

ECONOMIC COMMENTARY

Federal Reserve Bank of Cleveland

Mergers, Acquisitions and Evolution of the Region's Corporations

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How do regional economies adapt to changing national and international markets? Some researchers suggest that much of the ability of a region to develop rests with the openings and closings of small businesses.¹

If this is true, then the dominance of large firms in the Cleveland-Cincinnati-Pittsburgh region might suggest an inability to respond to economic challenges. This reasoning, however, ignores the fact that (particularly in the recent past) large firms engage in an alternative, highly visible form of transformation: corporate mergers and acquisitions (M&As). This *Economic Commentary* looks at how the M&As of a number of large firms have shaped the regional economy in the last three decades.

We briefly trace the evolution from 1960 to 1987 of 37 companies that operated in three key metropolitan areas of the Federal Reserve's Fourth District: Cleveland, Cincinnati, and Pittsburgh. In order to understand their propensity to grow, to expand into new markets, and to adopt new technologies, we discuss their size, geographical dispersion, products, and headquarters location, and link these features to concerns about the regional effects of M&As.

■ Concerns About Mergers and Acquisitions

In the recent past, Ohio and Pennsylvania have been among the most active states for location of corporate headquarters involved in M&As. Ohio ranked fifth in 1985 and 1986, with 307 M&As over the two years; while Pennsylvania ranked seventh, with 266 M&As. Overall, the Midwest led the other six Census regions in the U.S. in M&As in both years: accounting for one quarter of the nation's total M&As in those two years.²

The regional effects of M&As can be both positive and negative, as listed in table 1, and as described below. Although observers have raised a variety of concerns about the effect of M&As on a region's industrial structure, few of the issues have been explored systematically.

First, if M&As increase the size of companies, the new firms may become less flexible and less likely to operate on the cutting edge of technology and product development. If so, an area beset by M&As may suffer a decline in innovative and entrepreneurial activity. On the other hand, larger companies have more access to capital. Thus, the funds available for research and development may actually rise after a merger. Indeed, one recent study finds no evidence that re-

Mergers and acquisitions have both positive and negative effects on a region's industrial structure. The authors use a sample of 37 companies to discuss the effects of mergers and acquisitions on three key metropolitan areas in the Fourth Federal Reserve District.

search and development expenditures fall after an acquisition.³

A second source of concern about M&As stems from the consolidation of corporate headquarters and facilities. Not only are such consolidations inherently disruptive in the short run, but they can entail losses of jobs important to the region. When the ownership of a business transfers to a nonlocal firm, many of the functions of the acquired firm's headquarters shift to the headquarters of the buyer. This consolidation reduces local jobs for educated mid- and high-level white collar employees as, for example, research and development facilities are combined out of town. These lost headquarters jobs also tend to be less cyclically sensitive than production jobs. Thus, a region with a large share of M&A activity could suffer a disproport-

TABLE 1 POTENTIAL REGIONAL BENEFITS AND COSTS FROM MERGERS AND ACQUISITIONS

Potential Benefits

- Improved productivity from better management
- New synergies with other subsidiaries (that is, links to other technologies, products, and markets)
- Greater access to capital
- Preservation of production jobs and facilities
- Addition of cyclically stable, high-wage/high-skill jobs (if headquarters stays in town)
- Addition of community leaders (if headquarters stays in town)
- Increased profits from greater market power

Potential Costs

- Disruption associated with adjustment to new ownership
- Loss of the flexibility and innovativeness found in small companies
- Loss of cyclically stable, high-wage/high-skill jobs to new headquarters city
- Loss of community leaders to new headquarters city
- Less awareness of, or responsiveness to, local operational externalities
- Abrogation of explicit or implicit contracts with local labor or suppliers

tionate loss of cyclically stable, high-skill jobs. Regions may fear becoming merely the production arm of businesses, with no "brain."

Of course, if the region's M&As reflect local companies' acquisitions of nonlocal firms, then a wave of M&As could raise the local share of cyclically stable, high-skill employment. A study of the effect of M&As on small Michigan firms finds that mergers do not appear to result in lower wages and lower employment; in fact, one usually goes up while the other goes down, with the directions dependent on the type of merger.⁴

Also associated with corporate consolidation are the possible losses of local autonomy and corporate commitment to the region. Some high-level corporate officers are active community leaders; their departure may deprive the community of valuable input. Furthermore, local management or ownership may be more committed to long-run rather than short-run profit-maximization with regard to the local facilities, and be more sensitive to the

external costs (for example, of pollution or plant relocation) that their decisions impose on the region.

While losses of headquarters probably have a net negative impact on the region, we also need to consider what would happen to the companies (particularly those that are acquired) without M&As. Some would cease or reduce operations for lack of access to capital, technology, or markets. If so, the alternative to M&As may be losses of production jobs and facilities in addition to losses of headquarters jobs and offices.

