THE

# BUSINESS REVIEW

FEDERAL RESERVE BANK OF PHILADELPHIA



# CEMENT STACKS ARE SMOKING ON THE LEHIGH

The little Lehigh Valley makes more cement than any other region in the country.

The combination of good local limestone, coal just across the mountains to the west, and big seaboard markets to the east made Lehigh Valley the byword for cement. It is a feast or famine industry because it lives on construction.

The building boom has brought prosperity to the Valley.

Sold on a delivered price basis for years, cement went f.o.b. by judicial decree in 1948. Mills in the Valley may find tougher going when the big push in construction subsides.

# FINANCIAL STRENGTH OF BUSINESS

Business came out of the "recession" of 1949 in excellent financial condition.
Liquidity is high and profits are rising.

#### **CURRENT TRENDS**

Improved business was widespread in April. Building and construction activity attained still higher levels.

# CEMENT STACKS ARE SMOKING ON THE LEHIGH

The Lehigh Valley is the world's largest cement producing region, and its mills are going full blast. Last year they turned out about one-sixth of the country's total production. The 30 million barrels produced in the Lehigh area would make a train load of cement extending almost half-way across the continent. In response to the postwar building boom, that reached record proportions last year, the cement industry in the Lehigh Valley and other regions ground out the largest tonnage in history. This year may be even better if the construction industry maintains the vigor displayed during the first five months.

About 10 million barrels, or one-third of the Lehigh Valley output, went into the construction of apartment buildings, houses, office buildings, industrial plants, warehouses, and similar structures. Another 7 million or 8 million barrels went into concrete highways and streets. The remainder was used for a great variety of construction, such as flood control dams, drainage systems, power projects, sewers, water supply systems, bridges, railway trestles, and farm buildings; in fact, cement is a building material virtually indispensable for every type of construction ranging from a concrete sidewalk, requiring a few bags of cement, to mammoth projects like Grand Coulee Dam which required 24 million tons of concrete.

Cement is a regional industry. It is too costly to haul the product from one end of the country to the other because cement is heavy and it is a low-priced material. A ton of cement at the mill sells for only one-third the price of a ton of pig iron. Furthermore, there is no need to haul cement all around the country. Limestone, the principal ingredient, is a common raw material found in almost every state. The abundance of good cement rock gave rise to the Lehigh Valley district, but today its marketing area is hemmed in by the competition of other regional mills nearby.

#### Lehigh Valley Cement in a Rural Setting

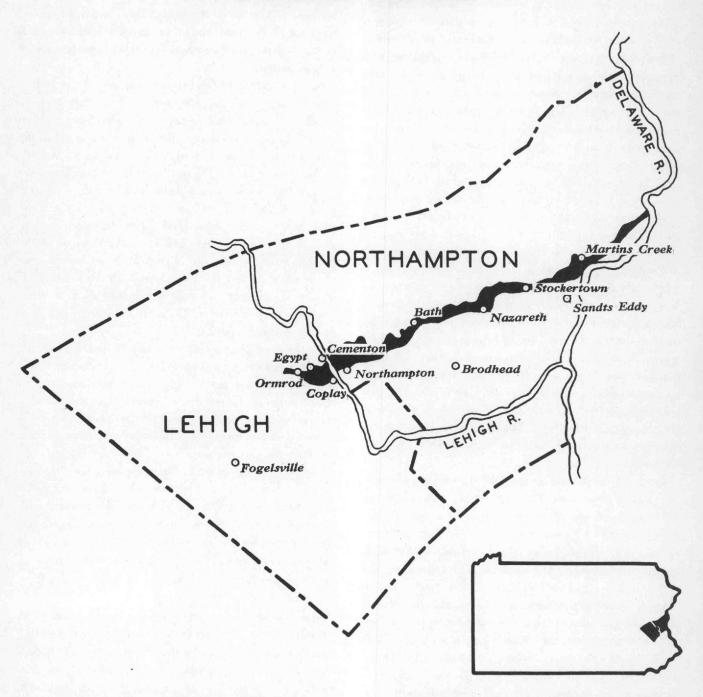
In the cement industry, the Lehigh Valley occupies a position of importance somewhat comparable to that of Pittsburgh in steel; but the Lehigh district is really a very small geographical area. Originally it comprised an area of only about four square miles, where the Lehigh River cuts through a band of cement rock, as shown in the accompanying map. Its origin goes back to the railroad building era. Construction of the Lehigh Valley Railroad required the blasting of deep cuts through the hills north of Coplay, which exposed the rich vein of limestone and there, in 1872, the first mill began to make cement. The narrow strip of cement rock, scarcely a half-mile wide in some places, parallels the great anthracite deposits just to the north.

As the markets for cement grew, additional plants were established to the northeast and to the southwest, as well as other points nearby where the outcropping layer of limestone occurs. Including the Evansville mill in Berks county, the Lehigh region today has seventeen operating plants. Some of the mills are single-plant enterprises; others are owned by companies that have acquired plants outside of this region.

Cement is essentially a rural industry; it must be made where suitable raw materials are found. Not a single mill is within the large Allentown-Bethlehem-Easton industrial area just south of the cement strip. The heaviest concentration of plants is at Nazareth, which has three mills, and both Northampton and Bath have two plants. The others are located in small communities like Brodhead, Cementon, Coplay, Egypt, Fogelsville, Martin's Creek, Ormrod, Sandt's Eddy, and Stockertown, where the mills are usually the chief source of local employment. Since cement is a man's industry, some of these towns have attracted textile and apparel manufacturing to utilize the available female labor.

