

New England

BUSINESS



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REVIEW

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Achieving Success in Specialty Paper

With some 5,000 different kinds of paper in production, paper manufacturers have a wide choice of product. Although any one manufacturer is not equipped to produce all varieties, he does have considerable flexibility. If he faces a competitive disadvantage in manufacturing one product, he can try another.

One New England paper company, for instance, began making filter paper for a cigarette manufacturer at the beginning of the filter boom. It was a great business until the tobacco company began making its own filter. Now the paper company is turning its efforts to vacuum cleaner filter bags.

Many of the more successful paper firms make products which are far removed from the simple concept of paper. Paper is frequently used as the carrying medium for special plastics, chemicals, or resins.

Skillful product development and marketing have been the means of survival for some southern New England paper mills, which face several economic disadvantages. These mills are "nonintegrated," which means they do not produce their own pulp. They must pay about twice as much for their wood pulp as the "integrated" firms, except for occasional periods when the pulp market is depressed. This differential arises because nonintegrated mills must pay for additional proc-

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PAPER COMPANY PROFIT PERFORMANCE 1947-1958 Average

	Net Profit as % of Sales	Net Profit as % of Net Worth
U. S. Integrated Companies	8.7	12.1
U. S. Nonintegrated	4.6	9.5
New England Nonintegrated (39 companies) ..	3.7	6.5
Successful New England Nonintegrated (7 companies)	5.5	10.0

Source: American Paper and Pulp Assn. and sample of 39 New England companies.

essing and transportation costs when the production and use of pulp are at separate locations. In order to transport the pulp it must be dehydrated, packed, shipped, and then returned to slush form before going through the paper-making process. A nonintegrated New England firm making a standard paper product has a 5 to 10 percent production cost disadvantage in pulp costs in comparison with the integrated firms. Similarly, the production costs of New England firms can be up to 5 percent higher than firms in other parts of the country because of higher fuel and electricity costs.

Another problem for the nonintegrated New England firm is equipment obsolescence. Wide, modern Fourdriniers (the basic paper-making machine) can operate at 2,000 feet or more per minute, but many of the older machines in New England have a maximum capability of 500 feet per minute.

In labor costs, however, some New England mills have an advantage over other regions. Labor wage rates, particularly for skilled labor, are lower than in any other region of the country. This may amount to a savings of up to 5 percent of total production costs for some high quality papers — providing the manufacturing equipment used is comparable to that used in the higher wage regions. But many of the nonintegrated mills in New England use obsolete equipment and their output per dollar of wages is actually less than that of similar mills in other parts of the country.

Although many nonintegrated mills do produce some standard grades of paper to fill up the running time of their machines so as to cover overhead costs, very few attempt to produce a standard large volume grade of paper as their primary product. In the past they have been able to compete with integrated mills by manufacturing products which required a combination of different types of fibers, i.e., waste paper, rags, jute, and many different grades of wood pulp. Recently new technology has permitted wood pulp fibers to be substituted for waste paper and rags in the production of paperboard, writing

paper, and numerous other products. As a result the more creative New England mills are now turning to synthetic and glass fiber. They are also manufacturing products that need special treatment or coating. This specialization is practical for a small firm because finishing and converting equipment is generally much less expensive than the basic paper-making machine. Various types of coating equipment cost from \$40-50,000, compared to several million dollars for a new Fourdrinier machine.

There are about 85 nonintegrated New England paper mills. They employ a work force of about 20,000 and have a daily productive capacity of close to 6,000 tons, which represents over 40 percent of New England's total paper and paperboard manufacturing capacity. The products of these mills range from standard paper, such as offset printing grades, to specialties, such as oil filter paper for automobiles. The production of about 20 firms consists entirely of specialized products.

In the postwar period New England's nonintegrated paper mills have shown a poor profit and sales performance in comparison with other firms in the nation. The table on this page shows this for a sample of 39 firms which represents 70 percent of the nonintegrated capacity in this region. However, seven of these 39 companies have been reasonably successful.

