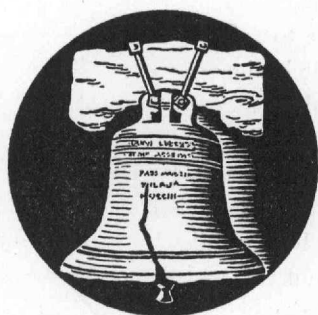


THE
**BUSINESS
 REVIEW**

FEDERAL RESERVE BANK OF PHILADELPHIA



**THE NUMBER LANGUAGE
 OF BUSINESS**

The complexity and diversity of the modern business world require a language common to all phases of economic activity. That language — the number language of business — is statistics.

Statistical tables published monthly in the BUSINESS REVIEW have been revised and reorganized. This issue is devoted to a plain-talk explanation of their sources and uses.

"Man-hours worked," "stocks-sales ratio," "money supply," "member bank reserves," and other terms in the tables, describe measurements that should be in the number vocabulary of every businessman and banker.

Statistics alone cannot solve problems nor predict future events.

But without them it is difficult to formulate sound business judgments. Without the number language, in fact, it is doubtful that those concerned with the workings of our economy could even talk to each other.

THE NUMBER LANGUAGE OF BUSINESS

Every business has its lingo. When bankers get together they talk about the "float," "longs," "shorts," "pegs," and "eligibles"—a mumbo-jumbo to non-bankers. In the wool trade, they discuss "tops," "picks," "counts," and "mules." Oil men talk about "cat crackers," "Christmas trees," "five spotting," and "wild-cattling." In Wall Street one hears terms like "ex-rights," "odd lots," "over the counter," and "blue chips." Business has become so diversified and specialized that one almost needs an interpreter when he steps out of his own bailiwick.

But there is one language common to all—the number language of business. A \$10 million profit or a \$5,000 tax needs no translation; the numbers convey a thought and do it accurately. They are familiar to the businessman in every walk of life—banker, manufacturer, retailer, and even the corner news dealer. They measure his costs and prices, income and expenses, production and sales, and profit and loss. In short, they evaluate his past performance and provide a basis for planning future policy.

As our economic system grows in size and complexity, men responsible for business decisions must look farther and farther afield for information sufficiently comprehensive to afford a sound basis for future planning. The business world is a composite of thousands of diversified and specialized firms, and the functioning of business is a circuitous process with each firm making its contribution to the whole and benefiting from the contribution of others. A cause and effect relationship exists between all phases of business activity. Because of this inter-dependence and inter-relationship it is important that the businessman be familiar with trends in all major phases of activity as well as in his own field of endeavor if he is to maintain or improve his competitive position.

There are many sources of information available—newspapers, radio, trade journals, investment services, business publications, or even a confidential exchange of figures between friends in response to the common greeting "how's business." Each serves a useful purpose. Some are general in scope and are designed to aid in an over-all analysis of business conditions. Others are sometimes fragmentary or limited in applicability, and if employed alone as a general measure of total activity may be very misleading.

The Federal Reserve System has particular need for broad measures of business and banking conditions in the determination of credit policies, and has supplemented information available elsewhere with many original compilations made by its own staffs. In the *Business Review* of this Bank, we endeavor to supply the businessman, the banker, and others with some of these assembled data which can be used in interpreting conditions and forming business judgments. There are two parts to the *Review*: the text and the statistical tables. The text is devoted primarily to the analysis of developments in major sectors of business and banking or the consideration of problems of particular importance at either national or regional levels.

The statistical tables, on the other hand, are designed to show month-to-month changes in business and banking, principally in the area served by this Bank. Beginning with this issue of the *Business Review*, these tables are reorganized in an effort to provide a more logical and useful pattern. Grouped according to the phase of activity they are to reflect, they have been given titles descriptive of the business process of which they are a part, such as production, employment and income, trade, prices, and banking.

The aim is to present a well-rounded picture of basic developments in this region. However, because of the close relation between district and national developments, some significant national data have been included. Providing in brief much of the information needed to determine current conditions, the tables also give a working basis for an answer to the important question "what's ahead?" The conclusions to be drawn are general, rather than specific, but it is the general movements that influence so materially developments in particular businesses. Insofar as space permits, some of the major subdivisions of production, employment, and department store sales also are given in the tables. For those who want to analyze their positions in greater detail against a background of general experience, the Bank prepares monthly releases which are available upon request.

No single measure, statistical or otherwise, covers the whole situation—much less forecasts the future. Many factors are constantly at work, inter-acting, and the end-

product is the resultant of numerous forces. There is no simple formula which will tell what the future course of business will be, but it is possible to suggest that certain segments of information are of considerable significance. The major part of new output flows into markets. But this flow will not continue unless the goods can be sold, and the goods can be sold only if people want them and have the money to buy them. Thus the flow of goods, the flow of money and prices are key factors in the business situation. Knowledge of what has gone before, supplied in part at least by changes over the month and the year given in the statistical appendix to the *Review*, is definitely part of the material needed.

Lack of proper balance among the various segments of the economy may cause serious trouble. Examples of this might be production in excess of demand, with the piling up of goods; heavy purchases by retailers at a time when personal incomes are declining; expansion in money supply or in the rate at which it is used when no proportionate expansion in the supply of goods is possible. Inflation, deflation, stability—whichever of the three prevails is not the result of accident but of the interplay of many forces.