The Lehigh district got off to a good and early start because its rock contained the essential ingredients—lime, silica, and alumina—and fortunately they were in just the right proportions to make natural cement. This was done by simply quarrying, crushing, and firing the stone. Soft coal from the Pennsylvania fields was used for the fuel, which is consumed in tremendous quantities both for power to crush the rock and for fuel to fire the furnaces. Furthermore, the region had the advantage of position

# THE LEHIGH VALLEY CEMENT DISTRICT



with respect to markets. Located close to the doorsteps of both New York and Philadelphia, the district was in a position to serve the heavily populated markets along the Atlantic Seaboard. Before cement plants were established

in other areas, the Lehigh district shipped westward by rail beyond the Mississippi and by water to the Gulf states and to the Pacific Coast by way of the Panama Canal, which was built with Lehigh Valley cement.

#### Growth and Decentralization of the Industry

Few industries have developed and grown as rapidly as cement during the half-century just completed. Tonnage of the entire industry rose from about 10 million barrels in 1900 to the present level of 200 million barrels, as a result of ever-widening markets and simultaneous improvement of the product. Cement gained increasing acceptance as a fire-proof building material and, used with steel to make reinforced concrete, sufficient strength was obtained to construct skyscrapers. The fast-growing motor vehicle industry generated a huge demand for cement to construct durable, hard-surface highways. As highway and other forms of construction pushed farther and farther southward and westward, it became increasingly difficult for the Lehigh Valley producers to supply the distant markets.

Meanwhile the industry made great technical progress. At the turn of the century came the shift from natural cement, made in stationary kilns operated intermittently, to Portland cement made in rotary kilns operated continuously. Portland cement—named for its grey cast similar in appearance and texture to the stone from the famous Isle of Portland off the coast of England—soon took the place of natural cement. Greater heat obtained in the new type of furnace produced more complete chemical reaction and a better product. In 1904 the American Society for Testing Materials adopted rigid specifications of specific gravity, fineness, tensile strength, setting time, and chemical composition for Portland cement. These specifications were improved from time to time and adopted by all producers.

Recent developments have taken the form of closer chemical control, finer grinding, larger kilns, and the introduction of special types of cement for special purposes. Cement rock has to be ground finer than face powder and it has to be ground twice: first into rock dust to be fed into the kiln, and again into powder when the clinker comes out of the kiln. That is one reason why the industry is such a large consumer of fuel; the other reason is that the kiln must be fired at a temperature hotter than that required to melt steel. Kilns come in sizes up to 450 feet in length—the largest rotating colossus in the American industrial jungle. About half of the plants buy electric power, but whether they purchase or produce it, they consume a tremendous amount of energy.

Well over three-fourths of the total product of the industry is common or all-purpose cement, but numerous producers now also make special types of cement. High early strength cement, as the name implies, has quick hardening properties demanded in highway construction. Air-entraining cement is specially made to resist severe frost action and scaling of concrete pavements where chemicals are used to melt ice on the roads. These and other special types are all Portland, and all are made to standard specifications. Natural cement is no longer an important factor in total output.

Standardization of the formula was one of the factors contributing to the decentralization of the industry. By blending raw materials in proper proportions it became possible to utilize materials other than those found in the Lehigh district, thus permitting the manufacture of Portland cement in various regions where the local demand was sufficient to justify the establishment of a mill. A market for 1½ million to 2 million barrels a year is about the minimum to justify the capital expenditures required to erect a mill. Today there are 150 mills throughout the country, with one or more in each of over three-quarters of the states. The kilns' diet varies with the location. It may be (1) cement rock and pure limestone or (2) limestone and clay or shale or (3) marl and clay or (4) blast furnace slag and limestone.

At the turn of the century about 70 per cent of the country's production was made from cement rock and pure limestone because the Lehigh district produced almost three-fourths of the country's cement at that time. Today only about one-fifth of the total production is made from cement rock and limestone, and 70 per cent is made from limestone and clay or shale.

Decentralization of the industry was also facilitated by the adaptation of fuels other than bituminous coal. Some of the Southern and Western mills fire their furnaces with either oil or gas, whichever can be obtained more economically in their respective territories. Mills in the Lehigh Valley generally fire their kilns with powdered bituminous coal, and some effort is being made to use a combination of powdered bituminous and anthracite.

High transportation costs exerted a strong influence in making cement production a regional industry. Most cement is shipped by rail either in bulk or in 94-pound bags—four bags constituting a 376-pound barrel, which is the unit commonly used throughout the trade, although cement is seldom barreled except for export. A barrel of cement currently priced around \$2.25 at the mill in Northampton cannot be shipped very far before the added freight charges become prohibitive. Under ordinary con-

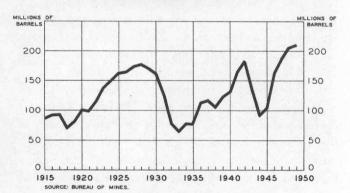
ditions, shipping charges limit the market to a radius of about 100 to 200 miles.

The establishment of regional mills to serve local markets more economically affected producers in the Lehigh Valley unfavorably, especially in view of the fact that the addition of more plants created capacity considerably in excess of total demand for cement. For a number of years prior to the current building boom, the cement industry as a whole was burdened with too much capacity. According to reports of the Bureau of Mines, the industry did not operate above 75 per cent of capacity in any year between 1927 and 1947. At various times, particularly between 1942 and 1947, mills in the Lehigh district operated at somewhat lower percentage of capacity than the rest of the industry. During the last two years, Lehigh Valley mills came closer to full capacity operation than the industry generally.

