluses (if any) from these transactions?

Endogenous merger theory is novel also for another reason. It builds on the theory of coalition formation, a branch of game theory that has not yet found many applications in economics.

It is timely to survey the first achievements, even though the endogenous merger literature is still young. I will cover a few examples of the results and explain how they help us understand some of the empirical puzzles about mergers. The survey also covers some current public policy issues.

Merger puzzles

Why mergers reduce profits ...

There is ample empirical evidence that mergers and acquisitions often lead to lower profits for the merging firms and pre-emption might be part of the explanation why.

Profits may, for instance, suffer because of cultural clashes or unfavorable reactions of the employees. The mystery is why so many transactions are completed nevertheless.

Pre-emption many help explain why some mergers reduce profits

A well-known explanation is that managers strive to build corporate empires rather than to maximize shareholder value. Another theory asserts that the managers who overestimate their abilities the most, are also most likely to buy a target firm. But neither of these explanations squares well with the evidence that mergers on average increase the combined value of the merging firms in the stock market.

When Volvo attempted to acquire the competing truck manufacturer Scania a few years ago, Volvo's chairman declared that their primary motive was to pre-empt other firms with an interest in Scania. And, indeed, shortly after the merger was blocked by the European Commission, Volkswagen bought a large stake in Scania.

It is reasonable to take the chairman at his word and assume that Volvo's acquisition of Scania would have increased Volvo's profits compared to the relevant alternative, which in this case was an alliance of Volvo's competitors. We will never know if this particular merger would have increased or reduced the profits as compared to the outset. It is clear though, that when pre-emption is an issue, managers with a wish to maximize their firms' profits may rationally merge, despite a reduction in the profits compared to the status quo. Thus, pre-emption may be part of the explanation for why some mergers appear to reduce profits (Fridolfsson and Stennek (2005a).

… and raise share-prices

Mergers are often anticipated. Perhaps that is because they are often logical adaptations to changes in industry-wide market conditions that can be observed by most analysts with an interest in the industry. The anticipations reach the business press, and it is highly likely that they also affect share prices.

But often there are several different merger candidates and there is uncertainty about the identity of the acquirer, or the target, or both. The pre-merger share prices will then reflect the firms' profits for all possible events, in proportion to how likely they are perceived to be.

When being an insider reduces profits less than being an outsider, the firms may compete to buy each other. When a merger is announced, the stock market increases the value of the merging firms. They won the contest – the risk of becoming an outsider is gone.

Do mergers occur in waves because of competition?

Mergers occur in waves, in the economy as a whole, but also in individual industries. Merger waves are among the most well-documented facts about mergers, and they have recently been dubbed one of the ten unresolved puzzles of finance (Brealy and Myers 2003).

It is a safe bet that waves are partly caused by market-wide shocks calling many companies to take the same action, at the same time, for the same reason. This tendency may be reinforced by strategic concerns. For instance, when the signal arrives, all the acquirers must raid quickly, if suitable targets are scarce (Toxvaerd 2004).

The strategic element may also take the form of protecting managerial rents. Managers often prefer to remain independent rather than being acquired. One

of the defensive techniques to avoid being taken over is to acquire another firm to increase the size of the own firm. A technological shock that is expected to make mergers profitable some time in the future may then trigger a pre-emptive wave of defensive mergers (Gorton, Kahl and Rosen 2004).

Or are merger waves a form of cooperation?

A merger to reduce competition and increase prices triggers a competitive response from rivals: they increase production in response to higher prices. But as mergers reduce competition in the market, they also dampen the competitive response to future mergers and, as a result, each merger becomes more and more profitable (Nilssen and Sörgard 1998 and Fauli-Oller 2000).

Merger waves raise the issue of monopolization, which shifts the focus to the effects of mergers on consumers.

Limits to monopolization

Mergers may harm consumers

Competing firms always have the option to merge in order to reduce competition. Consumers will have to pay higher prices; less will be produced and less will be consumed. Controlling mergers is vital to preserve competitive markets.

But the market itself may inhibit anti-competitive mergers

George Stigler pointed out that the market itself restrains firms striving towards oligopoly and monopoly (Stigler 1950). As mentioned, reduced competition and increased prices will lure the rivals to increase their production and to take market shares from the merging firms. Anticipating hostile reactions, many mergers may be scrapped already at the planning stage.

With less hostile reactions, an anti-competitive merger may be profitable. But remaining outside an anti-competitive merger is usually even more profitable than participating. The outsiders benefit from the price increase, but need not reduce output themselves. This phenomenon is called hold-up.

Later research has examined the acquisition process in more detail. And, indeed, it may be impossible for firms to construct a deal even if a merger would be profitable (Kamien and Zang 1990, 1993).

Think of a market with three firms and assume that one of them attempts to buy both competitors at the same time. In most markets, a monopolist would earn more than the combined profits of three firms competing for customers – the merger is profitable. To convince the competitors to sell their firms, the would-be acquirer has to offer the targets a premium above their current level of profits. Assuming the acquisition plan to be successful, each target realizes that it would come to enjoy a duopoly position if rejecting the offer. Each target will accordingly ask to be compensated for the loss of a duopoly profit, and not only for the loss of a triopoly profit. The necessary premium may be too high to allow the acquirer a surplus.

The hostile reactions from rivals and the hold-up problem suggest that most of the horizontal mergers that do occur have other motives than to reduce competition. The reason may, for example, be to reduce production costs. Controlling mergers may thwart, or at least delay, such gains.

Hold-ups by rivals prevent mergers that would reduce competition

But hold-up is only temporary

Hold-up may only delay anti-competitive mergers rather than preventing them completely. If a firm delays an acquisition proposal, it may forego an opportunity to increase its profits. It hopes for the chance that a competitor acquires the target, increasing profits even more. But, eventually, if no other firm acts, one firm or another will bring the matter to an end. Hold-up looks much like a war of attrition, and the final result is excessive concentration (Fridolfsson and Stennek 2005b).

Since hold-up is only a temporary friction, merger control may play an important part in preserving competitive markets. To design a control system well, it must be adapted to the hold-up friction. One issue concerns remedies.

Two diverging views on remedies

In the past, anti-competitive mergers were prohibited. Today, problematic mergers are often cleared, but subject to the condition that the merging parties divest some assets to remove competitive concerns. Different authorities have different views and rules, however.

The Federal Trade Commission (FTC) insists that merging parties secure the agency's approval of the buyers before it clears the merger. Up-front buyers are required in 85 percent of all cases. According to FTC's 1999 Divestiture Report, the use of up-front buyers cures several problems, e.g. that the divestiture process is accelerated, and that the agency may assist the buyer in preparing for entry into the market, but also that is gives the agency a better opportunity to evaluate the impact of the divestiture on competition.

The Department of Justice only requires up-front buyers in less than 10 percent of all cases. Demanding up-front buyers may delay the consummation of the merger and it gives the buyer of the assets unfair negotiating leverage.

Side-effects of insisting on up-front buyers

Insisting on an up-front buyer may also have some less obvious side-effects, in case the likely buyer is an existing competitor. The divestiture opens up a channel for transferring wealth from one or more outsiders to the insiders. Thereby the insiders can appropriate a part of the positive externality from the merger on the outsider, improving the situation of the insiders relative to the outsiders. If the divestiture requirements can be predicted in advance, the hold-up frictions will be reduced (Fridolfsson and Stennek 2005b).

If the divestiture is sufficient to eliminate the anti-competitive effects of the merger, the increased speed in the merger process is an advantage. But, with limited information, it is difficult for the authorities to design a package of assets which is sufficient to ensure that the whole deal will be pro-competitive. Furthermore, if the package reduces the anti-competitive effects but does not reverse them completely, the divestiture requirement may do more harm than good.

There are two possible solutions. One is to require the assets to be sold to a new entrant, especially in case the buyer has to be specified up-front. Another solution is to make sure that the divestiture is sufficient to offset any anti-competitive effects. If uncertain, it may be better to divest too much rather than too little.

Any policy advice must depend, however, on what the political goals are.

Why do competition authorities neglect firms' profits?

The goal of both US and European merger control is typically perceived to be to protect the consumers. The firms' profits are not considered.

The reason is perhaps a concern for the distribution of wealth in society, combined with the belief that company owners are typically wealthier than consumers. It is far from clear, however, that merger control can influence distribution much. And, in any case, taxes and transfers are probably more effective means. Many economists have advocated a shift of focus to economic efficiency – merger control should attempt to maximize the sum of the firms' profits and the consumers' surplus.

Profits or consumer protection: Efficiency may be better served by consumer bias

But maybe the authorities are right after all. Maybe competition authorities should have a consumer bias even though the ultimate goal may be overall efficiency. The reason is that firms can be expected to propose the most profitable mergers among those that would be accepted by the authorities. By demanding mergers to also benefit consumers, the firms are forced to propose mergers that are profitable because of important synergetic gains, rather than those that are profitable because they reduce competition. That is better for overall efficiency (Fridolfsson 2006 and Lyons 2002).

In many countries, the most controversial policy issues concern international mergers.

International mergers

Domestic mergers may reduce international competition

Firms' decisions to invest in foreign countries are partly driven by a wish to reduce trade costs by locating production close to the market. The higher the trade barriers, the higher the incentives for firms to start multinational operations. This is referred to as tariff-jumping.

The dominant form of foreign direct investment is mergers and acquisitions. Recent research shows that high trade barriers may induce domestic rather than international mergers, in contrast to what the tariff-jumping argument would suggest (Horn and Persson 2001).

In an international oligopolistic market, the firms' merger incentives balance their interest to avoid trade costs and their interest to avoid direct competition. Think, for simplicity's sake, about two countries with two firms each. When trade costs are high, domestic mergers create two local monopolies. Since the firms cannot compete effectively in foreign markets, they also spend very little on trade costs. Each firm will then make a larger profit than if they had participated in international mergers. International mergers would create duopolistic competition unrestrained by any trade costs, in both countries.

Competition authorities may thus have to scrutinize domestic mergers more thoroughly than international mergers. Domestic mergers threaten to hinder international competition.

International mergers may lead to lower wages

Competition authorities are often criticized when they intervene against domestic mergers or allow international takeovers. Common arguments include that they neglect how employees are affected and that production may be relocated to larger countries.

For instance, international mergers may weaken the bargaining power of unionized labor and therefore lead to lower wages in all countries. Domestic mergers, on the other hand, allow the unions to extract some of the monopoly surplus from their firms (Lommerud, Sörgard and Straume 2003).

The authorities don't care about location, they only care about consumers …

Mergers are controlled in the interest of consumers. Consequently, the European Commission has intervened against a number of domestic mergers in small Member States. For instance, the Commission prohibited Volvo's acquisition of Scania, arguing that competition would be reduced in e.g. Sweden and Finland.

These interventions triggered a political debate about merger control and market definitions. Smaller countries accused the Commission of making it impossible for their companies to merge and obtain leading global positions.

EU officials responded that companies in smaller countries can obtain leading positions by merging with companies from other countries. The Volvo/Renault and Scania/Volkswagen partnerships, which followed the prohibition of the Volvo/Scania merger, clearly showed that there were alternative ways for these companies to grow.

The critics acknowledge that international mergers may indeed constitute an alternative. But international mergers may be less advantageous for smaller countries. They may have adverse effects on employment and the location of both headquarters and production.

EU officials concede that EU merger control does not take into account a possible move of firms abroad. Mergers are controlled in the interest of consumers.

… but consumers care about location

International firms have an incentive to locate their production in the larger countries with the larger markets. They may also serve the smaller markets from the same production facilities to avoid duplication of plant-specific fixed costs. The consumers in smaller markets will then have to pay higher prices to cover the trade costs incurred when exporting goods from the larger to the smaller countries (Horn and Stennek 2006).

International mergers may be less advantageous for smaller countries

In developing and transition economies, international mergers are also criticized for crowding out domestic investments.

Crowding out

Many countries agree to so-called national treatment clauses committing them to treat foreign-owned firms on equal grounds to domestic firms. Foreign firms are not even supposed to be discriminated against in takeover-battles with domestic firms when governments privatize state-owned operations.

UNCTAD and others have raised the concern that foreign direct investments may "crowd out" domestic investments and shift profits from domestic to foreign firms.

The crowding-out effects are partly mitigated when auctions are used. In that case, the foreign firm has to pay a price which is higher than any domestic firm's valuation of the assets. The domestic firm's valuation, in turn, corresponds exactly to the decline in profits resulting from the foreign acquisition (Norbäck and Persson 2005).

Future challenges

The message of endogenous merger theory

Endogenous merger theory has for example explained that acquisitions reducing profits may be rational. If the target is otherwise taken over by a competitor, profits may be reduced even more. The stock market understands the dilemma and rewards the merging firms.

The new perspective on mergers has also demonstrated that domestic firms may merge to pre-empt international mergers that would increase competition in the home market. We have learned that several mergers may occur at almost the same time if each merger reduces competition and therefore the competitive response to other mergers.

Although this survey only covers a sample of papers, the main message is clear: To understand the causes and consequences of mergers we need to ask what the alternatives are.

Should competition authorities take alternative mergers into account?

To understand the causes and effects of mergers, the alternatives must be considered

Current merger policy is based on false presumptions. When the authorities examine mergers they simply assume that the status quo will continue to prevail if they block a merger. But the true alternative is often that some other merger will occur instead.

Should the authorities take the true alternatives into account? The practical difficulties could be enormous.

Still, traces of the alternative view do exist. Some anticompetitive mergers are allowed when the true alternative is bankruptcy. Efficiency gains can save a problematic merger, but not if there are less harmful alternative ways to achieve the same gains. Also recall that the European Commission, in the debate following the Volvo/Scania case, defended its position by pointing at alternative mergers.

The fact is that we do not know how to design a system that takes alternative mergers into account. Not even in principle. We do not know what the appropriate material test should be or what information would be needed. These are the most important issues for future research.

Merger control has evolved over the years, often in response to more formal economic thinking. The policies have been adapted to take into account ever more complex economic relations. One example is the treatment of efficiency gains. Evaluating mergers against true alternatives could become a natural next step some time in the future.

Again, to understand the effect of a merger, we need to ask what the alternatives would be. That goes for authorities too.

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THE MARKET FOR MERGERS AND THE BOUNDARIES OF THE FIRM

KEVIN GARDINER*

After the spectacular boom and bust of the millennium, global merger and acquisition activity has been gathering momentum again. In 2005, the value of deals announced rose by some 30 percent, to a level more than two-and-a-half times its 2002 nadir. Relative to market capitalisation, the value of M&A was up by 15 percent and 67 percent over the same periods. Cross-border deals have risen by more than the average. By region, growth has been fastest – though from much lower levels – in Asia, which largely missed the millennium frenzy.

As yet, there seem to be few obvious signs of excess. As a proportion of market capitalisation, the value of deals announced in 2005 was just half that in 1999. The proportion of stock-financed deals is relatively low; bid premia are unremarkable; and the exotic, cross-industry, epoch-defining "blockbuster" deal is conspicuous by its absence.

In this article we take a quick look at the likely drivers of M&A activity, at its possible worth to shareholders, and at the room for further consolidation going forward. We conclude that corporate capacity and incentives to merge and acquire are still high, and that the "value destruction" case against M&A has been overstated.

The drivers of M&A

We can identify four drivers of M&A activity that are perhaps each necessary but not sufficient conditions for a merger wave to commence. They are (in no particular order):

- A persuasive rationale for merger
- Business confidence
- The availability of finance
- Favourable valuations

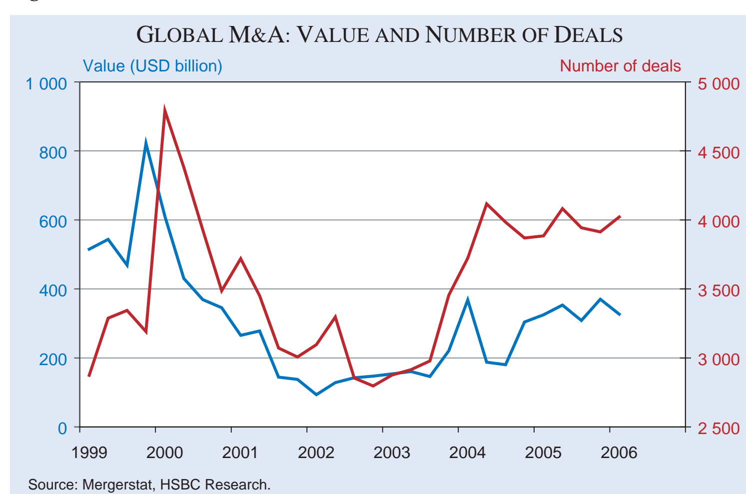
A persuasive rationale for merger

By buying or merging with a peer, a company is altering the boundaries of its day-to-day business. There are many reasons for doing this – some more compelling than others.

Efficiency gains are an obvious motive for M&A

The micro case: Most obviously, perhaps, there is what we might think of as the conventional, micro case for merger, namely the search for company-specific integration gains and the creation of improved market power.

Figure 1



Source: Mergerstat, HSBC Research.

The efficiency gains that can follow a successful acquisition or merger include the elimination of duplicated costs; the realisation of returns to scale; enhanced bargaining power with suppliers and customers (subject to antitrust law); and lowered effective tax rates. These things

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raise not just the acquirer's headline earnings but economic value added in the combined entity.

The macro case: There is a deeply-rooted belief, held by many managers and investors, that organic profit growth is more difficult to achieve in a low-inflation, "globalised" world. Growth by acquisition thus starts to look more attractive.

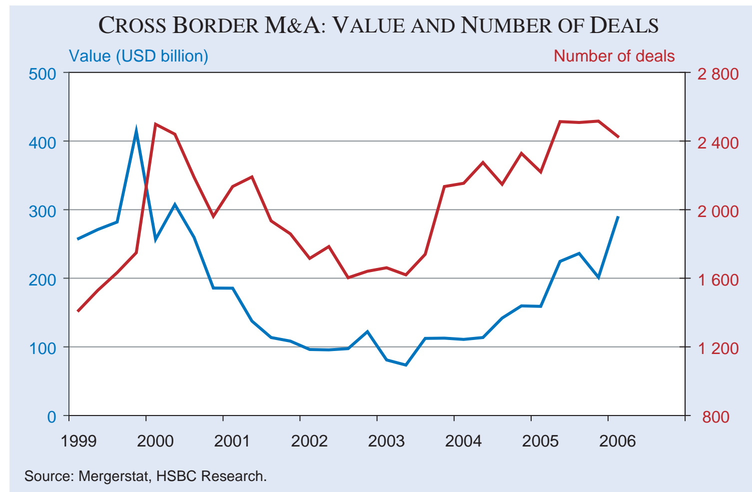
Some slow-growing sectors have indeed followed this strategy: tobacco, food retailing and utility industries, for example. But in aggregate, it is not clear whether this belief is justified. There is nothing intrinsic to either disinflation or globalization that requires trend growth to slow or profitability to fall.

A low inflation environment and globalisation are conducive to growth

Indeed, to the extent that the taming of inflation has fostered a smoother business cycle, it might be a positive development for growth – it is surely no coincidence that the slowest growth years in recent history were the inflationary 1970s.

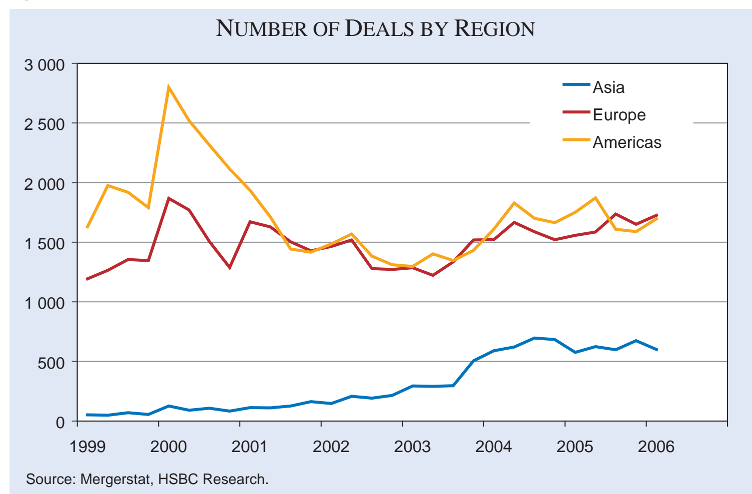
The history of the twentieth century as a whole suggests that a more integrated global economy grows more quickly, not more slowly – the emergence of new markets and of diversified supply chains is generally good for business. Nor is there much evidence of either a material slowdown in volume growth or of any trend decline in profitability in the last two decades (see charts). But the belief is ingrained, and will surely persist for a while yet.