New Product Development

One characteristic of the successful mills is their emphasis on developing new products. Because nonintegrated firms do not produce their own wood pulp, they have greater flexibility than integrated firms in trying out radically different fibers to create unique specialty papers. For example, one company once ran tobacco leaves over a conventional paper machine to see if it could make a cigar wrap. This same company is now using cotton fibers to manufacture a nonwoven interlining for wash and wear apparel.

The product development of the successful specialty mills is centered around the idea of developing a high technical competence in a particular area of fiber products. For example, one small concern has become a leader in certain highly technical saturation and filter papers by setting up a close-working relationship with both suppliers and customers. Specifications for new fibers or fiber-resin combinations are worked out jointly with large suppliers, including chemical companies. The firm also maintains a continuous, intensive search for new product ideas, especially in growth industries such as electronics and plastics. At the same time, the company maintains a close contact with all its customers, not only to learn of their existing requirements but to an-

ticipate any possible new specialty paper needs.

Not all of the successful firms, however, concentrate on specialties. Some have found that their most profitable products are technical grades which are produced in substantial volume. Total industry production of such "semi-specialties" usually runs between 25 and 50 thousand tons a year compared with 10 thousand tons or less for specialty products. One New England company with a wide range of products regards its technical papers as its principal source of profits and its highly technical grades primarily as potential additions to the semi-specialty lines as the market for them expands.

One large national firm has chosen to buck the trend toward specialty paper production in southern New England. Two years ago, it established a large modern nonintegrated paper mill in southern Connecticut to manufacture facial and toilet tissue and table napkins. This mill obtains its dry wood pulp from Canada and thus suffers from higher production costs common to all nonintegrated mills. But nearness to the New York-New England market offsets this disadvantage. Transportation costs of the final product are reduced and distributors can be given faster service.

Product Line Planning and Control

Product line success requires constant re-examination of the "product mix" and planning for future changes in market and technology. This does not require that a firm hire a number of full time, high-salaried staff people to make long-range plans. It does mean that members of the executive team regularly exchange views and think of how their day-to-day decisions will affect the firm's long-run position.

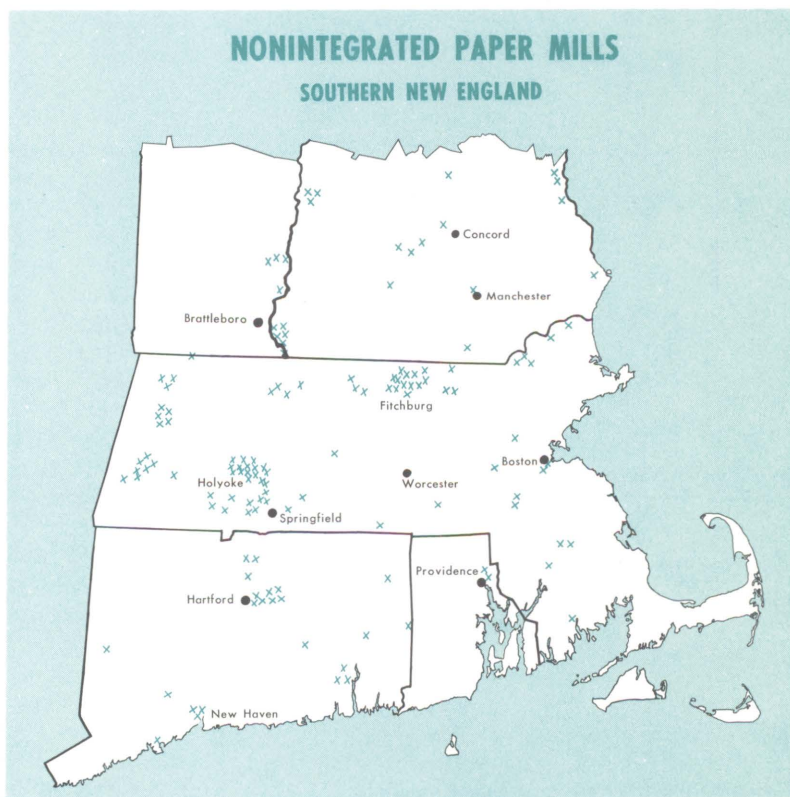
In one successful firm executives in sales, manufacturing, and finance annually draw up separate plans for the "perfect product mix" for their company broken down by months for the succeeding year. This mix is supposed to be the ideal combination for the firm of production grades, semi-specialties and specialties. But naturally the manufacturing executive is more concerned with production problems and less concerned with sales difficulties than is the sales manager, and vice-versa. As a result, the