## The Hunger for Tonnage

Cement mills ordinarily have a ravenous hunger for tonnage which grows out of the pressure of heavy overhead costs. Capital investment at \$13,000 per worker runs high because the process is thoroughly mechanized. Massive machinery is employed in every stage of the operation excavating, crushing, grinding, powdering, mixing, conveying, and firing. Occasionally, a worker is seen in the forest of machinery; in fact, the industry has more stockholders than workers. With millions of dollars invested in equipment, the wheels must be kept turning so that the machines pay their keep.

#### CEMENT PRODUCTION—U.S.



The hunger for tonnage is aggravated by the fact that the bulk of the market for cement comes from the building and construction industry, which is notoriously seasonal and cyclical. Cement mills can take care of the seasonality by off-peak storage of finished cement. The rows of silos seen at every cement mill are the seasonality absorbers, but there is no way to absorb the big cyclical dips that sometimes run for years. It was fifteen years from the peak cement production in 1927 to the peak in 1942, as shown in the chart. Hard times the industry must take as best it can.

What actually takes place during a famine in building and construction is that each cement producer goes hunting for all the business he can possibly get to keep his mill operating. Heretofore, competition has taken the form of freight absorption under a basing point system. When markets are lean and there is insufficient business in his own territory to keep his mill going, the cement producer is naturally tempted to go foraging in his neighbor's territory. Since the small difference in quality of cement from one producer to another is of little significance to most buyers, the only way a producer can compete is to meet or underbid his competitor's price. By quoting delivered prices and absorbing the freight charges, the producer can invade his competitor's territory in an attempt to pick up enough business to keep his mill operating. This procedure was available to all producers, however, and the net result was a redistribution of current production.

Obviously, there are limits to this form of inter-market penetration. The greater the distance cement is shipped the greater is the freight charge to be absorbed and the less is the mill net return. However, if the building famine is especially severe, the producer is tempted to go farther and farther afield as long as the business nets him enough to cover all of his out-of-pocket costs like labor, fuel, and materials, and some of his overhead-which is a millstone around his neck no matter whether the mill operates or whether it closes down. Producers sometimes choose to operate at a partial loss rather than close down at a greater loss. Practically all producers quoted delivered prices and absorbed freight until April 1948, when the Supreme Court sustained the cease-and-desist order of the Federal Trade Commission. Since that time, cement has been selling f.o.b. mill-the buyer paying freight.

#### F.o.b. Lehigh Valley

People in the cement towns throughout the Valley—mill operators, workers, merchants, and bankers—are naturally interested in the ultimate effects of f.o.b. pricing upon their local communities. The change in price structure incident to the abolition of basing point pricing had an im-

mediate beneficial effect upon the Lehigh area. The Supreme Court decision came at a time when, owing to the brisk demand for cement, Lehigh Valley producers were getting orders from distant buyers whose needs could not be satisfied by their local producers. Shipments of Lehigh Valley cement, therefore, went as far as New England, Maryland, the Virginias, and western Pennsylvania. Earnings of the producers increased as a result of both higher prices they got for their cement under the new system of pricing and also the lower unit costs derived from operating closer to full capacity. The question is: How will the Lehigh district fare when building and construction activity decline?

In view of the fact that it took the greatest building boom in our history to absorb the full capacity of the cement industry, it appears that the industry will again face idle capacity when demand recedes from present high levels. The Lehigh district may encounter somewhat harder going than other regions because it is still the largest cement surplus area. Mills in the Lehigh district have a combined capacity of 30 million barrels annually, but they have a price advantage in a territory that consumes only about 8 million barrels. They compete on a substantially equal basis with the Hudson Valley producers for another 8 million-barrel market in the New York City area. Disposal of the rest of the cement the Lehigh Valley mills are equipped to produce may be a tough problem. In the absence of a delivered-price system, producers in the Lehigh district are virtually excluded from most of the New England market and they can not go very far south or west before they encounter the competition of other local producers-unless they cut mill prices.

"Sauce for the goose is sauce for the gander," however. Just as the inability to absorb freight costs cuts Lehigh Valley mills out of far-away markets, it likewise prevents other producers from cutting into the Lehigh territory. Different types of readjustments will have to be made because of the unbalanced relationship between capacity and demand in the various local cement-producing regions. The price structure itself may have to undergo modification. Capacity and demand are constantly changing. From time to time, old mills are dismantled and new plants are constructed. Considering the possibility of changes throughout the entire industry, readjustments in the Lehigh Valley may not be as great as is now anticipated.

Another development which has the effect of confining

cement shipments of each district to its own local market is the rise in freight rates. Freight rates have gone up rather sharply in recent years and few commodities are so sensitive to changes in freight rates as cement. Long accustomed to calculating cement costs to several decimals, buyers will have more reason than ever to purchase from the nearest mill as long as they themselves are paying the shipping charges. Should the practice of freight absorption return, the present high freight rates would also discourage sellers from going too far beyond their natural market areas.

Just this month Congress passed a basing point bill. If signed by the President, business concerns may absorb freight charges and sell at uniform delivered prices. Should the bill become law during the current sellers' market for cement, no great immediate effects are anticipated in the Lehigh Valley district because the mills are selling all the cement they can produce. However, when demand subsides, high freight rates take on increased importance as a factor limiting the area of distribution.