FACTS ABOUT THE FIGURES

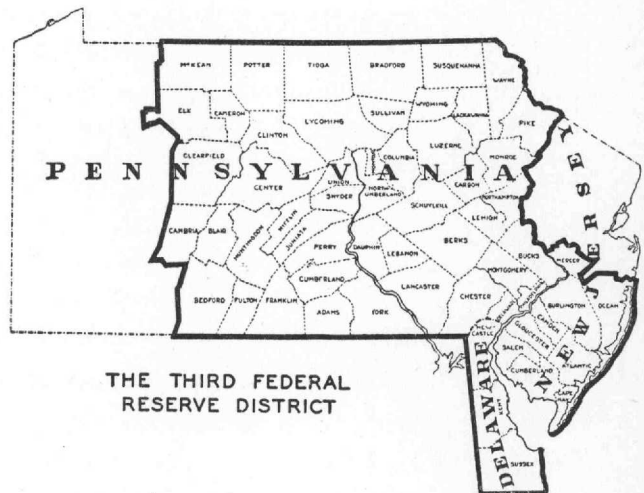
One of the purposes of this article is to acquaint the reader of the *Business Review* with the nature of the figures presented, how they are developed, and something about the ways in which they can be used. From time to time the data will be revised, new series added and old ones dropped, but always with the objective of supplying useful information on broad developments in this area.

The area served by the Bank, known as the Third Federal Reserve District, covers sixty counties in Pennsylvania, New Jersey, and Delaware, as shown in the accompanying map. Where data for this specific area are not available, we show figures for some other area falling partly or wholly within the district rather than omit completely a useful business barometer.

For the most part, the figures presented are prepared at this Bank. They are available because hundreds of business concerns and banking institutions are willing to report pertinent and confidential information to us in exchange for summary data that they can use to compare their own activities with those of others. Their excellent cooperation, tendered on a voluntary basis, bespeaks their interest in the results. Useful data originating outside the

Federal Reserve System also are included, with due acknowledgment of their source.

In most instances the statistical tables show changes from the preceding month and over the past year, stated in percentages in the case of business data and in dollars



in the banking figures. Where data lend themselves to the comparison, changes for the year to date from the same period of the preceding year are shown.

In general, some indication is given of the current level of the series. In the case of most banking figures, dollar amounts are given but in other cases an index is used as the measure. An "index" simply indicates the level of the figure at a given point of time in relation to the average level of the period on which the index is based. For example, an index of 125 shows that business is 25 per cent greater than in the base period, and an index of 85 reflects a 15 per cent decline. The average of the base period is always taken as 100. In the case of indexes shown in the table on employment and income, the base period is the monthly average for 1939; for trade and prices, it is the average of the sixty months in the five years 1935-1939.

A certain amount of caution has to be exercised if misinterpretation of the figures is to be avoided. Extraordinary events or unusual conditions—strikes, product or model change-overs, or unseasonable weather, for example—may affect one or both of the periods compared, resulting in a change that does not reflect the normal trend. And, too, some activities are highly seasonal in character, making month-to-month changes misleading. Examples of this are agricultural output, some forms of food processing, construction, and department store sales.

Because of this, the change from a year ago may at times prove to be a more reliable barometer of activity than the comparison with the preceding month.

Of the series presented in the appendix to the *Review*, the seasonal pattern is especially pronounced in the case of department store sales. These figures show two peaks of activity year after year, the first in March or April depending upon the date of Easter and the second in December as Christmas buying reaches its peak. In the case of total sales and total stocks, an attempt has been made to iron out seasonal disturbances to the indexes so that month-to-month changes will have significance to the user. While none of the other major series has been so adjusted, the seasonal pattern in these cases is less pronounced.

THE STATISTICS OF BUSINESS

For the convenience of those who are interested in obtaining what might be termed a bird's-eye view of business developments, some over-all indicators of activity in this area are assembled in a summary table. For comparative purposes, national figures are given as well.

Data on five basic and interrelated phases of activity are shown initially: output, employment and income, trade, banking, and prices. These are summary figures, the details of which appear in subsequent tables. Two other items, check payments and output of electricity, sometimes used as general measures of business trends, also are covered in the table.

Check payments constitute one of the over-all measures of the dollar volume of payments, covering expenditures for such diverse items as salaries and wages, refrigerators, food, real estate, stocks and bonds, as well as transfers of funds which merely involve a shift from one account of a depositor to another of his accounts. Obviously, the proportions of consumer spending, business spending, and purely financial transactions are constantly shifting, detracting somewhat from the value of check payments as an indicator of business activity. The figures are reported by banks in many leading cities of the country, including twenty in the Third Federal Reserve District. Actually, they also include certain other deductions from depositors' accounts but these probably are of minor importance, warranting use of the more familiar title "check payments" in place of the technically accurate "bank debits." In view of the shifting composition and sporadic changes from time to time, the general trend of the figures

is likely to prove more helpful than purely month-to-month changes.