Figure 2



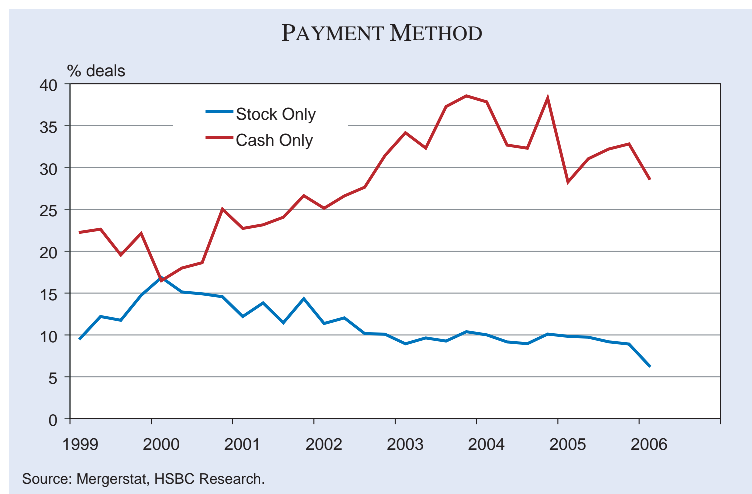
Source: Mergerstat, HSBC Research.

Figure 3



Source: Mergerstat, HSBC Research.

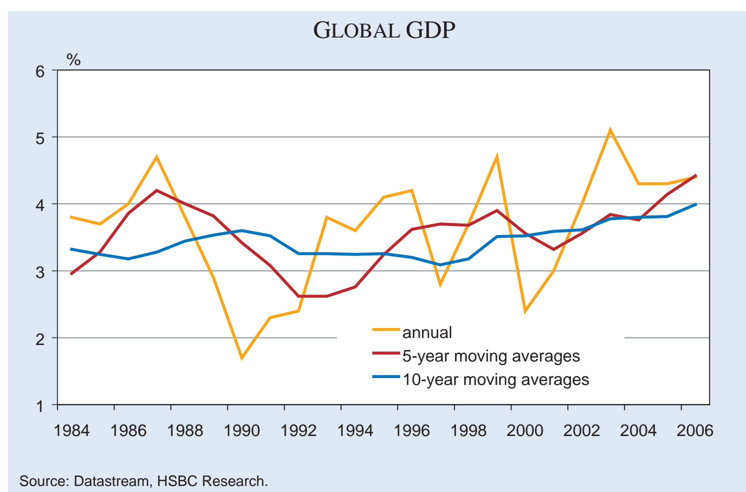
Figure 4



Source: Mergerstat, HSBC Research.

Special cases – regulatory and national strategic concerns: Changes in the regulatory environment can be a potent driver of merger activity. For example, the relaxation of controls on UK broadcasting ownership triggered a wave of (ongoing) consolidation among television and radio companies. Elsewhere, banks, insurers and asset gatherers across Europe are watching carefully the piecemeal progress towards the creation of a genuine single market in EU financial ser-

Figure 5



vices, and using M&A to help position themselves accordingly.

National governments – and central banks – can help shape merger and acquisition activity more directly, and not always in a way that is consistent with principles of positive economics. The EU has (in)famously spent more than a decade trying to formulate a common code for assessing mergers and takeovers in pursuit of its nominal commitment to a single market for capital, only to be frustrated by national governments seeking to protect local interests.

Topical illustrations here would include lists of "strategic" interests to be ring-fenced from foreign ownership, and the fostering of "national champions". Varying effects have been felt in the European aerospace, banking, pharmaceutical, utility and even food processing industries as domestic M&A has been preferred over cross-border deals. Further afield, it is all but impossible for foreign companies to buy control of Chinese companies, for example.

China also serves to illustrate a more positive effect that "strategic" national concerns can have on M&A activity. China's wish to secure long-term oil supplies, for example, led to CNOOC bidding (unsuccessfully) for a US oil company in 2005. More generally, the director of China's "National Commission for Brands Promotion" has argued for the creation of internationally-visible brands by China (Financial Times, 30th August 2005). IBM's personal computer division was bought by Lenovo, and Haier made an aborted bid for Maytag.

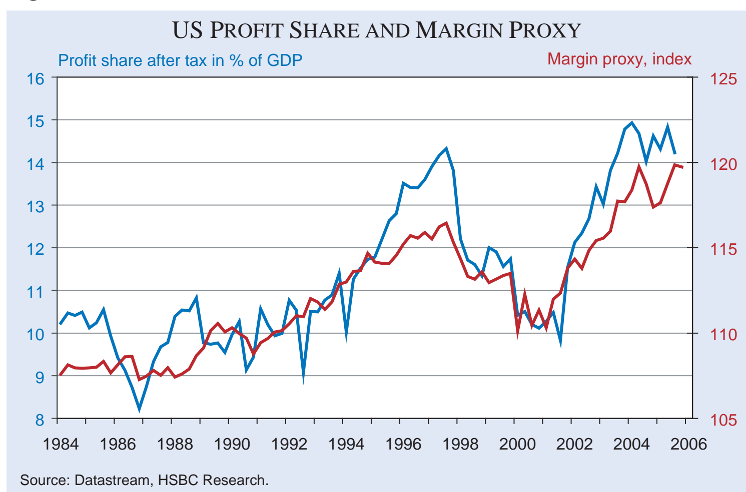
The boundaries of the modern firm are thus shifting along several axes. A more committed approach to profitability is encouraging increased horizontal and vertical integration as peers, suppliers and customers are absorbed. Further horizontal and vertical integration is also being driven, however mistakenly, by the belief that organic growth and profits are more difficult to come by. Foreign direct investment is a fertile source of integration globally.

Economic nationalism has given preference to domestic over cross-border M&A deals

A third dimension in which M&A is reshaping the firm is the extent to which activities are driven by the interaction of market forces with government – to extend the analogy, we might think of this dimension as market "depth". Some European mergers in particular are being negotiated on the margin of government. It is easy to imagine a combined entity opting for a deeper involvement with a national government in the hope of being sheltered from overseas takeover.

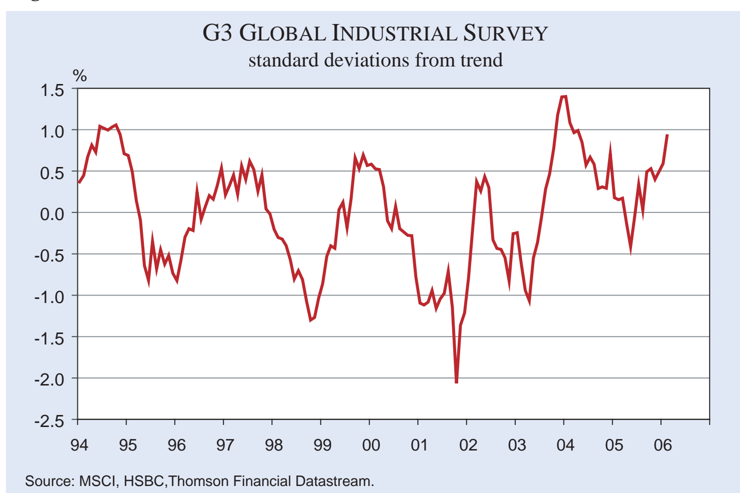
Lastly, and with some artistic licence perhaps, we might suggest that a growing awareness of the longevity of some corporate liabilities is helping reshape companies in a fourth dimension, that of time. In countries where defined-benefit pension schemes exist, significant pen-

Figure 6



sion deficits are beginning to shape deal-making. The practical relevance of such deficits to long-term corporate cashflow may be overstated by current accounting frameworks, but there is no doubt that corporate financiers are paying attention to them when advising would-be bidders.

Figure 7



Source: MSCI, HSBC,Thomson Financial Datastream.

Business confidence

Assuming a rationale for merger exists, one of the factors affecting timing will be the general state of business confidence. Few chief executives will attempt a significant acquisition if they believe that business is about to take a material turn for the worse.

The widely-followed surveys of industrial confidence, such as Ifo's own survey, or the US ISM index, trace out reasonably cyclical paths over time. However, not all sectors are adequately represented in such surveys, and the frequency and amplitude of the cycles revealed by them differs from the M&A cycle.

External financing of M&A has come to include private equity

Econometric analysis might yet reveal a statistically significant long-term correlation between such surveys and some measure of M&A activity, with other factors accounting for the divergence of the two cycles. Meanwhile, we note that survey levels are currently relatively buoyant (see chart). In February 2006, the Ifo survey's headline index hit its highest level since October 1991.

The availability of finance

Internal fund generation is currently strong. Global net income has almost tripled from its 2002 low, and cashflow has been further augmented by the relatively slow start to the capital spending cycle (a hangover from the excesses of 1999/2000, no doubt). Balance sheets have been rebuilt, and are arguably under-leveraged: transatlantic net debt/EBITDA ratios have fallen by more than a quarter since 2001, and we estimate that there is around $1.5 trillion of gross cash on the non-financial transatlantic balance sheet (yielding a negligible real return).

In practice, the usual source of financing for deals is external. At present, the banking system itself is more than adequately capitalised (with many banks returning excess capital to shareholders) and credit spreads are historically low. Rising interest rates at the Federal Reserve and the ECB may start to affect credit quality and the willingness of banks to lend at some stage, but for the time being, external funding is both plentiful and cheap. M&A is one of the factors cited as responsible for a recent acceleration in Euro area bank lending.

Equity issuance associated with M&A has as yet been relatively modest, but this is not surprising given corporate balance sheets and the level of real borrowing costs: the use of stock as an acquisition vehicle tends to come closer to the peak of an M&A cycle, and is usually a signal that valuations are becoming stretched (see below).

In a somewhat ironic development, one specialist participant in the M&A cycle is enjoying particularly easy access to funds at present. Defined benefit savings schemes have recently been encouraged, by accounting and regulatory changes, to reduce their holdings of equities, and to "immunise" their long-term liabilities by switching into a mixture of bonds and "alternative asset classes" – the latter including holdings in private equity groups. In some countries this has coincided with policies aimed at fostering the growth of the venture capital industry independently, with the net result that the private equity sector has experienced strong inflows.

With the general level of bond yields partially damped by those liability-driven purchases, some

private equity groups have been able to leverage their inflows cheaply to purchase quoted targets – in some cases, no doubt, the very same assets spurned by the traditional long-only, defined-benefit buyers. A side-effect of regulators' understandable wish to protect defined-benefit savers has thus been a marginal shift towards private equity sponsored M&A at the expense of traditional portfolio investment.

Favourable valuations

For firms considering stock-financed deals, average valuations are arguably less important than their distribution: companies enjoying relatively-high price/earnings multiples can acquire cheaper firms without diluting their earnings. After 4 years of converging valuations, PE ratios have in the last year started to diverge once more, albeit from subdued levels.

As noted, however, for the time being most deals are not being financed by the issuance of equity, and the valuations that matter most might instead be those that compare target values with the cost of borrowing or the opportunity cost of using cash. Such valuations currently are well below the average levels of the last twenty years in most regions, partly reflecting the unusually low levels of real interest rates. Even now, some three years into the stock market rally, there are many European companies whose net credit costs are below the dividend yield paid on their stock.

The case against M&A: not proven

"It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so." – Mark Twain

An investment maxim that arguably needs debunking – along with the idea that organic growth is dead, or that low inflation means low profitability – is the notion that M&A is necessarily destructive, and a contributor to low shareholder returns.

It is one thing to believe that companies should be in some sense "non-tradeable". This is the stuff of normative, not objective, analysis, and part of the political debate. But it is a different matter to suggest that, within the accepted context of a liberal market framework, mergers and acquisitions are generally bad for the owners of companies.

Even if it could be shown conclusively that M&A results in a net incremental loss of value to shareholders, it might be a loss that owners would tolerate when set alongside the perceived costs of the counter-factual situation in which merger and acquisition activity is absent. "Undisturbed" values of companies might be lower if there were no market for corporate control: liquidity would be reduced, and corporate governance looser.

The friction and volatility introduced by M&A might thus be an unavoidable component of the liberal economic model. The existence of a market for corporate control should be permitted, like any other trade in a free market framework, unless market failure becomes evident. The harshness of such a model is often overstated: there is room within it for government to provide an adequate safety net for workers who lose their jobs through restructuring, and indeed to tax any excessive profits that might arise from it.

Empirically, of course, it is extremely difficult to isolate the effects of M&A on shareholder value. There are many variables to control for, and unless a strong version of the efficient market hypothesis holds, the period of analysis can be open-ended. Focusing on the short-term impact on shareholder returns of a bid, for example, may exclude the longer-term synergies that might be extracted from the combined group.

The effects of M&A on shareholder value are not easily determined

Longer-term analyses are themselves confounded by the increased room for macroeconomic and sector-specific variables to affect company values independently of the deals under consideration. More detailed "clinical" studies that focus in depth on individual deals are perhaps most satisfying, but their results are difficult to generalise.

And this implicitly assumes that merger activity proceeds in a series of discrete, non-overlapping transactions that permit each deal to be analysed clearly. But many large deals are perhaps never really concluded, and effectively remain work in progress. To further complicate matters, much M&A activity is prosecuted by "serial acquirers", large firms for whom the ongoing, unceasing acquisition and exchange of corporate assets is part of normal business life. Such activity can last for decades, and the web of agglomerated franchises and their values can be impossible to disentangle.

These complications have not prevented economists from attempting to measure the incremental value of

deals. Perhaps most recently and comprehensively, Robert F Bruner (2002, 2004, 2005) has identified and summarised the results of more than 130 "scientific" research papers published in academic journals and based on M&A data mostly from the last 30 to 40 years.

Bruner's conclusions from his authoritative reading of the literature will surprise many. He notes huge dispersion among the various results, and in "Deals from Hell" carefully documents ten spectacular failures. He concludes, however, that generally, and in contrast to the received wisdom cited above:

"The fashionable view seems to be that M&A is a loser's game. Yet an objective study of more than 130 studies supports the conclusion that M&A ***does*** *pay. These studies suggest that the shareholders of the selling firms earn large returns from M&A, that the shareholders of the buyers and sellers* ***combined*** *earn significant positive returns and that the shareholders of buyers generally earn about the required rate of return on investment". – Bruner, 2005, p13*

Bruner notes that "serial acquirers" seem to be more successful than companies that are more sporadically active; that cash and debt-financed acquisitions seem to add most value; and that strategic fit, or the degree of 'relatedness', is important. Two of these at least are in my view general characteristics of the current upturn in M&A activity, and as noted above are reasons for thinking that the acquisition cycle is not yet excessively frothy (or "irrationally exuberant", if you prefer).

M&A activity may not only affect the players but the wider industry

If anything, the academic literature's focus is, despite its extent, in most cases a rather narrow one. Most studies focus on short-term event windows: deals are often appraised on the basis of stock price movements over periods that in most cases are counted in days, and in many instances end with the announcement of a bid.

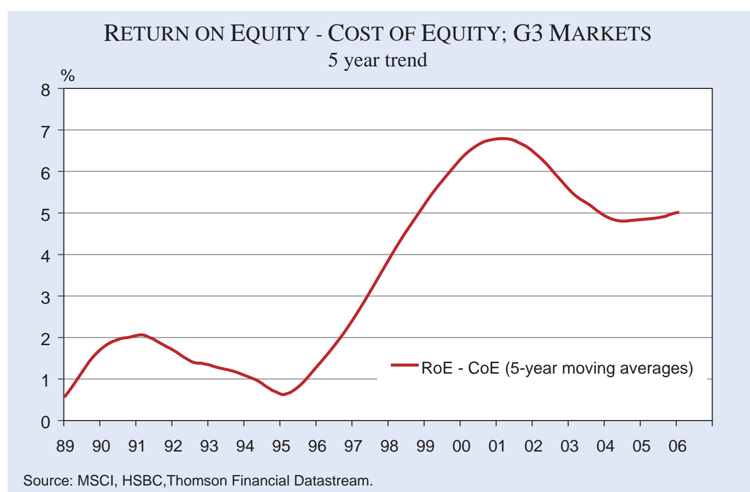
More tellingly, perhaps, the published studies (and the discussion above) generally exclude a potentially important consideration, namely, the possibility of third-party, or industry-wide effects. Merger activity may affect the strategic position not just of the immediate players but of the wider industry (perhaps even of the corporate sector at large).

A reduction in competition, of course, can be good for companies but bad for their customers and suppliers. Antitrust authorities rightly keep a close eye on M&A, and track closely the changes in market power that might follow a merger.

In practice, the commercial world is not characterised by clear-cut textbook extremes of perfect competition and full-blooded monopoly. The vast bulk of products are differentiated either by nature or by physical location – transport costs make the global market in such near-commodities as steel and cement much more fragmented than one might imagine, for example – and the reality is that most business is transacted under conditions of varying degrees of imperfect competition. (Just as much international trade is best viewed as part of a global supply chain, rather than the "head to head" competition that grabs headlines.)

When the US Department of Justice calculates its Herfindahl indices showing the changes in concentration that would follow a mooted merger, prospective increases in concentration are not outlawed automatically but are compared to specified threshold levels. National European regulators, and the EU Commission, operate a still more judgemental approach. There is as yet little sign that competition in aggregate has fallen too far for regulatory comfort (some possible exceptions might include consumer software, aerospace and national utilities). For companies and their owners this likely leaves room for further consolidation, enhanced bargaining power and higher profitability.

Figure 8



Source: MSCI, HSBC,Thomson Financial Datastream.

Have the successive waves of merger and acquisition activity in the 1980s and 1990s contributed to the improved trend over this period, on both sides of the Atlantic, in real corporate profitability? This trend has coincided with a steady reduction in the likely long-term cost of capital to companies, with the result that the gap between the return on equity and its cost has risen markedly, pointing to a possible increase in the ability of companies to deliver "super-normal" returns, for a while at least.

Factors other than consolidation have likely played a role in raising the return on capital, of course. Company managements are arguably more focused on delivering higher returns to shareholders than was the case a quarter-century back, particularly in Europe. Labour agreements are more decentralised; the business cycle is smoother, thanks partly to the decline in inflation and improved monetary credibility; and the opening-up of global markets has allowed companies to diversify their cost bases and address new customers.

Past M&A activity is only one factor among many in raising the return on capital

It is, moreover, difficult to show that concentration has increased over time, though again the appropriate comparison in this context might be with a counter-factual scenario in which M&A had been prohibited (that is, in which concentration was lower than it actually was).

The idea that concentration might trend higher over a prolonged period sits uneasily with the notional cut-and-thrust of capitalism. Many of the technology and telecom companies around which the bubble of the late 1990s inflated didn't exist five years earlier; many of them don't exist now. But some industries and franchises do last for many decades, and the two big merger waves of the last quarter century do not appear to have been fully unwound through subsequent disbursements (though there have of course been spectacular failures). One possibility, perhaps, is that a core of businesses – including resources, consumer products, utilities, banking (though the sector remains very fragmented) and insurance – have steadily become more concentrated over time, while capitalism's "creative destruction" has been located at the margins, as new technologies are tried and tested (in some cases indeed to the limit). The rising returns shown in the chart suggests that this topic merits further study.

The conjecture that M&A has contributed to improved profitability, low inflation notwithstanding, is thus a plausible one, and cannot immediately be refuted. And it is largely ignored by the mergers literature – possibly because to attempt to account for these indirect effects would make an already difficult task all but impossible.

Perhaps the most sensible conclusion, then, is to accept that M&A is part of the fabric of the market economy, and of likely value to shareholders for that reason – though we can no more easily quantify its worth than we can that of markets in general.

Room for further consolidation

In a report published in September, we took a look at the relative concentration of quoted sectors to gauge the room for future consolidation. We concluded that the most fragmented sectors in most regions include real estate, engineering, support services, building materials, and banks. The most concentrated include mining, tobacco, personal care and oil. Japanese engineers and retailers appear particularly fragmented; European and US tobacco are especially concentrated.

More detailed screens can be constructed at the stock level in an attempt to identify potential targets.

The usefulness of such exercises and stock screens will always be limited, however, by the unavoidably subjective elements in the M&A process. Note, for example, that hostile bids are still very rare in Japan, and not that common in Germany; and that events in the European electricity sector are demonstrating that an industry can be relatively concentrated and still provide corporate financiers with a lot of work. One recurrent theme in the literature is that successful deals are often those where the "fit" is good. High-water marks in previous M&A cycles were such exotic, and unfocused, proposals as: the proposed acquisition of a major UK bank by an advertising agency; and the actual acquisition of a US entertainment group by a European sewage company.

Conclusion

The revival in M&A seems to be propelled by several objective drivers, including low borrowing costs, high profitability and cashflow, and undemanding valuations. The evidence for the view that M&A

destroys value is much less robust than is generally assumed.