Continued prosperity in the Lehigh Valley is dependent not only upon its slice of the pie but also upon the size of the pie. Cement producers are counting on 1950 to be another good year, based largely upon the widespread expectation that the total volume of building and construction will approximate the 1949 record of \$19 billion. Practically all classes of public construction are expected to run higher than last year, which would be favorable to the cement industry. Cement is used in large quantities in numerous types of public construction such as highways, sewers and water works, and conservation projects. Concrete highways have the advantage of lower maintenance costs over other forms of hard-surfaced roads and there is a huge amount of highway construction and rebuilding in process and in prospect. Earlier estimates of modest increases in road construction for 1950 are being revised upward as the year progresses. As of the middle of May, contracts awarded for highway construction in the United States were over 50 per cent above the dollar volume of the like period last year. Several large projects are within the competitive area of Lehigh Valley mills. The eastern extension of the Pennsylvania Turnpike from the Harrisburg area to the outskirts of Philadelphia is scheduled for completion before the year-end. Contracts are now being awarded for the New Jersey Turnpike, a 118-mile highway to run from the New York City area to the Delaware River Memorial Bridge now being built just below Philadelphia.

Another factor in the building and construction outlook that is favorable to cement is its price. Cement competes with brick, tile, structural steel, and lumber. Notwithstanding rising costs of labor and materials, the price of cement has not gone up so much during the war and postwar years as prices of other building materials. In 1950 cement prices were only 50 per cent above pre-war, against increases of 75 per cent for structural steel, brick and tile,

and almost 200 per cent for lumber.

Cement stacks are still smoking on the Lehigh. Producers are enjoying the prosperity while it lasts, but they are making no predictions. Cement mill operators believe that the present high tide in construction cannot be maintained indefinitely. They also remember some long lean years of the past. Yet the rising volume of construction contract awards looks good.

# FINANCIAL STRENGTH OF BUSINESS

It is now clear that the last eight months have witnessed a marked business recovery. The pick-up has not been steady, partly because of industrial disputes, and it has not affected all segments of the economy equally; but many business barometers now point to a very high if not a record level of activity.

The staying power of the current boomlet and its ability to generate sufficient momentum to carry it over the rough spots depends on many factors, not the least of which is the financial condition of business firms. A situation in which there is a profit squeeze for many companies, or profits that are merely "on paper," a topheavy credit structure, and excessive inventory or receivables is often characteristic of a boom near the breaking point. If business is relatively liquid, on the other hand, and profit trends are favorable, industry and trade are likely to have not only the incentive to expand operations, but also the financial ability to do so.

The record of the last year and a half reveals that American business in general, far from being weakened financially by the minor recession of 1949, is probably as strong or stronger now than at any time in the last three years. Neither the rigors of increasing competition nor the pressure of high break-even points has been able to weaken the financial structure. Nor has undue credit expansion been allowed to give the appearance of health while obscuring basic defects.

#### Recent Profit Trends

Profits of nonfinancial corporations in the United States declined during 1949 as sales activity diminished and prices fell. The Department of Commerce estimates that corporate profits after taxes dropped from \$21.2 billion in 1948 to \$17.3 billion—a decline of 18 per cent. Other factors aside, even though the level of profits in 1949 was high by conventional standards, a declining profit trend weakens incentives, and lower profits tend to reduce liquid funds available for expansion and other purposes. The significance of these lower earnings totals for the year should not be weighed without considering several pertinent facts, however. First, while profits generally were lower, the firm which showed a deficit was the exception; many made gains. Among manufacturing industry groups, only the automotive firms showed a substantial increase in earnings; but even the hardest hit industries showed profits. A survey of corporate statements by the National City Bank of New York reveals only about three-fifths of the reporting companies showed smaller earnings in 1949 than in the previous year.

Second, reported profits include gains and losses arising out of fluctuating inventory values. Such gains and losses are not unimportant, especially as they affect the competitive positions of individual firms but they do not, in the aggregate, make cash available to business or reduce liquidity. They are "paper" profits and losses. The year 1949 was one in which prices were falling and in which inventory losses were sustained. It compares all the more unfavorably therefore with 1948, a year when inventory profits were substantial. An adjustment for inventory gains and losses would narrow the true profit difference between the two years.

Third, after the second quarter of the year the trend of corporate profits was upward. This was probably not the case for smaller manufacturing firms and for many enterprises in other fields. But taking seasonal factors into account, enough firms experienced improvement in the third and fourth quarters of 1949 to bring about generally improved financial conditions and a marked change in business sentiment.

It is quite likely that noncorporate business and smaller firms generally have not fared so well as the corporate "giants." Certainly, this is true for manufacturing firms. As reported by the Federal Trade Commission and the Securities and Exchange Commission, manufacturing corporations with assets under \$1 million, and particularly those with assets of less than \$250,000, had a much lower rate of profit and sustained sharper declines in profits during 1949 than the larger companies. Other indications also point toward this conclusion for unincorporated businesses. Even for the small businessman, however, 1949 could not be called a bad year. Business and professional incomes were only slightly under those of 1948. Fewer new businesses were started and more were discontinued, especially in the first half of the year, but the number of business failures, though substantially higher, was still very low in comparison with pre-war experience. Dun and Bradstreet reports total liabilities of concerns which failed in 1949 at \$372 million compared with \$311 million for 1948.

