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New War Between the States

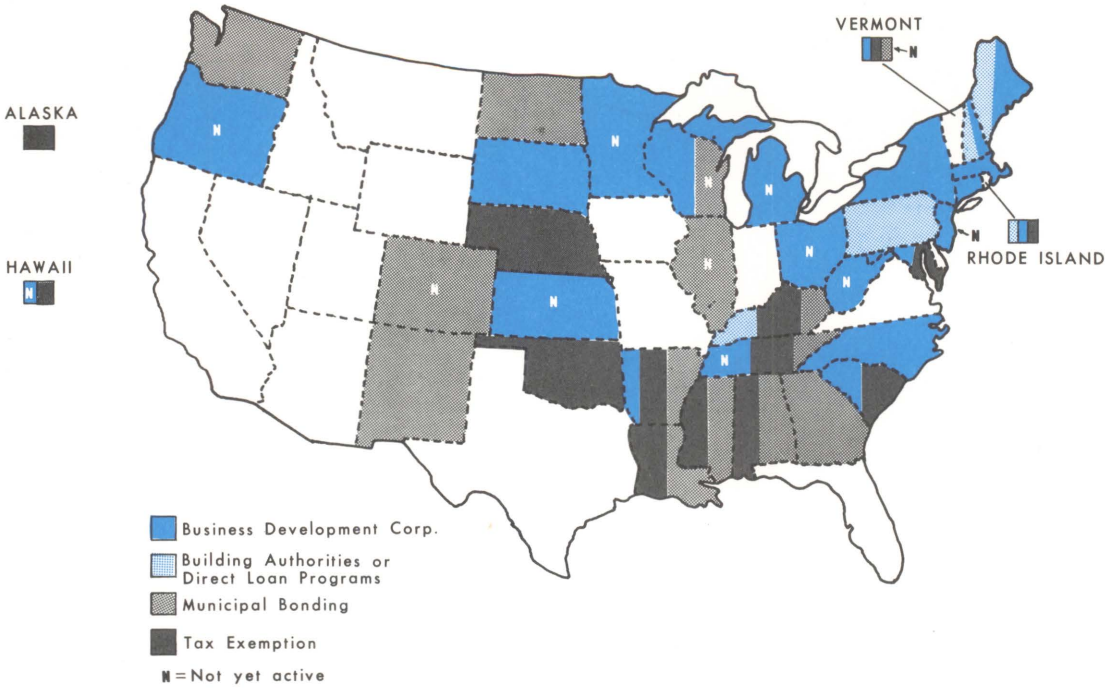
The battle between the states continues unabated. This battle is bloodless, but not without bitterness, hardfought but with no clear-cut criteria to judge who is winning. The battle is for new industry and it has reached such proportions that it may be called the New War Between the States.

The weapons of this battle are no longer limited to advertising and the hard sell. The combatants have developed special subsidy techniques involving substantial sums of money.

These "money weapons" fall into four major categories. Two may be termed the "Blue's" weapons since they originated and are still used predominantly in the North. These are the privately financed Business Development Corporations, and state financing of industrial buildings either through insurance or direct loans. Of the "Grey's" two weapons, one exempts new industry from state or local taxation

(Continued on page 2)

STATE-WIDE 'MONEY' PROGRAMS THROUGH 1959



SOURCE: Boston Federal Reserve Bank Survey of State Industrial Development Directors

and sometimes from both. The other is the use of municipal bonds for private industrial financing.

The map above illustrates in shades of blue and grey the relative concentration of the different development techniques in the North and the South as of 1959. Admittedly, this grouping reflected the industrial and agricultural problems of these regions and their need for extraordinary development techniques rather than any hidden desires to re-enact the War Between the States.

In recent years states in all parts of the country have tended to take the shotgun approach to economic development. The map on page 3 shows that many states plan to use all available industrial development techniques. Perhaps the most popular campaign promise of gubernatorial candidates is to "bring industry to our state." These efforts to attract industry are in part a response to the national problems of unemployment and slow economic growth. But they also reflect the growing realization that the use of these weapons by one state may pull industry away from another state. The loss of even a few firms can be important.

