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BUSINESS REVIEW

Corporate Courting, and After
Capital Spending Revives on Schedule
Electronic Banking



FEDERAL RESERVE BANK OF PHILADELPHIA

BUSINESS REVIEW

is produced in the Department of Research. Evan B. Alderfer was primarily responsible for the article "Corporate Courting, and After," Bertram W. Zumeta for "Capital Spending Revives on Schedule," and Lawrence C. Murdoch, Jr. for "Electronic Banking." The authors will be glad to receive comments on their articles.

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CORPORATE COURTING, AND AFTER

Some people are concerned about industrial enterprises in the Philadelphia metropolitan area merging with "outside" companies. It is feared that when local enterprises become branches or divisions of nonresident companies the region loses initiative and becomes less dynamic. This article explores industrial mergers, with special reference to the leading local manufacturing companies that have merged with "outsiders" in recent years.

*The
Board of Directors
of the
XYZ Company
announce the merger
of their company
with...*

business relationship; in other instances, they may meet on a stratoliner, or a golf course, or at a convention. Then, too, some mergers are arranged by the John Aldens of business; some would-be brides even put an ad in the newspapers where they put their best foot forward, so to speak, with the objective—matrimony. Corporate mores sanction initial advances by the bride.

The groom is generally bigger and often, although not always, older, worldlier, and wealthier. Reliable records and ratings on substance and prenuptial debts outstanding are readily available to both parties upon consulting any of the well-known financial services. Debutantes are not necessarily the most attractive. While they may have good corporate configuration and a

Corporations marry for money. Simon Pure, unabashed gold digging is the sole motive behind every business merger. How they meet is a matter of chance or choice. Sometimes the marriage is a culmination of a long and mutually profitable busi-

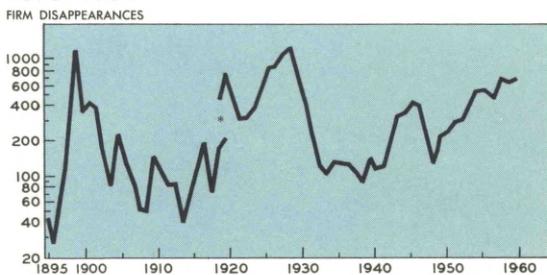
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The climate for mergers

Mergers, like most other economic phenomena, go in surges or cycles. As far as the records go, the first big upsurge occurred at the turn of the century when the baronial empire builders put together giant corporations in chemicals, meat packing, oil, steel, and other industries. Capitalizations attained monumental magnitudes, running into nine and ten figures.

The second surge of mergers played a prominent part in the phony prosperity which collapsed with the 1929 stock market crash. The third is now blooming. It hasn't yet pushed up to the peaks of its predecessors but it has attained respectable magnitude, as the chart readily shows.

ANNUAL FIRM DISAPPEARANCES BY MERGER, 1895-1961



* The two series on merger disappearances are not directly comparable.
Source: National Bureau of Economic Research; Federal Trade Commission.

Mergers, like measles, appear to be epidemic. Precisely what causes the periodic flare-ups is a matter about which we cannot be too sure. If the chart on mergers is superimposed on charts of other economic activities, the best family relationship, according to a study by the National Bureau of Economic Research, was found to be industrial stock prices, stock market trading, and business incorporations. Thus mergers seem to thrive best in times of prosperity and particularly when conditions in the capital markets are most auspicious.

Philadelphia brides

Ford's recent acquisition of Philco reminded us of numerous other corporate swains that have taken Philadelphia area brides in the current merger upthrust that began around 1950. Fully a score or more manufacturing concerns in the Philadelphia metropolitan area have been acquired during this period by companies with headquarters elsewhere.

Each industrial region has its appeal. Much of the attractiveness of metropolitan Philadelphia is its almost endless variety of manufacturing. Philadelphia is the core of an industrial constellation of major magnitude covering eight counties officially and still more actually. Here is made almost everything that is made. The industrial composition includes batteries and bearings, books and bricks, containers and computers, dyes and dentures, drugs and rugs, gears and golf balls, hats, heaters, paint, paper, pretzels and potato chips, radios, radiators, refrigerators and refractories, tachometers and thermometers, things commonplace and spectacular, melodic and molecular, atomic and electronic. Indeed, it would have been easier to enumerate what isn't made here. Examples: automobiles and locomotives,

and they were formerly part of the industrial scene.