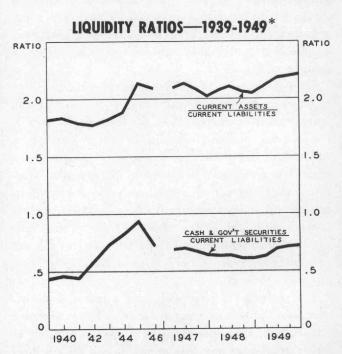
Reports of first quarter 1950 operations indicate a further improvement in corporate profits and business incomes, and a decline in business failures. The profit situation does not equal that of the booming first quarter of 1948 but the trend is clearly in that direction, and if the inventory gains of the former period were taken into account, business might well be considered to be at a new profit peak at the present time.

#### Liquidity

Although corporate profits were lower in 1949, dividend payments were up—from \$7.9 billion to \$8.4 billion. Yet, net working capital of corporations increased to an all-time high. For 1949, these are key statistics because they reflect great strength in the financial position of business. The Securities and Exchange Commission had this to say about all United States corporations, excluding banks and insurance companies: "This increased liquidity in 1949 resulted from a \$2.6 billion rise in holdings of cash and U. S. Government securities and a \$5.5 billion decline in current liabilities. At the end of 1949, corporations held more than \$40 billion of cash and U. S. Government secur-

ities. These holdings amounted to 72 per cent of current liabilities as against 61 per cent at the end of 1948 and only 45 per cent in the years preceding the war." This was accomplished without an increase in loans from commercial banks. In fact, business loans of member banks in leading cities were reduced by \$1.8 billion during the year, and such expansion as did take place toward the end of 1949 was apparently seasonal in nature.

The accompanying chart presents a graphic measure of corporate liquidity in recent years. Both the familiar "current" ratio and the so-called "acid test" ratio of cash and Governments to current liabilities have shown constant improvement since the last quarter of 1948. In 1949, in comparison with the previous year, less money was used for plant and equipment, and the reduction of inventory provided funds rather than demanding additional outlays, as was the case during the previous year's expansion. Mort-



\* Figures as of end of year or quarter—nonfinancial corporations. Source: Securities and Exchange Commission.

gage loans and new security issues provided a little less money than in 1948, but reductions in the uses of funds were great enough to allow for substantial repayment of bank loans, reduction of tax liabilities, and the building up of cash reserves.

Here again it is likely that improvement of liquidity position has been greater and liquidity ratios higher for large concerns than for smaller firms with limited financial resources. From the fourth quarter of 1948 to the end of 1949 the "current" ratio of manufacturing corporations in the \$1,000 to \$249,000 asset class went from 2.1 to 2.2, while \$100 million and over corporations went from 2.7 to 3.0. The "acid test" ratios moved from .61 to .62 and .84 to 1.16, respectively.

#### Conclusions

The ratios presented here are, of course, the result of a conglomeration of data from many different kinds of industries of varying sizes. They are in no sense standards for credit analysis. Different industries have different liquidity requirements, and averages of the type pictured in the chart have only the most general applicability for individual firms. They are, however, significant in the analysis of business fluctuations. In the present situation, they cannot be offered as final evidence but they point toward several important conclusions. First, by the end of 1949 business had recuperated financially from the recession of 1948-1949. The manner of improvement in financial condition indicates a situation that is typical of

normal and sustained recovery, not a temporary burst of optimism.

Second, when considered in the light of business conditions since the beginning of this year, it is apparent that business is in position to respond to the opportunities presented by technological improvements and growing consumer markets. Investment in plant and equipment depends not only on profit expectations, though these are paramount, but also on ease of financing. This adds force to the current feeling that capital outlays may be greater this year than originally anticipated.

Third, with prices tending upward, business is in position to accumulate inventory once again. A new wave of inventory building has already started. Ready cash in the businessman's hand and low indebtedness probably tends to reinforce his willingness to stock up and may lead—unless he is on guard—to over-buying and over-pricing. That there are elements of danger in this situation is clear. The caution exercised by bankers and businessmen in the post-war period thus far, however, speaks well for their ability to avoid speculation and to make the best possible use of the resources at their disposal.

# **CURRENT TRENDS**

April reports from business concerns throughout the Philadelphia Federal Reserve District were generally expansionary. Employment, production, pay rolls, and department store sales rose to levels above those of March. Construction continued to be a strong sustaining force in the economy, and although bank deposits, loans, and investments did not increase, they were greater than those of a year ago. The consumer price index did not reflect more recent price rises. Production receded in only a few industries, notably anthracite coal, transportation equipment, and tobacco.

Over-all output and pay rolls in manufacturing industries in Pennsylvania were above the previous month. The increases reflected substantial gains in the durable goods industries, which were only partly offset by declines in the non-durable field. Production in the iron and steel industry rose substantially and was just slightly under that of 1949. Automobile output continued above the volume of a year ago. Although it remained 4 per cent below the level of last year, total factory employment showed improvement. Like the gains in production and pay rolls, the greatest increases occurred in the automobile and iron and steel industries.

Activity in the construction field continued at a record pace. Contracts awarded for new buildings rose, both in relation to the preceding month and to the previous year; in fact, building has been so active that fears of material shortages have arisen in some quarters. The scramble for lumber and other building supplies is already threatening home construction in the Philadelphia area, and some builders are feeling spot shortages.