The adoption of these techniques for attracting industry has grown rapidly in recent years. One or more of them were put into active use by 19 states from 1960 to 1962 and nine additional programs were authorized during 1963. States with lower than average employment growth first developed these methods and have nine times more experience in years in handling these programs than states with higher growth rates. Since 1962, however, more than half the adoptions have been in states with above average employment growth. This indicates the use of such programs for defensive purposes as well as to meet employment crises.

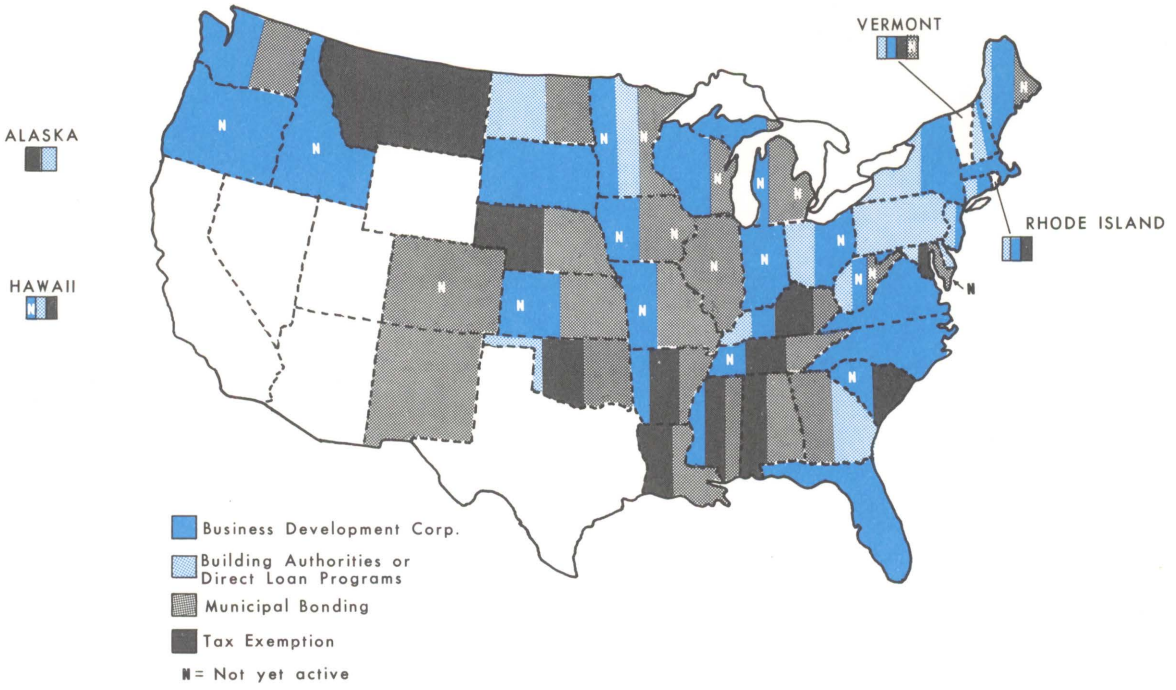
A comparison of the two maps shows the rate of growth and the extent of coverage of these "money" techniques. Only six states are not yet using any, while 12 states have approved three or more of these measures.

Each of these techniques should be assessed not only for its effectiveness as such but also for its long-term impact on the state and the Nation as a whole. This first article of a four-part series examines the use of Business Development Corporations. The following sections will consider the other weapons.

New England Movement Goes National

On April 29, 1963 the Northeast Conference of

STATE-WIDE 'MONEY' PROGRAMS THROUGH SEPTEMBER 1963



SOURCE: Boston Federal Reserve Bank Survey of State Industrial Development Directors

Business Development Corporations disbanded in order to create a National Association. Business Development Corporations (BDC's) have been activated in 18 states and authorized in 12 others. This unique form of financial organization was developed primarily to lend money to spur industrial development rather than to make a profit. The BDC differs from a federally assisted Small Business Investment Company. The latter is primarily concerned with supplying long-term capital for which it receives shares of stock or convertible debentures. The SBIC owners are interested in capital gains and generally will not consider investing in companies without potential for public stock issues.