The variety of processes, machines, and technology found here almost defies description. Here you can see hydraulic presses of herculean size gently nudging a huge, half-million pound, red-hot ingot into preliminary shape for subsequent machining into a big marine drive shaft on a lathe about half the length of a football field; great strong-arm punch presses with enough power to force a chunk of cold steel bigger than the business end of a baseball bat through a die, like pressing toothpaste out of a tube; little "tin" cans taking on shape for a soup factory marching by the millions through the can factory in strict formation like well-drilled tin soldiers, which is positively uncanny; wholesale soldering operations of tiny wires on tiny terminals on printed circuits for the incomprehensible anatomy of a TV set; thousands of mice cooperating with hundreds of workers to make death-dealing capsules for killing the germs bent on killing people; laboratory testing devices trying to shake the living daylight out of airplane parts for months at a stretch, equivalent to ten years of flight; and a computer humming along thoughtfully on the job of designing a more efficient computer.

Merger motivation—Case histories

Money-making is the basic motive, as already mentioned, but the paths to this goal are as numerous as the spokes to the hub of a wheel. Let's consider a few Philadelphia area examples.

1. For years, a concern on the Delaware was turning out a finished product from a semi-finished raw material made by a firm on the western slope of the Alleghenies. The eastern plant was older and smaller than the "western" supplier. The latter saw an opportunity to enhance his profits by buying out the Delaware Valley plant

so that he would reap more dollars per ton of finished product by doing the entire job of manufacturing instead of just half of it. He installed new machinery to eliminate manual operations and obtained control over quality of the final product. The merger gave its instigator a firmer foothold on the big Eastern Seaboard market. The industry is one which requires careful cultivation of the market because the customers habitually operate on a hand-to-mouth basis—slow to place orders and impatient for deliveries. Creeping up on the market was the prime motive of this merger.

2. Sometimes the unification of two concerns is the easiest and quickest way to bigger net profits when each company has outstanding but unlike points of strength and weakness. In that great omnibus of industries, conveniently called chemicals and notorious for taking in each other's wash, there is a Philadelphia company with a good name and just fame. For some years this company did business with a similar concern also well-off and also well off the local reservation. Although neither had to be apologetic about earnings, one excelled in research and the other excelled in the no less important art of merchandising. It would have cost the smart merchandiser a pile of money to build up a really first-class research organization, and it would have been a long and costly job for the company wise in the ways of research to build a topnotch merchandising organization. All that was avoided by bringing the two famous names together on either side of a comma.

3. For years and years a local firm made money by making a product that served its users well, but by-and-by something went wrong. Either the management became careless or the world changed. Whatever it was, the company fell upon evil days, as a result of which it fell

into the lap of another concern in the same line of business. The buyer sold the old plant, built a new one on a site with more elbowroom with funds received from the sale of the old plant in a hopelessly crowded locality, kept the bought-out firm's name and a modicum of its equipment, and now operates the local plant as a highly specialized department of its multi-plant organization. The products they make come in various sizes which might be called small, medium, and large; and the local plant specializes in one of these lines exclusively for the national and international markets. It goes under the name of the Blank Division of the Blanket Corporation, and it goes right well.



4. Where so much manufacturing congregates, as it does in the Philadelphia area, it is almost inevitable—in fact indispensable—to have a number of jobbing shops. A jobbing shop is a sort of jack-of-all-trades, expanded into a corporation, a tailor-to-the-trade type of place. It is a big machine shop full of boring mills, engine lathes, drill presses, milling machines, grinders, press brakes, planers, shapers, welding irons, a hydraulic press or two, and a few machine tools with unfamiliar names imported from West Germany or Switzerland. You get the idea—a jobbing shop is a factory-sized tool box wired for power and capable of making anything but money. One of the Philadelphia jobbing shops, a big one as jobbing shops go, was recently merged with a big mass-production mogul from Chicago, Detroit, Cleveland, or one of those mighty Western cities. Why in the world would a mass-production outfit want to get mixed up with a jobbing shop? Or it is just as sensible to ask, why would a jobbing shop want to join hands with a mass-production operator?

Well, you see it was like this: the Western mass-producer of window frames, or whatever it was that he made, had learned how to make these things real cheap and was irked by the high cost of shipment to the Atlantic Seaboard, so he wanted a plant here. The Philadelphia jobbing shop, forever operating below capacity was mighty glad to convert the idle part of its jobbing shop into a little mass-production department. Result: matrimony and they have lived happily ever after, at least thus far.

5. Strange, isn't it, that Philadelphia, which makes almost everything else, somehow or other has always encountered some difficulty in getting into airplane manufacturing in a big way. Just off the edge of the city is a shop that makes these flying windmills that can throw a skyhook into a cloud and stand still in mid-air like a hummingbird. Now, these are technically jumpy products with improved models forever pushing their predecessors off the drawing boards. We can't prove it, but it is said that it takes more drawings to build one of those contraptions than the finished machine with gas in the tank can lift. The story seems credible after cruising through the plant and observing scads of engineers and draftsmen seemingly all out of proportion to the blue-collar workers in metal and Fiberglas.