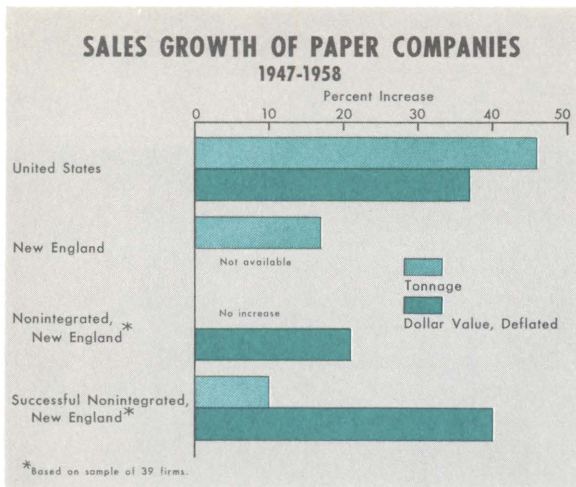
chief executive irons out differences in series of meetings which include discussion of the firm's long-range sales goals and capital improvement plans.

In contrast the less successful firms seldom have any clear-cut ideas of their long-range goal. New grades of paper are added in response to the competitive pressures of the moment with little thought given as to whether or not these lines add strength to the company's operations. Many of the companies are completely unaware of modern cost control techniques and lack a clear picture of the relative cost of their different products. One manufacturer has stated: "We can sense whether we are losing money or not. If our bank balances are slipping, and our costs are creeping up, then we begin to get suspicious about those products whose prices we have been unable to raise."

Merchandising

An imaginative sales organization is maintained in most of the successful specialty mills. One manufacturer, for example, has successfully promoted colorful premium priced table napkins which housewives use as part of an attractive table place setting. This same mill has pioneered in developing deluxe, embossed, linen-like napkins sold initially to the restaurant and institutional trade. To promote this type of sale the firm hired a man experienced in the restaurant business. The company also developed napkins bear-





ing promotional messages for advertising use. The advertisers bear a substantial part of the cost of these napkins, and the mill can sell this product at about half the cost of regular napkins. This firm's merchandising skill is combined with a unique ability to do quality printing on extremely soft napkin paper stock.

The more aggressive mills watch the product lines of large companies in search of a small volume product which the small firm can produce more efficiently because of greater flexibility. But two can play this game, and a competitive disadvantage facing most independent mills is the loss of their new products to larger mills. These smaller mills, which must innovate to survive, always face the danger that an integrated mill will take over their largest volume product and make it more cheaply. This danger is lessened for paper manufactured from many different wood pulps or from other materials.

Another major problem facing specialty producers is their dependence on a few large customers. This problem is particularly serious because some of the most profitable accounts are often lost through technological change in the fast growing end-user industries. One company attacked this problem through an arrangement for long-term contracts with several of its large customers. The company was allowed to charge a premium price for what it sold to them as long as it carried out a definite product improvement program to meet the customers' changing technological needs.

Because of the critical importance of management in the success of the mills the more creative firms in New England, even those which are family owned, have made an effort to attract outsiders with new ideas. Sometimes they have managed to get highly capable technical directors and sales managers from larger, integrated firms. A major factor which caused these executives to leave a larger firm was the greater freedom of ac-

tion and recognition for achievement in the small creative firm.

