

# MAINE STATE LEGISLATURE

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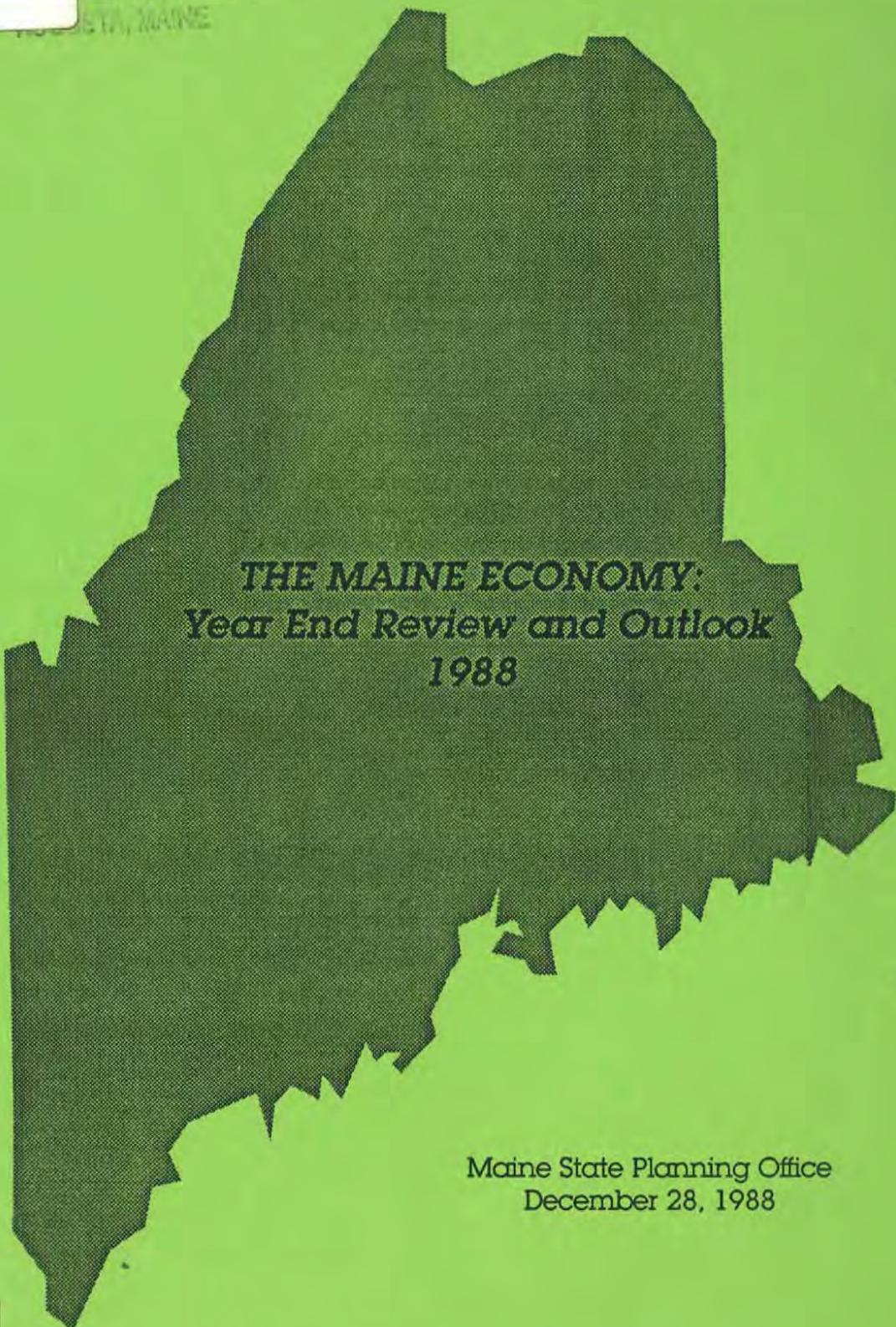


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**THE MAINE ECONOMY:**  
*Year End Review and Outlook*  
**1988**

Maine State Planning Office  
December 28, 1988

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This Review and Outlook for the Maine economy was prepared by the Economics Division of the State Planning Office to inform Maine citizens of recent trends in Maine's economy, provide a forecast of what may be expected over the next two years, and highlight some important long term trends that will shape Maine through the end of this century.