Two things, among others, are indispensable to the making of these machines: a lot of capital and a lot of know-how. The local firm ran short of the former and was in a position to use a little more of the latter, so a big Western aircraft manufacturer with plenty of both took the flying windmill factory under its wing and in two years employment jumped from 1,700 to 5,400; and a new plant is under construction.

Diversification—wide or deep

Many a merger has grown out of the itch to

diversify. More than one Philadelphia concern has become a "division of" another company seeking greater diversification. The ostensible purpose of diversification is to average earnings upward on the theory that unlike things seldom turn from sweet to sour simultaneously. So a company in some branch of the metal trade, say, stamping, may acquire another firm with predominantly pressing or perhaps forging facilities. Sometimes the desire for diversification results in the acquisition of plants engaged in turning out products only remotely related or totally unrelated. Examples might be cited where the quest for diversification goes forward toward the ultimate market or backward toward the basic raw materials, or both. Diversification can go in any direction—up, down, sidewise, or dippy-doodle.



Diversification is not so simple a way to greater and more regular profits as many textbooks imply. The diversifier must do more than diversify. After the marriage come numerous problems of connubial adjustment. Among these are unification of accounting, billing, costing, advertising, selling, transportation, standards, inspection, personnel, and all the other cares of running a company. And usually the bigger the merger, the bigger the problems. When two or more really big companies consolidate, it may take years before all indigestive difficulties are straightened out. Examples could be cited, but that would be unkind.

There is yet another form of diversification. This is what might be called diversification in depth or farsighted diversification. The objective is not quick profits but surer ultimate profits. This type of diversifier is very, very careful

whom he woos. He considers the genetics of corporate marriage; he examines his own strengths; shores up his own weaknesses; carefully studies industrial trends, ponders emerging concepts and ideas rather than going products and processes; corrals a stable of Ph.D.'s with free rein to wander way beyond the conventional pastures into the gee-whiz. Upon getting a nibble, he seeks to merge with a company already well-endowed with the right hardware, and harnesses the acquisition for a long trot to new and distant goals. The company he buys may not even be a current investment favorite but if not, so much the better the bargain. The bargain may not even be in the Philadelphia area, but several such are for they have been gobbled up.

Moreover

Still other circumstances invite mergers. When the founder and builder-upper of a company becomes old and arthritic, his business is ripe for absorption by another and usually bigger company. By simple exchange of stock at a mutually agreed-upon ratio, the retiring executive drops his company cares for a nice block of dividend-yielding stock to brighten his retirement years, and at the same time postpones an immediate high income tax liability for a later and lower capital gains tax liability when he sells the stock of the buyer company.

When the owner and major stockholder hangs on to the control of the business until his decease, his heirs may not wish to operate the business for personal or other reasons, and a good way out is to accept a merger proposal which greatly eases the problem of obtaining liquidity (cash) to meet inheritance tax liabilities.

Merger motives are many, frequently mixed, and occasionally obscure. Sometimes when a big and profitable company buys out its twentieth

or fifty-seventh company, the only apparent purpose seems to be the desire to add another pearl to the holding company necklace. Or, when a merger-minded company acquires a money-losing concern, the deal, if not made for loss-carry-forward purposes to offset profits arising elsewhere, may elicit words of surprise like those of a sophomore when he looks at the picture on his roommate's bureau—he wonders why.

Rumors

Romance flourishes best in the dark, but it is hard to keep secret. Almost inevitably rumors of a merger begin to sprout before its consummation or its public announcement. Howsoever discreet the courting, howsoever elaborate the precautions, howsoever secretive the negotiations, rumors will out, especially if the company being sought has an elevator shaft.

The rumors may be incorrect as to the identity of the buyer, but the workers are quick to sense something cooking. When a representative of the prospective buyer makes a tour of inspection with a local company wheel serving as guide, the stranger is quickly spotted as something other than a rubbernecking visitor. Perhaps the host is too deferential, or the guest too inquisitive; something in their actions is a giveaway.

Cherish or obey

Nerves are really set on edge upon the announcement of the merger. Everyone in the company being absorbed is naturally concerned about what changes will take place and how he will be affected. Everybody is on the anxious seat except perhaps the top officer who engineered the deal. Every individual member of the "brass" is concerned about what will become of him. Will he get the promised promotion, or suffer a demotion? Worse still, will he become merger fallout

and lose his job, for it is apparent that the company cannot have two treasurers, two comptrollers, or two general managers—someone has to be assistant this or that.

In the ranks below the brass there is also uneasiness. Who is going to be the immediate boss and the big boss? What about personnel policies—remuneration, advancements, retirement benefits, vacations, etc.

According to this limited survey, no well-defined pattern of regency emerged. In slightly over half of the mergers, the man who lands on top with the title of vice president or general manager or both turned out to be a representative of the buyer. This seems to have been especially true in those cases where the buyer subsequently poured a sizable amount of money into the new acquisition for purposes of expansion or modernization. Money talks, you know.