Of course, human nature is extrapolative, and while M&A activity and balance sheets look sound now, the exuberance may not look quite so rational in a couple of years' time. Will the cycle again end unhappily? Perhaps. The late Peter Cook might have been thinking of the financial markets when he remarked *"I have learned from my mistakes, and I am sure that I could repeat them exactly"*. But the question then would be whether the global economy would be better off without a market for corporate control. If one subscribes to a liberal model the answer is surely "no".

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Corporate restructuring and M&A activity

José Manuel Campa*

The market for corporate restructuring has shown a fast rebound over the last two years. We are observing corporations engaging in a new wave of M&A transactions at a global scale not seen since the peak in the late part of the previous decade. This increase in transactions reflects partly the recovery in world financial markets but is also due to the changes in technology and globalization in the world economy.

The European Union has been a major player in this new cycle of economic reorganization. In the last two months we have seen unsolicited purchase offers for Spain's largest utility, the world's largest airport operator based in the UK and the London Stock Exchange. Despite this recent spur in cross-border M&A in Europe, most of the transactions that are actually taking place occur among domestic competitors. Integration and corporate restructuring across European borders remain difficult and unlikely to succeed.

This paper provides a framework for understanding the underlying reasons for this spur in corporate restructuring activity. The first section reviews the major trends of technological change and globalization that are re-designing the boundaries of the firm. The next section reviews the trend in M&A activity in the world, with a particular emphasis on European evidence, and the underlying arguments for its development. The last section provides a case study of the European retail banking industry to highlight the barriers that deter further integration and restructuring within the European corporate sector.

Firm structure – size and ownership

Technological innovations in the last decade and economic policies pursued by many countries towards increased globalization have led firms to engage in major restructuring activities of their operations. Most of the discussion, especially among policy circles in Western Europe, has focused on the shifting of production facilities overseas by firms producing in the large European countries. However, the deeper issue at the core of this debate concerns the optimal size of the firm.

Any firm must choose the set of activities in the value-added chain that it would like to do within the firm and those activities it would like to buy from third parties. For the subset of activities the firm decides to produce, the location of its production facilities is also an issue (see Chart below). The conditions under which a firm should perform operations within the firm in its existing operations, relocate its production facilities abroad (offshoring) or subcontract them to an alternative producer (outsourcing) are at the core of the current debate on the implications of globalization.

These organizational alternatives have been exploited to a different degree by different firms implying a large degree of corporate restructuring. In the last decade, some additional drivers for this restructuring of the size of firms have become more predominant. They can be separated into two broad categories: technological progress and economic liberalization.

Optimal firm size has been a major issue

Technological advance has been at the core of production relocation for centuries. Traditional neoclassical economic theories based location and trade patterns on the idea of comparative advantage. Comparative advantage focuses on the fact that countries will specialize in the production of those goods for which their relative endowments of labor, natural inputs and relative productivities makes them more attractive. Under this view of the world, goods are tradable in world markets, while factors of production (with the exception of capital and some primary commodities) are not. Production and trade would lead to the eventual convergence of relative world prices to the differentials in productivity across these different locations.

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The structure of production inside and outside the firm

		Ownership of activities	
		Internal to the firm	External to the firm
Location of activities	Home	*Domestic in-house production* (firm produces its products domestically without any outside contracts)	*Domestic outsourcing* (firm uses inputs supplied by another domestically-based company)
	Overseas	*Offshoring* (firm uses inputs supplied by its foreign-based affiliates)	*International outsourcing* (firm uses inputs suplied by an unaffiliated foreign-based company)

Source: European Commission, The EU Economy 2005 Review, ECFIN REP 55229.

Two major technological shifts have caused a revision of this paradigm. First, technological developments have induced firms to exploit to a larger extent the benefits of efficient size and economies of scale in production. Economies of scale can be achieved by having intangible assets with a public good component that can be exploited at no additional cost over a larger size. To the extent that the diffusion of this technological know-how is more efficiently performed within the firm, this technology-based competitive advantage determines the bounds of the activities performed within the firm and the size of the multinational enterprise (Caves 1996). In this world with economies of scale volume is key. Firms are no longer attracted by locations with cheap inputs that are perceived to be exogenous. Rather, other inputs such as specialized labor, specialized intermediate inputs or the presence of complementary technologies, become important.

Technological change has been one driver of company restructuring

A second major technological shift has been the development of information technologies. These technologies have made it possible to decrease communication costs drastically across the world. They have also increased the range of goods and services that are tradable in world markets. The traditional economic division of products between goods and services was determined by the characteristics of each product in terms of tradability. To be a good, its production and consumption did not have to take place at the same moment in time. A service, in contrast, required that production and consumption happened simultaneously. Therefore, goods were essentially tradable, whereas services were non-tradable. This implied that the production of services was isolated from international competition in world markets beyond foreign direct investment. Modern information and communication technologies, however, have made a large array of service products tradable in world markets. Call centers, reservation centers, data-processing rooms, software consulting and education services are just a small sample of the range of services that recent technological progress has made tradable in world markets. Essentially, anything that can be digitalized in computer code has become a tradable product. This revolution implies changes in the value chain of firms and has caused them to redefine their production strategy, size and the location of their production facilities.

The existing evidence for the European Union suggests that manufacturing relocation and offshoring has had a deep impact on the structure of production. The prevalence of offshoring, both internal and external to the firm, has led to a decrease in the ratio of domestic value added per unit of output – the so called production depth – over the last decade. For instance, the share of imported intermediate inputs in German exports, including the imports of exported merchandise, increased from about 30 percent in 1995 to 38.8 percent in 2002 (Cesifo, 2005). It has also led to a strong linkage between exports and imports of the country. An additional unit of exports in Germany in 2002 implied an increase of 0.55 in imported intermediate inputs into the country.

The evidence on service outsourcing is very limited. The existing evidence indicates that its prevalence is still very small although growing fast. The *Ministère de l'Economie, des Finances et de l'Industrie* in France shows that in 2003/04 the international outsourcing of computing services represented only 2 percent to 3 percent of the country's total computing service industry (European Commission 2005). The UK had a similarly low ratio, at 1.2 percent (Amiti et al. 2005). Nonetheless, Amiti et al. report that the outsourcing intensity ratio of service inputs has increased from 3.5 percent (0.4 percent) in 1992 to 5.5 percent (0.8 percent) in 2001 in the UK (U.S.).

Recent trends in European M&A activity

Overall M&A activity in Europe has increased significantly over the last two years. According to Thomson Financial, in the first half of 2005 European M&A totalled US$403 billion, compared to US$362 billion a year earlier, and it had reached volumes similar to its peak in 2000. Part of this trend has been caused by an overall increase in the volume of M&A activity in the world which had risen from US$1200 billion in 2002 to US$1260 billion in only the first six months of 2005. This increase was also perceptible in the number of transactions that went from just over 9,700 in 1997 to a peak of 16,750 firms in 2000 and to over 15,000 transactions in just the first half of 2005. This section looks at why this volume of activity is happening now and where all this corporate restructuring is taking us.

Mergers and acquisitions are well known to undergo waves of activity around the business cycle and stock market booms. In this context, the current boom in M&A transactions in Europe is not specific to the region but part of a worldwide trend. In fact, the share of European M&As in world transactions was 34 percent in the first half of 2005 and thus very similar to its value in the mid-1990s. Some explanations have been put forward to explain this correlation between M&A activity and business and financial cycles. Shleifer and Vishny (2003) and Rhodes-Kropf and Viswanathan (2004) report models of financial market inefficiency in which relative valuations between acquirers and bidders drive merger waves. In both cases, managers in the firms take advantage of the inefficient pricing in financial markets to engage in M&A activity. A second line of explanation relies on the behaviour of the economic cycle and technological shocks. Jovanovich and Rousseau (2004) show that technological shocks, to the extent that they do not happen homogeneously to all players in an industry, can lead to capital reallocation among the players in an industry. (Lambrecht 2004) also shows that the increased benefits of size in industries, in which economies of scale matter, drive mergers around cyclical patterns since firms want to be larger when they expect demand to be also large.

A second argument for an increase in mergers in Europe has been the creation of the Single Market in 1993 and more recently the introduction of the euro. The euro has generated a very large and deep financial market in which firms have easier and cheaper access to funds for financing their growth. At the same time, the creation of this financial market has decreased the costs of engaging in cross-border transactions and fostered integration both in the financial and goods markets.

Despite this internationalization of the euro area, the vast majority of merger activity continues to take place within individual European countries. The European Commission reported that the proportion of domestic M&A transactions, i.e. M&As involving firms from the same EU member country, relative to total M&A transactions involving a EU corporation has remained constant in the last decade at slightly over 50 percent (57 percent in 2004 vs. 58 percent in 1995) (European Commission, 2005). One of the main characteristics of M&A in 2005 is that we have observed large cross-border European transactions in a more consistent pattern. The purchases of O2 by Telefonica and of the HVB Group by Unicredito were two of the largest reported transactions last year. Both of them involved large cross-border acquisitions in regulated markets that remind us of the previous cycle that peaked in 1999–2000 with the purchase of Mannesman by Vodafone. Despite these examples, cross-border M&As in Europe continue to be the exception rather than the rule.

Despite some big cases, cross-border M&A in Europe remain the exception

It is difficult to know exactly what the sources of frictions among firms are that deter them from engaging in cross-border EU transactions. Technological reasons are clearly part of the explanation. But also lacking possibilities of exploiting economies of scale, differences in taxation, regulatory and supervisory agencies, as well as the negative reaction of stakeholders all play a role in determining this perception. The size and relative importance of these barriers are likely to differ by industry and no general principle may apply to all industries. To get a better sense of the relative importance of these impediments to cross-border consolidation, we focus in the next section on the case study of the European financial industry.

M&A activity in the European financial industry

The financial industry followed a similar pattern of M&A activity as overall European industry. M&As were very intense during the late 1990s and considerably weaker from 2001 to 2003 with a recovery in the last two years. However, European cross-border M&As in the financial industry are much less com-

mon than in other industries. From 1999 to 2004 the share of cross-border transactions in the financial industry in total M&As in the European Union has remained at 20 percent. In other sectors, this share has been consistently large, reaching a peak of over 60 percent in 2000 (European Commission 2005). It is worth mentioning that international M&As in the banking industry are carried out more often with banks from outside the euro-zone than with banks from different euro-area countries (Hartmann et al. 2004). In 2001, cross-border euro-area M&As accounted for only 11 percent of all transactions, while cross-border transactions beyond the euro area were almost four times larger, accounting for 42 percent of transactions. Despite the large transactions that we have seen in the last two years, mainly through the purchase of Abbey by Santander and the purchase of HVB in Germany by Unicredito, the battle that arose among foreign participants, regulators and the domestic Italian banking sector following the announcement of bids for Italian banks by BBVA and ABN Amro exemplifies some of the barriers that this integration may confront.

European financial integration is already quite advanced – except for retail banking

The trend in M&As has also implied an important qualitative change in terms of industry structure. In the late 1990s, invested volumes among domestic competitors increased as these transactions more aggressively pursued market access and an enhancement of the competitive position of the firms involved. This resulted in substantial increases in market concentration at the national level during this period (European Central Bank 2005). From 1997 to 2004, the number of banks operating in the EU banking sector declined by 26 percent. The average share of total banking assets accounted for by the five largest institutions (the C5 concentration ratio) increased in all major national markets of the euro area over the period 1997-2004. In Spain, the C5 ratio increased by 12 percentage points (from 32 percent to 44 percent); in France and Germany, by 5 pp. (from 40 percent to 45 percent and from 17 percent to 22 percent respectively). National differences in concentration are still large, with Germany having one of the less concentrated banking sectors while smaller countries like the Netherlands, Finland and Belgium have five-firm concentration ratios above 80 percent. The unweighted average of the C5 ratios for the 12 EU-15 member countries increased from 46 percent in 1997 to 53 percent in 2004. This increase in concentration ratios may be cause for concern if it reflects increased market power, particularly for some EU countries in which concentration ratios have risen to very large numbers. Nevertheless, looking at the euro area as a whole, concentration is markedly lower. Bikker and Wesseling (2003) report that the C5 concentration ratio for the euro area, i.e. the market share of the largest five euro area banks, increased only by 4 pp., from 12 percent in 1996 to 16 percent in 2001.

There are a number of reasons for this lack of cross-border M&A in the European financial industry. In part, the integration of the European financial services industry has developed beyond M&A transactions.[1] This integration is reflected in a quick convergence of prices and large cross-border trading in certain markets. In the money market, actual transaction prices for overnight rates in the euro interbank market have converged to within 2 basis points; beyond this point arbitrage is no longer profitable. European stock markets have also been largely integrated. In wholesale banking, prices have also converged very fast within the euro-area countries. International flows within the European banking sector have also significantly increased during this period. Pérez et al. (2005) report an increase in the proportion of the total amount of foreign claims received(sent) from(to) euro area countries from 17.1 percent of total banking assets in euro-area countries in 1999 to 22.2 percent in 2002. This number is higher for smaller countries indicating a higher degree of cross-border flow, but still low in absolute terms (see Campa and Hernando 2006).

Nevertheless, integration is still lacking in retail banking markets. In this respect, a recent survey by the European Commission states that there are intrinsic characteristics of the traditional banking business that constrain the cross-border expansion of commercial banking. Among these differences, the lack of overlapping fixed costs in international integration and the diversity of business practices appear to be the most important barriers to integration within the industry (European Commission 2005). This lack of integration in the retail banking segment is reflected in the large differences in the breakdown of net income from the different national retail banking industries (J.P. Morgan 2004). This heterogeneity in the sources of value-added by product in the different national banking markets reflects underlying differences in the functioning of these markets in the European Union and they imply an

[1] See Baele et al. (2004) for a review of alternative measures to quantify the degree of financial integration in the euro area.

important barrier to developing financial integration within the Union.

The second set of barriers identified in the survey was related to attitudes of the population and the stakeholders. In particular, the negative reactions by employees and customers to a possible acquisition by a foreign entity were mentioned as an important deterrent for engaging in such transactions. Regulatory barriers also played a role. In particular, the existence of more than one supervisory agency (from the home and host countries) and the differences in supervision that these two entities may impose was the most commonly mentioned barrier to engaging in an international transaction. In contrast, political interference and fiscal issues played a much smaller role.

Concluding remarks

The optimal size of the firm has been a major issue in the economic literature for centuries. Technological innovations and economic policies towards globalization have affected the set of activities that firms are choosing to perform within and outside their organizations. These trends have recently caused a large shift in corporate restructuring and M&As.

European economic integration is immersed in this process of corporate restructuring. Despite large improvements in the integration of markets across Europe, most M&A transactions still involve the integration of two firms from the same country. Cross-border transactions in Europe are still the exception and this lack of activity is signalling, to a large degree, difficulties in the ability of firms to exploit the benefits from technological innovation and integration in a Europe-wide strategy, given the large differences that still remain in industry structure across member countries.

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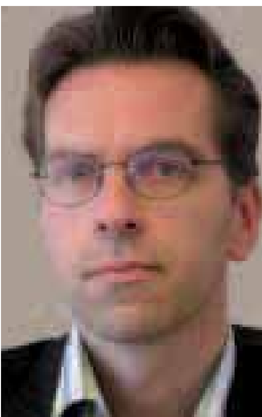

Comparative advantage, cross-border mergers and merger waves: International economics meets industrial organization

Steven Brakman*
Harry Garretsen**
and Charles van Marrewijk***

Perhaps the most striking aspect of the current phase of globalization is the increased importance of foreign direct investment (FDI). This is not only true at the global level but also at the regional level. It is clear that the process of economic integration in the European Union has boosted FDI for the EU countries. In the field of international economics, the modeling of FDI has been high on the research agenda in recent years and clear progress has been made in understanding the determinants and effects of FDI (see for instance Barba-Navaretti and Venables (2004) for an overview). The new theoretical insights are, however, not always in line with the facts. One important puzzle in this respect is precisely the fact that economic integration or, in modeling terms, a fall in trade costs has been accompanied by an increase in FDI. From the data we know that so-called horizontal FDI, that is FDI undertaken for market size considerations, is the dominant form of FDI, but theory tells us that a fall in trade costs should go along with a *de*crease in horizontal FDI. Lower trade costs, *ceteris paribus,* make it more profitable for firms to serve foreign markets via exports instead of setting up their own production in these markets.

One way to solve this puzzle is to recognize that the bulk of FDI does not take the form of greenfield investment but, instead, takes place through cross-border mergers & acquisitions (M&A). Traditionally, the topic of M&A has belonged to the domain of industrial organization. But research in this area has so far not been very successful in pinpointing the determinants of cross-border M&A and it has in particular not paid much attention to insights from international economics as to the causes of FDI. It is the goal of this paper to show for the case of cross-border M&A how a "marriage" between international economics and industrial organization can help us improve our understanding of these important phenomena. Based on innovative theoretical work by Peter Neary (2003, 2004), we will illustrate how a key insight from international economics, the concept of *comparative advantage,* can be used to improve our understanding of the main vehicle for FDI, *cross-border mergers.* Our research (Brakman, Garretsen, and van Marrewijk, 2005) shows that firms from sectors in which the country under consideration has a comparative advantage are bound to be engaged in cross-border mergers. We also find that the use of comparative advantage may help us understand the stylized fact that mergers come in waves. One important policy implication of our findings is that more traditional analyses of the effects of economic integration may underestimate its true impact. If, and this is a big if, cross-border M&As improve the efficiency of the firms concerned, economic integration has additional welfare gains over and above the ones (trade creation, improved dynamic efficiency) that are commonly put forward in the literature.

The importance of mergers & acquisitions[1]

As illustrated in Table 1, cross border M&As are the main driving force behind the surge in foreign direct investment, recently accounting for more than three quarters of total FDI flows. This holds particularly for developed countries, where the share has almost reached 90 percent of the total. It should also be noted that a high share of total M&A activity crosses international borders. For example, during the period 1987 to 1999, which captures most of the so-

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[1] See Brakman, Garretsen, and van Marrewijk (2005) as the general source of the data presented in this article.

Table 1

Cross-border M&A investment (percent of total FDI inflows to the host countries)

	1987 to 1991	1992 to 1994	1995 to 1997	1998 to 2001
World	66.3	44.6	60.2	76.2
Developed countries	77.5	64.9	85.4	89.0
Developing and transition economies	21.9	15.5	25.8	35.7

Source: Barba-Navaretti and Venables (2004) , p.10.

called fourth and fifth merger waves (see below), cross border transactions accounted for about 25 to 30 percent of total M&A activity, both in terms of value and the number of transactions. Again, this holds in particular for developed countries. According to OECD data, the UK and the Netherlands are the leading countries in cross-border M&As, closely followed by Germany and France. At the peak of the so-called fifth merger wave in the late 1990s, for instance, cross-border M&As relative to GDP amounted to 16.3 percent in the UK and 13.7 percent in the Netherlands.

Our data

A good and extensive data source on mergers and acquisitions is the *Global Mergers and Acquisitions database of Thomson Financial Securities Data* (Thomson, hereafter). This company gathers information on mergers and acquisitions exceeding one million US dollars, its main sources of information being financial newspapers and specialized agencies like Bloomberg and Reuters. Our Thomson data set begins in 1979 and ends in April 2005. After some preliminary investigations, we decided to restrict our analysis to cross-border merger deals in the period 1980 to early 2005 for five active countries, varying in size and location, namely Australia (AUS), France (FR), the Netherlands (NL), the United Kingdom (UK), and the United States (US). This resulted in 11,721 observations, or about 28.5 percent of all cross border mergers and acquisitions in the Thomson database.