The aggressiveness of the field sales effort is another characteristic of the successful mills. Salesmen are thoroughly trained, carefully supervised, and compensated in such a manner as to encourage an active search for new customers and new product ideas. A number of the specialty mills hire only trained chemists or engineers as salesmen to help customers write specifications for new products and anticipate new specialty paper needs.

In contrast many of the salesmen for the less successful firms have little technical training and have almost no interest in product development. Many of their salesmen often put in as little as one third of their time in the field, spending the remainder on details such as sales correspondence and order processing, which could better have been delegated to lower paid personnel at the mill.

Mergers

The problems of the independent mills have caused many of them to merge with larger integrated firms. The merger gives assurance of a source of pulp supply during periods of shortage. The greater financial resources of the larger company provide an inducement to mills with capital needs. But the most important motivation is usually the research laboratories and nationwide marketing facilities of the larger companies. The merger gives the larger firm the small mill's capacity and the know-how of the work force in manufacturing many different types of specialty papers. This skill is difficult to duplicate in a larger mill accustomed to manufacturing production grades of paper.

It seems quite probable that the unfavorable economic conditions which the southern New England mills have faced will become more intense in the years to come. Many large firms are developing wood pulps which will supplant raw wood pulp fiber. The trend toward larger corporate units and national sales organizations continues. Every year large expenditures on research and development become more essential for survival. Whether the nonintegrated mills can survive will depend on their willingness to learn from the experiences of the successful members of their group. Creative firms have pointed the way, adaptive ones are starting to follow, but many of the mills, unless saved by merger, may well go out of business.

This article is based on a doctoral thesis by Stuart U. Rich at Harvard Graduate School of Business Administration, where he is assistant professor of business administration. The study, *Product Policies of Nonintegrated New England Paper Companies*, was conducted with the aid of a research grant from the Federal Reserve Bank of Boston. Copies of a condensed version of the thesis will be available this coming winter, and requests for copies may be made at any time to the bank's research department.

\$28 Billion in Liquid Savings

Savings held through institutions have grown rapidly during this century. National holdings of liquid savings rose from about \$5 billion in 1900 to about \$290 billion in 1959. This is a 58-fold increase, a much greater expansion than shown in such economic measures as Gross National Product, national wealth, and total demand deposits, all of which grew some 25-fold over this period.

Liquid savings consist of assets which can easily be "cashed in," or transformed into cash, at stated values. The types included in this analysis are time deposits at commercial banks, savings deposits at mutual savings banks, shares of savings and loan associations and cooperative banks, and United States savings bonds. Equities in life insurance policies are also included because they are roughly equal to cash surrender values.

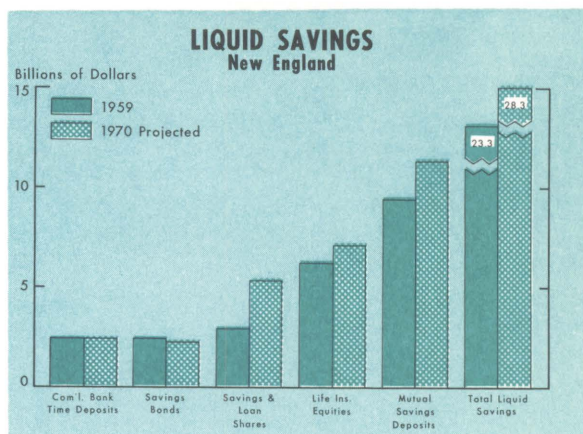
Liquid savings can also be held in currency and demand deposits. These holdings are not included in this analysis because of the difficulty of estimating holdings for savings and those for current transactions. Credit union shares, amounting to only about \$34 million in New England, are also excluded, because of the lack of historical data.

In broad terms, there are three outlets for savings. The saver can invest directly in some capital good like farm or machinery. He can invest more indirectly in capital goods by buying stocks, marketable bonds, or mortgages. The least direct way is for the saver to place his money with an institution which does the investing for him.