The first BDC was started in Maine in 1949; other New England states and then the rest of the Northeast followed suit rapidly. Even now, this form of private business development organization is called the "New England form." The corporation sells stock to that part of the business community interested in economic development. Then the corporation can borrow up to some multiple (typically 10) of its issued stock and surplus from member lending institutions. The business development corporation usually borrows money at rates ¼ to ½ percent higher than the prime rate, and lends money to firms at higher rates, typically 6½ percent.

These corporations are organized by each state under a special charter which in effect exempts commercial lending institutions from normal lending standards and permits them to lend a small portion of their assets to a business development corporation. Commercial banks provide the backbone of support for the movement and comprise three-fourths of the lending members. The rest are chiefly savings banks, savings and loan associations, and insurance companies.

These lending organizations in the state thus pool the risk on loans that have industrial growth potential but would not ordinarily be granted by private commercial lenders acting alone. Loans of this type are usually made to growing firms that are too small or too young to get long-term financing from insurance companies or other lenders, or whose owners do not wish to sell part of their equity. On occasion, a firm may need to supplement a conventional mortgage with a second one on a new building. A BDC can supply such a mortgage.

Business development corporations thus induce location of industry or encourage expansion of facil-

ities in their particular states by providing loans which, if available at all, would otherwise be at prohibitive rates. Loans of BDC's usually average 6½ percent; rates of commercial financing companies would be at least twice as high, and could not always be obtained. This "subsidy" in the form of saving of high interest cost involves no expenditure of state funds.

The major cost to the community is that of the stock which is sold primarily to organizations or individuals interested in the state's economic development. This cost has averaged about $427,000 for each state. Usually there is little or no promise to pay anything but token dividends, although a few development corporations are successful enough to pay more if they so desire. Other costs or "subsidies" include the investigation of prospects by member banks and the slightly lower interest that lending members charge. This latter cost is, however, slight because once established, most development corporations become good credit risks which would enable them to borrow without special consideration at rates not much higher than those they are paying now. Most established BDC's have a solid base of stock, retained earnings, and reserves, forming a comfortable cushion—usually about 20 percent of outstanding loans. Moreover, their current earnings are normally more than enough to cover overhead costs, including salaries for a 3 to 5-man staff. Three BDC firms borrow below the prime rate but find it a mixed privilege in that it dampens the enthusiasm of the lending institutions. The supporting lenders naturally prefer a rate of return that represents no great loss of revenue.

Varying Functions

The nature and the size of BDC's vary among the states. In a large state with a well-developed financial community, a business development corporation can develop a high risk portfolio with sufficient volume to cover the chance of loss. In a state at an earlier stage of industrial development, a BDC frequently makes loans which in another area would be "bankable."

The functions of these organizations are frequently modified by other industrial development programs of the state. Six of seven recent commitments of the Rhode Island BDC were in connection with that State's 100 percent Financing Plan for new industrial plants. In this plan the Business Development Corporation advanced the "last" 10 percent with the Rhode Island Industrial Building Authority insuring 90 percent of new plant cost and taking a senior mortgage position. About one-third of the BDC's activity in Rhode Island is related to the state's 100 percent Financing Plan.

Although set up primarily to create jobs by aiding manufacturing, most business development corporations recognize that other forms of economic activity may increase employment in the state. For example, the New Hampshire Business Development Corporation advanced funds for a new steel warehouse and distribution center, while the New York organization made some loans to resort motels.

How Great a Risk?

The oldest BDC is only 13 years old and most are much younger. Consequently, the collective experience on losses is still limited. The ratio of losses to outstanding loans has varied yearly from zero up to .58 percent, with an average of .26 percent. This figure, about the same as that incurred in the direct loan program of the Small Business Administration, is almost 10 times that of commercial bank loans to businesses. This higher than bank loss ratio is not surprising since all applicants for BDC loans must previously have been turned down by a commercial bank.