Cross-border M&As: account for 90 percent of developed countries' FDI

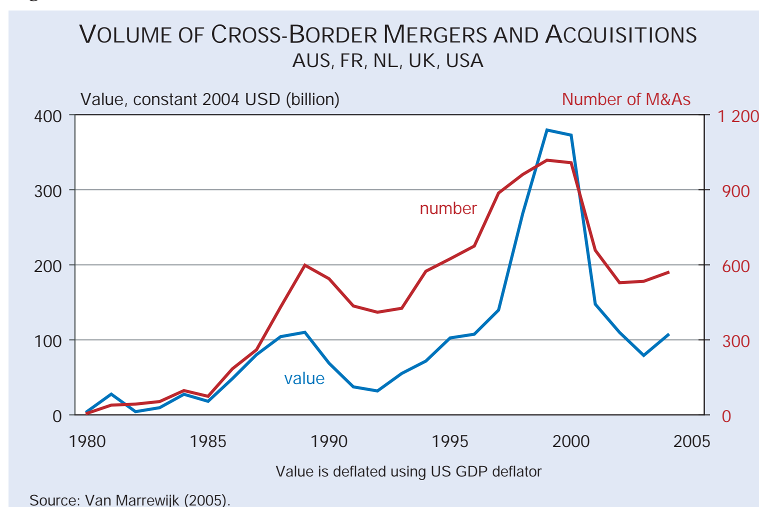
As summarized in Table 2, the United States was the most active country involved in mergers & acquisitions (40.3 percent of the acquisitions and 43.7 percent of the targets), closely followed by the UK (39.5 and 27.6 percent, respectively). Note that cross-border M&A deals with acquirer and target located in the same country are possible, for example, when an American firm takes over another

Table 2

Overview of M&As
Five countries, all sectors, 1980 to 2005

		Acquirer AUS	FR	USA	UK	NL	Total
No. of deals							
Target	AUS	562	23	388	351	26	1,350
	FR	14	223	425	608	74	1,344
	US	231	310	2,136	2,229	213	5,119
	UK	137	249	1,602	1,095	154	3,237
	NL	13	52	178	351	77	671
	Total	957	857	4,729	4,634	544	11,721
Percent							
	AUS	4.8	0.2	3.3	3.0	0.2	11.5
	FR	0.1	1.9	3.6	5.2	0.6	11.5
	US	2.0	2.6	18.2	19.0	1.8	43.7
	UK	1.2	2.1	13.7	9.3	1.3	27.6
	NL	0.1	0.4	1.5	3.0	0.7	5.7
	Total	8.2	7.3	40.3	39.5	4.6	100
Horizontal M&As (2-digit sic level):					5,628	(48.0%)	
100% acquired in M&A					8,487	(72.4%)	
100% owned after M&A					9,007	(76.8%)	
Value of transaction (million $):			mean				186.17
			median				20.00
			maximum				60,286.67

Figure 1



Source: Van Marrewijk (2005).

American firm that is active abroad. As indicated in the Table, the median value of an M&A is $20 million. Note that the distribution of the value of deals is rather skewed. The maximum value, for example, was more than $60 billion, resulting in an average value per transaction of about $186 million, much higher than the $20 million median value. In most cases (72.4 percent), full ownership is acquired with the transaction, or at least the transaction leads to full ownership afterwards (76.8 percent). Moreover, in almost 50 percent of all cases a similar type of firm is acquired, indicating that we are dealing with horizontal M&As. For the period 1985–2004, the average annual number of deals for our five countries was 570 and their annual value was $122 billion.[2]

Cross-border M&As come in waves

Mergers & acquisitions: waves

There is an important stylized fact as to the development of M&A activity over time: they come in waves. Figure 1 gives an impression of the importance of the 'wave' phenomenon for our five countries. Since the value of the deals is measured in current US dollars, we use the American GDP deflator to adjust all values to constant 2004 dollars. It is common to distinguish between five merger waves during the 20th century, three of which are recent. The third wave took place in the late 1960s to early 1970s, the fourth wave ran from about the mid 1980s until 1990, and the fifth wave started around 1995 and ended in 2000 with the collapse of the "New Economy". The waves are illustrated in Figure 1 for both the number of deals and their value in the last two waves. The first peak (of 1989) was almost 600 deals with a value of $110 billion. The second peak (of 1999) was 1018 deals with a value of $380 billion. When compared to the average of the period, it is clear that the most recent wave reached unprecedented levels in terms of number of deals and value. During the fifth merger wave, European firms engaged in a number of (mega) M&As with the cross-border take-over of Mannesmann (Germany) by Vodafone (UK) for $172 billion in 2000 as the largest deal in Europe to date (not included in Table 2). Merger waves are positively correlated with increases in share prices, price-earnings ratios, and the overall business cycle. In terms of standard M&A motives (see below), it is rather difficult to explain the wave phenomenon.

Modeling difficulties

Despite the obvious quantitative importance of cross border M&As, the reasons underlying these transactions are still not well understood. Various motives for M&As can be distinguished in general. In the industrial organization literature two basic motives stand out: an efficiency motive and a strategic motive. Efficiency gains arise because takeovers increase synergy between firms that increase economies of scale or scope. Strategic gains arise if M&As change the market structure and thus a company's competitive position and profit level. The main problems with these explanations is that they are (i) based on *partial equilibrium* models, taking demand and income levels as given, and (ii) do not deal explicitly with *cross-border* M&As. This therefore provides a fundamental but also limited understanding of this form of takeover, as cross-border mergers are related to economy-wide shocks, such as (European) economic integration, changes in the legal and regulatory environment, or possible asymmetric business cycles. These factors change the position of one country relative to another, pointing in the direction of general equilibrium trade models and thus in the direction of international economics. Standard trade theory, however, is not well-equipped to explain M&As since it often rules out strategic

[2] Ignoring the first four years in which the data set is incomplete.

interaction between firms.[3] As argued by economists like Peter Neary, Avinash Dixit and Joe Stiglitz, this not only holds for the neoclassical perfect competition models, but also for the models based on increasing returns to scale and monopolistic competition.

The Neary model

A recent theoretical model developed by Peter Neary (2003, 2004), combines general equilibrium trade theory with imperfect markets and strategic behavior of firms to determine cross-border M&As. It therefore is an attempt to combine international economics and industrial organization. This attempt is not only to be welcomed from the perspective of industrial organization because it allows for the linkage between cross-border M&As, see above, but it is also to be welcomed from the perspective of international economics because there, as we explained in our introduction, cross-border M&As, the main vehicle for FDI, are a blind spot.

The attempt by Neary to combine general equilibrium trade theory with imperfect markets and strategic behavior of firms is *a priori* a difficult one because pricing decisions of large firms not only directly affect profits, but their market (pricing) behavior also affects national income and the real income of their customers. Furthermore, large firms can also influence factor prices. All these effects combined have to be taken into consideration by firms when making their decisions. Without going into the details of the Neary model, the central idea can be described with the help of the equation below, providing the gain to a foreign firm if it takes over a domestic firm (an asterisk indicates foreign variables):

$$Gain = \underbrace{\left[\pi^*(n-1,n^*) - \pi^*(n,n^*)\right]}_{A:\ profitability\ gain} - \underbrace{\pi(n,n^*)}_{B:\ takeover\ costs}$$

The term A reflects the change in profits (π) of the foreign firm when the number of domestic firms is reduced by one (from n to n-1): less competition increases profits. The term B reflects the price the foreign firm has to pay for taking over the domestic firm, as the initial owners have to be compensated for their profit loss. Intuitively, the equation indicates that if the foreign acquirer is more efficient than the domestic target, the gain in profits (the term A) may be high enough to cover the cost of a takeover (the term B). Note, in particular, that if the domestic target firm has high costs its profit level will be low, and so will be the cost of acquiring this firm (the term B). Also note that the cost difference should not be too large, because then there is no firm to take over. We relate the cost differences between firms in this international setting to the well-known concept of revealed comparative advantage (see below). The first testable hypothesis is therefore that M&As tend to take place in sectors where the acquiring firm has a strong comparative advantage. The Neary model is also able to explain merger waves. Again looking at the equation, it is evident that foreign firms prefer other firms to move first in taking over a domestic firm, as this increases their profits (term A) without the need to incur the costs (term B). Using a game-theoretic setting, Neary translates these forces into a theory of merger waves, leading to a second testable hypothesis.

The Neary model combines trade theory with imperfect markets and the strategic behavior of firms

Mergers and acquisitions and comparative advantage

To get a first glimpse of the empirical relevance of the above two implications of the model, we have to link the Thomson data set, introduced above, to international trade data to determine a country's strong sectors. To do this, we identified 20 different 2-digit sectors in the data, for which the Thomson data can be adequately linked to the trade data (reducing the number of available observations to 3,462 M&As). For each country, each sector, and each year we then calculated the Balassa index, an index of (revealed) comparative advantage at the sector level, equal to the share of a country's exports in a certain sector relative to that same share for a group of reference countries (all OECD countries). The index is a positive number, that is the higher the stronger this particular sector is for the country in question. If the Balassa index exceeds unity, the country is said to have a *revealed* comparative advantage in that sector.

Figure 2 indicates that M&As do tend to take place in strong export sectors by comparing the share of sectors where the Balassa index exceeds unity in case of a merger or takeover with a relevant standard or benchmark distribution. For the period 1980 to 2000, the latter shows the share of the 20 sector-

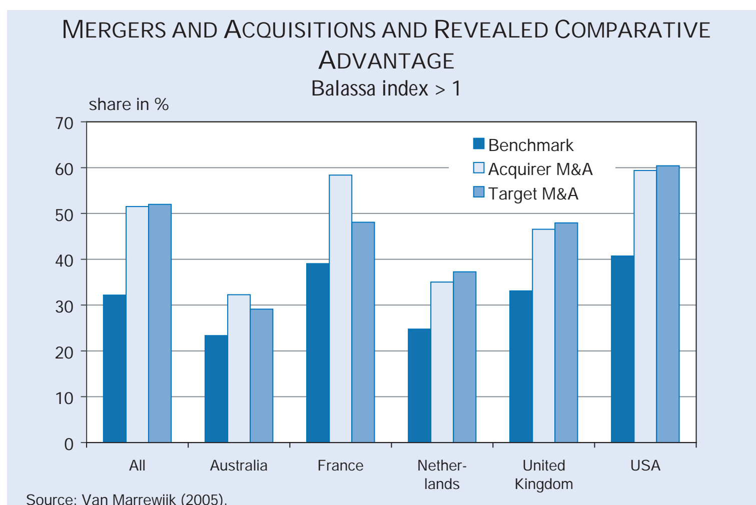
[3] See, for example, the contributions of Peter Neary, Avinash Dixit and Joe Stiglitz in: Brakman and Heijdra (2004).

year-country observations with a Balassa index higher than one. For example, the first column indicates that for all countries, all years, and all sectors 32.2 percent of the observations were larger than 1 (676 out of 2,100 observations). We do the same for the acquirer and the target in case of a merger or takeover. In each case, we determined whether or not the sector involved in a merger or takeover had a revealed comparative advantage (Balassa index above one) both from the acquiring firm's (sector-country-year) and the target firm's (sector-country-year) perspective. As Figure 2 illustrates, for all mergers and acquisitions taken together, the acquiring firm was active in a sector with a revealed comparative advantage for more than 50 percent of the observations, significantly more often than in the benchmark case. Figure 2 clearly illustrates that M&As tend to take place in strong export sectors, with up to 60 percent of the cases with a revealed comparative advantage for the United States. In our underlying analysis (Brakman, Garretsen, and van Marrewijk, 2005) we show that these first indications of Figure 2 are confirmed by more rigorous testing. The same holds true for the idea that cross-border mergers occur in waves, recall Figure 1. In particular we find that:

M&As tend to take place in strong export sectors

- Australia, France, and The Netherlands, other things being equal, are less active in cross-border mergers & acquisitions than the UK and the USA.
- Mergers and acquisitions are undertaken by 'strong' firms, that is firms active in sectors with a revealed comparative advantage as measured by the Balassa index, in accordance with the first hypothesis that follows from Neary's model.
- Waves play an important role in cross-border merger and acquisitions, this is also in accordance with the Neary model and sector-waves occur with a two-year horizon.

Figure 2



Source: Van Marrewijk (2005).

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Trouble in paradise: Will technocrats review global mergers forever?

Simon J. Evenett*

Mergers and acquisitions (M&A), be they domestic or cross-border, represent one important means through which economies restructure. Whatever their associated benefits to the firms directly involved, it has long been recognised that such M&A can lead to economic concentrations and, quite separately, in the case of foreign takeovers, to political backlash. Governments, recognising the various stakes involved, have established agencies to evaluate M&As, often before the transactions are completed. The trend, at least in the industrialised countries, has been to make such agencies relatively independent of central government. Whatever advantages independence has been thought to bring, arguably government steps concerning cross-border M&As on both sides of the Atlantic have, over the last twelve months, raised questions about the longer term independence of competition agencies, or about what such independence is likely to be worth. This paper describes the status quo in merger enforcement, discusses a number of recent developments, and examines their implications for competition agencies. In my view, their situation is probably weaker than they think and this reflects a number of prior choices on their part, the consequences of which are only now becoming clear.

The remainder of this short paper on the political economy of merger reviews and associated enforcement is organised as follows. The next section describes the paradise of independent and isolated competition agencies that review mergers and acquisitions. The third section describes how that splendid isolation has, by and large, not been affected by numerous international developments. The fourth section describes the trouble in paradise witnessed in recent times as governments have taken various measures on selected cross-border mergers and acquisitions and draws out a number of potential implications for future merger enforcement. Concluding comments follow.

Paradise

Before characterising the regimes used to review mergers and acquisitions, it is worth recalling the magnitude of the underlying corporate transactions. According to most observers, there have been five waves of mergers and acquisitions over the last 100 years or so, the last two of which (at the end of the 1980s and during 1995–2000) arguably had a substantial cross-border component. The merger wave at the end of the 1990s was broader in scope than its predecessor at the end of the 1980s, which was essentially a US and UK affair. By 2000, the peak of the last wave, firms in Continental Europe, parts of East Asia (notably Korea and Singapore) and Latin America joined British and American firms in what was probably the first truly global wave of M&A. Although precise estimates of the amount of M&A are hard to come by, at its peak M&A deals worth between \$4 and \$5 trillion were announced, over a trillion dollars of which had some cross-border element.[1]

The merger wave at the end of the 1990s was the first truly global M&A wave

Ease of financing, in particular the ability to issue large quantities of stock, was probably the single most important determinant of the timing of the last wave of M&A. It is significant that the stock market correction in the early part of this decade heralded an end to so-called cheap money (or, rather, cheap financing). Cross-border M&A, for example, fell and fluctuated between \$300 and \$400 billion during

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[1] To have a cross-border element an M&A transaction must involve firms whose headquarters are located in two or more different jurisdictions or involve commerce in two or more different jurisdictions.

2002–2004. Much of that M&A was in the service sector, with the financial sector accounting for the lion's share of M&A in that category. Total cross-border M&A in manufacturing currently runs at half of that in the service sector. The comparable totals for the primary sector account for less than five percent of total cross-border M&A in services.

As well as being a means of corporate restructuring, mergers and acquisitions are significant because they form part of the market for corporate control through which, ideally, managers and senior executives of publicly-traded companies are provided with sharp incentives to maximise shareholder value. Although it may seem rather obvious, it is worth recalling that the discipline actually felt by senior executives depends on a number of factors, some of which are in the control of the state. The relevant factors include the identity of the shareholders and their propensity to sell, any legal restrictions on the conduct of hostile mergers and acquisitions, and the other characteristics of national corporate governance systems. Countries differ markedly in the extent to which their firms are bought by foreigners. In Europe, for example, in terms of the absolute value of cross-border M&A, British firms are bought most often, followed by German firms, then French firms, and Italian firms finishing a distant fourth. While some of these international differences may reflect market factors, they almost certainly reveal differences in national policies and attitudes towards foreign mergers and acquisitions.

Concerns about the market-power increasing consequences of mergers and acquisitions led national policymakers to establish, and occasionally to reform (typically by strengthening), merger review procedures. The technical, essentially legal and economic, nature of merger reviews has led, along with a general tendency of politicians to withdraw from intervening in firm decision making, policymakers to create independent competition or antitrust agencies to undertake reviews of M&A according to guidelines specified in national legislation. In industrialised countries, the creation of independent competition agencies is most pronounced, although notable exceptions exist. Independence from political influence can have many facets, but some experts argue that the right to open and close a merger review on terms decided by the competition agency alone provide the minimum necessary degree of independence.

Competition laws that relate to mergers and acquisitions typically specify, amongst others, the size of M&A transactions that must be notified to the competition agency and the timing of such a notification. The latter is thought to be particularly important as competition agencies are said to have the most leverage when a transaction is notified before an M&A transaction is completed by the parties. National laws often provide for a variety of steps that a competition agency can take after it has reviewed a merger, including approving a merger without changes, an outright prohibition of the merger (or the right to sue for an outright prohibition), seeking structural changes to a merger (including divestitures), and seeking behavioural remedies from the parties (such as a commitment to lease a piece of technology to other parties at a specified price for a specified period of time). These powers give truly independent competition agencies significant leverage over private sector interests that come before it. However, it should be noted that many competition statutes specify mechanisms to review, or in some cases override, an agency's use of these powers.

Political review on other than competitive grounds has consequences for competition agencies

Nations differ markedly in the extent to which government ministries, other state bodies, and the courts can review the merger-related activities of a competition agency or can opine on the same matters as those addressed by the competition agency. One option is that a minister can override an agency's decisions on pre-specified grounds, such as national security, public interest, national economic interest, etc. (Here much turns on the definition of these terms and their interpretation.) Another option is to allow a government body to review the merger or acquisition on grounds unrelated to competition. For example, a sectoral regulator may review a proposed merger to see if any public service requirements are likely to be compromised by the transaction. A third option is outright exemption from the merger law, where certain specified economic activities (e.g. sectors) or entities (e.g. state-controlled firms) need not seek approval from the competition agencies for any M&As that they engage in.

Use of these three options has different consequences for competition agencies with merger review powers. On the one hand, the existence of agencies conducting non-competition-related reviews has given competition agencies license to focus solely on the efficiency-related (or resource allocation-related) aspects of M&A. This accounts

in part for the strong nexus between law and microeconomics in merger enforcement, and in competition law enforcement more generally. In doing so, competition agencies implicitly signal to the central government that if the latter wants mergers evaluated on some other grounds they had better legislate to that effect or create another body to undertake a separate evaluation of M&A. Competition agencies may also benefit in that some of the corporate or political pressure to decide in favour of a certain interest may be deflected to other state bodies or officials with the relevant decision-making powers. Together, this may give the impression of a competition agency under less pressure than comparable state bodies that is steadfastly holding to its efficiency-related criteria, so reinforcing the image of independence.

The downsides of these review mechanisms can, however, be fairly severe. A non-competition agency may conduct its review and demand changes from the parties involved that are, in fact, competition-impeding. In such circumstances, a competition agency may engage in what is known as competition advocacy, seeking to discourage the non-competition agency from taking measures that distort the competitive process. The downside here, then, is that the second review of a merger creates additional work for the competition agency. Worse, if the second reviewer rejects the competition agency's advice then the latter's credibility may well be adversely affected. With respect to ministerial overrides of the competition agency's decisions, the signal sent by such overrides to aggressive corporate and political interests about the standing of the competition agency cannot be positive.

Fortunately to date, with a few notable exceptions, the two disadvantages mentioned above have not been much in evidence. Overall, then, competition agencies have found themselves in an enviable position. Their independence and focus on efficiency-related concerns enables them to avoid a number of potentially difficult circumstances and to deflect pressures to other state bodies. Moreover, the popularity of M&A as a tool of corporate restructuring ensures a steady stream of reputation-enhancing opportunities for all concerned and a certain profile for the competition agency and its officials within the private sector. Power, limited constraints on action, and a narrowly construed mandate is the paradise that independent competition agencies have created for themselves. Will it last?

Potential spoilers: Bloody foreigners

The integration of national markets into the world economy and the spread of merger review laws around the globe has had important implications for the political economy of competition policy, although not of the sort that economists might have anticipated. The purpose of this section is to describe the dogs that did not bark, those that did, and how leading competition agencies have handily dealt with the potential challenges to their independence that have had international origins.

The fact that a merger or acquisition can be reviewed in many jurisdictions gives rise to potentially conflicting decisions by national competition agencies. At the extreme, this can involve one agency prohibiting a merger while another accepts the proposed transaction. Disagreements of this type are, in fact, quite rare but when they do happen they can be very pointed (as the proposed General Electric-Honeywell transaction demonstrated.) A milder form of disagreement can have significant consequences, too: different competition agencies may seek remedies and divestitures which, when considered in the aggregate, can undermine completely or partly the viability of the proposed transaction.

Independence of national competition agencies has been challenged by extra-jurisdictional merger review

Viability, however, is not the correct microeconomic metric with which to assess the effects of multi-jurisdictional merger review. Resource allocation is the metric preferred by economists. In this respect, each competition agency that reviews a proposed transaction can make two types of mistake: (1) on the basis of the effects in its own jurisdiction it can prohibit a merger that is, in fact, world welfare improving and (2) it can allow a merger that is actually world welfare reducing. These mistakes amount to being too strict or too lenient, respectively. As there are many competition agencies, and given that, in principle, only one agency need prohibit a merger for it not to go ahead, then the combined effect of multi-jurisdictional merger review is likely to be a regime that is too strict rather than too lax. This means that some M&A deals that could have improved on net the world's allocation of resources may well have been frustrated.