Use by savers of institutions to invest their money is termed the institutionalization of savings. Liquid savings rose from 25 percent of GNP in 1900 to 53 percent in 1929, and have since risen only slightly more, to about 60 percent in 1959. Thus the institutionalization of savings proceeded at a three times faster pace prior to 1929 than since.

In recent years liquid savings growth in New England has tended to lag slightly behind that in the nation. This is evident in most categories, especially in time deposits at commercial banks, shares at savings and loan associations and cooperative banks, and U. S. savings bonds. Presumably there is some shift within the region to other forms of saving, notably common stocks, but data is not available to confirm this.

What is the outlook for liquid savings for the next ten years? Experience of the last 60 years seems to rule out a decline in the ratio of liquid savings to GNP. The choice thus reduces to either a continuation of the postwar stability in



the ratio or a resumption of its earlier rise. Since the postwar stability has now prevailed for 15 years, it seems best to expect a continuation for the next 10, with perhaps some possibility for a slow rise. The present and projected composition of liquid savings in the region is shown above.

While liquid savings in New England are not expected to rise as rapidly as in the nation over the coming decade, the difference should be small, judging by postwar experience. If so, New England per capita holdings in 1970 should continue to be well above the national average, with the present 40 percent edge narrowed only slightly.

Historical Trend

The behavior of liquid assets in relation to Gross National Product raises a question: Why should the ratio have risen for 45 years and then remained stable for the next 15?

There appear to be no ready explanations for the greater growth in liquid savings than in total national wealth prior to World War II. One possibility lies in the slower growth of agriculture, resulting in a smaller share of national income that can be invested directly by the farmer in his farm. But agriculture amounted to only 20 percent of GNP in 1909, so even a decline to zero would not explain the liquid asset rise from 25 percent to 60 percent of GNP.

A stronger case can be made if this agricultural decline is combined with the general rise in urbanization which saw large, specialized businesses replace the small, owner-operated, and more self-

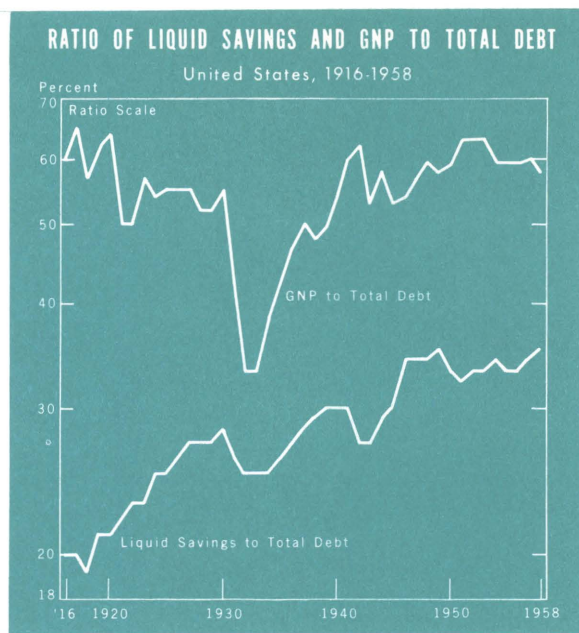
This article, one in a series of projections of the New England economy, is based on a study, *New England Banking and Other Financial Functions in 1970*. Copies of the full study are available on request from the research department of the Federal Reserve Bank of Boston.

contained businesses. These shifts reduced the possibilities of direct investment of savings and led to institutionalization of the process.

Liquid assets are not related as much to national wealth, however, as they are to debt in the nation. Liquid assets themselves are debt. They represent, in the main, ownership in other debt, since the principal assets of savings institutions are debt instruments in the form of government and private bonds and private mortgages. As shown in the chart on this page, the relationship between total debt and GNP has been fairly stable over the long term, but the ratio of liquid savings to total debt has grown.