Department store sales for April showed a gain over the previous month. With the exception of Lancaster, improvement in sales occurred in every city for which data are available. However, for the first four months of 1950, sales were below the corresponding period of last year. Philadelphia department stores report continued demand for housefurnishings, and huge sales in their radio and television departments. The high level of home construction should assure a sustained demand for furniture and major household appliances in coming months.

Deposits and loans of all member banks in the Third Federal Reserve District declined slightly during April, but investments remained unchanged. During May, however, through the 24th, deposits and loans of weekly reporting banks rose. While investments declined somewhat they were still 12 per cent above a year ago.

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-2	- 7	0	- 6					-13	+ 2
+6	- 9	+15	- 8					+ 3	- 3
0	- 2	0	+ 4	- 8	-5	+4	+7	-10	+14
0	- 6	- 3	- 4	+ 5	-3	+4	0	-19	+14
0	- 3	- 3	0	+ 6	-6	+4	0	+ 1	+ 2
+3	+11	- 2	+20					- 3	+15
				+18	+2	+3	-4	+ 9	+ 7
-7	-18	-13	-16	+12	-6	+3	+5	- 8	- 5
+1	+ 6	- 1	+10					- 6	+ 1
0	- 2	0	+ 4					-15	+14
+1	+ 6	+ 1	+16	+12	-3	+3	+8	- 9	- 6
	che Aprii fr mo. ago +1 +4 -2 +6 0 0 +37 +1 0	ago ago  +1 - 4 +4 - 1 -2 - 7 +6 - 9 0 - 2 0 - 6 0 - 3 +3 +117 - 18 +1 + 6 0 - 2	change April 1950         change April 1950         change from           mo.         year         mo.           ago         ago           +1         -4         +4           +4         -1         +6           -2         -7         0           +6         -9         +15           0         -2         0           0         -6         -3           0         -3         -3           +3         +11         -2           -7         -18         -13           +1         +6         -1           0         -2         0	change April 1950 from         change April 1950 from           mo.         year ago         mo.         year ago           +1         -4         +4         +2           +4         -1         +6         -8           -2         -7         0         -6           +6         -9         +15         -8           0         -2         0         +4           0         -3         -3         0           +3         +11         -2         +20           -7         -18         -13         -16           +1         +6         -1         +10           0         -2         0         +4	change April 1950 from         change April 1950 from         change April 1950 from         change April 1950 from         change April 1950 from         change April 1950 from         change April 1950 ago         change April 1950 ago         change April 1950 ago         change ago         change April 1950 ago         change April 1950 ago         change April 1950 ago         change ago         change April 1950 ago         change ago         change ago         change April 1950 ago         change ago	change April 1950 from         change April 1950 from         change April 1950 from         change April 1950 from           mo.         year ago         mo.         year ago         mo.         year ago           +1         -4         +4         +2             +4         -1         +6         -8             -2         -7         0         -6             0         -2         0         +4         -8         -5           0         -6         -3         -4         +5         -3           0         -3         -3         0         +6         -6           +3         +11         -2         +20             -7         -18         -13         -16         +12         -6           +1         +6         -1         +10             0         -2         0         +4	change April 1950 from         change April 1950 ago         April 1950 ago	change April 1950 from         change April 1950 ago         change ago         ago         ago	change April 1950 from         change April 1950 ago         April 1950 ago

Factory\*

Employ-

Department Store

Check

<sup>\*</sup>Not restricted to corporate limits of cities but covers areas of one or more counties.

<sup>\*</sup>Pennsylvania. \*\*Adjusted for seasonal variation. †Philadelphia.

# **MEASURES OF OUTPUT**

	Per	cent cha	ange
	April from		4 mos 1950
	month ago	year ago	from year ago
MANUFACTURING (Pa.)* Durable goods industries Nondurable goods industries	+ 2 + 6 - 2	- 4 - 6 - 1	- 9 -13 - 2
Foods. Tobacco. Textiles. Apparel. Lumber. Furniture and lumber products. Paper. Printing and publishing Chemicals. Petroleum and coal products. Rubber. Leather. Stone, clay and glass. Iron and Steel. Nonferrous metals. Machinery (excl. electrical) Electrical machinery Transportation equipment (excl. auto). Automobiles and equipment.	$\begin{array}{c} -3 \\ -15 \\ -6 \\ -8 \\ +1 \\ +1 \\ -1 \\ -1 \\ +3 \\ +4 \\ -9 \\ +2 \\ -13 \\ +6 \\ 6 \\ +1 \end{array}$	$\begin{array}{c} - & 5 \\ - & 12 \\ + & 7 \\ + & 2 \\ - & 12 \\ + & 33 \\ - & 15 \\ - & 5 \\ - & 10 \\ - & 2 \\ - & 3 \\ - & 11 \\ - & 55 \\ + & 12 \\ \end{array}$	$\begin{array}{c} -2 \\ -12 \\ +1 \\ +6 \\ -12 \\ +18 \\ +11 \\ -29 \\ -7 \\ 0 \\ -11 \\ -8 \\ -12 \\ -14 \\ -20 \\ -6 \\ -46 \\ +6 \\ -9 \end{array}$
COAL MINING (3rd F. R. Dist.)† Anthracite Bituminous	$   \begin{array}{r}     -19 \\     -23 \\     + 8   \end{array} $	- 5 - 6 - 3	$^{0}_{+8}^{-34}$
CRUDE OIL (3rd F. R. Dist.) ††	+ 2	- 2	- 7
CONSTRUCTION — CONTRACT AWARDS (3rd F. R. Dist.)** Residential Nonresidential. Public works and utilities	+22 +53 - 3 +13	+ 59 +204 + 17 + 11	$^{+29}_{+63}_{+25}_{+1}$

<sup>\*</sup>Temporary series—not comparable with former production indexes.