Electricity, like money, is used very widely. It is employed in almost every stage of production and consumption—from the mines and farms through manufacturing, transportation, trade, and the home, even down to the electric alarm clock that wakens us in the morning. As such, the output of electricity is sometimes used as a measure of general business conditions in the short run. When used to measure long-run changes, allowance should be made for the fact that it has been rising faster over the years than output in general, reflecting increasing electrification. This divergence, however, is diminishing as fuller utilization is achieved.

Measures of Output

Is the output of the basic industries in the district increasing, decreasing, or being maintained? Are trends identical in all fields of activity or are they stronger in some than in others, and if this is true what are these differences? These are some of the questions which this information is designed to answer.

Three broad fields of primary activity are covered: manufacturing, mineral production, and construction. Detailed information includes twenty major industrial divisions of manufacturing as well as the two basic subdivisions—durable and nondurable goods. Mineral output includes anthracite, bituminous coal, and crude-oil production. Construction activity is subdivided into residential, nonresidential, and public works and utilities. Except for building activity, the changes measure physical volume of production rather than dollar volume, avoiding the influence of price changes that have been so pronounced in recent years. Agriculture, though important in some areas of the district, is not included because the great number of farms makes it extremely difficult to assemble reliable and meaningful monthly figures.

The data on manufacturing output are new and not comparable with the series formerly published in the *Business Review*, which are being revised to improve accuracy. In the meantime, temporary series have been developed which should be satisfactory measures of short-run changes. They pertain to the State of Pennsylvania rather than to the Third Federal Reserve District, and are based primarily on labor effort utilized in the production process rather than on physical volume of end-products. Reports on man-hours worked are received by this Bank

from manufacturing firms accounting for more than 70 per cent of total manufacturing activity in the state. The data are tabulated for seventy-two reasonably homogeneous industry classifications and then combined into the major industry groups published, using weights based on value added by manufacture. This system of weights was used because labor is not equally important to the final product in all industries, making a correction for this variation desirable. The chief shortcoming of man-hours as a measure of output is the fact that as output per man-hour increases the data on labor expended tend to understate actual production trends. This, however, should not result in any serious distortion over so short a period as the one year covered by these figures.

The changes in anthracite and bituminous coal production are computed from tonnage figures published monthly by the United States Bureau of Mines. Changes in crude petroleum production are based on reports from the American Petroleum Institute covering production in the Bradford field.

Employment and Income

Important to any analysis of business conditions is the employment and current income status of ultimate consumers. If employment is increasing and incomes are rising, it is safe to conclude that consumer purchases will also increase. There is a definite relationship between disposable income of individuals and consumer purchases.

The data presented in this table cover production workers employed in Pennsylvania manufacturing industries. This is by far the largest segment of employed workers in the state, accounting for about one-half of the three million total. The number in the next largest group—retail trade—is only one-third as large. Being engaged in the production process, this group of workers is especially sensitive to basic trends in the area.

In addition to changes in employment and payrolls, the table supplies the answers to many other significant questions. It shows the industries in which changes are occurring and the magnitude of the changes. The data on average weekly earnings indicate what is happening to the average worker's income. A comparison with consumer price data published in a subsequent table casts some light on the ability of the worker to expand his purchases. If weekly earnings are being maintained but prices are declining, the purchasing power of the average

employed worker is improving, and he can either increase his purchases or his savings. Changes in average hourly earnings and average hours worked usually indicate whether changes in the average worker's pay are due to change in wage rates or in the length of his work-week. This, however, is not always true and conclusions should not be drawn too hastily. A shift of employment from lower paying jobs to higher paying jobs, for example, could cause average weekly and hourly earnings to increase without any change in wage rates or average working time. This type of shift was very pronounced during the war, when priority for the available supply of labor was given to war industries which paid relatively high wages. Changes in the amount of overtime work can also influence average earnings, but this is not as significant an influence today as it was a few years ago.

These data are developed from the same reports mentioned in the discussion of measures of output. They are subject to some error because a sampling technique is employed. Any error, however, should be slight because the samples are good and are best in those industries where the probability of sampling error is greatest. In total, the reporting firms account for almost three-fourths of factory employment in the state.

Trade

Information on the movement of goods from the producers to the consumers is as important in analyzing the business situation as information on production, employment, and income. The manufacturer, the merchant, or the banker, in planning his program, must know whether demand is holding up, where it is strongest and weakest, and whether goods are going to consumers or accumulating in stocks.

The domestic market for the final products of industry falls into three major classes: government, business, and individuals. The data published here deal only with the third, but it is by far the largest of the three. Last year consumer expenditures accounted for 70 per cent of the total final value of all goods and services produced in the United States.

National figures on capital expenditures by business and on Government spending are published in the *Federal Reserve Bulletin*, and a survey of capital expenditures by manufacturing firms in Philadelphia has been conducted in the fall of each year, the findings being published in the *Business Review*.

There are many thousands of retail stores and service establishments in the Third Federal Reserve District, making it impractical to canvass the entire field, even on a sampling basis. Within the distributive trades, however, is a group of stores—department stores—that handle a wide variety of consumer goods and services, and whose total volume of business bears a direct relationship to total consumer purchases. Their activity is used as the basic indicator of consumer demand in this district. Figures are also available on total sales and stocks of women's apparel and furniture stores.