In some instances, there was no change in management whatsoever; the acquired company continued to operate as an autonomous, independent organization very much as it had before the merger—except in one important respect. Major expenditures for capital improvements had to be approved from on high.

In at least one instance there is no resident manager at all. In that company, the visitor sees the production manager or the sales manager or the personnel manager, depending upon the purpose of the call. Over-all supervision is provided on an ambulatory basis—periodically a district supervisor from another part of the country stops in for an occasional look-see and checkup. In another instance, where the going was particularly rough, there was a succession of bosses, like substitutions in the pitcher's box none of which pitched more than an inning or two. It should be added, however, that the going was rough even before the merger.

For better or for worse

When a stranger comes to town and takes a local bride the event creates apprehensions not only within the company but also within the community. Local business and political leaders raise their eyebrows. Though the groom be ever so well-born and have the best of references, he is always suspect.

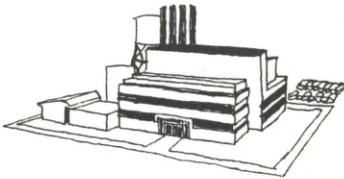
What the community leaders probably fear is that the local company will be ravished instead of cherished. There is always the possibility that the former officials of the local company will be downgraded to glorified office boys soon to be taking orders from New York, Chicago, Detroit, or Los Angeles; that the local organization must get permission from headquarters to buy a month's supply of postage stamps; that the newcomer will take little or no interest in local civic affairs; that he may make only nominal contributions to local welfare organizations; that he may scale down employment in the local plant by closing down some departments; or, worse still, that he may rob the local plant of its best people and equipment, and close down the area plant completely. Then there are also the fears that the local firm will no longer buy its advertising, banking, insurance, and other related services here as it had done prior to the merger. In short, the fears are that the newcomer may leave his heart at headquarters, that the merger may do the local area more harm than good.

Have any or all of these post-merger things really happened? Not all, but perhaps some. The appraiser, of course, encounters some difficulties. After the merger, financial statements are usually published on a consolidated basis, so that it is no longer possible to ascertain such information as dollar volume of sales, earnings, and other financial data. And, some other things, such as open-handedness to local charities, are hard to come

by unless one engages in indiscreet snooping.

Many, if not most, of the fears and apprehensions are imaginary, on the basis of this survey of the recent history of acquisitions of local companies.

Were any of the local plants closed down or moved out subsequent to and incident to the merger? Answer: No. One of the companies in the survey had moved South into a brand-



new plant several years before the merger, leaving with us only its sales office. Another moved, after the merger, a substantial part of the machinery in the Philadelphia plant South into a brand-new plant built by an industrial development outfit for the express purpose of luring industry into the community. Employment in what remains of the Philadelphia plant is considerably smaller—now scarcely 200 workers in contrast to about 800 at the time of the merger. Although this looks like a mere crust of the former loaf, you should have seen the size of the loaf years ago when the company was at its peak. But for the merger, the local works might have shrunk to zero. In other instances, entirely new facilities were built or are a-building within this area to supplement or replace older area facilities. Whether the local plants are being operated more efficiently after the merger than before is hard to say, but almost all impressions were favorable with respect to those we had the opportunity of visiting both before and after. With almost no exception, there were improvements in appearance, housekeeping, maintenance, and equipment.

What about employment? For all of the firms whose employment data, present and pre-merger, were available, the record is mixed. One sizable decline in percentage has already been men-

tioned. In another case where employment went down by one-third, about 1,700 jobs disappeared. This was caused by the disposition of a specialty line of products which, incidentally, was bought by a newcomer into this area now occupying a plant vacated by a third party. When manufacturing operations in the reoccupied plant get into full swing, some or all of the job displacements may be recovered. In all other cases affording data, employment decreased slightly or was maintained at pre-merger levels, with one outstanding exception. That is the case where employment more than tripled and is destined to go still higher; in fact, it has already swung the election so that we have a net increase for all plants, where the numbers could be obtained.

It cannot be denied that mergers cause some loss of business to the auxiliary service industries, such as banking, insurance, and advertising. For example, funds for building programs or major purchases of equipment, as well as payroll money, are frequently supplied from the home base. Of course, we live in a competitive world and cannot rationally subscribe to the mercantilistic doctrine that what brings money into the area is good and what takes money out is bad. If auxiliary services are “imported” on a lowest cost basis and not on a *quid pro quo* basis, there can be no sensible objection. In passing, however, it should also be recognized that some such services may be lost, not on economic grounds but by mutual back scratching.