The economist's standard prescription in such cases is to advocate some form of joint decision-making mechanism whereby one agency decides the merits of a merger in multiple jurisdictions, adding up the costs and benefits across many economies to see if a

proposed transaction should go ahead. With the exception of the European Union, where arguably the creation of a supranational competition agency with teeth was an unintended consequence of treaty-making 40 years ago, no other region has seriously pursued this option of pooling sovereignty. It must also be admitted that there is little evidence as to the magnitude of the losses created by multi-jurisdictional merger review, just as there is little available evidence for the contrary proposition: namely, that in a multi-country world the simultaneous application of national merger reviews leads to the globally optimal allocation of resources. I suspect that the real explanation for the lack of international collective action here lies not in information and evidence, but elsewhere.

Corporations with interests that span many countries may find the current system of national merger reviews expensive, intrusive, uncertainty-creating, and ultimately frustrating of their plans. In principle, these firms may well welcome a "one stop" shop for merger reviews in a region or sub-region. However there may be other, arguably more attractive, alternatives from these firms' point of view. First, businesses may advocate the narrowing of differences in the implementation of merger reviews, perhaps reducing the costs of merger reviews and the time taken to clear transactions. Of course, as many of these firms are headquartered in industrialised economies, it would be desirable from their perspective if national merger review practices generally converged to those in richer economies, which these firms are used to dealing with. A second stance is to overtly or covertly discourage the spread of merger review laws in the first place. A gentle alternative here is to discourage the application of these laws by nascent competition enforcement regimes, often by arguing that other challenges (such as prosecuting cartels and undertaking competition advocacy) should take priority. Here much is made of the "complexity" of appropriately enforced merger reviews, with the implication that developing countries don't have the staff expertise to implement them.

National competition agencies prefer competition advocacy and adoption of best practices to more merger review laws

For the established competition agencies, the spread of merger review laws is a mixed blessing, too. One might have thought that the spread would expand the number of allies for each competition agency and afford senior officials at leading competition agencies with opportunities to develop reputations on the world stage. Against these benefits are likely to be a number of concerns on the part of competition agencies. The first is that international business is at best lukewarm about the spread of merger review laws. Established competition agencies may well suspect that there is little to be gained by making the case for merger review laws worldwide in a way that antagonises multinational businesses based in their jurisdiction, especially if the latter decide to take their revenge by lobbying for reductions in the powers and resources of the national competition agency. Rather than give up entirely on trying to influence nascent merger review regimes, competition agencies have an incentive to offer advice that international business finds palatable. The strong presumption underling many technical assistance programmes run by leading competition agencies that competition advocacy, a non-enforcement activity, should be a priority for new competition agencies, followed in time by cartel enforcement, is consistent with the above explanation.

Another strategy open to leading competition agencies is to encourage, for those jurisdictions with merger review laws on the statute books, the adoption of "best practices," which just so happen to almost entirely correspond to the existing procedures of the leading competition agencies. Moreover, to placate the business community, the antitrust or competition bar could be encouraged to participate in the design and dissemination of these merger-related best practices. Such an initiative could, of course, be entirely voluntary, thus not encroaching on the independence of national competition agencies or obligating those agencies to seek changes in national laws, which would bring another unwelcome group (politicians) into the equation.

The creation of the International Competition Network (ICN) in 2001, whose members are only competition agencies and whose numbers now total approximately 90, can be seen as a vehicle towards promoting convergence towards ideally simpler, less arbitrary merger review regimes by encouraging the rest of the world's competition agencies to converge to the practices of their counterparts in leading industrialised countries.

This interpretation is consistent with the ICN's heavy focus, in its first three years, on merger reviews and to a lesser extent on competition advocacy. Now that much of the work on mergers has been completed, it is noteworthy that private sector representatives are mumbling about the ICN losing momentum and are expressing concerns about the expan-

sion of the ICN's activities into cartels. The resistance to creating an ICN working group on abuses of a dominant position, or monopolisation, which has eventually delayed such an initiative for at least two years, is probably another indication of the reluctance of some competition agencies to get too far ahead of vocal private sector interests.

The spread of competition law and market integration more generally have posed two other threats to the nicely constructed paradise mentioned earlier. Ironically, the first comes from other national competition agencies which, perhaps unsurprisingly, have sought cooperation from their more experienced peers. Outside of established technical assistance programmes and contacts at international conferences, the willingness to engage in cooperation, especially on enforcement matters, is limited. There may well be two benign explanations for this outcome: legal constraints on the form of permitted cooperation and the staff resources necessary to respond to cooperation requests. In addition, however, one cannot discount other possibilities. First, a competition agency may fear a backlash from domestic politicians if it cooperates with a foreign enforcement agency that, it transpires, is bringing enforcement action against multinational corporations, some of which are based in the former's jurisdiction. Here self-preservation would take priority over combating anti-competitive practices abroad. Second, leading competition agencies may not want to create even implicit obligations to cooperate with foreign agencies. For this reason the more discretionary forms of assistance to new competition agencies would be emphasised, such as training and long-term advisors, rather than actual cooperation in enforcement cases. Such agencies would probably follow a strategy of ABC to nascent competition regimes: Anything But Cooperation. These choices would be consistent with the assumption that the preservation of independent rights of action is the key objective of established national competition agencies.

Nowhere is the opposition from leading competition agencies to measures that might infringe on their powers and prerogatives greater than when it comes to international trade agreements. Trade policy is an arena where in most jurisdictions the corporate and bureaucratic interests are too large for comfort for many competition agencies. The logic of trade negotiations with its emphasis on compromise and mercantilism does not sit well with the absolute pursuit of efficiency. Moreover, competition provisions of trade agreements are typically not central to the negotiating exercise, ensuring that the resulting legislation might result in the competition agency's interests being overwhelmed by other factors. Leading competition agencies have often called into question the value of competition provisions in free trade agreements, arguing that they are ineffective and wishful thinking. Some of these criticisms may be true (I too have my doubts about some such provisions) but one cannot help wondering if it is the preservation of independence at home that really drives the opposition to more formal modes of cooperation.

Having said all this, there are a small number of cooperation agreements between competition agencies. For the competition agencies in larger economies, these tend to be with those trading partners where there is a lot of cross-border M&A in both directions, offering both parties' respective business communities more expeditious and less fraught merger reviews. Where significant M&A volumes are absent, such agreements are much less in evidence. Moreover, cooperation agreements on matters that prejudice commercial interests, such as cartel investigations, are even rarer.

Preserving independent rights of action is the key objective of established national competition agencies

This section has described the various ways in which the consequences of international market integration and the spread of national competition laws have been managed by leading competition agencies. From the perspective of maximising their independent room for manoeuvre, these agencies have done very well indeed. Whether, in a globalising world, customers are best served by these arrangements is another matter.

Trouble in paradise

While established competition agencies have been, by and large, successful at fending off unwelcome foreign initiatives, they have been much less successful on home ground, especially in Europe and in the United States. In the last few years, and in particular in the last twelve months, a number of seemingly unrelated events have taken place that call into question just how far paradise's realm extends and whether that realm will shrink in the future. In the United States, the proximate cause has been concerns about the national security implications of cross-border M&A. In Europe, concerns about the capacity of European firms to compete in world

markets, and whether there will be "enough" such firms, have cast long shadows over the regulation of mergers.

Underlying developments on both sides of the Atlantic is the notion that nationality does indeed matter, at least in the eyes of politicians and others influential persons and groups in society. In the United States, concerns about the nationality of owners of ports and oil facilities have ensured that two foreign takeovers of companies with US assets were scuppered. The furore, in early 2006, over Dubai Ports World's potential acquisition of certain US ports from the British company Peninsular and Oriental Steam Navigation Company ended up pitting the US Federal government against many members of the US Congress and arguably large swathes of public opinion. Considerations of efficiency were given short shrift by policymakers and, as far as I can discern, the US antitrust agencies made no public interventions in this debate. One can appreciate the reluctance on the part of US antitrust officials to disagree with many Congressmen and women. However, their silence may come at a price as some in Congress are advocating expanding the definition of national security (itself relatively loose) to include economic security. Should this proposal be enacted, then US antitrust authorities could find themselves increasingly marginalised as opponents to proposed cross-border M&As of US assets seek to influence the inter-agency process responsible for security matters, however defined.

National security, national champions, and nationality may override the focus on efficiency

This example highlights the advantages and limitations of the sole focus on efficiency as the metric used to evaluate mergers and acquisitions. On the one hand, a focus on efficiency lets competition agencies "duck" or avoid very contentious evaluations on national security grounds. Yet, these agencies do so by ceding ground to other government bodies. Moreover, once elected officials get involved with evaluating a case, they may be tempted to draw more general lessons, possibly redrawing the boundaries where efficiency-based rationales take priority over other metrics and vice versa. In short, an exclusive focus on efficiency provides only so much "cover" for competition agencies and that protection comes at a price.

In some respects, matters are worse in Europe. Unlike in the United States, where in principle concerns about national security could be relatively clearly defined and are distinct from economic objectives, in Europe the very metric of efficiency has been called into question through a number of different means. The argument that mergers should be allowed because they enhance the ability of the firms involved to compete on world markets, a claim that is often made by supporters of so-called national champions or as the French Prime Minister calls it "economic patriotism", suggests that the effect of a merger on resource allocation in the affected markets (which the efficiency criterion assesses) is not accepted in highest counsels of government, at least in Paris, Berlin (although arguably the newly appointed government may differ in this respect from its predecessor), Madrid, and elsewhere.

Moreover, claims that non-European companies should not be allowed to take over large European corporate groups, such as the proposed takeover by Mittal Steel of the French-Luxembourg-Spanish group Arcelor, suggest that nationality rather than efficiency matters. Furthermore, the reluctance of some European governments to countenance national banking and energy companies being bought up by foreign, but still European, companies suggests that the notion of nationality in the minds of some European policymakers is pretty tightly drawn.

Whatever its attractions, the exclusive focus on efficiency, and therefore the denial of the importance of other metrics, has – from the perspective of political economy – put competition agencies on the defensive. By failing to address what others see as legitimate objectives to be pursued as economies restructure, competition agencies invite political and corporate interests to circumvent or override them. For example, competition agencies were given a blunt reminder of their place on the political food chain when, in 2002, the German Ministry of Economics rejected the Federal Cartel Office's recommended prohibition of E.on's takeover of Ruhrgas. (The German government based its objection to the recommendation on the argument that the combined entity would be a substantial export powerhouse.)

There is another risk of the growing divergence between what governments want from their microeconomic policies and what competition agencies deign to provide and that is that the former will create state bodies that will do their current bidding. Over time, these state bodies will inevitably seek to extend their remit, possibly at the expense of the

competition agency. The result may well be institutional rivalry between a purist competition agency and an opportunistic state body. Paradise may slowly resemble an impeccably kept vegetable plot in the middle of a run-down urban ghetto.

Worse still, to the extent that foreign investors are discriminated against in the M&A arena, competition law will almost surely return to the agenda of state-to-state commercial negotiations. In this respect it is worth noting that the disputed Arcelor-Mittal Steel transaction has already been a topic of conversation at a summit between the Prime Minister of India and the President of France (in early 2006.) This is probably the first time that the occupants of these two posts have discussed competition-law related matters. Frustrated foreign investors are likely to argue that disciplines on the conduct of merger reviews be placed on the negotiating table in future trade agreements. Should this come to pass, competition agencies will have to evaluate the potential harm such provisions could do to both its independence and to the standing of other agencies that review mergers. In these circumstances, splendid isolation appears to be a far less tenable long-term option.

Defenders of the status quo in competition agencies are not without a few good arguments of their own. They could point out, correctly, that the robust microeconomic underpinnings of efficiency compare well to the relatively sloppy definitions of competitiveness, national champions, and economic patriotism, and that the former provide a better guide to policymaking. Moreover, they could argue that the correct response to apparent changes in government preferences is to advocate efficiency-based principles more forcefully, and not to abandon them. These arguments have some appeal, but each implicitly takes the view that ideas can trump interests in the political arena, a questionable proposition at best.

Perhaps a more imaginative response on the part of competition agencies could be to identify the reasons why policymakers are dissatisfied with current corporate performance, be it export-related or some other metric, and to examine what measures to promote competition could play in furthering the goals. This approach might indicate some responsiveness on the part of competition agencies to new government priorities. Even so, it still leaves open the question as to the metric to be used when evaluating mergers and acquisitions.

Paradise lost

Competition agencies successfully rode the wave of economic reform that took hold around the world from 1985 onwards. Many such agencies were created, and existing agencies were reinforced and often made independent, especially in industrialised economies. The associated freedom and a number of strategic choices (such as the adoption of efficiency standards) enabled competition agencies to initially avoid a number of entanglements, in particular foreign constraints. Underpinning this success, however, were many governments' commitments to liberalise markets.

Now that government priorities appear to have evolved on both sides of the Atlantic to include national security, national champions, and competitiveness considerations, the question arises as to whether the commitment-free and wide-ranging paradise created by competition agencies will continue. Trouble in paradise is brewing and it is unclear that competition agencies have recognised the scale of the threats to them, or have begun to formulate adequate responses. In the current climate it is difficult to see how competition agencies can maintain their splendid isolation, especially if governments continue to pursue non-efficiency objectives in policies towards corporate restructuring, of which mergers and acquisitions are an important component. Assuming these state objectives persist, then either the technocrats will not reign over M&A forever or they will have to learn how to accommodate to and make the most of a new political reality.

Return to state-to-state negotiations on merger issues will dilute the power of competition agencies

THE "MORE ECONOMIC APPROACH" IN EU MERGER CONTROL

ARNDT CHRISTIANSEN*

EU Merger Control, which was introduced as recently as 1990, has since become an important element of the regulatory framework for international mergers and acquisitions. It is currently undergoing its most profound reform, central to which is the "more economic approach". This article traces the main elements of the new approach and gives a preliminary assessment, thereby highlighting remaining problems and open questions.

Outline of EU merger control

If certain turnover thresholds are met, then EU merger rules apply to cross-border concentrations irrespective of the companies' seats or their major areas of activity. Pre-merger notification is obligatory with the European Commission, i.e. its Competition Directorate General (DG Comp). Most cases are dealt with in Phase I, that is within six weeks. Only complex transactions, which amount to roughly five percent, enter Phase II proceedings that take up to four additional months. Final decisions are subject to judicial review by the Court of First Instance (CFI) and ultimately the European Court of Justice (ECJ).

The "more economic approach" relies increasingly on concepts from industrial economics

Almost 3,000 cases were handled from early 1990 until the end of 2005. As Figure 1 shows, the annual caseload rose steadily until 2000. Interestingly, there have only been 19 outright prohibitions to date with a maximum of five in 2001. Since then there has only been one additional prohibition in 2004.[1] These are, however, complemented by 95 withdrawn transactions and, most importantly, 210 approval decisions coupled with conditions and obligations ranging from comprehensive divestitures to specific behavioural commitments.

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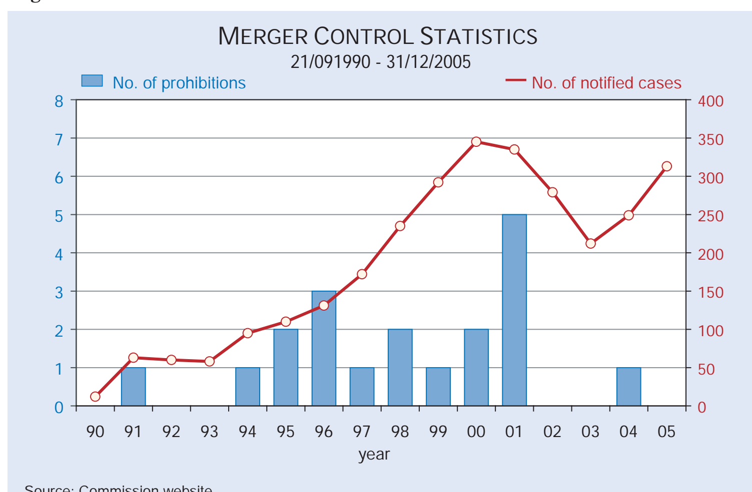
Figure 1



Source: Commission website.

Main elements of the "more economic approach"

The "more economic approach" is the most important result of the ongoing reform process. It implies increased reliance on theoretical concepts from industrial economics and quantitative methods of analysis, firstly in case investigations and, secondly, in formulating legislation and defining the relevant criteria (Christiansen 2006; Röller 2005). This is widely seen as a reaction to the harsh criticisms of the Commission's previous decision-making and, in particular, to the heightened standard of proof resulting from the threefold annulment of prohibition decisions by the CFI in 2002.

The new approach has had a tangible influence on the amended EC Merger Regulation (ECMR)[2], the likewise redrafted Implementing Regulation and the

[1] All cited decisions are available at the Commission's website at http://europa.eu.int/comm/competition/mergers/cases.
[2] All cited legal documents are available at the Commission's website at http://europa.eu.int/comm/competition/mergers/legislation.

new Horizontal Merger Guidelines (HMG), all of May 2004, as well as subsequent decision practice. The most striking change is the new prohibition criterion. Article 2 (3) of the ECMR now reads:

> "A concentration which would significantly impede effective competition in the common market or in a substantial part of it, in particular as a result of the creation or strengthening of a dominant position, shall be declared incompatible with the common market."

This is referred to as the "significant impediment to effective competition" or simply SIEC test. The previous criterion of market dominance is still embodied in the rule, but it now merely constitutes a primary example.

The new test is given concrete form in the accompanying Guidelines. Accordingly, the overall aim continues to be the prevention of (significantly increased) market power, which denotes the ability to increase prices, to reduce output, choice or quality, or to diminish innovation at the expense of consumers (HMG, para 8). The Commission compares, within the "competitive analysis in a particular case", the foreseeable impact of the merger with the situation that would have prevailed otherwise (HMG, para 13). While, at this level, there is no fundamental change, the Guidelines subsequently introduce a number of new concepts from contemporary industrial economics.

The first one is the Herfindahl-Hirschman Index (HHI), i.e. the summed squares of the market shares of all firms, as an additional indicator of market structure (HMG, paras 16–21). Even more important is the differentiation – originating in US practice – between coordinated and non-coordinated effects as possible anti-competitive consequences of horizontal mergers, which will be dealt with more extensively below. While the remarks on coordinated effects largely represent a restatement of the traditional collective dominance concept, the inclusion of unilateral effects was explicitly meant to extend the scope of the ECMR and thereby cover anti-competitive mergers in oligopolistic markets "below" the old market dominance threshold.

Conversely, efficiencies are for the first time acknowledged as a "countervailing factor", which can result in approval despite a dominant market position (HMG, paras 76-88; Schwalbe 2005). The Guidelines set out three cumulative conditions for acceptance. In detail, the efficiencies must be merger-specific and verifiable. They must also – at least partly – be passed on to consumers, which conforms to the so-called consumer welfare standard. Moreover, the burden of proof lies with the firms in contrast to the normal merger control procedure. In this connection, the expected efficiency gains must be weighed quantitatively against merger–related welfare losses on a case-by-case basis. A similar concept known as "efficiency defence" is already established practice in US merger control. Taken together these concepts constitute the substantive core of the "more economic approach". In addition, the Guidelines mention the other well established factors of buyer power, entry and the "failing firm defence" (HMG, paras 64–75; 89–91).

The substantive issues are complemented by a number of important procedural changes in the amended ECMR itself and in the Implementing Regulation. These include the extension of the time limits in complex cases, the increase of the Commission's investigative powers and sanctions as well as firms' extended duties to furnish information upon notification. The "more economic approach" is also closely related to a number of organisational changes within DG Comp. One is the appointment of Prof. L.-H. Röller as the first Chief Economist who heads up a team of – at present ten – industrial economists.[3] In addition, the European Advisory Group on Competition Policy (EAGCP) has been set up as an academic advisory body.

The Horizontal Merger Guidelines consider "efficiencies" to offset a "dominant market position"

Finally, the new approach is already visible in the merger control practice, although its implementation is far from completed. In particular, there has been no prohibition decision on the basis of the new SIEC

[3] More details can be found at the DG Comp website at http://europa.eu.int/comm/dgs/competition/cce_en.htm respectively http://europa.eu.int/comm/dgs/competition/eagcp.htm.

Figure 2

MAIN ELEMENTS OF THE "MORE ECONOMIC APPROACH"

- New prohibition criterion "significant impediment to effective competition" (SIEC)
- New substantive concepts in the Horizontal Merger Guidelines: Herfindahl-Hirschman Index, coordinated and unilateral effects analysis, "efficiency defence"
- Procedural changes: extended time limits, increased investigative powers, greater information requirements
- Appointment of Chief Economist, establishment of advisory body EAGCP
- Strengthened use of quantitative analysis in case practice

test to date, nor has a merger been approved on the grounds of efficiency. There is, however, evidence of greater recourse to statistical and econometric analyses (Weitbrecht 2006). As a corollary, economic experts are involved more regularly in proceedings, both within the Commission and on behalf of the companies. Recent examples include the cases of Oracle/PeopleSoft (2004) and Blackstone/Acetex (2005). These changes further contribute to an alignment with US practice.