Data on total sales and stocks of department and women's apparel stores are adjusted to remove purely seasonal influences and improve the value of month-to-month changes as indications of trend. All other data shown in this table, including sales and stocks of furniture stores and the various departments of department stores, are not adjusted for seasonal variation. As a matter of fact, month-ago changes have been omitted from the table showing changes for various departments of department stores, because of the probability of misinterpretation. As soon as possible these departmental figures will be corrected for seasonal change. Since the data have been compiled only since 1941, a period of unusual war and post-war activity, accurate seasonal measurements cannot be made at the present time.

Only the major groups of main store and basement store departments are covered in this *Review*. More detail is available upon request to anyone interested in making a more thorough analysis.

Prices

Prices reflect the changing relationships between the flow of spending and the flow of goods. Too much money and too few goods mean rising prices. Too many goods and too little spending mean a decline in prices. Prices are the means of reducing the large variety of goods to a common denominator—value expressed in dollar terms. In measuring the total volume of consumer purchases, for example, it would be meaningless to combine the number of neckties sold with the number of refrigerators, or suites of furniture, or automobiles or houses. But where dollar figures are used, the month-to-month changes may be more of a reflection of price changes than of physical volume. For that reason it is helpful to have some information on price changes for use in estimating the degree to which prices affect dollar totals.

Price series compiled by the United States Bureau of Labor Statistics, one on wholesale prices and one on consumer prices, are given in our table. The data on wholesale prices include a general index of all wholesale prices and three major divisions—farm products, foods, and all other commodities. Consumer prices include the total series for both the United States and Philadelphia in addition to six subclassifications for the city—food, clothing, rent, fuel, housefurnishings, and other types of expenditure. Additional wholesale price series for the country are available at the source, and consumer prices are published for thirty-three other cities. Scranton is the only other city in the Third Federal Reserve District for which an index of consumer prices is compiled, and then only at quarterly intervals.

Consumer prices, formerly referred to as "cost of living" series, cover prices of goods and services normally purchased by families of wage earners and moderate income workers in large cities. The name was probably changed because the series is actually a barometer of prices for a fixed bill of goods rather than a measure of living costs, which would vary with changes in income and mode of living.

Consumer Credit

Credit is an important factor in consumer purchases. It permits the buyer to acquire merchandise without paying the full price at the time of purchase, establishing a credit for the unpaid balance to be paid in one or more future payments. The credit can be established either at the retail store at which the purchase is made or at a lending institution. Such transactions, increasing a consumer's immediate purchasing power but mortgaging his future ability to buy, are important in analyzing the present and prospective business situation.

The Federal Reserve System now has the responsibility for exercising controls over consumer credit and in that connection prepares national estimates each month on the volume of such credit outstanding. They are published monthly in the *Federal Reserve Bulletin*. The current estimates are based principally on monthly reports collected from sample groups of retail credit-granting stores and lending institutions by each of the Federal Reserve Banks. The data are revised periodically as more complete information becomes available.

To indicate the trend of activity in this district, some of the data compiled here are presented for both sale and

loan credit, including changes in both the monthly volume of new credit and the accumulated volume outstanding.

STATISTICS OF BANKING

Production and the flow of goods will not continue unless matched by a flow of money payments from buyers to sellers. Demand, the driving force of the economy, becomes effective only as people use the money they have or that which they can obtain through borrowing or the conversion of other assets into it. Thus, the money supply has an important influence on the volume of spending and, in turn, on production, employment, and income. Like many other good things, the supply of money can be too large for the physical volume of business to be transacted, tending to produce price inflation. Or it can be too small in amount and too sparingly used, bringing about deflation. The preservation of a reasonable balance between the flow of money and the flow of goods is one of the primary concerns of the monetary authorities and motivates many of their actions.

Information on the money supply and the factors which bear upon it is given in the first part of the banking statistics section of the *Business Review*. Since there can be no useful geographical segregation of the money supply, the data given there are national rather than regional. For those who are interested in banking developments at the regional level, tables also are given showing the loan and investment activities of banks in the Third Federal Reserve District.

Nature of the Money Supply

The currency in the pockets of individuals or in the tills of business concerns and the balances which they carry in either demand or time accounts at banking institutions are all part of the money supply. "Money supply" is simply a convenient term for the specifically descriptive "deposits and currency outside banks" estimated each month by the Board of Governors of the Federal Reserve System. Checks in process of collection and deposits held for other banks are excluded to avoid duplication of figures. To approximate "privately owned" money supply, the figures given in the appendix also exclude deposits of the United States Government.

Since the possession or availability of funds largely determines whether or not a person or a company will buy goods or services, the money supply is one of the

key elements in the economic situation. Moving from hand to hand, these funds constitute the life blood of business and of day-to-day living. The rate at which they move has an important influence on the volume of production and trade. A dollar turning over ten times within a given period of time does twice as much work as one which turns over only five times. To the extent that dollars on hand or on deposit are used to meet the costs of business and every-day living, the turnover is likely to be rapid. To the extent that the money supply represents savings, held for future use, turnover of the total is held down. The proportion between these two segments of the money supply is changing constantly.