The new resident managers transferred here to operate local plants like Philadelphia because it is so Philadelphian. What they probably like best is the nice blend of city and country. The city offers orchestra and opera, theatres and libraries, museums and halls of science, art galleries and shooting galleries, colleges and universities, public and private schools, churches of all

kinds, country clubs and athletic clubs as well as clubs geographic and philosophic.

And what beautiful suburbs! Gently rolling countryside where the grass is always green in season, heralded by magnificent multi-colored floral displays in the spring and a riot of arbo-

real coloration in the fall. Philadelphians, native or adopted, rarely yield to proselyting. Seldom, also, do mergers with Philadelphia corporate brides wind up in the divorce courts. Some Philadelphia firms have acquired companies in other areas, but that's another story.

CAPITAL SPENDING REVIVES ON SCHEDULE

Manufacturers in the Philadelphia Metropolitan Area have raised their sights considerably since last fall. Then, facing an uncertain business outlook, manufacturing firms projected a drop of more than 9 per cent in 1962 capital expenditures. Now, after a closer reading of the business climate for 1962, they have raised their estimates by more than one-sixth—from \$291 million to \$342 million. The 9 per cent decrease from the 1961 total has turned into a 7 per cent rise.

This is a big change—a turnaround from extreme caution to a mildly optimistic outlook. But such a turnaround is not unprecedented. It repeats what happened in 1959, another year of business recovery, and is rather like the pattern which developed in 1955. Why?

Capital spending decisions reflect business conditions

Decisions to invest in plant and equipment require that a firm have access to funds. Given this necessary condition, actual outlays for capital assets require reasonably good expectations that profit will result from the investment. How can companies know this? Only in the same way anyone decides a course of action—by estimating how future conditions will favor or not favor the

result sought. In individual firms, special circumstances may determine an investment decision: a machine may wear out, a new market may open up, a careful economic analysis may point out the logic of a certain expenditure. But when one examines the behavior of many firms at once, the total of the group's investment decisions depends on how they're doing at the moment. When business is good, they fix up the factory; when business is bad, fixing is limited to what has to be done.

The accompanying chart shows how, as business improved in 1955, initial estimates of manufacturers' capital expenditures were revised upward, until the final total came close to matching that reached in 1954. In 1959, the same sequence of events occurred, and the final total surpassed the level of 1958. Both 1954 and 1958 were years of recession. In each case, as business strength developed in the subsequent year, capital outlays improved. The same pattern is developing in 1961-1962.

Increases well-diffused among industries

Every industry but one in the Philadelphia area either plans more spending on plant and equipment in 1962 than in 1961, or has at least in-

creased its spending plans since the fall of 1961. The sole exception is the primary metals group, where a further 6 per cent reduction in capital spending plans has reduced the total to 21 per cent below 1961.

Neighboring areas exhibit less optimism

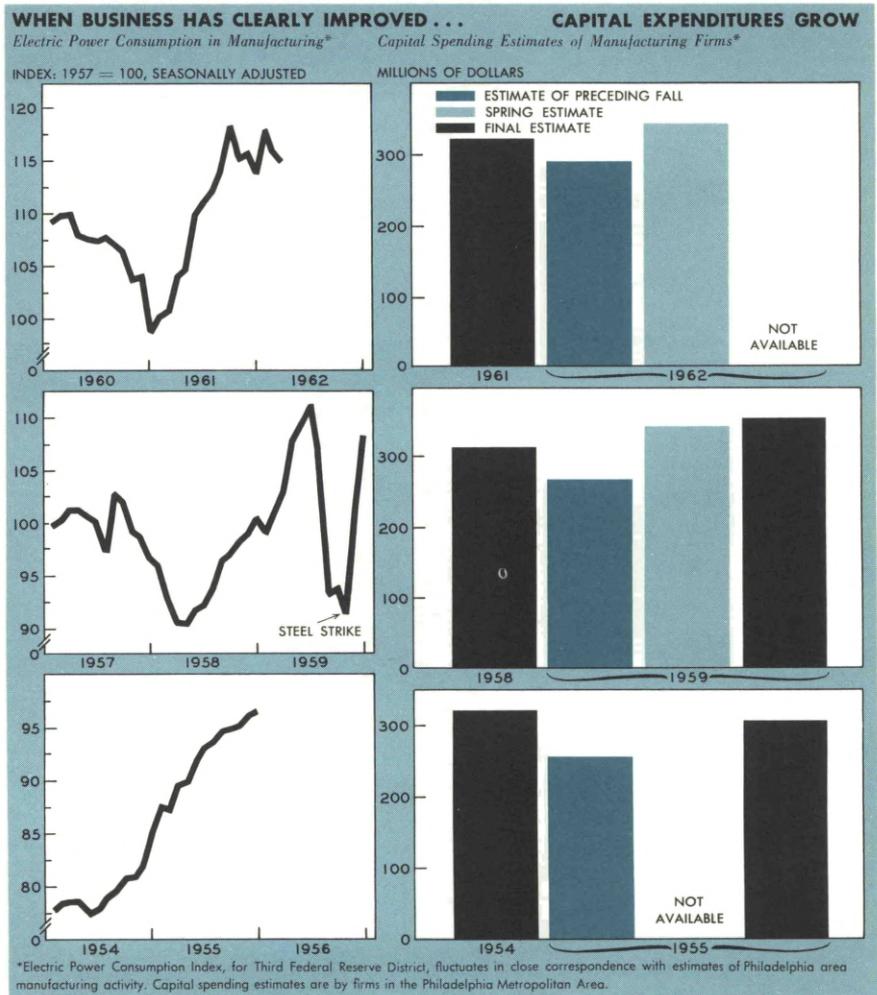
In the Trenton and Lehigh Valley areas, the same pattern of revisions upward has developed, but the revisions as yet have been small. Consequently, compared with 1961, these regions still indicate substantial declines in capital expenditures in 1962. In Wilmington, which last fall reported the smallest decline of any area surveyed, there has been a further small decrease.