In considering the points above, it is important to realize that some M&As reduce the size of companies involved. In these "bust-up" M&As (which include many leveraged buy-outs), the buyers sell off the components of conglomerates in order to finance their purchase. In that case, many of the arguments above work in the opposite direction.

The possible causes of M&As also have important regional implications. One explanation emphasizes the role of M&As in raising the productivity of acquired

and/or acquiring firms. The productivity-enhancing theory has two variants; the target company may be either poorly managed or have potential synergies with the operations of the buyer.⁵ Then, by implication, a rash of M&As can be the vehicle through which a region's productivity is raised.

Alternatively, M&As may represent attempts to increase or acquire market power.⁶ If so, they may raise wealth in the region where the new, more profitable company is located, although they may reduce competition and lower welfare in the country as a whole. On the other hand, since these M&As do not raise firms' productivity, their disruptive effects may be the strongest effect experienced by the region.

A final explanation for M&As (particularly hostile ones) is the incentive to abrogate long-term contracts, whether explicit or implicit.⁷ To the extent that these contracts were made with local employees or suppliers, the regional labor market will suffer a loss of jobs or a lowering of compensation, and regional suppliers will lose customers.

■ Mergers and Acquisitions in a Sample of Firms in the District

Thus, M&As are part of the process by which a region undergoes needed restructuring, modernization, and streamlining. But, they can also cause operational disruptions, sap local businesses of autonomy, and remove valuable members from the community. In order to get a picture of the impact of M&As in the Fourth District, this *Economic Commentary* follows changes in 37 major employers in the Cleveland, Cincinnati, and Pittsburgh metropolitan statistical areas (MSAs).

The sample was chosen from a group of privately-held large employers in the three MSAs.⁸ While these firms may not be strictly representative of firms in the region, their experiences are instructive about the effects of M&As. Data were collected from Moody's Industrial Manuals for 1960 and 1987. As can be seen in table 2, the firms covered were very large, broadly-held, and well-

TABLE 2 COMPARISON OF HISTORICALLY INTACT COMPANIES AND ACQUIRED COMPANIES: 1960 MEASURES OF AGE AND SIZE

	Historically Intact Companies	Acquired Companies
Number	20	17
Average age	58 years	70 years
Average number of employees	80,655	12,575
Average number of common stockholders	112,388	23,415
Average number of subsidiaries	49	8

SOURCE: Authors' tabulations from Moody's Industrial Manuals, 1960 and 1987.

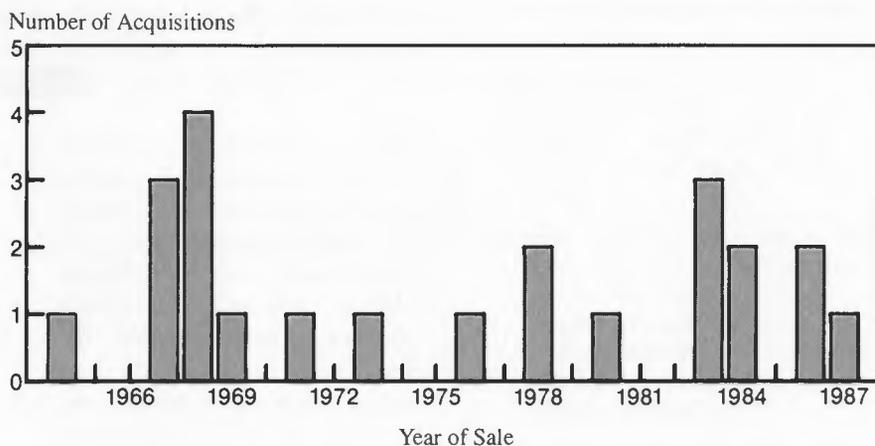
TABLE 3 EMPLOYEE GROWTH: 1960-1987 BY SIZE OF COMPANY AND MERGER STATUS^a

	Number of Companies	Average Number of Employees		Percent Change in Employment
		1960	1987	
Smaller Companies (less than 16,000 employees)				
Intact	8	9,147	17,887	95.5%
Acquired	13	6,310	33,157	425.5%
Total Group	21	7,390	27,340	269.9%
Medium Companies (30,000-100,000 employees)				
Intact	6	42,247	58,083	37.5%
Acquired	3	38,992	90,931	133.2%
Total Group	9	41,162	69,032	67.7%
Large Companies (over 100,000 employees)				
Intact	5	255,289	359,691	40.9%

a. Groups are based on 1960 employment of sampled companies.

SOURCE: Authors' tabulations from Moody's Industrial Manuals, 1960 and 1987.