Earning Assets of Commercial Banks

When commercial banks extend credit through loans or the purchase of securities, they create deposits—spending power in a form ready for immediate use. Changes in the earning assets of these banks are largely responsible for changes in the money supply. Other factors which may affect it include gold imports and Federal Reserve purchases of securities from nonbank holders.

Since changes in earning assets of the commercial banks affect money supply so directly, they are included in our statistical summary. The figures given there are largely based on actual reports, and cover more than 14,000 institutions whose combined assets are in the vicinity of \$150 billion. In reaching decisions as to loans and investments, bankers have to take many points into consideration—risk, effect on borrower and community, etc.—but their ability to make them depends on the adequacy of reserves. This brings us to the third aspect of banking conditions in the national sphere covered in the appendix of the *Business Review*.

Bank Reserves Against Deposits

In general, commercial banks are required to set aside certain proportions of their deposits as "reserves." Since loans create deposits, they can be granted only if reserves are sufficient or can be increased. In the case of member banks of the Federal Reserve System, which have 85 per cent of the deposits of all commercial banks, legal reserves against deposits can be only in the form of balances carried with the Federal Reserve Banks.

In earlier years, the prime function of reserves was conceived to be assurance of the immediate liquidity of

at least a minimum proportion of the deposits covered. But liquidity depends on the quality and marketability of assets. With the coming of the Federal Reserve Banks, imparting liquidity to many types of bank assets, a new concept arose based on the relationship between bank credit and reserves. Under present-day conditions, the principal function of reserves is to serve as a medium through which the monetary authorities can influence the volume of bank credit and, through this, the money supply. An increase in reserve funds makes possible an expansion in deposits and the money supply, while a decrease tends to bring about a contraction. By making reserves more costly or less so, difficult or relatively easy to obtain, or by changing the proportion of reserves that must be maintained against deposits, the authorities influence the willingness and ability of bankers to extend credit and create deposits.

Indirectly, too, the actions of the monetary authorities may have some influence on the rate of turnover of the existing money supply—on the rate at which money already in existence flows from hand to hand. If businessmen or consumers find it difficult to get loans, they may be more hesitant about their expenditures even where credit is not required.

Factors Affecting Bank Reserves

Day by day and week by week many factors are at work tending to change the volume of reserves held. Space does not permit setting forth all of these factors in the statistical appendix, but a few of the main factors at work during the period under review are singled out.

Changes in Federal Reserve credit—in the volume of loans and Government securities held by Federal Reserve Banks—tend to result in corresponding changes in the supply of bank reserves, an increase in such credit being attended by an increase in reserves and vice versa. When the Treasury transfers funds from commercial banks to the Reserve Banks, member bank reserves decline and this decline can be made permanent, insofar as the Treasury is concerned, by using the funds to redeem maturing securities held by the Federal Reserve. On the other hand, if it uses funds carried with the Reserve Banks to make payments to the banking and business public, reserves are increased. An increase of currency in circulation decreases bank reserves and a return flow increases them. Similarly, an export of gold tends to reduce such reserves and imports of the metal build them up.

Thus, changes in the several factors influencing bank reserves and, through them, bank credit and the money supply constitute a medley of many transactions. Some originate in decisions by the public, others in decisions of commercial bankers, and still others represent the considered actions of monetary and fiscal authorities who are concerned with the over-all maintenance of a soundly based economy operating at a high level of activity.

Third District Banking Data

The credit-granting activities of Third District banks are subject to the same general influences as those affecting banks in general, tempered by the specific requirements of the section. Loans and investments of all member banks in the district are given in summary form comparable to the national data for all commercial banks.

In addition, the most recent information is supplied for a group of banks located in leading cities—Philadelphia, Camden, Scranton, Wilkes-Barre, and Wilmington—which, while few in number, have one-half of the assets of all member banks in the district. Their figures, supplementing those of banks in other districts, provide the basis for a bank condition report released weekly by the Board of Governors of the Federal Reserve System.

Of particular interest in the five-city report is the breakdown of loans, largely on the basis of the use to which the funds are to be put. Since the banks are predominantly large city banks, advances to business concerns make up the bulk of their loan portfolios. Real-estate loans currently are only about one-tenth of the total, differing markedly in this respect from other member banks which, as a group, hold substantially more real-estate loans than business loans.

Items taken from the statement of the Federal Reserve Bank of Philadelphia also are given in the table. Perhaps the most significant figures in point of reflecting district trends are the changes in member bank reserves and in the volume of Federal Reserve notes of this Bank in circulation, the latter giving some indication of changes in the local demand for currency. The item "Total loans and securities" at present is made up almost entirely of Government securities, representing the Bank's participation in securities held by the entire Federal Reserve System. Changes in the dollar amount owned by this Bank do not necessarily reflect any significant alteration in total System holdings, since the percentage of participation changes from time to time. At present, direct advances

to member banks are relatively small. If they should increase materially, they probably will be shown separately in the table.

IN CONCLUSION

An understanding of the nature and purpose of the available tools is always essential if a good job is to be done. Some of the most useful tools for the determination of how business is going, how it got where it is, and what the future has in store for it are statistics—the number language of business.