Short-run rises and long-run levels

Manufacturing firms' current capital spending plans bear out the general belief that 1962 will bring a mild business revival. Some notion of the kind of year envisaged may be gained by listing the strength of each turn-around of investment plans, following business recessions. In 1955, original estimates here were finally increased by about 20 per cent; in 1959, the in-

crease was 32 per cent; this year, the increase so far has been only 18 per cent. Final estimates won't be known before late fall, but since our spring capital expenditures estimates to date have closely approximated final totals, the chances are good that 18 per cent is close to the ultimate figure. This would mean an improvement of only 7 or 8 per cent in manufacturers' plant and equipment spending over the year, to about \$350 million—well below the \$412 million

THE PATTERN OF INVESTMENT DECISIONS



ESTIMATED CAPITAL EXPENDITURES OF MANUFACTURERS
IN THE DELAWARE AND LEHIGH VALLEYS
1961 AND 1962

	EXPENDITURES 1961	1962 ESTIMATE AS OF		CHANGE 1961-1962	CHANGE IN 1962 ESTIMATE FALL-SPRING
		FALL 1961	SPRING 1962		
<i>(Dollar Amounts in Millions)</i>					
Philadelphia Metropolitan Area					
All Manufacturing	\$320.7	\$290.9	\$342.4	+ 6.8%	+ 17.7%
Durables	135.6	114.4	148.0	+ 9.1	+ 29.4
Lumber and furniture	2.6	1.0	2.6	0.0	+160.0
Stone, clay and glass	6.6	8.6	15.4	+133.3	+ 79.1
Primary metals	44.7	37.7	35.4	- 20.8	- 6.1
Fabricated metals	18.6	10.9	29.5	+ 58.6	+170.6
Machinery (excl. elec.)	16.9	16.4	18.9	+ 11.8	+ 15.2
Electrical machinery	31.8	27.7	32.5	+ 2.2	+ 17.3
Transportation equipment	6.2	3.5	3.7	- 40.3	+ 5.7
Instruments and misc.	8.2	8.6	10.0	+ 22.0	+ 16.3
Nondurables	185.1	176.5	194.4	+ 5.0	+ 10.1
Food and tobacco	33.6	26.2	30.6	- 8.9	+ 16.8
Textiles	7.4	4.0	6.1	- 17.6	+ 52.5
Apparel	2.9	2.3	3.4	+ 17.2	+ 47.8
Paper	22.8	15.8	24.5	+ 7.5	+ 55.1
Printing and publishing	17.6	22.6	18.7	+ 6.3	- 17.3
Chemicals	46.3	51.4	52.9	+ 14.3	+ 2.9
Petroleum and coal	42.1	46.2	46.3	+ 10.0	+ 0.2
Rubber and leather	12.4	8.0	11.9	- 4.0	+ 48.8
Lehigh Valley					
All Manufacturing	52.4	44.1	47.3	- 9.7	+ 7.3
Trenton					
All Manufacturing	22.6	13.9	16.2	- 28.3	+ 16.5
Wilmington					
All Manufacturing	68.1	65.4	64.1	- 5.9	- 2.0

of 1960, the record year for the Philadelphia area.

The most important message of this year's capital expenditures survey is that the short-run improvement, which materialized as expected,

was so small. In a fluctuating economy, movements upward must be stronger than 7 per cent, if fluctuations are to be around a satisfactorily rising level of activity.

ELECTRONIC BANKING

A slim girl touched a button. A light winked at her and then another and another. The machine chattered briskly. Behind a clear plastic shield, checks began cascading into pockets. They moved so fast they looked like continuous ribbons of paper—so fast they would travel two and a half miles in a minute.