The loss experience of these development corporations depends in large part on the volume of manufacturing activity in the state. Being able to choose from a large number of applications allows a more diversified portfolio of loans. Although the BDC's have been criticized in the past for not taking enough risks, their loan standards are by no means conventional. However, if earnings continue to more than cover current costs and provide for future losses, relaxation of their already flexible credit standards could well be considered. Only by assuming greater than ordinary lending risks can a BDC provide a real developmental advantage for a state.

How Significant?

At the end of 1962, 15 development corporations had almost $42 million of loans outstanding, an average of slightly less than $3 million for each state. In New England, where the movement has been developed most fully, such BDC loans totaled $13 million, equal to 1 percent of manufacturing loans outstanding at commercial banks. Although this is

not a staggering sum, these corporations are not designed to compete with commercial banks but to provide supplementary financing for growth firms whose needs are not "bankable."

It is difficult to attribute employment to any one source of financing. However, in New England BDC loans have helped sustain or expand firms employing 57,000 persons.

Aid to Bankers

One function the BDC serves is to make loans feasible for commercial banks and other private lenders. Bank participation in BDC loans in one state amounted to $1.4 million in 1962. In addition, private lenders such as banks and insurance companies have been able to make loans of $55 million because of the availability of risk money from BDC's. Furthermore, as BDC loans prove successful, they are often purchased before maturity by members of the banking community. Altogether bankers and other lenders have acquired $13 million of such loans before maturity. Although this practice frees more money for new loans, in one sense it has had a dampening effect on the growth of business development corporations activity. While good loans are readily sold, the BDC's are forced to retain and seek additional high risk loans. The larger business development corporations have enough loan income to allow such refunding without imposing a penalty for early repayment. However, a few BDC's have found it desirable to provide an early repayment penalty clause in order to offset the income loss.

Money to Spare

Today business development corporations have an average of $1.9 million of unutilized borrowing power. Thus, their problem is not insufficient funds but finding suitable loan applicants. The relative ease in monetary policy in recent years has added to the competitive forces encouraging bankers to take more risks, leaving fewer opportunities for BDC's.

Direct loans of the Small Business Administration and the Area Redevelopment Authority also supply credit for nonbankable loans. Some joint loans have been made by a BDC and a federal agency. In many cases, however, the federal credit agencies are directly competitive with BDC's although the law technically gives the BDC's priority on loan applications. Borrowers often bypass BDC's when government money can be obtained in larger amounts, for longer periods, and at lower interest rates. This raises an interesting public issue: To what extent should a private, self-liquidating, growth oriented lending institution be supplanted by federally subsidized lending operations?

The New England Business Review is produced in the Research Department. Edwin C. Gooding was primarily responsible for the article, "New War Between the States" and Mabelle Tucker for "Measuring New England's Manufacturing Production." The authors will be glad to receive comments.

Professional Opinion

How desirable are business development corporations? According to a recent survey made by this Bank, most industrial development directors in states where BDC's operate are enthusiastic. They believe that these organizations are extremely helpful in encouraging internal growth of small firms. They regard these organizations as important, but not necessarily their most essential industrial development instrument.

The only adverse comment was that in one instance the BDC's loan policy was too conservative and its interest rate too high.

Summing Up

Eighteen BDC's now operate actively. If their use continues to grow, comprehensive coverage may in part cancel the major competitive advantages for one state over another.

Nevertheless, it seems clear that BDC's would still perform a useful function for the Nation's economy. By incurring risks and charging enough to cover costs, these corporations aid the expansion of firms whose growth might otherwise be stunted. Thus, only with some cost to initial stockholders, business development corporations provide an effective tool for economic development. That the volume of loans handled by these corporations is such a small portion of all lending activity is a tribute to the efficiency of our regular financial system.

Although some member firms have been criticized for their conservative lending policies, an examination of their loan portfolios raises the question of how much more aggressive they could be and still remain solvent. To provide more money for greater risks at lower interest requires the use of government money and credit. State efforts in this area will be discussed in Part II of this series.

Measuring New England's Manufacturing Production

What is the current trend of manufacturing in New England? Is the region producing more now than in previous years? How does our rate of growth compare with the Nation's? Because these trends are basic to the region's economic activity, the Federal Reserve Bank of Boston publishes a monthly index of manufacturing for New England.