Why have liquid savings stabilized at 35 percent of total debt (and at 60 percent of GNP)? One possible explanation suggests that people have, on the average, reached the desired amount of liquid savings they want to hold relative to their incomes. Additional amounts of savings are put into bonds, stocks, and real estate.

The explanation appears to be refuted by the fact that New England's liquid savings amount to over 90 percent of disposable income as compared to an average ratio of just over 70 percent for the nation (gross product data is not available by region). But New England is characterized by special features which may account for the higher ratio. Agriculture is less important in the region and the population is about 7 percent older on the average; both factors are associated with a higher relative level of liquid savings.



Another possible explanation of the postwar stability of the liquid savings ratio is that it is only a temporary pause in the rise, caused perhaps by inflation. The postwar era is the longest peacetime inflationary period following a war in our history. The effect of this inflation on liquid savings is probably not so much direct losses in the purchasing power of these savings as the great inflationary gains that have accrued to other investments such as real estate and stocks.

Department Store Sales Gain

Sales of New England department stores appear headed for a record volume this year. At the end of August sales were running 4 percent higher than in 1959, which was tied with 1956 for top dollar volume honors.

If allowance is made for vagaries of the calendar, including the shift in the date of Easter, sales have consistently exceeded year-ago levels except in May, when they equalled those in May 1959. The closeness of Easter to Mother's Day may have reduced sales volume for the latter event. Somewhat cooler and damper weather this May than in 1959 also had a depressing effect on the beginning sales of light-weight clothing and other summer goods. Such sales picked up in June, however, and continued above year-earlier levels in July. Back-to-school promotions in August fared better than in 1959.

Better-than-average sales gains have occurred in departments selling a wide variety of goods, such as cotton yard goods, costume jewelry, handbags and small leather goods, shoes, children's clothing, blouses, skirts and sportswear,

floor coverings, lamps and shades, sporting goods and cameras as well as most basement departments. Gains in sales of records have not been sufficient to offset declines in sales of television sets. Also trailing last year's results are sales of women's and misses' suits, handkerchiefs, books and magazines, and gift shop items.

The sales increases have been accompanied by similar increases in the use of credit. The total of charge accounts outstanding has risen 4 percent and instalment accounts 9 percent, sparked by a 12 percent gain in revolving credit outstanding. Collection ratios on these accounts have stayed close to year-ago levels so far this year.

Inventories are higher than a year ago but are generally in line with the increased sales levels. With sales gains for the first eight months of the year in hand, merchants are looking forward to a continuance in the remaining months, hoping that electioneering will not divert too much consumer attention from their wares and that consumer incomes will continue to rise.

Compacts Highlight Automotive Market

Stimulated by the increasing popularity of the compact car, sales of new passenger cars in the United States were 11 percent ahead of 1959 in the first half of this year. Sales of standard-size cars declined, but compacts more than made up the difference.

Domestic manufacturers now offer six compact lines. The Big Three introduced four of their own compact models this year to meet growing domestic and foreign competition. With smaller dimensions, economical upkeep, and lower selling prices, the compacts showed great strength in 1959. The sudden switch in public preference to the smaller car surprised most manufacturers.

The compacts claimed 10 percent of *new car registrations* for 1959. This year their share of the domestic market has been even greater. They had captured 24 percent in March. April found these little cars inching up to 28 percent of new car sales. They were a significant factor in pushing back the standard-size car sales 13 percent from a year ago. The standards rallied in May apparently due to dealers' determination to move them, and caused the compacts' share of the market to drop two points to 26 percent.

One reason for the inroads the compacts are making into the standard car market is price. Their quoted price averages 9 percent less than the low-priced standards. This means more cars must be sold to yield the same revenue.

Sales of new cars (including imports) in 1960 are expected to reach 6.3 million, which would represent an increase of some 300,000 over last year. New passenger car registrations totaled 3,411,000 through June of this year. This compares with 3,087,000 in the first half of last year.

New England's share of this six-month 1960 mar-

ket was 195,000 cars—34,000 more than last year's period. This 21 percent jump shows a thorough endorsement of the small car in the region. All six states showed new car sales increases this year, Massachusetts leading with 27 percent.