FIGURE 1 ANNUAL DISTRIBUTION OF THE ACQUISITIONS OF SAMPLE COMPANIES BY OTHERS



established in 1960. The level of M&A activity in the region is readily apparent in the sample. By 1987, only about half of the companies remained an identifiable buyer throughout the period; the other half were bought and merged into a larger entity.⁹

Several characteristics distinguish acquired and unacquired companies. Companies that remained intact tended in 1960 to be younger, and to have over six times the employment, nearly five times as many common stockholders, and six times as many subsidiaries as acquired companies.¹⁰

A study of the "motive" of takeovers finds that disciplinary takeovers are likely to be hostile, while synergistic takeovers are likely to be friendly. Furthermore, the characteristics of the targets can be distinguished on several counts. For example, targets of hostile takeovers were likely to be older, smaller, and growing more slowly than were other Fortune 500 firms.¹¹ On the basis of sample differences in characteristics between acquired and intact companies, the acquired companies in this region were more likely to have been the targets of disciplinary takeovers than of synergistic mergers.

The 17 companies from the sample that were taken over by other companies generally (with four exceptions) became a permanent part of the new larger entity.¹² Thus, most of these companies do not appear to have been involved in "bust-up" acquisitions. Ownership also stayed within the country; with only one exception, all of the acquiring companies were American-owned.

The sales of these companies (as shown in figure 1) follow the widely noted waves of M&As in the late 1960s and the 1980s. Also, the sales do not appear to have been the result of economic downturns; except for 1980, when we experienced a short recession, all of these companies were sold during years of economic expansion. Thus, there is no indication that the acquisitions of these companies was spurred by their distress in hard times.

TABLE 4 GROWTH OF GEOGRAPHIC PRESENCE: 1960-1987

	Average Number of States			Average Number of Countries		
	1960	1987	Percent Change	1960	1987	Percent Change
Intact Companies n=18	17	20	18%	6	13	117%
Acquired Companies n=15	9	13	44%	3	11	267%

SOURCE: Authors' tabulations from Moody's Industrial Manuals, 1960 and 1987.

TABLE 5 HEADQUARTERS LOCATION: 1960-1987

	Number of Companies Headquartered in MSA			Number of Companies Headquartered in Sunbelt	
	1960	1987	Percent Change	1987	
Cleveland					
Intact	6	3	- 50%		1
Acquired	5	1	- 80%		0
Total	11	4	- 55%		1
Cincinnati					
Intact	3	3	0%		0
Acquired	2	0	-100%		0
Total	5	3	- 40%		0
Pittsburgh					
Intact	6	5	- 17%		0
Acquired	7	2	- 71%		2
Total	13	7	- 46%		2
All Three MSAs					
Intact	15	11	- 27%		1
Acquired	14	3	- 79%		2
Total	29	14	- 52%		3

■ Size and Geographic Scope of the Companies

Have M&As increased the size and scope of companies in the region? One of the most striking regularities observed among the companies followed is that all of the companies expanded their production capacities or their markets over the period; all 36 surviving entities are now part of much larger corporations than they were in 1960. We track this through two measures of company size: number of employees and locational expansion.

Table 3 summarizes the trends in number of employees for our sample companies, grouped according to number of employees in 1959.¹³ Not one of the largest companies was acquired. Furthermore, in both the small and medium-size groups, the companies that were eventually acquired tended to be the relatively smaller companies within each group. The exaggerated "growth" rate of the acquired firms is an obvious result of the tendency of these relatively small entities to be bought by larger entities. Thus, by 1987, the acquired companies were

part of much larger entities than were their intact counterparts.

The intact companies also exhibit strong employment growth, which varies inversely with original size. While the smallest companies in this category enjoyed a 95 percent growth in employees over the 27-year period, the medium and large intact companies experienced much lower growth rates.

All of the companies vastly expanded their geographical coverage during the period. This is particularly true of the acquired companies, which are now associated with entities that operate in almost four times as many countries as did the original companies in 1960. Table 4 presents a dramatic picture of the growth of the presence of American companies in foreign countries during the past 27 years. This presence takes the form of subsidiaries, production facilities, or marketing activity. Over this period, the average number of countries in which intact companies operated more than doubled to 13. Expansion of operations to other states in the U.S. followed a similar pattern, but the changes were less dramatic, probably because domestic coverage was already fairly extensive in 1960.

In 1960, the companies that were to remain intact tended to have a broader geographic presence both in the U.S. and in foreign markets than did the companies that were to be acquired. But in marked contrast to the results for employment, by 1987 the intact companies were still more geographically dispersed (domestically and internationally) than were the entities that acquired their counterparts.

■ Location of Headquarters

But did these companies' headquarters stay in town? If not, where did they move, and why? Table 5 shows the considerable movement of headquarters location in our sample. In 1960, although all of the companies in our sample employed a large number of people in one of the three key cities in the District, only 29 companies had their headquarters in Cleveland, Cincinnati,

nati, or Pittsburgh. And, by 1987 only fourteen of the companies remained headquartered in one of these cities, a decline of over one-half.