Recently, the Bank has revised its method of calculating this index to make it even more current and, therefore, more useful in analysing regional trends. The results show more growth in the region over the last 13 years—particularly in the last 4—than previously recorded. The new index is also less volatile in its monthly fluctuations. Furthermore for easy comparison with most federal statistics, the new index uses as its base period average production for the years 1957-59.

Few measures of actual output in the region are published monthly. The small number available is limited to shoe production and to some types of textiles, food, and nonelectrical machinery. It is, therefore, impossible to construct an index of manufacturing production based on total actual output, as the Federal Reserve Board does for the United States. Instead, regional output must be estimated indirectly from the other data which are available monthly—the hours worked by production laborers, the kilowatt hours of electricity used in manufacturing, or some combination of the two.

The Old Index

In the index published by the Boston Federal Reserve Bank from 1957 until now, a combination of these two series was used to estimate the region's industrial production. This procedure assumed that changes in productivity, or the amount produced per man-hour, are represented by the hours of electrical energy used for each hour of labor. That is, with the introduction of new machinery and processes making output less dependent on labor, more electricity will be used for each man-hour. Estimating equations were therefore based on the relationship of kilowatt hours and production worker man-hours to actual output in the base period. Output data were obtained from a survey of 600 manufacturing firms in the region. With changes in technology, however, new estimating equations are needed periodically. To obtain them requires the expensive and time consuming process of collecting and analysing more output data.

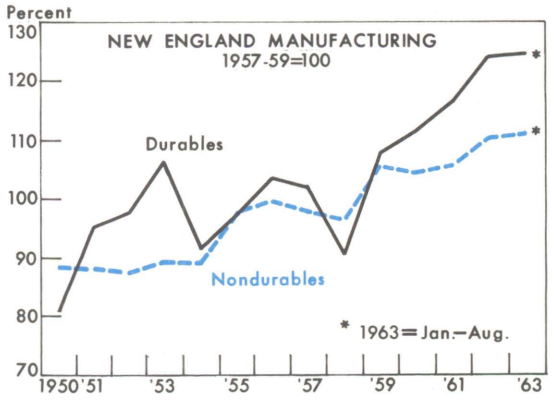
In addition, because the sample kilowatt data are collected from numerous regional sources with different billing dates, it is difficult to obtain these figures currently. Moreover, these data present problems of interpretation. For example, the use of electricity to air-condition a manufacturing plant is only indirectly related to actual output.

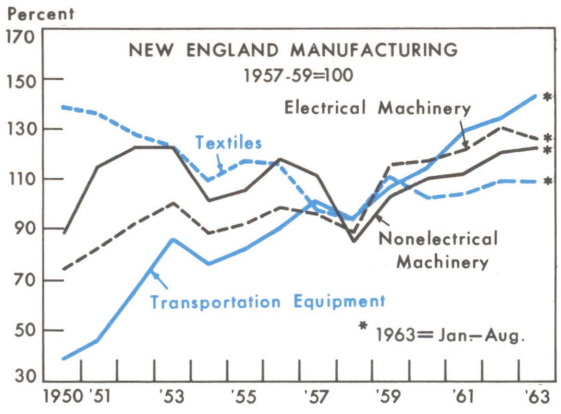
Therefore, although the original assumptions are still sound, the maintenance of the index is a formidable undertaking. To overcome these problems, the Bank has developed a different method of measuring the region's production—a method that requires less statistical work and is available on a more current basis. The Bank also plans to publish as an additional economic indicator a regular series on electrical energy used in manufacturing.

The New Method

In the new index output in New England is estimated by a series of relationships between statistics for the region and the Nation. Thus it takes advantage of the national output data represented in the Federal Reserve Board indexes. These national indexes are based on a combination of physical and man-hour data. In the future, the Board plans to incorporate electrical energy information which will thus be reflected in the regional index.

This concept assumes that output in New England in any month is equal to output in the Nation for that month adjusted for differences in man-hours and productivity, or output per man-hour, within the region. Or,





$$\text{U.S. output} \times \frac{\text{N.E. man-hours} \times \text{N.E. output per man-hour}}{\text{U.S. man-hours} \times \text{U.S. output per man-hour}} = \text{N.E. output}$$

The result is changed to an index number using an average of 1957-59 as a base.