This machine, not much bigger than a deep freeze, is called a reader-sorter. It has the power to revolutionize check handling, for it can work up to 30 times faster than the proof machine it replaces.

How many banks have reader-sorters on hand or on order? And how about electronic computers? In short, what is the current status of bank automation? To find out, we asked all the Third District commercial banks with deposits over \$25 million. The survey was made in mid-April, 1962, and we present the highlights in the following sections.

Reader-sorters

Reader-sorters “read” magnetic ink characters—those lumpy numbers along the bottom edge of checks. These machines have been quickly and widely accepted by larger banks. Two years ago not one machine was at work in the district. Now over half of the survey banks have them in use, on order, or planned. This includes all banks with over \$100 million deposits and five banks in the \$25 million-\$50 million category.

THE READER-SORTER ROSTER

DEPOSIT SIZE (\$ MILLIONS)	NUMBER OF BANKS IN SURVEY	PERCENTAGE WITH READER-SORTER ON HAND, ON ORDER, OR PLANNED
25- 50	23	22%
50-100	16	50
100-250	13	100
over 250	6	100
Total	58	55%

Reader-sorters are used principally for deposit account and transit operations. They are most efficient when operated in conjunction with a computer. In the survey, however, ten banks that planned to get reader-sorters had not yet ordered computers.

About 40 per cent of the reader-sorter banks report they expect to offer deposit account and/or check sorting services to other banks, presumably smaller correspondents on a fee basis. The basic purpose is to utilize the full capacity of the equipment and thus reduce unit overhead costs. As a general rule, the larger the bank the more likely it is to offer such services.

Only about one-sixth of the banks not acquiring reader-sorters themselves indicated a desire to make use of such equipment owned by other banks or service organizations.

Magnetic ink imprinting

In the spring of 1960, only a handful of district banks had started imprinting their transit number-routing symbol on their checks in magnetic ink. All district banks are now using some imprinted checks. In fact, almost three out of every four of their checks are imprinted.

Magnetic ink transit number-routing symbols are put on a check when it is first printed. Often individual account numbers are preprinted at the same time. After the check has been drawn, the amount also must be encoded in magnetic ink if the check is to be processed by a reader-sorter. The first bank receiving the check is encouraged to encode amounts even if it does not use a reader-sorter. This makes it easier for the next bank in line which might use one. About one-third of the banks in the survey have equipment with which to encode amounts in magnetic ink.

AMOUNT-ENCODING EQUIPMENT

DEPOSIT SIZE (\$ MILLIONS)	NUMBER OF BANKS IN SURVEY	PERCENTAGE WITH EQUIPMENT ON HAND
25- 50	23	9%
50-100	16	19
100-250	13	77
over 250	6	100
Total	58	36%

Computers

Seven banks are now operating electronic computers. The smallest of the lot has about \$95 million in deposits. In addition, fifteen other banks—including four with deposits of less than \$100 million—are in the process of installing computers (no easy task), or have them on order.

THE COMPUTER COUNT

DEPOSIT SIZE (\$ MILLIONS)	NUMBER OF BANKS IN SURVEY	PER CENT WITH COMPUTERS IN OPERATION	PER CENT WITH COMPUTERS BEING INSTALLED OR ON ORDER
25- 50	23	0%	4%
50-100	16	6	19
100-250	13	15	70
over 250	6	67	33
Total	58	12%	26%

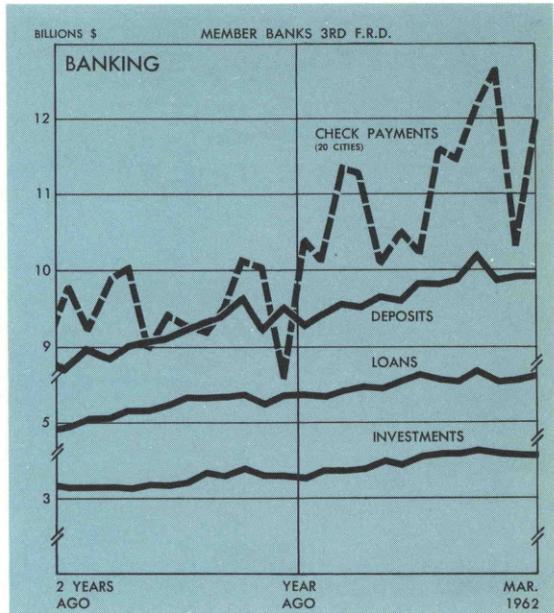
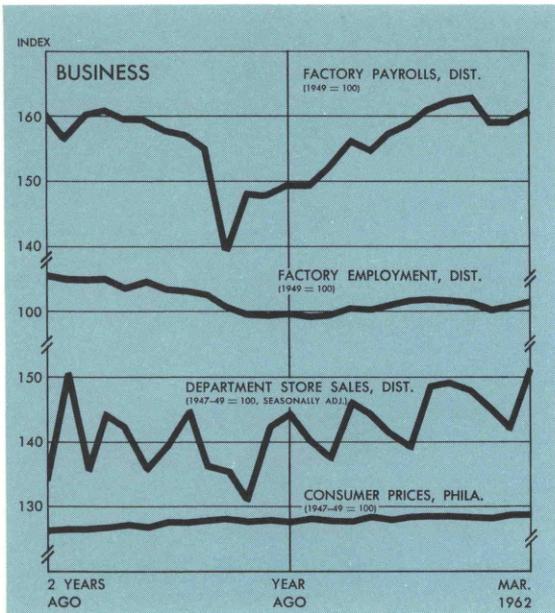
Two years ago we made a survey of bank automation. At that time, only two banks were actually using computers but thirteen had definite plans to get them. Apparently seven additional banks have decided for computers since the previous survey.