Another area where the impact of the compact is felt is the *used car market*. Here again, the price of the compact is a factor. A one-year-old sedan, selling for about \$3,200 new, would ordinarily fetch \$2,600 in the used car market. Most lending agencies want one third to one fourth down and the balance in 24 months. But a customer will think twice when he can buy a new compact for several hundred less, with a warranty, smaller down payment, and better terms.

This results in a tight squeeze on the used car market. The dealer, anxious to sell his new cars, is forced to buy the used car at a high price. He runs into difficulty when he attempts to move this expensively-bought used car at a profit or minimum loss because of the competing compact.

The third place where the compacts are exerting pressure is *foreign imports*. U. S. manufacturers have been viewing with some alarm the increase in sales of foreign cars from 379,000 in 1958 to 610,000 in 1959. Last year imports represented 10 percent of total U. S. sales.

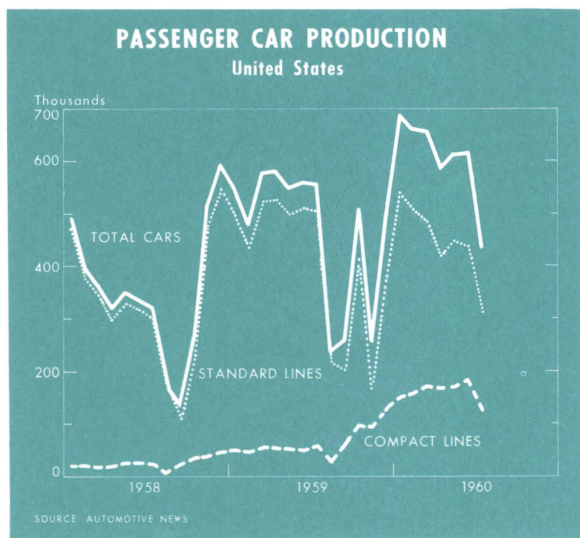
U. S. economy cars are cutting into imports. In this year's first quarter imports were selling 6 percent ahead of last year, one factor being limited production of U. S. makes due to steel strike influences, but the April figure shows a 10 percent drop. Total import sales through the first half of 1960 are estimated at 271,000 units. This is 7 percent less than the comparable 1959 figure.

Sports car imports are doing better, but sedans are losing out. Sales of imports are not coming as easily as in the past two years. New England, however, managed to show a 9 percent increase in foreign car registrations over the first six months of 1959.

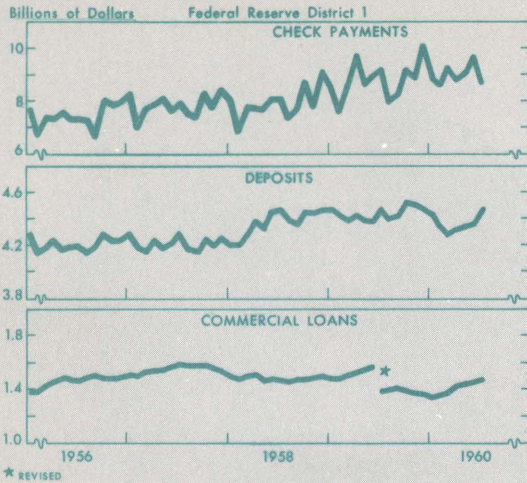
Automobile credit extensions reached a record high during the first half of this year both in New England and the nation. Because repayments of these loans are also high, the level of automobile purchase credit rose about the same amount as in the first half of 1959, and about one-third less than during the boom auto year of 1955.

More varied lines, lightweight aluminum engines, 4-cylinder motors, and other innovations are expected to give compacts a larger share of the 1961 market. The increase in models will also bring greater sales effort among manufacturers.