In this article the statistical tools appearing in the *Business Review* have been described, their usefulness explored, and something of their limitations suggested. Attention has been concentrated mainly on presenting the over-all facts of business and banking—facts with

respect to the flow of goods, the flow of spending, the money supply, and prices, all of which have a great deal to do with the rise and fall of business and inflation or deflation. Much is to be gained from having more than a nodding acquaintance with the figures. Plans have to be formulated in any case, and many pitfalls can be avoided if they are based on the best available information.

Figures do not provide the entire answer to the riddle of the future. Certain intangibles always have to be taken into account—the human hopes and desires and reactions that no set of figures can wholly evaluate. In this world of buying and selling, lending and borrowing, spending and saving, the exact sequences of cause and effect which we often associate with the physical sciences are lacking. A little of the crystal ball, therefore, enters into every forecast in the economic sphere.

THE MONTH'S STATISTICS

A drop in consumer spending at department stores in the Third District was one of many declines in measures of business activity during the month of February—normally a “slow” month. For the first two months of the year, sales were down 5 per cent from 1948. Undoubtedly, the Philadelphia transit strike was largely responsible for the unfavorable comparisons.

Manufacturing output in Pennsylvania was off 2 per cent from the preceding month, and employment and pay rolls dropped correspondingly. Although manufacturing output was below that of February 1948, higher hourly earnings of factory workers kept total pay rolls above those of last year. Unseasonably warm weather contributed to a substantial reduction in output of both hard and soft coal.

Declines in food prices brought the index of consumer prices down 1 per cent during the month. While the consumer was still paying a little more for cost-of-living items than in February of last year, the general level of all wholesale prices had declined to 2 per cent below that of 1948. Wholesale prices of both farm and non-farm commodities dropped during the month.

Money supply declined in the early months of 1949. This change, like that of a year earlier, reflected in large part heavy tax payments to the Treasury. Banks in leading cities of the country reported a falling off in business loans.

BUSINESS AND BANKING STATISTICS

SUMMARY	Third Federal Reserve District			United States		
	Per cent change			Per cent change		
	Feb. 1949 from		2 mos. 1949 from	Feb. 1949 from		2 mos. 1949 from
	mo. ago	year ago	year ago	mo. ago	year ago	year ago
OUTPUT						
Manufacturing production	- 2*	- 5*	- 4*	- 1	- 2	- 2
Construction contracts	+ 7	+13	+16	- 2	-14	-11
Coal mining	-13	-33	-26	- 3	-13	-13
EMPLOYMENT AND INCOME						
Factory employment	- 1*	- 4*	- 4*	- 1	- 4	- 4
Factory wage income	- 2*	+ 2*	+ 2*			
TRADE**						
Department store sales	- 7	- 8	- 5	- 5	- 5	- 2
Department store stocks	0	- 6		+ 6	- 5	
BANKING (All member banks)						
Deposits		+ 1	+ 1	- 1		
Loans	+ 1	+ 9	+ 9	- 1	+ 8	+ 9
Investments		- 4	- 4	- 1	- 7	- 8
U. S. Govt. Securities	- 1	- 5	- 6	- 1	- 9	- 9
Other	+ 1	+ 3	+ 2	+ 1	+ 3	+ 2
PRICES						
Wholesale				- 2	- 2	- 2
Consumers	- 1†	+ 1†	+ 1†	- 1	+ 1	+ 1
OTHER						
Check payments	-11	- 2	- 3	-15	- 1	0
Output of electricity	- 3	+ 1	0			

* Pennsylvania ** Adjusted for seasonal variation. † Philadelphia

LOCAL CONDITIONS	Factory*				Department Store				Check Payments			
	Employment		Payrolls		Sales		Stocks		Per cent change Feb. 1949 from			
	Per cent change Feb. 1949 from		Per cent change Feb. 1949 from		Per cent change Feb. 1949 from		Per cent change Feb. 1949 from		Per cent change Feb. 1949 from			
	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago		
Allentown	0	- 5	- 1	+ 2							-17	-18
Altoona	- 5	- 1	- 6	- 2							-12	- 2
Harrisburg	0	- 3	- 3	+ 5							- 7	+10
Johnstown	- 2	- 7	- 6	+ 7							- 7	+ 3
Lancaster	- 1	- 1	- 1	+ 4	- 2	- 1	+14	-19	- 9	+ 1		
Philadelphia	- 2	- 5	- 3	- 1	- 9	-11	+10	- 8	-11	- 4		
Reading	- 1	- 3	+ 1	- 1	+ 8	+ 1	+16	- 2	-10	0		
Scranton	0	-14	+ 5	-13							-19	- 5
Trenton					- 1	+ 3	+ 6	- 6	- 1	+ 3		
Wilkes-Barre	+ 1	0	+ 1	+ 3	- 8	-11	+11	- 4	-25	+11		
Williamsport	- 3	- 5	- 5	- 2							-12	- 3
Wilmington	0	- 2	- 1	+ 9							-22	- 4
York	- 2	-12	- 4	- 8	- 1	- 5	+ 9	- 5	-12	+ 2		