Currently, special checking accounts, consumer loans, mortgage loans, payroll, and trust accounting are the most common computer applications.

All computers in the survey are owned or leased by the operating bank rather than by a cooperative of several banks or by a service bureau.

In summary, automation seems to be proceeding at a steady pace in Third District banks. One might even call the pace rapid considering the cost of equipment and the planning and preparation necessary to get it working properly. As one banker told us, "Automation isn't just plugging in a fancy new machine full of transistors and diodes; it is a whole new way of life. Don't underestimate the changes it will bring to bank operations."

FOR THE RECORD...



SUMMARY

	Third Federal Reserve District			United States		
	Per cent change			Per cent change		
	Mar. 1962 from		3 mos. 1962 from year ago	Mar. 1962 from		3 mos. 1962 from year ago
	mo. ago	year ago		mo. ago	year ago	
MANUFACTURING						
Production.....			+ 1	+14	+13	
Electric power consumed.....	+ 3	+12	+15	.....	.....
Man-hours, total*.....	+ 1	+ 4	+ 4	.....	.....
Employment, total.....	0	+ 2	+ 1	0	+ 4	
Wage income*.....	+ 2	+ 8	+ 8	.....	.....
CONSTRUCTION**	+122	+43	+27	+45	+26	
COAL PRODUCTION	- 7	+20	+15	+ 1	+23	
TRADE***						
Department store sales.....	+ 6	+ 4	+ 2	+ 5	+ 8	
Department store stocks.....	+ 2	+ 8	.....	+ 1	+ 8
BANKING						
(All member banks)						
Deposits.....	0	+ 6	+ 6	- 1	+ 8	
Loans.....	+ 1	+ 4	+ 4	+ 1	+ 7	
Investments.....	- 1	+ 9	+ 9	- 1	+11	
U.S. Govt. securities.....	- 1	+10	+10	- 3	+ 8	
Other.....	+ 1	+ 5	+ 4	+ 4	+19	
Check payments.....	+16†	+15†	+20†	+22	+11	
PRICES						
Wholesale.....	.....	.....	.....	0	0
Consumer.....	0‡	+1‡	+1‡	0	+ 1	

*Production workers only.

**Value of contracts.

***Adjusted for seasonal variation.

†20 Cities

‡Philadelphia

LOCAL CHANGES

	Factory*		Department Store†				Check Payments		
	Employment	Payrolls	Sales		Stocks		Check Payments		
	Per cent change Mar. 1962 from		Per cent change Mar. 1962 from		Per cent change Mar. 1962 from		Per cent change Mar. 1962 from		
	mo. ago	year ago							
Lehigh Valley...	+ 1	+ 6	+ 1	+16	.....	.....	.....	+15	+ 4
Harrisburg.....	+ 1	- 3	+ 4	+ 2	.....	.....	.....	+14	+ 2
Lancaster.....	+ 1	+ 4	+ 2	+10	+19	+13	+ 8	+ 2	+11
Philadelphia....	+ 1	+ 1	+ 1	+ 6	+ 4	+ 2	+ 2	+11	+15
Reading.....	0	+ 7	0	+16	+18	+10	+ 9	+ 8	+11
Scranton.....	- 1	+ 1	- 1	+ 7	+17	+ 3	+ 1	- 1	+21
Trenton.....	0	+ 3	- 2	+ 8	- 2	+ 4	+ 4	+ 2	+19
Wilkes-Barre...	0	- 1	+ 1	+ 8	+10	+ 6	+ 3	0	+16
Wilmington.....	0	- 1	+ 2	+ 3	+ 7	+ 6	+ 6	+11	+31
York.....	- 2	- 3	- 2	+ 3	+12	+11	+ 4	+11	+17

*Not restricted to corporate limits of cities but covers areas of one or more counties.

†Adjusted for seasonal variation.