In this equation United States output is represented by the monthly Federal Reserve Board index for each major industry group. Output per man-hour in New England and the Nation is determined from the latest Census or Annual Survey of Manufactures. Man-hours for each industry are obtained each month from the Bureau of Labor Statistics, whose regional office in New England has been most helpful in providing the Bank with an historical series of man-hours beginning in 1950 and revised for industry code changes according to the latest Standard Industrial Classification.

Using these data, indexes for each industry were calculated. Before being combined into one index of total manufacturing, these figures were weighted by the importance of the industry in the region. For this purpose, value added figures from the 1958 Census of Manufactures were used for the years beginning with January 1953. Weights from the 1954 Census were used for the period 1950 through 1952. The two series were linked in January 1953.

A Picture of Growth, 1950-1962

The new index shows the substantial growth of manufacturing in New England. For the 13-year period the average annual rate of growth in the region was 2.9 percent. This, however, was less than the Nation's increase of 3.8 percent each year. But beginning with 1957, the region's annual growth has accelerated to 3.4 percent while the Nation's has declined to 3.3 percent.

Most of New England's manufacturing expansion in the period 1950-62 was in the durable goods industries. These increased at a rate of 3.7 percent each year, while the growth in nondurables was considerably smaller, 1.9 percent. In the Nation, production of both rose by about the same amount.

New England also differed from the Nation in the timing of its durable goods expansion. While the Nation's larger growth occurred from 1950 to 1957 with an annual rate of 5 percent, the region was slower in getting under way. From 1957 to 1962, however, New England's rate of growth—4.2 percent—exceeded the national rate of 2.5 percent. Because of the expansion of these industries, the 1961 recession was milder in the region than in the Nation.

The industry showing the greatest growth in New England during these 13 years was transportation equipment, including aircraft engines, helicopters, and propellers as well as shipbuilding. Its greatest growth was from 1950 through 1957 when it increased 160 percent in New England and 89 percent in the country. Though its growth has declined in the more recent period, output in the region rose 34 percent as compared with 11 percent in the Nation.

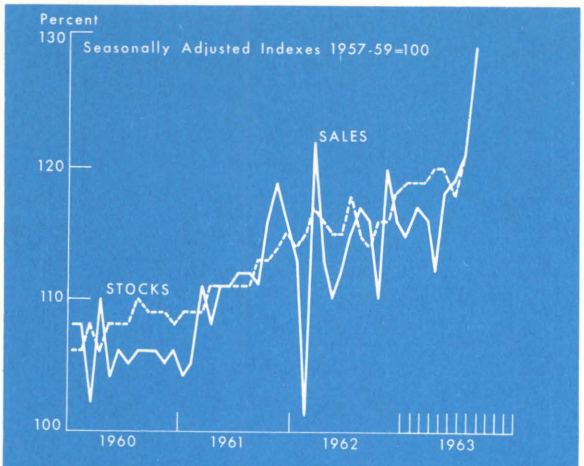
Both sectors of New England's most important industry—machinery—have shown substantial growth during this 13-year period. Output in electrical machinery which includes electronics has increased 77 percent, not far from the national growth of 89 percent. Unlike the Nation, however, the region's increase was greater from 1957 to 1962.

Nonelectrical machinery, including machine tools as well as industrial machinery, also showed significant growth, with an increase of three-eighths for the entire period.

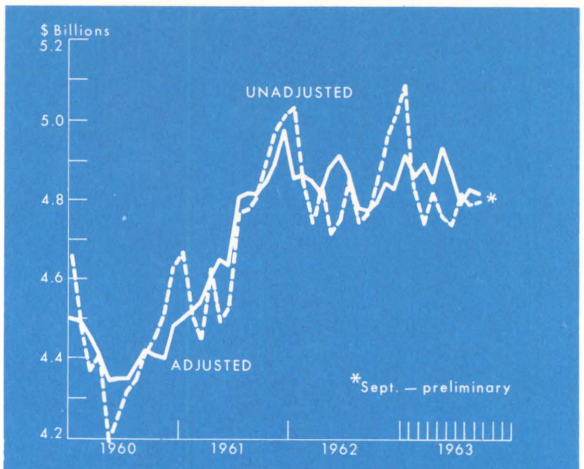
Although nondurable goods in the region grew less than durables, many separate industries made notable gains. Among these were rubber and plastics, up 79 percent since 1950; both food and paper have increased about 50 percent.