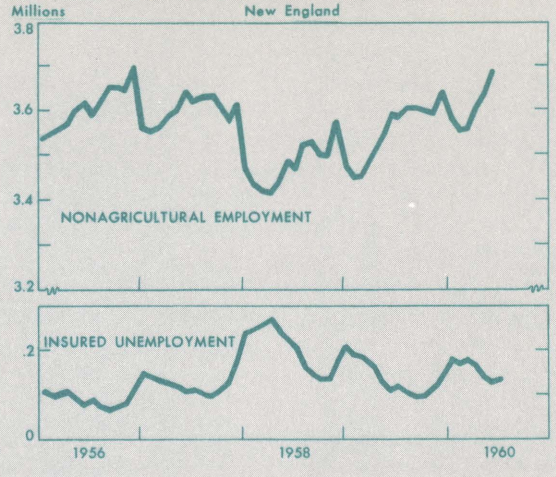
The die has been cast. The manufacturers are retooling for 1961. When the new models come out this fall, the compact car will be out in front.



BANKING



EMPLOYMENT-UNEMPLOYMENT



MANUFACTURING INDEXES (seasonally adjusted)	MASSACHUSETTS (1950-52 = 100)			NEW ENGLAND (1950-52 = 100)			UNITED STATES (1957 = 100)		
	July '60	June '60	July '59	July '60	June '60	July '59	July '60	June '60	July '59
All Manufacturing	n.a.	125	126r	n.a.	124	122r	110	110	108
Primary Metals	n.a.	94	95r	n.a.	90	95r	86	87	81
Textiles	n.a.	50	50	n.a.	71	73	n.a.	115	121
Leather	n.a.	129	127r	n.a.	129	129r	n.a.	n.a.	111
Paper	n.a.	111	107	n.a.	131	124r	n.a.	112	114

	NEW ENGLAND Percent Change from:			UNITED STATES Percent Change from:		
	July '60	June '60	July '59	July '60	June '60	July '59
BANKING AND CREDIT						
Commercial and Industrial Loans (\$ millions) (Weekly Reporting Member Banks)	1,469	+ 1	+ 7	31,241	- 1	+10
Deposits (\$ millions) (Weekly Reporting Member Banks)	4,463	+ 2	0	108,725	+ 1	- 1
Check Payments (\$ millions) (Selected Cities)	8,677	-10	- 5	223,608	-11	- 5
Consumer Installment Credit Outstanding (index, 1950-52 = 100)	252.4	+ 1	+13	280.5	+ 1	+14
TRADE						
Department Store Sales (index, seas. adj. 1947-49 = 100)	126	- 2	0	149	+ 3	0
Department Store Stocks (index, seas. adj. 1947-49 = 100)	149	+ 1	+ 3	167	+ 1	+ 6
EMPLOYMENT, PRICES, MAN-HOURS, & EARNINGS						
Nonagricultural Employment (thousands)	3,679	0	+ 1	53,171	- 1	+ 2
Insured Unemployment (thousands) (excl. R. R. and temporary programs)	132	+ 7	+15	1,693	+ 4	+23
Consumer Prices (index, 1947-49 = 100)	129.3	0	+ 2	126.6	0	+ 1
Production-Worker Man-Hours (index, 1950 = 100)	87.0	- 2	0	96.9	- 2	- 4
Weekly Earnings in Manufacturing (\$) (Mass.)	83.37	0	+ 3	91.14	- 1	+ 2
OTHER INDICATORS						
Construction Contract Awards (\$ thous.) (3-mos. moving averages May, June, July)						
Total	176,600	+ 6	- 4	3,468,636	+ 2	- 4
Residential	78,358	+ 2	-10	1,421,594	- 4	-17
Public Works	26,705	+20	- 7	660,457	+ 8	+ 6
Electrical Energy Production (index, seas. adj. 1947-49 = 100)*	220	+ 2	+ 4	272	+ 2	+ 7
Business Failures (number)	38	-28	- 7	1,146	-14	+ 7
New Business Incorporations (number)	881	-16	- 4	14,676	-12	-12
	n.a.	= not available				
		r = revised				