Acquired companies showed a much stronger tendency to change their headquarters city than did intact companies. Almost 80 percent of acquired companies moved their headquarters, whereas less than 30 percent of the intact companies moved their headquarters. Only three companies in the sample moved their headquarters to the Sunbelt and two of these moves apparently resulted from acquisitions by companies located in the South.¹⁴ These tentative findings invite further study of the impact of M&As on the movement of headquarters out of cities.

■ Product Changes

Another important dimension of structural change is the evolution of products. On the one hand, M&As are a likely vehicle for capitalizing on synergies between the products or operations of ongoing firms. If so, we'd expect the intact companies to be less likely to change their products over time than would acquired companies.¹⁵ On the other hand, control by a very large, bureaucratic firm may limit the ability of a plant to adapt to market changes.

With just two exceptions, all of the intact companies continued producing or selling essentially the same products over the 27 years. Both companies that changed products produced office equipment in 1960 and were dramatically affected by technological innovations in business equipment and communication processes.¹⁶

Half of the acquired companies were bought by multiproduct entities, although the distinction between durable and nondurable goods was often preserved.¹⁷ The other eight acquired companies continued to be identified with companies that were engaged in essentially the same product. Of these, seven companies were highly capital-intensive.¹⁸

■ Conclusions

This *Economic Commentary* has explored the effects of M&As on the evolution of 37 large companies in the region over the past 27 years. The dependence of our region's economy on the M&A activities of ongoing enterprises, combined with an understanding of the possible regional benefits and costs of M&As (as summarized in table 1) heightens concern about the directions in which these activities have taken our region. While this analysis cannot measure the net cost or benefit of these changes in corporate affiliation, we have noted some important structural effects of the M&As on our region.

Employees of all of these firms now work for much larger and perhaps more efficient (or profitable) companies than they did in the past. These employers now make a wider variety of products, and operate in more states and countries than they did before. Half of the companies were absorbed by American-owned entities, the others retained their corporate identities while they expanded or acquired smaller companies.

In this sample, the smaller, older, less geographically-dispersed companies had a higher probability of being acquired. These acquired companies are now permanent parts of larger, but less geographically-dispersed firms than are their intact counterparts. Finally, of the firms headquartered in these three MSAs in 1960, about half (including almost all of the acquired companies) moved their headquarters out of town.

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■ Footnotes

1. See Birch (1979). Other studies examine the role of openings and closings in the region (for example, Eberts [1984]).
2. These figures are based on unpublished tabulations provided by the staff of Mergers and Acquisitions Magazine using the Mergers and Acquisitions Data Base.
3. See Hall (1988).
4. See Brown and Medoff (1988).
5. The fact that studies of stock prices of acquired firms find that they usually rise as a result of acquisition, while stock prices of the buyers are stable or may fall slightly, is usually taken as strong evidence for this argument. However, Caves (1987) points out that the *ex post* value of the new entity is often lower than the combined value of the two firms before the acquisition.
6. See Caves (1987).
7. See Schleifer and Summers (1988).
8. These firms participated in a survey conducted by the Federal Reserve Bank of Cleveland for other purposes.
9. Companies were considered to be acquired when they ceased to have an independent listing in Moody's Industrial Manual.
10. Of the 20 companies that were never acquired, two filed bankruptcy proceedings in the 1980s. One sold off its viable operations and has otherwise ceased to exist. The other continues to operate under the supervision of the Bankruptcy Court.
11. See Mork, Shliefer, and Vishny (1988). Browne and Rosengren (1987) find few differences in the financial characteristics of the two types of targets.

12. Thirteen companies were bought only once, three were sold twice, and one company (in the steel industry) changed hands four times.

13. Two companies could not be included in this section because employee data were unavailable for 1987.

14. The much-feared migration of businesses to the Sunbelt from the Rustbelt has been attributed to lower utility costs in the South (due to the weather), the favorable business climate encouraged by the governments of the newly emerging Southern cities, and the prevalence of nonunion labor.

15. This effect would arise both because of fewer opportunities for synergies in the products and operations of the intact companies (therefore, no other company acquired them for that purpose), and because acquired companies are sometimes bought by conglomerates whose major concentration is in an industry different than that of its new acquisition.

16. One expanded into the worldwide graphics market; the other moved into advanced information systems.

17. For example, a toiletry company was merged into a larger conglomerate that produces nondurable consumer products. Meanwhile, an elevator company merged with a producer of transportation equipment and building systems.

18. Three firms are engaged in steel production, two in petroleum refining, and two in the production of heavy industry equipment. The final company, a chain of retail food stores, merged with a larger retail food store chain.

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