\*\*Source: F.W. Dodge Corporation. Changes computed from 3-month
moving averages, centered on 3rd month.

†U.S. Bureau of Mines. ††American Petroleum Inst. Bradford field.

# **EMPLOYMENT AND INCOME**

Pennsylvania Manufacturing	Em	ploym	ent	I	Payroll	s	Aver Weel Earni	kly	Ho	rage urly nings
Industries* Indexes	Apr. 1950	cha fro	cent nge om	Apr. 1950	Per cha fro		Apr.	chg.	Apr.	chg.
(1939 avg. =100)	(In- dex)	mo. ago	year ago	(In- dex)	mo. ago	year ago	1950	year ago	1950	year ago
All manufacturing Durable goods	114	+ 1	- 4	269	+ 3	- 1	\$52.78	+ 4	\$1.365	+2
industries Nondurable goods	134	+ 2	- 8	302	+ 7	- 4	58.77	+ 4	1.481	+1
industries	96	- 1	0	228	- 4	+ 4	45.39	+ 4	1.213	+3
Foods	113 79 76 90	- 1 - 4 - 1 - 1	$     \begin{array}{r}       -3 \\       -11 \\       +4 \\       +1     \end{array} $	234 160 185 229	$     \begin{array}{r}       -4 \\       -14 \\       -7 \\       -8     \end{array} $	$     \begin{array}{r}       -1 \\       -8 \\       +6 \\       +8     \end{array} $	46.02 26.55 43.55 35.85	$\begin{array}{c c} + 1 \\ + 3 \\ + 2 \\ + 7 \end{array}$	1.170 .806 1.189 .969	$\begin{array}{r} +4 \\ +4 \\ -1 \\ +5 \end{array}$
Lumber Furniture and	82	- 1	- 9	187	0	- 7	42.57	+ 2	1.093	+6
Paper	99 118	+ 1	$^{+25}_{+3}$	249 276	- 1	$^{+41}_{+12}$	46.39 50.42	$^{+13}_{+9}$	1.077 1.231	+6 +5
publishing Chemicals Petroleum and coal	132 112	+ 1 + 1	- 3 - 5	294 257	$-1 \\ +4$	$\begin{array}{c c} + & 1 \\ + & 4 \end{array}$	63.19 54.57	$^{+4}_{+10}$	1.706 1.331	+5 +3
products	144 126 85	+ 2 - 1 - 2	- 4 - 2 + 1	301 262 179	+ 4 - 9	- 5 + 6 + 5	63.68 51.92 36.01	- 1 + 8 + 4	1.662 1.435 1.108	$^{+1}_{+3}_{+6}$
glass Iron and Steel Nonferrous metals Machinery (excl.	116 128 115	+ 1 + 4 + 1	- 2 - 5 - 7	269 293 262	$^{+\ 3}_{+15}_{+\ 2}$	+ 3 0 - 2	53.03 61.91 59.31	+ 5 + 5 + 6	1.297 1.557 1.452	$^{+2}_{+2}_{+1}$
electrical)	168	+ 3	-14	361	+ 2	-12	54.60	+ 2	1.426	+2
machinery Transportation equipment	208	+ 1	- 1	427	- 2	- 3	57.28	- 1	1.497	-2
(excl. auto) Automobiles and	112	-11	-55	232	-11	-53	63.38	+ 5	1.595	0
equipment Other manufacturing	123 115	+ 5	+ 6 + 4	285 239	+ 6	+17 + 6	64.04 43.30	$^{+10}_{+2}$	1.554 1.186	$^{+4}_{+3}$

<sup>\*</sup>Production workers only.

# TRADE

		Per o	nge	
Third F. R. District	1950 (Index)	April 195	4 mos. 1950	
Indexes: 1935-39 Avg. =100 Adjusted for seasonal variation	(Index)	month ago	year ago	from year ago
SALES Department stores Women's apparel stores Furniture stores	281 239	+ 7 +15 - 2*	+2 -8 -5*	$-2 \\ -14 \\ 0*$
STOCKS Department stores Women's apparel stores Furniture stores	217	$\begin{array}{c c} + & 4 \\ - & 2 \\ + & 3* \end{array}$	+2 +3 +2*	
Recent Changes in Depar in Central Phila		ore Sales		Per cent change from year ago
Week ended May 6 Week ended May 13				-14 + 1
Week ended May 20				- 8 - 3

<sup>\*</sup>Not adjusted for seasonal variation.