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

MEASURES OF OUTPUT

	Per cent change		
	Feb. 1949 from		2 mos. 1949 from
	month ago	year ago	year ago
MANUFACTURING (Pa.)*			
Durable goods industries	- 2	- 5	- 4
Nondurable goods industries	- 3	- 3	- 3
	0	- 7	- 7
Foods	- 3	- 4	- 4
Tobacco	- 7	-11	-10
Textiles	- 1	-15	-13
Apparel	+ 9	- 9	-12
Lumber	- 2	- 4	- 4
Furniture and lumber products	- 7	-19	-16
Paper	- 3	-10	- 9
Printing and publishing	+ 2	- 3	- 4
Chemicals	+ 3	+ 4	+ 3
Petroleum and coal products	- 1	+ 1	+ 2
Rubber	- 1	-32	-32
Leather	0	-15	-16
Stone, clay and glass	- 1	- 3	- 3
Iron and steel	- 2	+ 2	+ 2
Nonferrous metals	- 4	-10	- 8
Machinery (excl. electrical)	- 3	- 7	- 6
Electrical machinery	- 4	- 6	- 6
Transportation equipment (excl. auto)	0	+ 6	+ 8
Automobiles and equipment	- 4	-37	-36
Other manufacturing	- 4	- 8	- 5
COAL MINING†			
Anthracite	-13	-33	-26
Bituminous	-16	-37	-30
	- 7	-11	- 9
CRUDE OIL††			
	- 2	- 7	- 7
CONSTRUCTION — CONTRACT AWARDS**			
Residential	+ 7	+13	+16
Nonresidential	-10	+18	+28
Public works and utilities	- 1	+ 5	+ 8
	+54	+16	+10

* 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 Industries)*

Indexes (1939 avg. = 100)	Employment		Payrolls		Average Weekly Earnings		Average Hourly Earnings			
	Feb. 1949 (Index)	Per cent change from	Feb. 1949 (Index)	Per cent change from	Feb. 1949	% chg. from year ago	Feb. 1949	% chg. from year ago		
	mo. ago	year ago	mo. ago	year ago						
All manufacturing	124	- 1	- 4	291	- 2	+ 2	\$52.65	+ 6	\$1.345	+ 8
Durable goods industries	151	- 1	- 3	339	- 3	+ 5	58.26	+ 8	1.467	+ 9
Nondurable goods industries	100	0	- 6	234	0	- 3	45.09	+ 4	1.176	+ 7
Foods	118	- 3	- 3	241	- 2	+ 5	45.47	+ 8	1.123	+ 9
Tobacco	97	- 1	- 5	204	- 8	- 8	27.66	- 4	.770	+ 3
Textiles	80	- 1	- 9	201	- 1	-10	44.88	- 1	1.200	+ 6
Apparel	88	+ 5	- 7	225	+ 9	- 9	36.12	- 1	.949	+ 1
Lumber	90	- 1	- 3	211	- 2	+ 7	43.58	+10	1.098	+12
Furniture and lumber products	88	- 5	-17	205	- 8	-16	43.13	+ 1	1.025	+ 3
Paper	116	- 2	- 4	256	- 3	- 2	47.83	+ 2	1.147	+ 9
Printing and publishing	132	0	- 5	278	+ 3	+ 2	59.66	+ 7	1.586	+ 9
Chemicals	126	+ 1	+ 4	276	+ 3	+11	52.24	+ 7	1.292	+ 8
Petroleum and coal products	150	0	+ 1	321	0	+13	65.04	+12	1.645	+11
Rubber	124	- 4	-23	231	- 5	-24	46.22	- 1	1.427	+10
Leather	85	- 1	-13	185	+ 1	- 9	37.11	+ 4	1.025	+ 6
Stone, clay and glass	128	- 1	- 3	290	- 1	+ 4	52.06	+ 8	1.269	+ 7
Iron and steel	139	- 1	+ 1	314	- 2	+11	60.81	+10	1.535	+10
Nonferrous metals	134	- 4	-10	300	- 4	- 2	58.65	+ 9	1.452	+10
Machinery (excl. electrical)	202	- 2	- 4	438	- 3	- 1	54.95	+ 4	1.398	+ 7
Electrical machinery	223	- 3	- 4	478	- 5	0	59.80	+ 4	1.525	+ 6
Transportation equipment (excl. auto)	242	+ 1	+ 7	494	- 1	+14	62.24	+ 6	1.591	+ 9
Automobiles and equipment	120	- 4	-33	251	- 4	-32	57.57	+ 2	1.483	+ 8
Other manufacturing	128	- 3	- 6	256	- 5	- 3	41.98	+ 3	1.147	+ 7

* Production workers only

TRADE

Indexes: 1935-39 Avg. =100 Adjusted for seasonal variation	Feb. 1949 (Index)	Per cent change		
		Feb. 1949 from		2 mos. 1949 from year ago
		month ago	year ago	
SALES				
Department stores.....	258	- 7	- 8	- 5
Women's apparel stores.....	209	-19	-11	- 5
Furniture stores.....		+ 1*	- 3*	- 3*
STOCKS				
Department stores.....	239p	0	- 6	
Women's apparel stores.....	230	- 3	- 8	
Furniture stores.....		+ 4*	-10*	

