Mergers and Acquisitions

A new perspective on mergers and acquisitions: evidence explained, policies prescribed

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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).

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

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.

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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