Unilateral versus coordinated effects

A few more words are due on the newly introduced pair of possible anti-competitive effects of horizontal mergers. Together with the novel "efficiency defence", they constitute the substantive core of the "more economic approach", but are of a much greater practical significance. They are typical of the new approach in that they both reflect recent theoretical developments in industrial economics and, in addition, closely resemble US merger control practice (Vickers 2004, 463). They further contribute to the overall tendency towards more differentiated treatment of and, consequently, deeper inquiries into individual cases (Christiansen and Kerber 2005, 3–4). Apparently, this is deemed to be the logical consequence of incorporating more economics into competition law and its application.

Unilateral effects mean increased market power for the merging firms

A merger may give rise to so-called unilateral effects because of the removal of competitive constraints on one or more seller(s) (HMG, paras 24–38; Motta 2004, 233–250). Increased market power, especially for the merging firms, may be the result, thus widening the scope for profitably increasing prices or reducing output. This does not require an accommodating reaction on the part of the competitors nor the establishment of a dominant position in the sense of the old substantive test. Rather, the decisive factor is the intensity of competition between the merging firms relative to their competitors. Unilateral effects are therefore likely to occur primarily in differentiated product markets. The Guidelines cite as conducive factors high market shares, a high degree of substitutability between the merging firms' products, the lack of alternatives for customers and capacity constraints faced by the competitors.

Coordinated effects result if sellers are enabled to coordinate their behavior

In practice, an assessment of unilateral effects requires a quantitative projection of the (short-term) price and quantity effects of the merger. This is done increasingly by means of so-called "merger simulation models". These models incorporate assumptions on the form or structure of the given market and the primary competitive parameters such as price or quantity. Moreover, the relevant price elasticities must be estimated and any cost savings as well as reactions by competitors to the merger need to be forecasted. Both the underlying theoretical concept and the empirical simulation models have been in use in US merger control for some time. The theoretical background is provided by industrial economics models on incentives for mergers in oligopolistic markets developed since the 1980s.

Coordinated effects, on the other hand, are said to result from a merger if it enables the sellers to (implicitly) coordinate their behaviour or if it stabilises already practiced coordination (HMG, paras 39–57). The term tacit collusion is also used, since no explicit agreements are involved. Competition between the coordinating firms is (largely) eliminated. In contrast to unilateral effects, this is more likely to emerge in homogeneous markets. The Guidelines define four cumulative criteria. Firstly, it must be relatively simple to reach a common understanding on the terms of coordination. Secondly, the coordinating firms must also be able to monitor each other's compliance and, thirdly, they must be capable of sanctioning any deviation, which implies the existence of a credible deterrent mechanism. Fourthly, the foreseeable reactions of customers as well as actual and potential competitors must not undermine coordinated action. In practice, a number of structural factors are examined such as the market shares and the number of firms, transparency, degree of product homogeneity and demand growth. All in all, these criteria are closely aligned with contemporary thinking in industrial economics as well as US practice (Motta 2004, 137–185).

Costs and benefits of the "more economic approach"

In order to assess the benefits and costs associated with the new approach, three aspects are worth considering, namely the administrative burden, legal certainty and decision quality. To begin with, the recent reform made the administrative burden rise especially with regard to complicated cases (Weitbrecht 2006, 44). Several factors are responsible for this. For one, the (new) Article 3 (2) of the Implementing Regulation requires the official notification form (Form CO) and all documents to be submitted in the original and in 35 copies (!) as compared with 24 and

19 copies previously. Furthermore, the notifying parties have to furnish more extensive information. The market share threshold for details about competitors has been lowered from ten percent to five percent. In addition, for the first time, pre-merger and post-merger HHI values have to be calculated for all the affected markets (Section 7.3 of Form CO).

Increasing quantitative analysis plays a crucial role as well. Both econometric market delineation and, above all, the new simulation models require the compilation of extensive data sets. Particularly exacting requirements are associated with the new "efficiency defence", which is conceived as a case-by-case assessment with the burden of proof lying with the firms (Section 9.3 of Form CO). This affects not only the firms but also the Commission, which conducts its own studies and must examine those submitted by the firms. It also must make the data files and calculations accessible for inspection by the firms in a specially devised "data room". Taken together, this results in a significant rise in administrative costs.

The "more economic approach" also has important repercussions on the degree of predictability and, hence, legal certainty for the affected parties. In the context of merger control, this refers primarily to the ability to predict the outcome of an investigation with sufficient reliability (Voigt and Schmidt 2005). Proponents of the new approach repeatedly argued that the increased application of economic concepts made the decision-making more transparent and, thus, more predictable (e.g. Röller 2005, 21). This implies that the new concepts provide a clearer benchmark for the assessment of concrete cases. However, contemporary economic knowledge cannot in fact fulfil this expectation (Christiansen 2006, 10–12).

Industrial economics, which underlies the new approach, is built primarily on game-theoretic (oligopoly) models (Motta 2004). A wide range of theoretical work is available, which often either leads to contradictory results or suffers from limited validity because of rather specific assumptions. Concurrently, a (more) general theory as well as systematic empirical work are lacking, so that the scope of validity of the individual models and, thus, the selection of the relevant model remain ambiguous. This, in turn, widens the scope for discretion, thus making the Commission's decisions more difficult to predict. Hence, legal certainty is not improved but diminished.

During the reform process, improved decision quality became more and more important (e.g. Röller 2005; Vickers 2004). The new concepts and analytical methods, according to the argument, made it possible to identify more reliably any anti-competitive mergers, on the one hand, and welfare-enhancing transactions, on the other. Compared to the practice before the reform, decision errors of both types would be reduced, thus increasing social welfare. Figure 3 serves to illustrate the possible cases and ensuing welfare effects.

Regarding the actual reforms, the incorporation of unilateral effects analysis was explicitly meant to close a gap under the old ECMR and, thus, to eliminate a systematic source of type I-errors. There are some indications of the theoretical relevance of such a gap in respect of certain welfare-reducing mergers in heterogeneous oligopolistic markets "below" the market dominance threshold. However, evidence of a significant number of false approvals by the Commission is widely lacking. The only case cited in this connection is Airtours/FirstChoice (1999). Even more importantly, the Commission had already examined unilateral effects before the reform and had thereby also resorted to econometric methods, for example in the cases Philips/Agilent (2001), GE/Instrumentarium (2003) and Oracle/PeopleSoft (2004). Although this list does not claim to be exhaustive, it reduces the scope of the potential gap.

The new approach is said to render decision-making more transparent, but ...

As to the analysis of coordinated effects, no reduction in errors can be expected simply for the reason that it is closely aligned to the previous collective dominance concept. Like the inclusion of unilateral

Figure 3

ERROR TYPES AND WELFARE EFFECTS

		Welfare effect of the merger	
		Negative	Positive
Decision by the authority	Approval	**Error Type I (direct welfare loss)**	Correct decision (direct welfare gain)
	Prohibition	Correct decision (avoided welfare loss)	**Error Type II (foregone welfare gain)**

Adapted from Christiansen and Kerber (2005, 9).

effects, however, the "efficiency defence" was meant to correct a certain type of decision errors. It was claimed that efficiency had been falsely used as an argument against mergers ("efficiency offence") and that type II-errors had therefore been committed. However, the empirical evidence for this claim is fairly weak. Moreover, the specific conditions set out in the Guidelines are presumably impossible to fulfil in practice (Schwalbe 2005). The US experience points in the same direction. In conclusion, a significant improvement in decision quality is unlikely.

All in all, the effects of the "more economic approach" on decision quality remain ambiguous for the time being. The coordinated effects analysis as well as the newly adopted "efficiency defence" are unlikely to reduce errors. For unilateral effects analysis, which will probably have the greatest practical relevance, the outcome is more positive. All the same, the extent of the alleged gap and the ensuing reduction of type I-errors must be put into perspective. At present, it is still unclear, however, what the relative weights of these effects will be. However, any assessment of the new approach must also take account of the rise in administrative costs and the reduction in legal certainty. Even without precise quantification, there is every indication that the costs associated with the "more economic approach" outweigh the benefits.

... the effects on decision quality remain ambiguous

Important institutional implications

A comprehensive assessment of the new approach must also include institutional considerations. Two points are particularly important, namely the scope for non-competition factors to interfere with the decision-making process and the related aspect of separation of functions. Regarding the former, EU Merger Control has suffered from a fundamental institutional flaw ever since it was introduced. With the European Commission, responsibility for final decision-making lies with a primarily political body whose members are particularly exposed to influence from firms and from (governments of) the EU member states (Murray 2004, Schmidt 1999). Political interventions constitute another source of welfare loss due to erroneous decisions. Indeed, a number of questionable decisions could be observed. These include the cases of Boeing/McDonnell-Douglas (1997), Kali&Salz/MdK/Treuhand (1994) and Mannesmann/Vallourec/Ilva (1994).

The preferred institutional solution would be the creation of an independent competition authority along the lines of the German Federal Cartel Office. However, proposals to this effect have receded more and more into the background. Although non-competition factors have apparently played a lesser role in recent years, the issue remains important. The inclination towards political intervention will persist. This was clearly indicated by the French-German initiative for a pan-European industry policy in autumn 2004 and the parallel discussions on the competences of Günter Verheugen, the new Vice-President. Other examples are the German ministerial authorisation of the E.ON/Ruhrgas merger in 2002 and the French government's rescue of Alstom in 2003/4.

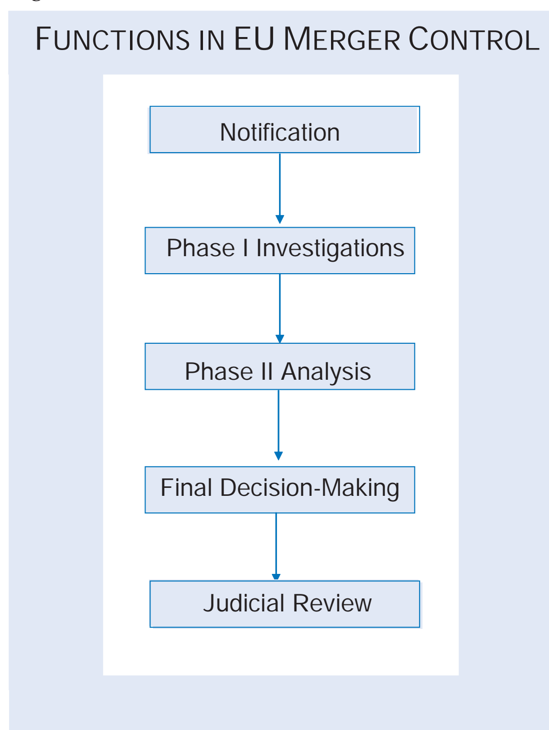
Against this background, the increased focus on economic analysis can be interpreted as an attempt on the part of the supporters of a purely competition-oriented approach within DG Comp to shield themselves from political influence. Greater complexity of the economic argumentation already had this effect before the reform. Hence, the "more economic approach" might be a logical refinement of this strategy. It is, however, only a "second best" solution. Superior institutional solutions are available (Christiansen and Kerber 2005, 15–16). Besides an independent competition authority, this includes the formulation of more general rules so as to reduce administrative discretion and thus the potential for biased decisions. By contrast, the actual orientation towards case-by-case analysis threatens to create new possibilities for discretionary decisions and might thus raise the incentives for firms and politicians to exert influence again.

The second important criticism regarding the institutional framework of EU Merger Control concerns the concentration of functions, which also dates back to the very beginnings (Murray 2004, 41–48; Voigt and Schmidt 2005, 166–175). In principle, the merger control process consists of five analytically distinct functions (see Fig. 4). Of these, only judicial review is assigned to a separate body, while the first three functions even lie in the hands of the same case team within DG Comp. This institutional structure clearly lacks "checks and balances", thus offering little incentive for careful investigations and decision quality.

The preferred institutional solution is greater functional separation. There are two principal ways to achieve this. Firstly, notification and analysis could be assigned to an independent institution, while the European Commission would remain responsible for the final review of the case and the ultimate deci-

Figure 4

FUNCTIONS IN EU MERGER CONTROL



sion. In practice, this would mean the institutional separation of DG Comp. It would resemble the institutional structure in the UK since the Enterprise Act of 2002, which divided the responsibilities for merger review between the Office of Fair Trading and the Competition Commission (Vickers 2004, 457). Secondly, the said functions could remain within the purview of the Commission, while final decision-making would be transferred to a court of lower instance like in the US (Levy 2003, 200).

In comparison, the changes in the course of the reform have not gone far enough (Levy 2003, 215–216). Of late, complex cases have been reviewed internally by so-called "peer review panels". The Chief Economist and his team have also been increasingly involved in the decision-making process. On conceptual issues there has also been a greater exchange with academic experts, in particular through the EAGCP. More importantly, the Court of First Instance has introduced a fast-track procedure, which makes judicial review much more effective. This last change lies outside the Commission's domain, however. So the need for institutional reform remains. If suitably structured, functional separation would also help to curtail the possibilities for political influence discussed above. All in all, the "more economic approach" should be broadened in this respect, and consideration be given to economics-based proposals for an improved institutional framework.

Greater separation of functions (like in the UK) would constitute a better institutional solution

Conclusion

With the "more economic approach", the EU is taking a new tack on merger control policy. This is visible not only in the new SIEC prohibition criterion and the criteria for appraising horizontal mergers, but also in more recent decision-making practice. On closer analysis, the new approach de facto reduces legal certainty, while the upshot in terms of decision quality remains unclear. Conversely, the administrative burden has risen significantly. Moreover, institutional deficiencies remain regarding political interventions and the separation of functions. In conclusion, a broader perception of an economics-based approach that takes account especially of the institutional implications is called for. Specific recommendations are the establishment of an independent competition authority and the stronger orientation of merger control towards (more) general rules.

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Germany as an Emerging Archipelago Economy: On Some Less Obvious Implications of Corporate Takeovers and Mergers

Hans-Martin Zademach*

Besides company restructuring and economic change, M&As have political and socio-institutional effects

Since the mid 1980s, most of Europe and the developed world experienced an unprecedented wave of mergers and acquisitions (M&As) that only faded away during the economic downturn at the beginning of the 21st century. In 2000, the global market for M&As represented USD 3.498 billion[1] (UN 2002). Germany, together with the US and the UK, was one of the three most important markets for M&As (Kang and Johansson 2000). During the 1990s alone, almost 30,000 corporate takeovers involved at least one German firm; the value of corporate transactions here attained a volume of EUR 199 billion in 1999 and EUR 487 billion in 2000, compared to EUR 26 billion in 1990 (M&A 2003).

This massive number of takeovers[2] has led to important changes not just in the structure of businesses, but also to a thorough reshuffling in the location of economic activity and decision-making. Yet, whereas research on corporate takeovers from a microeconomic perspective is extensive, the number of empirical studies examining their overall effects on the location of economic activity is still relatively small (e.g. Chapman 2003; Markusen 2003). Taking the *M&A Review database* of the German *Handelsblatt* group as the source of data, the present article thus explores the reshuffling in the location of economic activity in Germany over the last decade, with particular attention being paid to the role and increasing interconnection of metropolitan regions as major nodes of economic power and control.

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[1] After 2000, the volume of transactions quickly waned to USD 1.753 billion in 2001 and to USD 1.230 billion in 2002 (UN 2003; Thomson Financial 2003).

[2] Takeovers (or acquisitions) indicate the purchase of a company by transferring the control of assets and operations from one firm to the other, the former becoming an affiliate of the acquirer. A merger, on the other hand, implies the combination of the assets and operations of two firms to establish a new entity whose control resides in a team from one or both of the two. Despite these differences, M&As are usually bundled together for most purposes.

Corporate takeovers in spatial perspective

As today's dominant form of foreign direct investment in developed countries, M&As have become one of the main drivers of industrial restructuring. Firms engage in M&A activity for several reasons. The basic strategic corporate objectives include the search for new markets, increased market power and dominance, greater size and scope, efficiency gains through synergies, and geographic and product line diversification, i.e. the spreading of risk. Corporate takeovers enable firms to quickly access strategic assets, such as skilled labour, patents, brands, licenses, or management skills (Porter 1990; Trautwein 1990; Berkovitch and Narayanan 1993; Dunning 1997). Further central factors motivating firms to undertake M&As are financial enticements – like tax treatment and subsidies, transfer pricing, trade barriers, transportation costs, or monopoly type practices (Ravenscraft and Scherer 1987; Healy et al. 1992; Loughran and Vij 1997; compare also Clark 1993; Wrigley 1999) – and personal or behavioural attributes (Shleifer and Vishny 1989; Avery et al. 1998; Shinn 1999).

The basic rationale behind M&As is thus one of achieving greater efficiency. But corporate takeovers and mergers not only lead to firm restructuring and economic change (see Curry and George 1983; Jensen and Ruback 1983; Davies and Lyons 1996; Nilsson and Schamp 1996). They also have profound political and socio-institutional implications and are by no means an 'aspatial phenomenon': strategic decisions on the transfer of assets and control affect not only the firms involved, but also both the locations and environment with which they are associat-

ed and the organisational and geographical shape of industries as a whole. In brief, M&As have become one of the keys in shaping the location of economic activity and decision-making.

If considered in their totality, the spatial distribution of M&As intensely affects the overall organisation of an economy through modifications in regional and urban structures: The changing ownership configuration and the resulting transfer of the corporate locus of control as well as the shifting of assets and personnel across geographic areas and industries adversely affects the localities involved. M&As thus cause fundamental change in corporate space and increase the risk of external domination of segments of a local economy. Companies and establishments at peripheral regions, for instance, have become increasingly owned und ultimately controlled by firms headquartered in core regions (Chapman and Edmond 2000). The possibility to exercise ultimate control from headquarters located in a different region than the other parts of the business accordingly facilitated the expansion of contemporary corporations' power networks.

As decisions made at the highest level of corporate control directly influence the growth and development of city systems, the performance of major corporations has great impact on interrelationships in a nation's urban structure (Green 1990). M&A activity has thus to be conceived as a paramount driver of the particular role of cities as increasingly concentrated locations of power and control (Friedman 1986, Sassen 1991, 2000, Castells 1996, Taylor 2000, Duranton and Puga 2003 and others on the theory of globalised urban networks). Extending this theory, Veltz (1996) argues that the functional links between cities with similar roles in the world economy are strengthened beyond physical contiguity; in his 'archipelago economy' approach, he proposes that the connections between cities are greatly enhanced, whereas they become increasingly detached from their regional contexts and hinterlands (Veltz 2000, 33–38). Representing important stationary relocation processes that permit the transfer or corporate power from one metropolitan complex to another, corporate takeovers therefore strengthen the increased interconnectivity between large urban areas.

In sum, M&As reinforce the spatial concentration of economic activity, the resulting disparities in regional development, and the changes and linkages in an economy's metropolitan hierarchy. Hence, the concentration of power and control resulting from M&A activity has implications for regional development and indicates the importance of corporate strategy and the spatial organisation of production to metropolitan systems.

M&As reinforce the spatial concentration of economic activity

Data and methodology

The source of the data, on which our empirical analysis is based, is the *M&A Review Database,* the most comprehensive record of recent M&A activity in Germany. It offers information on more than 29,000 M&As that took place in the 1990s, in which at least one German firm was involved, and classifies – whenever possible – each acquisition by location, industry and type.[3] As with all data sources on M&As (see e.g. Green and Mayer 1997; Chapman and Edmond 2000), there is unfortunately little information on the value of the transactions, i.e. the economic significance of an acquisition. Nevertheless, frequency counts represent a good indicator of the overall level of M&A activity and its wide-ranging trends.[4]

From a methodological point of view, the analysis builds, in essence, on the application of a location quotient. Via standardisation by regional GDP, the index $MApR\text{-}I_{(gdp)}$[5] identifies the relative, i.e. the weighted burden of M&As in each of the 40 German counties (Regierungsbezirke, the primary administrative divisions of the Länder). The entire number of close to 24,600 corporate takeovers contained in the database, in which the acquiring firm was a German one, were used for the calculation of the quotient, after having discarded those cases

[3] The database is maintained by the University of St. Gallen and can be accessed via the platform Genios *Wirtschaftsdatenbanken*. Due to missing entries (see below), the present study does not cover all 29,385 transactions contained in the dataset, of which 7,765 are transnational.

[4] No distinction is made between mergers and acquisitions in this paper. Given international trends – 97 percent of all cross-border M&As included in the World Development Report were defined as acquisitions (UN 2000) – it can be assumed, however, that the great majority of transactions are in fact acquisitions or corporate takeovers.