On the other hand, production in the region's shoe and leather industry has declined slightly during these years. Textile output in the region also decreased by 21 percent over this period. Nevertheless, from its low in 1958, textile production has increased by almost one-fifth.

A technical supplement to this article, containing notes, tables, and charts, is available on request from the bank's research department.



Department Store Sales in District 1 rose to new highs, reflecting strong consumer demand spurred by good weather and back-to-school sales.



Demand Deposits in District 1 have fluctuated around a plateau since late 1961, but the rate of use has risen sharply.

MANUFACTURING INDEXES (seasonally adjusted) 1957–59 = 100*	NEW ENGLAND pAug. '63	NEW ENGLAND July '63	NEW ENGLAND Aug. '62	UNITED STATES pAug. '63	UNITED STATES July '63	UNITED STATES Aug. '62
All Manufacturing	119	120	118	126	127	120
Nonelectrical Machinery	125	125	123	128	127	123
Electrical Machinery	131	129	132	134	133	130
Transportation Equipment	144	145	138	126	129	121
Textiles, Apparel, Leather	102	103	103	120	119	116
Textiles	104	109	109	119	117	117
Apparel	105	104	102	127	126	119
Leather	n.a.	96	97	n.a.	99	101
Paper	111	116	114	122	128	121

	NEW ENGLAND	NEW ENGLAND Percent Change from:		UNITED STATES	UNITED STATES Percent Change from:	
	Aug. '63	July '63	Aug. '62	Aug. '63	July '63	Aug. '62
BANKING AND CREDIT						
Commercial and Industrial Loans ($ millions) (Weekly Reporting Member Banks)	1,671	0	+ 5	35,206	0	+ 6
Deposits ($ millions) (Weekly Reporting Member Banks)	5,040	− 2	+ 4	132,525	− 1	+ 6
Check Payments ($ millions) (Selected Cities)	11,308	− 7	+ 6	180,198	− 5	+ 6
Consumer Installment Credit Outstanding (index, seas. adj. 1957 = 100)	137.2	+ 1	+ 9	151.5	+ 1	+11
DEPARTMENT STORE SALES (index, seas. adj. 1957–59 = 100)	129	+ 7	+ 9	125	+ 4	+ 9
EMPLOYMENT, PRICES, MAN-HOURS & EARNINGS						
Nonagricultural Employment (thousands)	3,864	+ 1	0	57,603	0	+ 2
Insured Unemployment (thousands) (excl. R.R. and temporary programs)	118	−13	+10	1,453	− 5	− 4
Consumer Prices (index, 1957–59 = 100)	108.7 (Mass.)	0	+ 2	107.1	0	+ 2
Production-Worker Man-Hours (index, 1957–59 = 100)	97.2	+ 2	− 2	n.a.	n.a.	n.a.
Weekly Earnings in Manufacturing ($)	91.60 (Mass.)	+ 1	+ 2	98.42	− 1	+ 3
OTHER INDICATORS						
Construction Contract Awards ($ thous.) (3-mos. moving averages, June, July, Aug.,)						
Total	246,753	− 3	+31	4,196,122	− 6	+12
Residential	89,817	− 5	+18	1,927,486	− 3	+17
Public Works	61,444	− 9	+87	742,847	−11	+ 8
Electrical Energy Production (index, seas. adj. 1957–59 = 100)	140	+ 2	+10	140	− 2	+ 8
Business Failures (number)	57	+12	−35	1,135	− 2	−14
New Business Incorporations (number)	882	−13	−11	15,197	− 4	+ 2

* New Index for New England — see page 6.

p = preliminary

n.a. = not available