	S	ales	Stocks (end of month)			
Departmental Sales and Stocks of Independent Department Stores  Third F. R. District	% chg. April 1950 from year	4 mos. April (r 1950 1950 s		(mo	to sales nths' ply) ril	
	ago ago		ago	1950	1949	
Total — All departments	-10	- 3	+ 1	3.0	2.7	
Main store total. Piece goods and household textiles. Small wares. Women's and misses' accessories. Women's and misses' apparel. Men's and boys' wear Housefurnishings Other main store.	$ \begin{array}{rrr} -8 \\ -11 \\ -7 \\ -14 \\ -17 \\ -8 \\ +7 \\ -12 \end{array} $	$ \begin{array}{rrr}  - 2 \\  -13 \\  - 2 \\  - 5 \\  -11 \\  - 1 \\  +10 \\  - 7 \end{array} $	+ 2 + 8 + 5 + 9 + 3 + 8 - 3 - 13	3.3 4.5 4.1 2.8 1.9 4.1 4.0 2.8	3.0 3.7 3.7 2.2 1.6 3.5 4.4 2.8	
Basement store total.  Domestics and blankets Small wares. Women's and misses' wear Men's and hoys' wear Housefurnishings. Shoes.	$ \begin{array}{r} -15 \\ +5 \\ -7 \\ -21 \\ -10 \\ -1 \\ -14 \end{array} $	- 9 - 3 + 4 -13 - 4 - 2 - 6	- 7 - 4 -12 - 7 + 2 -15 - 4	1.8 2.9 1.5 1.3 2.2 2.8 2.5	1.7 3.2 1.6 1.1 1.9 3.2 2.2	
Nonmerchandise total	- 3	0				

# CONSUMER CREDIT

Sale Credit	Sa	Receivables (end of month)	
Third F. R. District	% chg. April 1950 from yearago	% chg. 4 mos. 1950 from yearago	% chg. April 1950 from year ago
Department stores Cash. Charge account. Instalment account.	-13 - 7 + 2	- 8 - 2 +19	- 1 +27
Furniture stores Cash	-14 + 1	-10 + 4	
Tustament account	- 2	+ 4	+16
Loan Credit		+ 4	
	Loans % chg. April 1950 from		Loan bal- ances out- standing (end of month) % chg. April 1950 from

## **PRICES**

Index: 1935-39 average = 100		April 1950	Per cen fr	t chang om
	(Index)	month ago	year ago	
Wholesale prices — United States Farm products. Foods. Other.		190 210 196 180	0 0 0 0	-3 -7 -5 -2
Consumer prices United States Philadelphia Food. Clothing. Rent.		167 166 192 181 122	0 0 0 0	$     \begin{array}{r}       -1 \\       -2 \\       -3 \\       -4     \end{array} $
Fuel Housefurnishings Other		146 190 152	$\begin{array}{c c} +1 & 0 \\ 0 & 0 \end{array}$	$^{+4}_{-2}_{0}$
Fuel		146 190	+1	-2
Fuel		146 190	+1	-2

Source: U.S. Bureau of Labor Statistics.

# BANKING

MONEY SUPPLY AND RELATED ITEMS	April	Chang	Changes in—	
United States (Billions \$)	26 1950	four weeks	year	
Money supply, privately owned	168.5	+1.4	+3.0	
Demand deposits, adjusted Time deposits Currency outside banks	84.5 59.5 24.6	+1.2 + .2 0	$^{+2.1}_{+1.3}_{4}$	
Turnover of demand deposits	19.6*	+3.7*	+4.3*	
Commercial bank earning assets	120.4	+ .1	+7.9	
Loans. U.S. Government securities. Other securities.	43.8 65.6 11.0	+ .1 2 + .2	+2.5 +3.6 +1.8	
Member bank reserves held	15.9	+ .1	-3.1	
Required reserves (estimated)	15.2 .7	1 + .2	$^{-3.3}_{+\ .2}$	

Changes in reserves during 4 weeks ended April 26 reflected the following:

	Effect on reserves
Net payments by the Treasury Increase in Reserve Bank holdings of Governments Decrease in loans to member banks. Other transactions	+.2 +.1 1 1
Change in reserves	+.1

\*Annual rate for the month and per cent changes from month and year ago at leading cities outside N. Y. City.

OTHER BANKING DATA	May 24 1950	Chan	ges in—
OTHER BANKING DATA	1930	four weeks	year
Weekly reporting banks—leading cities United States (billions \$): Loans— Commercial, industrial and agricultural Security. Real estate. To banks. All other	13.4 2.3 4.6 .4 4.7	1 1 + .1 + .1 + .1	$ \begin{array}{r}3 \\ + .5 \\ + .9 \end{array} $
Total loans—gross. Investments. Deposits.	25.4 42.0 75.0	+ .1 + .4 + .5	+ 1.4 + 3.4 + 2.9
Third Federal Reserve District (millions \$): Loans— Commercial, industrial and agricultural Security. Real estate. To banks. All other	499 47 113 10 325	+13 + 8 + 5 + 2 + 4	$   \begin{array}{r}     + 12 \\     + 14 \\     + 24 \\     + 3 \\     + 50   \end{array} $
Total loans—gross. Investments. Deposits.	994 1,826 3,090	+32 - 5 +29	+103 +192 +239
Member bank reserves and related items United States (billions \$): Member bank reserves held. Reserve Bank holdings of Governments. Gold stock. Money in circulation Treasury deposits at Reserve Banks.	15.9 17.3 24.2 26.9 .4	0 4 0 1 4	- 2.1 - 2.4 1 5 2
Federal Reserve Bank of Phila. (millions \$) Loans and securities. Federal Reserve notes. Member bank reserve deposits. Gold certificate reserves. Reserve ratio (%).	1,156 1,605 760 1,332 53.8%	$ \begin{array}{r} -25 \\ + 6 \\ + 12 \\ + 1 \\ + .4\% \end{array} $	$   \begin{array}{r}     -199 \\     -7 \\     -92 \\     +120 \\     +6.3\%   \end{array} $