[5] $MApR_{(gdp)}\text{-}I$ is calculated according to the following formula:

$$MApR_{(gdp)} - I = \frac{\sum_{t_0}^{t_1} MA_i \;/\; \sum_{t_0}^{t_1} GDP_i}{\sum_{t_0}^{t_1} MA_{Ger} \;/\; \sum_{t_0}^{t_1} GDP_{Ger}}$$

where MA depicts the absolute number of M&A transactions, GDP denotes the regional GDP (in EUR million), t_0 and t_1 denote the period of analysis, i stands for the regional unit of analysis (Regierungsbezirk) and Ger, finally, corresponds to the whole of Germany. The German average equals one.

included in the database for which no exact geographical information was given. Before turning to the series of maps that visually demonstrate the location quotient and highlight the main changes in the German geography of M&As during the period under investigation, some more general characteristics of the economy's takeover landscape are outlined.

Reshaping the economic decision-making in Germany

German economic geography of M&As, as observed in the 1990s, has three important features. First of all, there is the key role played by economies of proximity and agglomeration in corporate takeovers in Germany. By far the greatest share of M&As occurred either within the same county, or among large metropolitan areas. In more than a third of all German M&As during the 1990s, the acquiring firm and its target were located in the same county (see Rodríguez-Pose and Zademach 2003 for more detail). Apart from localisation economies (external to the firm, internal to the industry) and urbanisation economies (external to the industry, internal to the local economy, for example skilled labour pooling, knowledge spillovers and scale economies in infrastructure provision), other factors, such as the role played by institutional investors deserve special attention as potential determinants of this huge geographical concentration of M&As. For financial intermediaries such as banks and insurance companies and the Länder – being particularly relevant in the "German model" of corporate governance as the primary owners of companies on the local and regional level (Gorton and Schmidt 1996; Streeck 1997; Berndt 1998; Franks and Meyer 2001; Wójcik 2002; Clark and Wójcik 2003), – distance would be a significant obstacle in exercising control. Local embeddedness (Granovetter 1985; see also Glückler 2001; Hess 2004), characterised by the presence of locational assets, localised capabilities and, not least, the possibility for frequent personal or "handshake" interaction, face-to-face communication and "emotional closeness" (Leamer and Storper 2001; Storper and Venables 2004), also contributes to the geographical concentration of M&As.

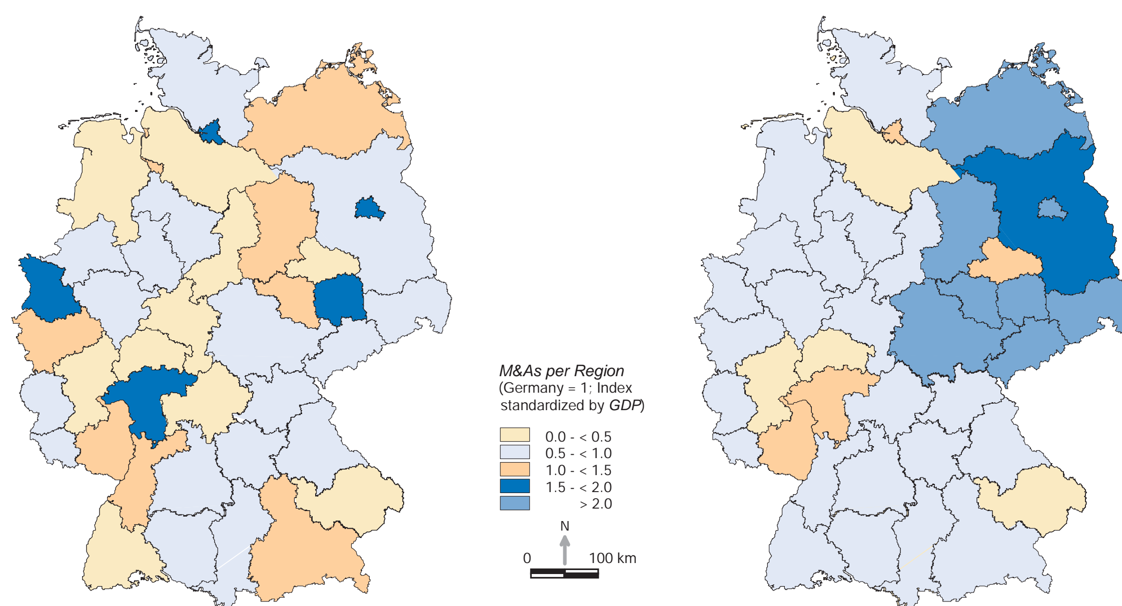
Distinct geographical concentration of German M&As is due to localisation and urbanisation economies

The significance of agglomeration economies for M&As in Germany is even more striking if only the most important German M&A metropolitan areas are taken into consideration. Their intraregional transactions alone (i.e. not the M&As performed *between*, but only *within* them) account for close to a fifth of all intranational M&As. This figure climbs to 22.3 percent, if the top ten German agglomerations are taken into consideration (Stuttgart, Karlsruhe, Hanover and Bremen, in addition to the six key nodes Frankfurt, Dusseldorf, Hamburg, Munich, Berlin and Cologne). Overall, more than 55 percent of all intranational transactions involved at least a firm located in one of the six most important German centres of M&As; and if, again, the top ten German urban regions are taken into account, almost 70 percent of the overall German M&A activity is concentrated in large metropolitan areas.

The second key characteristic of the German M&A economic geography is the 'interconnectivity' of the largest metropolitan areas. In line with Veltz's (1996) archipelago economy, 33 percent of all intranational M&As in Germany during the 1990s took place only within and between the six largest German metropolitan areas. Moreover, the share of intrametropolitan transactions kept on growing throughout the decade. If only the M&As conducted from the six key nodes are considered, the percentage rises to more than three fifths of all transactions. This can be taken not only as a strong indication of the increasing concentration of economic decision-making in a small number of agglomerations, but also of the strengthening of the interactions and linkages between these points of control, at the expense of their regional contexts.

The third important aspect of the spatial distribution of M&As in Germany is related to distance. Once agglomeration factors are controlled for, corporate transactions are more likely to happen between nearby, rather than distant cities (Rodríguez-Pose and Zademach 2003, 1912). This insight corresponds to the findings of Wójcik (2003, 1455), who also demonstrates that geography must be regarded as a crucial dimension in the German model of corporate governance: "... proximity breeds corporate ownership and control links, and corporate governance, even at the subnational level, is by no means spatially uniform." That is, considered at the aggregate level, companies tend to be financed and/or controlled by entities with nearby headquarters.

Figure 1
Acquiring firms and M&A targets in Germany



Territorial dynamics in the German M&A economy

These agglomerating and centralising trends are confirmed by the mapping of the location quotient MApR-I(gdp). In the years around and immediately after reunification (1990–94), the overall German geography of M&As was characterised by marked differences between the spatial distribution of acquiring and target firms (Figure 1). The restructuring and the reorganisation of production in the former German Democratic Republic triggered a significant number of intranational M&As between western and eastern firms, with western firms as the main acquirers. Relative to the GDP of the region, firms in eastern Germany became the primary target of western firms. All east German counties had more transactions per region than the German average. Leipzig (with a location quotient of 3.60), Dresden (3.05) and Chemnitz (2.64), the three regions of Saxony, Magdeburg (3.44) and Halle (3.05), both in Saxony-Anhalt, as well as Thuringia (3.09) and Mecklenburg-Western Pomerania (2.88) were the main target regions during this period.

Acquiring firms, on the other hand, were primarily located in the large west German metropolitan areas. Berlin[6], with a location quotient of 1.79 was top, followed closely by Frankfurt (1.71), Düsseldorf (1.70) and Hamburg (1.70). Yet some eastern counties, such as Mecklenburg-Western Pomerania (1.10), Magdeburg (1.24), Halle (1.28) and Leipzig (1.52) also had above average ratios. In spite of the performance of these four eastern regions, the post-unification period was characterised by a significant overall loss of corporate control in the whole of east Germany.

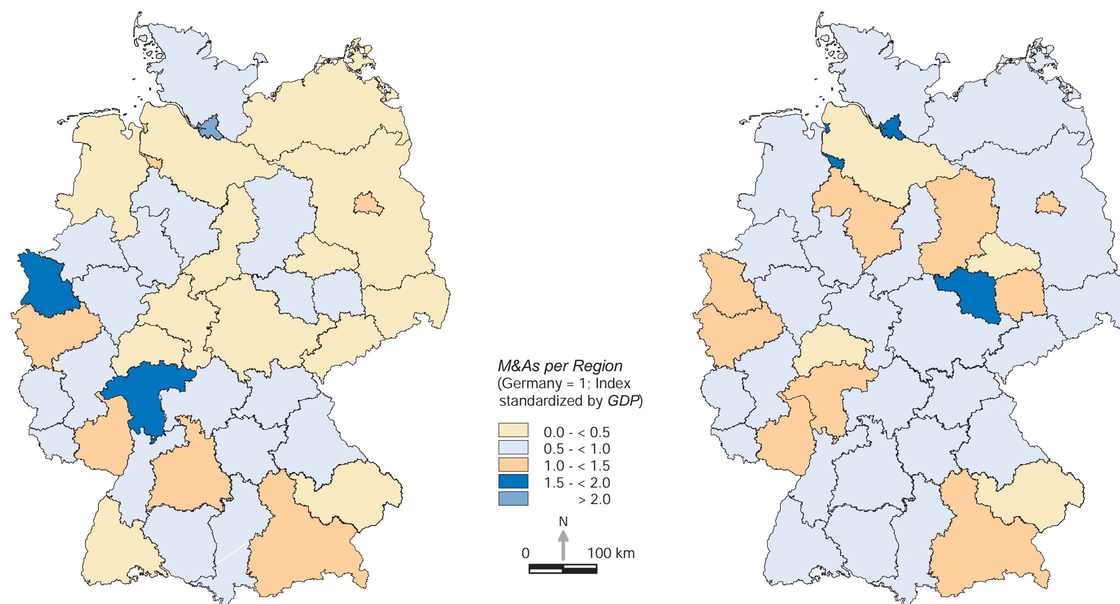
In 1990–1994, after German reunification, firms in east Germany were the main targets of west German acquirers

The second half of the 1990s saw a sharp turnaround in this process. The east-west dimension of the M&A market during the first half of the decade lost all relevance and was substituted by a complete dominance of large urban areas (Figure 2).

From the acquisition point of view, the panorama is one of continuity. Hamburg (2.02), Düsseldorf (1.80) and Frankfurt (1.73) represent the three most important acquiring centres, while Munich, Cologne, Berlin, Bremen, Stuttgart and Rhinehesse-Palatinate also punch above their economic weight. The only significant change is the increase in the relative share of the acquiring firms in these regions. The picture changes radically, however, on the target side. With the sole exceptions of Halle, Magdeburg and Leipzig – remnants of the earlier east-west trend – M&A target firms become increasingly concentrated in large metropolitan areas. The greatest relative concentration of targets is found in the two city states of Hamburg (1.84) and Bremen (1.76). Frankfurt (1.41), Düsseldorf (1.34), Berlin and Munich (both

[6] Note that the location quotients for the three German city states Berlin, Bremen, and Hamburg might be slightly overestimated, as within their administrative borders there is no hinterland.

Figure 2
Acquiring firms and M&A targets in Germany



1.24) as well as Cologne (1.13) also score above the national average. During the second half of the decade, the largest German metropolitan areas had thus become the most dominant locations both for acquiring headquarters and target firms, stressing the increasing emergence of an archipelago economy scenario.

Conclusion

After 1995, the large urban areas came to dominate the M&A market again

Corporate takeovers and mergers are a key characteristic of the information-based and globalised economy of the late 20th and early 21st centuries. They also reflect the ongoing restructuring of production processes in an increasingly competitive environment. Taking the German economy as a case study, this paper has analysed the dynamics of M&As and the extent to which the most recent wave of corporate consolidation has led to a profound relocation of economic activity and to an increasing concentration of corporate power and control in large urban areas. Agglomeration economies and, to a lesser extent, geographical distance seem to have been the main factors shaping the restructuring of the territorial distribution of economic power and activity in Germany. From this perspective, M&As represent both a symptom and a cause of the increasing concentration of economic decision-making in large urban areas and of the rise of the economic power of metropolitan areas.

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After the EP vote: Amendments to the draft Services Directive

Pro: ETUC

The European Trade Union Confederation warmly welcomed the outcome of the European Parliament vote amending the draft Services Directive on 16 February.

It was indeed a victory for European workers – a vindication of the coordinated and disciplined opposition campaign conducted by the European trade union movement over the two years since the draft legislation was first published, and a fitting response to the 50,000 people who rallied in Strasbourg two days before the vote, including many from the new EU Member States.

The original 'Bolkestein' proposal for liberalising services across national borders laid down a Country of Origin Principle (COP) whereby service providers would only be governed by the rules and regulations of the country where they were established. This would have meant that, for most purposes, a company from Germany, for example, could provide services in another EU country and comply only with German laws. Put simply, a competitive advantage would accrue to companies setting up in the poorest, most weakly regulated Member State and claiming it as their 'country of origin'.

This was political dynamite, eliciting instant fury in many EU countries. It meant that incoming firms 'based' in cheap, low standard locations would be given licence not to observe the laws, standards and customs of other nations on matters such as labour law, environmental standards and consumer protection. European trade unions saw the plan as the starting gun for a 'race to the bottom' – tumbling standards for workers, for the environment, and for consumers.

The ETUC was at the centre of the campaign to get the draft directive changed. We succeeded because we represented the interests of thousands of workers who identified it as a serious threat to their working conditions.

The EP vote removes the COP altogether, leaving Member States space to monitor and enforce national rules that guard the public interest. It also meets other crucial ETUC demands, respecting fundamental rights to collective bargaining, and excluding labour law and sensitive sectors such as temporary work agencies and private security services, services of general interest and some services of general economic interest such as healthcare.

It was very encouraging to see a broadly based majority of members of the European Parliament listening to widespread public concerns and acting on them. MEPs succeeded in finding a compromise that allows for the opening up of the services market while at the same time safeguarding the European Social Model.

However, there are still some improvements to be made. The ETUC will be watching carefully to ensure progress is not abandoned in the forthcoming revised Commission proposal, and pushing at the same time for European legislation to govern temporary agency workers and services of general interest.

The ETUC is not being protectionist, cosseting the rich countries at the expense of the poorer ones. But it is standing up for non-discrimination and fair competition. Incidentally, Europe's small and medium-sized businesses and their organisation UEAPME had no problem with the vote. It was multinational industry that came out against Europe's elected decision-makers.

If Bolkestein had got his way, the EU would be widely blamed for lowering standards and breaking national laws – inflicting incalculable damage on the whole process of EU integration for who knows how many years to come.

Kate Holman
Press and Communication Dept.
ETUC (European Trade Union Confederation)

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In a context dominated by a disproportionate political debate often prompted by misconceptions and the misleading new labelling of the proposal as a social directive, the Members of the European Parliament agreed to amend the services directive dramatically, reducing considerably its scope, diminishing the level of legal certainty and opening the way for red tape.

This directive is key to the Lisbon objectives and it is expected to deliver practical positive effects for growth and employment in Europe in the form of about 600.000 new jobs and an increase of 30 to 60 percent in commercial services trade in the EU.

To that end, the objective of the proposal is to achieve a genuine Internal Market in services by removing legal and administrative barriers to the development of service activities between Member States, whether they occur when service providers from one Member State wish to establish themselves in another Member State or when service providers wish to provide a service from their Member State of establishment in another Member State.

Accordingly, the Parliamentary amendments must then be examined by the Commission with utmost care. Only those amendments that provide legal certainty and truly facilitate the exercise of two fundamental freedoms (freedom of establishment and freedom to provide services) enshrined in the EC Treaty should be accepted.

UNICE is particularly concerned about the amendments that:

- Reduce the scope of the directive further

UNICE supports a broad scope and exclusions should be clearly justified and defined. UNICE is firmly opposed to the exclusion of temporary work agencies. Temporary work agencies are well regulated and legitimate services industry playing an important role for a smooth functioning of the labour market, and should benefit from the advantages of the directive's provisions.

- Weaken administrative simplification and promote red tape

Simplification of administrative procedures and elimination of red tape are essential for facilitation of the two freedoms of establishment and provision of services. Amendments which reduce the simplification effect of the directive should not be endorsed.

- Increase legal uncertainty and risk of multiple interpretations

Legal certainty and uniform interpretation of the directive are decisive for the well-functioning of the services market. UNICE is seriously concerned about the interpretation of the new wording of article 16 which is the cornerstone article for freedom to provide services, and asks the Commission to revise it. Also, there is a need for clarification about the use of the concept of "overriding reasons of public interest" and the relationship of the directive with other areas of law such as criminal law and consumer policy.

- Deal with exclusion of labour law and industrial relations aspects

The interpretation of the amendments dealing with exclusion of labour law and industrial action raise serious concerns. They are open to misinterpretation which may go against the aims of the directive.

The services directive is not intended to regulate such matters but simply to set out the principles of the legal framework applicable to cross-border provision of services taking also into account existing Community legislation and case law.

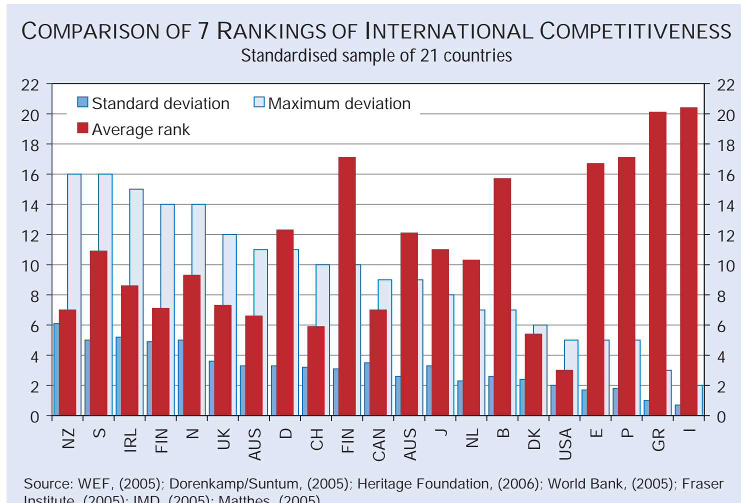
UNICE supports the principle of neutrality of the directive vis-à-vis these matters and asks for reformulation of the relevant amendments.

Notwithstanding the highly political and emotional debate on this proposal, this directive should not be amended with the aim of addressing ideological and political questions which are outside of the scope of the directive, priority should be given to providing practical solutions to the problems entangling the services market.

Carlos Almaraz
Senior Adviser, Legal Affairs Department, UNICE (Union of Industrial and Employers' Confederations of Europe), Brussels.

Rankings of International Competitiveness in Comparison[1]

Jürgen Matthes*



Source: WEF, (2005); Dorenkamp/Suntum, (2005); Heritage Foundation, (2006); World Bank, (2005); Fraser Institute, (2005); IMD, (2005); Matthes, (2005).

Rankings of the international competitiveness of nations are methodically problematic, but nevertheless very popular. Taking a closer look, it is striking that studies with a very similar objective sometimes come to rather different conclusions. This is partly due to the fact, that the seven prominent rankings that are analysed cover a widely different number of countries – between 21 and 157. Thus, a standardisation is required and the number for each ranking is limited to 21 industrialized countries. However, the deviations are still significant. Germany is placed by most rankings at the lower end of the midfield, but its position varies between fifth place in the Global Competitive Index of the World Economic Forum (WEF) and sixteenth place in the Activity-Index of the Bertelsmann Foundation. For five other countries the span covers even more ranks – for New Zealand and Sweden 16 ranks, for Ireland 15 ranks and for Norway and Finland 14 ranks. Apart from the World Competitiveness Yearbook of the Institute for Management Development (IMD) all rankings produce one or more of the extreme results that contribute to the wide spans mentioned.

Concerning the objectives, nearly all rankings focus on the ability of nations to generate a high living standard and/or a high rate of economic growth. In contrast to this similarity, the number of indicators used varies widely – between 12 and 241. Most studies aggregate the basic indicators in a bottom-up approach covering various hierarchical stages of subgroups and using unweighted averages. However, due to the construction and choice of the subgroups, different weights are implicitly introduced with regard to the basic indicators. This is one major reason why results differ.

More important still are the differences in whether certain indicator groups are chosen or not, like economic performance, business sophistication, infrastructure, business regulation, fiscal policy and foreign direct investment. For example, the two rankings of the WEF rank Germany rather differently (in position 5 and 12 respectively in the standardised sample) – mainly because one ranking covers the indicator subgroups business sophistication and infrastructure where Germany ranks at the top and the other ranking excludes these fields and includes instead macroeconomic performance where Germany displays significant weaknesses. Moreover, it is interesting that similar "indicator labels" can have different meanings. For example, the IMD also covers the indicator group business efficiency but focuses not only on the business field (as the WEF does) but also includes indicator subgroups concerning the labour market and social values.