Departmental Sales and Stocks of Independent Department Stores	Sales		Stocks (end of month)		
	% chg. Feb. 1949 from year ago	% chg. Feb. 1949 from year ago	% chg. Feb. 1949 from year ago	Ratio to sales (month's supply) February	
				1949	1948
Total—All departments.....	-10	- 7	- 7	3.8	3.6
Main store total.....	-12	- 8	- 5	4.1	3.8
Piece goods and household textiles.....	- 9	0	-10	3.6	3.6
Small wares.....	- 4	- 3	- 5	3.9	4.0
Women's and misses' accessories.....	-13	-10	-10	3.9	3.8
Women's and misses' apparel.....	-13	- 5	- 1	3.1	2.7
Men's and boys' wear.....	-16	- 8	- 8	5.1	4.7
Housefurnishings.....	-12	-13	- 3	4.6	4.2
Other main store.....	-11	-15	- 5	4.0	3.7
Basement store total.....	- 7	- 3	-16	2.5	2.8
Small wares.....	+10	+11	- 9	2.7	3.3
Women's and misses' wear.....	-11	- 4	-15	2.1	2.2
Men's and boys' wear.....	-20	-13	-22	3.1	3.1
Housefurnishings.....	+10	+ 6	-22	2.7	3.9
Nonmerchandise total.....	- 5	- 3			

* Not adjusted for seasonal variation. P-preliminary

CONSUMER CREDIT

Sale Credit	Sales		Receiv- ables (end of month)
	% chg. Feb. 1949 from year ago	% chg. Feb. 1949 from year ago	
Department stores			
Cash.....	- 9	- 6	
Charge account.....	- 4	- 1	+ 9
Instalment account.....	-12	-10	+22
Furniture stores			
Cash.....	+ 8	+ 3	
Charge account.....	- 3	- 6	
Instalment account.....	-15	-16	+14

Loan Credit	Loans made		Loan bal- ances out- standing (end of month)
	% chg. Feb. 1949 from year ago	% chg. Feb. 1949 from year ago	
Consumer instalment loans			
Commercial banks.....	- 3	- 3	+35
Industrial banks and loan companies.....	-20	-12	+ 3
Small loan companies.....	+ 8	+ 5	+ 9
Credit unions.....	+13	+11	+32

BANKING

UNITED STATES (Billions \$)	Feb. 23, 1949	Changes in—	
		4 weeks	Year
Money supply, privately owned.....	166.1	-1.9	-1.1
Demand deposits, adjusted.....	83.3	-2.0	-1.4
Time deposits.....	57.7	+ .2	+ .9
Currency outside banks.....	25.1	- .1	- .6
Turnover of demand deposits.....	18.6*	- .4*	0*
Commercial bank earning assets.....	113.3	-1.0	-2.2
Loans.....	42.0	- .4	+3.3
U. S. Government securities.....	62.2	- .7	-5.7
Other securities.....	9.1	+ .1	+ .2
Member bank reserves held.....	19.4	- .6	+2.7
Required reserves (estimated).....	18.8	- .3	+3.0
Excess reserves (estimated).....	.6	- .3	- .3

Changes in reserves during four weeks ending February 23 reflected the following:

	Effect on reserves
Increase in Reserve Bank holdings of Governments ..	+ .3
Decline in Reserve Bank loans.....	- .1
Net payments to Treasury.....	- .5
Other transactions.....	- .3
Change in reserves.....	- .6

* Monthly rate and per cent changes from month and year ago at leading cities outside N. Y. City.

THIRD FEDERAL RESERVE DISTRICT (Millions \$)	Feb. 23, 1949	Changes in—	
		4 weeks	Year
All member banks—earning assets.....	5,316	0	- 6
Loans.....	1,756	+13	+145
U. S. Government securities.....	2,946	-20	-166
Other securities.....	614	+ 7	+ 15
Reporting banks—leading cities	Mar. 30	5 weeks	
Loans:			
Commercial and industrial.....	529	- 4	+ 21
Security.....	28	+ 1	0
Real estate.....	91	- 3	+ 19
To banks.....	13	+ 6	- 2
Other.....	270	- 5	+ 24
Total gross.....	931	- 5	+ 62
Total—less reserves.....	921	- 5	+ 57
Investments.....	1,596	-20	- 2
Deposits.....	2,904	0	+ 61
Federal Reserve Bank (selected items from statement)			
Loans and securities.....	1,505	-47	- 4
Federal Reserve notes.....	1,615	-22	- 11
Member bank reserve deposits.....	926	+30	+126
Gold certificate reserves.....	1,226	+27	+107
Reserve ratio (%).....	45.0%	+1.1%	+2.5%

PRICES

Index: 1935-39 average =100	Feb. 1949 (Index)	Per cent change from	
		month ago	year ago
Wholesale prices—United States.....	196	- 2	- 2
Farm products.....	221	- 2	- 9
Foods.....	204	- 3	- 6
Other.....	187	- 1	+ 3
Consumer prices			
United States.....	169	- 1	+ 1
Philadelphia.....	169	- 1	+ 1
Food.....	195	- 3	- 2
Clothing.....	191	0	0
Rent.....	120		+ 2
Fuel.....	145	0	+ 7
Housefurnishings.....	197	0	+ 2
Other.....	153	0	+ 7

Source: U. S. Bureau of Labor Statistics.