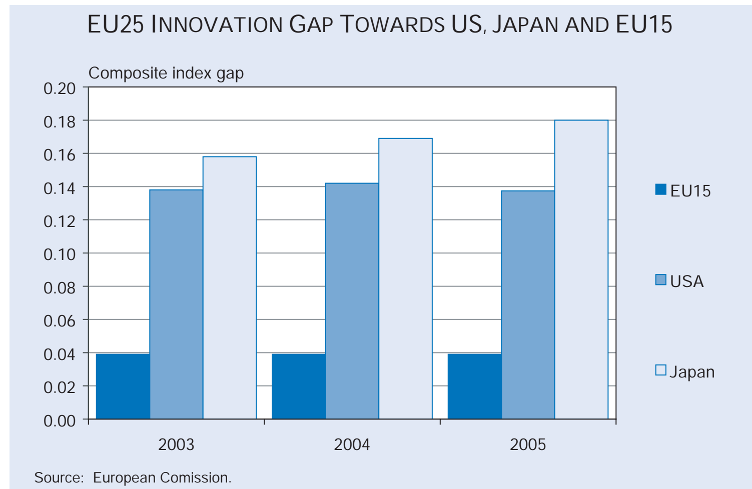
There are also differences among the rankings in the extent surveys instead of hard statistical data are used. The latter has the disadvantage of a time-lag in publication by statistical offices, but the advantage of being rather reliable. On the other hand, surveys are better able to also cover the current situation and possibly also the outlook for the near future. However, survey respondents might not be objective. In this respect it is striking that the surveys of the WEF and the IMD sometimes come to rather different conclusions, for example regarding similar questions about the effectiveness of corporate boards and corporate governance in Germany.

In summary, it proves necessary to take a closer look at the complex rankings in order to find the reasons why rather similar approaches sometimes produce very different results.

[1] Vgl. Matthes (2005).

* Cologne Institute for Business Research.

EU25 INNOVATION GAP REMAINS LARGE



The *European Innovation Scoreboard* (EIS) is the instrument developed by the European Commission, under the Lisbon Strategy, to evaluate and compare the innovation performance of the Member States. The EIS 2005 includes innovation indicators and trend analyses for all 25 EU Member States, as well as for Bulgaria, Romania, Turkey, Iceland, Norway, Switzerland, the United States and Japan. With respect to the situation in Europe, significant national differences are still observed as reflected by their Summary Innovation Index (SII).

Based on their SII score and the growth rate of the SII, the European countries can be divided into four groups:

- Switzerland, Finland, Sweden, Denmark and Germany make up the group of *"Leading countries"*.
- France, Luxembourg, Ireland, United Kingdom, Netherlands, Belgium, Austria, Norway, Italy and Iceland all belong to the group of countries showing *"Average performance"*.
- Countries *"Catching up"* are Slovenia, Hungary, Portugal, Czech Republic, Lithuania, Latvia, Greece, Cyprus and Malta.
- Countries *"Losing ground"* are Estonia, Spain, Bulgaria, Poland, Slovakia, Romania and Turkey .

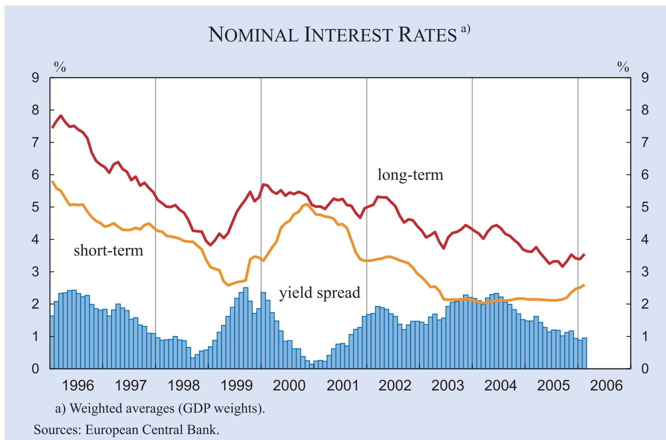
Although many countries show signs of catching-up, none of these countries is expected to complete this process by 2010. Using a simple linear extrapolation of current performances and growth rates, only Hungary , Slovenia and Italy are expected to reach the EU25 average within 20 years. For the other countries this process will take even longer, for some even more than 50 years. This also means that it would take more than 50 years for the EU25 to catch up to the US level of innovation performance.

The innovation gap between the enlarged European Union as a whole and the United States and Japan is substantial. The latter two countries are still far ahead of the EU25.

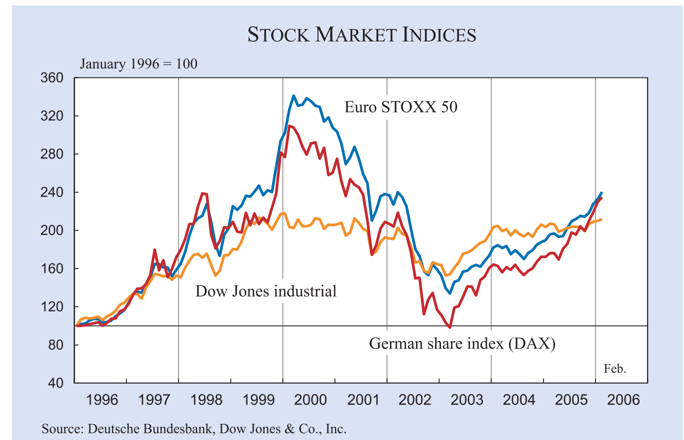
While the innovation gap between the EU25 and the United States is nearly stable, the one between EU25 and Japan is even increasing. About 70% of the EU-US innovation gap is explained by lagging EU performance in three indicators: USPTO (United States Patent and Trademark Office) patents, population with tertiary education and ICT expenditures. The EU-Japan innovation gap is largely explained by lagging EU performance in three indicators: USPTO patents, Triad patents and population with tertiary education. However, the economic interpretation of these statistical differences must be conducted with care where, for example, the patenting performance does not only reflect a difference in terms of innovation performance, but also in terms of business usage and sector coverage.

H.C.S.

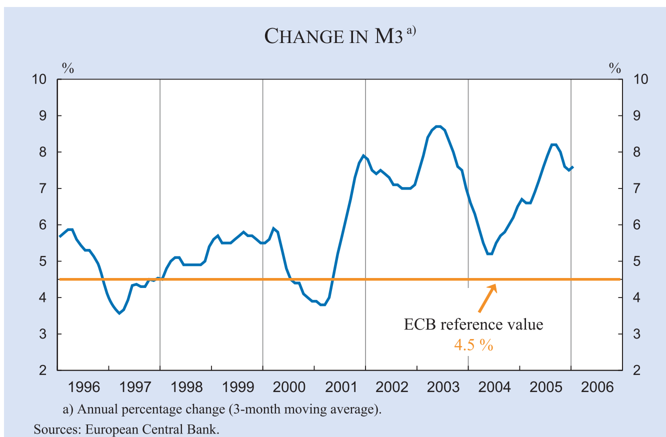
FINANCIAL CONDITIONS IN THE EURO AREA



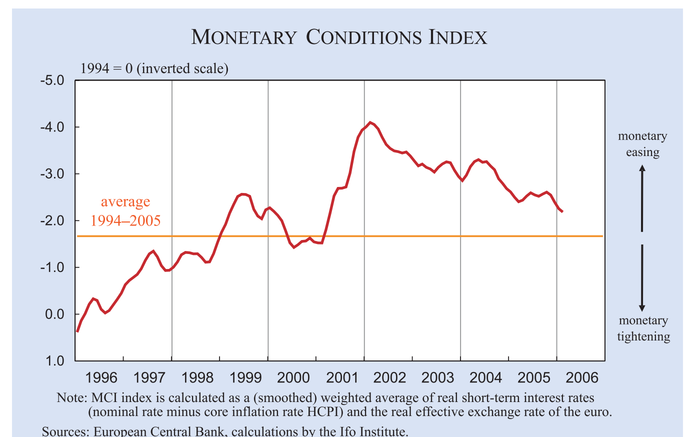
In anticipation of a rise in ECB key interest rates on 6 December 2005, money market rates had started to increase in October 2005 and continued to do so between December 2005 and the end of February 2006. In February, the 3-month EURIBOR averaged 2.6%. Then, on 8 March 2006, the ECB raised its key rates by another 25 basis points.
Ten-year bond yields had also started to rise in October 2005 when they stood at 3.3%. They averaged 3.55% in February 2006. The yield spread had narrowed until January 2006 and slightly increased again in February.



The German stock index DAX continued its steep increase in 2006, averaging 5796 in February and approaching the 6000 mark in late March. The Euro STOXX rose in parallel, averaging 3744 in February. Compared to the performance of these two European indices, the Dow Jones Industrial has moved rather slowly toward the 11,000 mark, passing it in March.

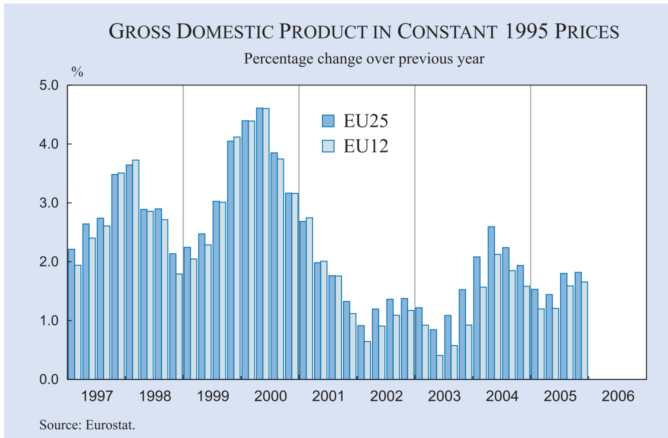


The annual growth rate of M3 increased to 8.0% in February 2006, from 7.6% in January. The three-month moving average of the annual M3 growth rates over the period from December 2005 to February 2006 stood at 7.6%, compared with 7.5% in the previous three-month period (November 2005 to January 2006). The annual growth rate of M1 decreased to 9.9% in February, from 10.2% in January.



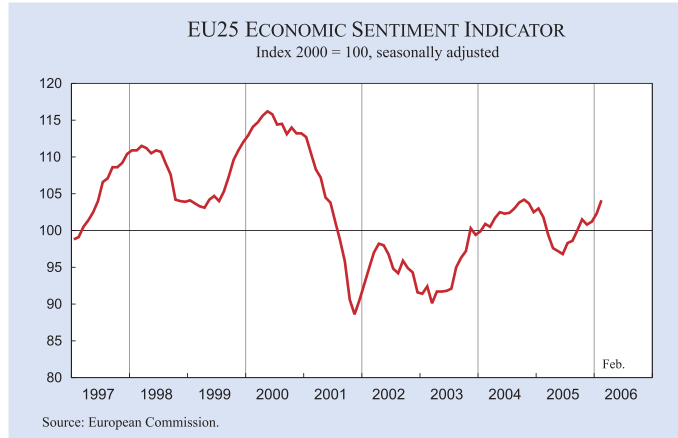
The monetary conditions index has continued its trend decline that had started in 2002. After a sideward movement in most of 2005, the index sharply declined in late 2005 and early 2006, signalling greater monetary tightening. This is the result of rising real short-term interest rates and a falling real exchange rate of the euro.

EU SURVEY RESULTS



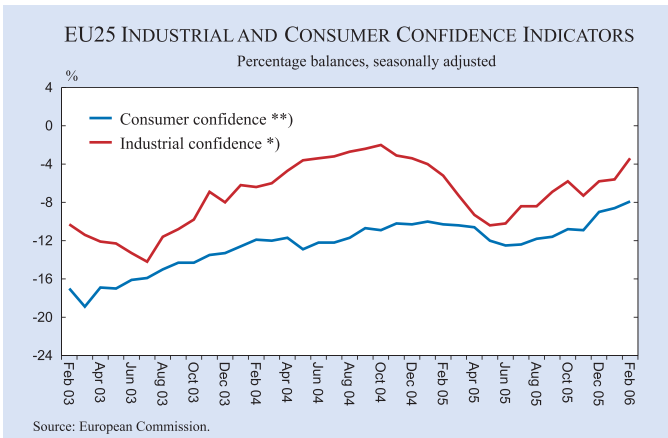
GROSS DOMESTIC PRODUCT IN CONSTANT 1995 PRICES
Percentage change over previous year
Source: Eurostat.

Both euro-zone and EU25 real GDP grew by 0.3% in the fourth quarter of 2005, compared to the previous quarter. In the third quarter of 2005, growth rates had been 0.7% in both zones.
Compared to the fourth quarter of 2004, GDP rose by 1.7% in the euro-zone and by 1.8% in the EU25, after 1.6% and 1.8% respectively in the previous quarter.



EU25 ECONOMIC SENTIMENT INDICATOR
Index 2000 = 100, seasonally adjusted
Source: European Commission.

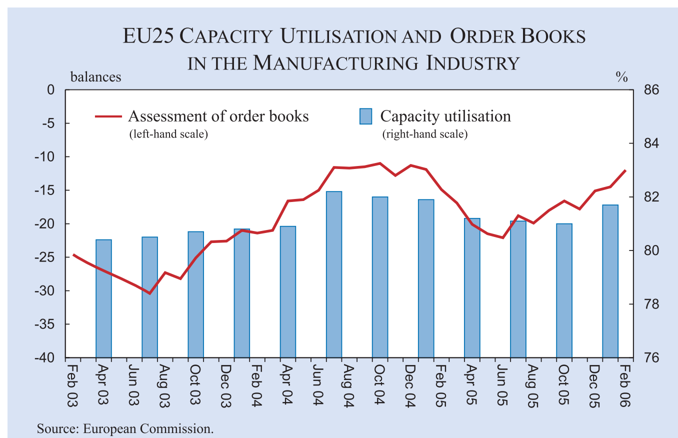
The upward trend of the EU Economic Sentiment Indicator, which had begun in the summer of 2005, continued in February. Compared with January, the indicator improved by 1.8 points in the EU and by 1.2 points in the euro area. In both areas, the indicator is now considerably above its long-term average.



EU25 INDUSTRIAL AND CONSUMER CONFIDENCE INDICATORS
Percentage balances, seasonally adjusted
Source: European Commission.

* The industrial confidence indicator is an average of responses (balances) to the questions on production expectations, order-books and stocks (the latter with inverted sign).
** New consumer confidence indicators, calculated as an arithmetic average of the following questions: financial and general economic situation (over the next 12 months), unemployment expectations (over the next 12 months) and savings (over the next 12 months). Seasonally adjusted data.

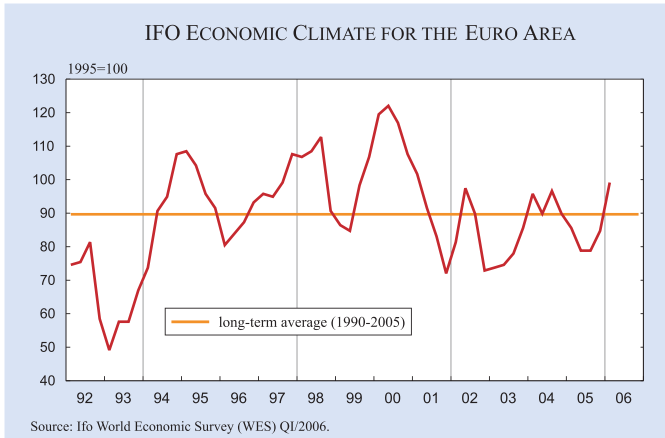
The EU industrial confidence indicator rose sharply in February, increasing by 3 points and extending the gradual upward trend the indicator has been following since the second quarter of 2005. The biggest improvements were registered in Finland (8 points), the UK (7 points), and Ireland (6 points).
The EU consumer confidence indicator rose by 1 point in February. At the country level, developments were generally positive. Of the larger Member States, only Germany and Spain saw a small decline in consumer confidence. France, Poland and the UK reported improvements of 2 points, while Italy came out on top with 4 points.



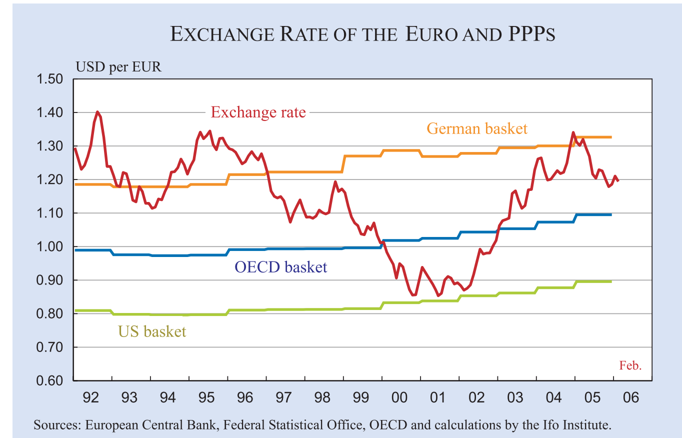
EU25 CAPACITY UTILISATION AND ORDER BOOKS
IN THE MANUFACTURING INDUSTRY
Source: European Commission.

The sharp improvement in February's industrial confidence was primarily due to the assessment of order books (and the stock of finished products). Capacity utilisation rose to 81.7 in the first quarter of 2006 from 81.0 in the fourth quarter of 2005.

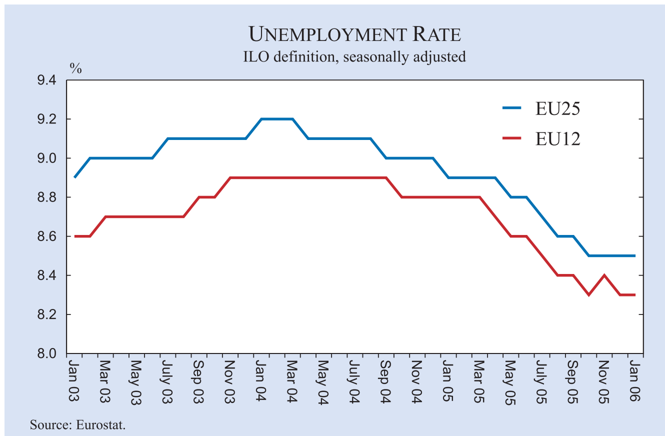
EURO AREA INDICATORS



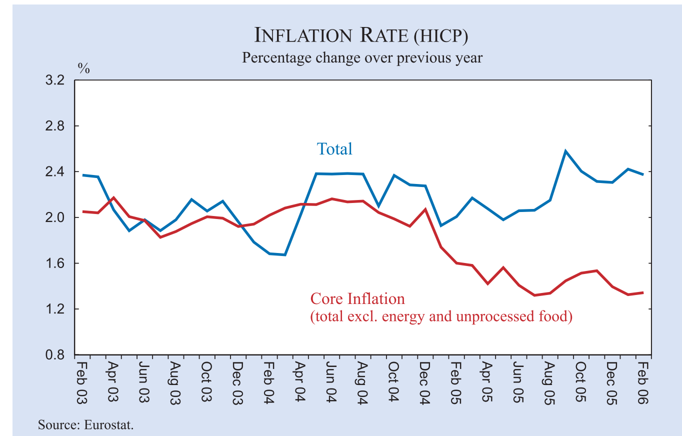
The Ifo indicator for the euro-area economic climate rose sharply in January 2006, continuing the recovery that became evident in mid-2005. Both, the assessments of the current economic situation and the expectations for the coming six months improved considerably.



The exchange rate of the euro against the US dollar, which had peaked at 1.34 $/€ in December 2004, averaged only 1.19 $/€ in February 2006. During the past few months it seems to be fluctuating around the mark of 1.20 $/€ following the sharp decline during most of 2005.



Euro-area unemployment remained stable at 8.3%. EU25 unemployment stood at 8.5% in January 2006, a rate that has been unchanged since November 2005. The lowest rates were again registered in Ireland (4.3%), Denmark (4.4% in December), the Netherlands (4.6%), the UK (5.0% in November), and Austria (5.2%). Unemployment rates were highest in Poland (17.2%), Slovakia (15.8%), Greece (10.1%), France (9.2%), and Germany (9.1%).



The annual inflation rate of the euro-zone (HICP) was 2.3% in February 2006, down from 2.4% in January. In February 2005 it stood at 2.1%. In February, the lowest annual rates were observed in Poland (0.9%), Sweden (1.1%), the Netherlands (1.4%) and Austria (1.5%). The highest rates were registered in Latvia (7.0%), Estonia (4.2%), Luxembourg (3.9%), and Spain (3.5%). Year-on-year core inflation (excluding energy and unprocessed foods), fell to 1.3% in January and February 2006 from 1.4% in December 2005.

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