Among the observations made in this report:

- 1988 was another very strong year for the Maine economy, although some rates of growth have slowed noticeably. 1988 was notable for a recovery of employment in manufacturing for the first time this decade and for a spreading of growth throughout the state.
- The next two years promise a continuation of slower but steady growth in Maine, in New England, and in the rest of the country. Barring extraordinary events in the financial markets, a recession is unlikely. The positive trends in manufacturing and in regional growth trends noted in 1988 will continue at least through 1989.
- By the year 2000 the shift away from manufacturing as a source of employment will push the non-manufacturing industries to fully three quarters of all jobs. Despite recent gains, manufacturing employment will decline slightly by 2000, but will hold its share of gross state product. Within manufacturing, a historic shift will take place at some point in the next decade: the durable goods producers will account for more of the state's manufacturing employment and output than the traditional nondurable natural resource and clothing industries.
- When a recession occurs, Maine will do significantly better than the nation on most measures of economic performance. However, the shift towards durable goods production makes the manufacturing sector in Maine somewhat more vulnerable to recessions than in years past.

We hope you find this report useful, and invite your comments.

*Richard H. Silkman*  
 Director  
 State Planning Office

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## The Maine Economy in 1988

1988 was a very good year for the Maine economy. For the ninth consecutive year, economic growth outperformed that of the nation, as measured by the Economic Growth Index.\* Maine's overall economic growth from the third quarter of 1987 through the third quarter of 1988 was 3.4% compared with national growth of 3.2%\*\*.

The last year in which national growth exceeded Maine's was 1979.

While Maine's growth rate in 1988 represents a slip from the extraordinary 1987 rate of 6.3%, it was still very close to the average annual growth rate of 3.5% for the 1980's. National growth over the same period averaged 2% per year.

Maine's superior economic performance during the past year, and in fact during the whole decade of the 1980's, can be seen in every important economic indicator. It can also be seen in all regions of the state. While differences in growth continue to exist among the regions, these differences have clearly diminished over the past two years.

**Employment** For the first nine months of 1988, Maine employment averaged 16,800 jobs more than the same period of 1987. This represents a 3% gain compared to a gain of 2.3% for the nation as a whole. Through the first three quarters of 1988 most of Maine's sixteen counties created jobs as fast as, or faster than the nation as a whole. The fastest job growth through the first nine months of '88 (versus the same period of '87) was in Sagadahoc (up 5.5%) and Lincoln (5.4%) counties; next fastest were Franklin and Washington counties (both 4.3%), illustrating the spreading nature of Maine's economic revival of recent years.

In a remarkable departure from the trend of recent years, manufacturing employment has increased by 4,200 jobs. Prior to this year, manufacturing employment had been flat or declining for many years as losses in such traditional industries as apparel and shoes overwhelmed gains in metals and electronic goods. But in 1988 a strong surge of jobs in these durable goods industries offset small losses in nondurables to produce the first manufacturing employment gain this decade.

Other large gains over the first three quarters were in traditionally strong sectors such as services (6,600), trade (5,200), and construction (3,900). Last year - third quarter over third quarter - trade and services accounted for three-fourths of all new payroll jobs, but this year they accounted for only half the new growth.

**Unemployment rates** Rapid employment growth in Maine, combined with slow labor force growth, once again pushed unemployment rates to post World War II

lows. Maine's seasonally adjusted rate in September 1988 was 3.5%, down from 4.1% one year ago, and the second lowest unemployment rate in the country. The national rate for September 1988 was 5.4%. Maine's jobless rate has been cut over the last four years, and has now been consistently below the national average for eight years.

All Maine regions have seen considerable decline in jobless rates over the past few years. As of September 1988, all Maine counties had rates below the national average except Washington, which equalled the national rate. Counties with the lowest September rates were Knox (1.8%), York (1.9%), and Cumberland (2.0%). Ten counties had rates below 4%.

**Personal Income** Personal incomes in Maine have grown rapidly during the past year. Between second quarter 1987 and second quarter 1988, Maine's per capita income rose over 12%, compared to 8% growth nationally. Maine's per capita income ranking among the fifty states rose from 44th in 1979 to 31st in 1987. In fact, in 1987, Maine's growth rate was the highest in the nation (7.3%). Given the growth during the first half of 1988, Maine will doubtless be near the top of the growth chart in '88 as well, and will likely move up again among the State rankings.

**Retail sales** Increasing personal income, combined with continued growth in Maine's tourism industry, pushed retail sales up over 9% during the first nine months of 1988 (compared to the same period in 1987). Nationally, the rate of retail sales growth was only 5.9%. The largest increase in retail sales was in "other retail" (mostly specialty stores) (12.5%), with restaurant and lodging sales second fastest (11.7%).

Building supply stores also enjoyed very strong sales gains during the first three quarters of 1988 (11.4%). This is not surprising since construction has been booming in the state for several years. 1988 did mark another slight downturn (3.3%) from the previous year in housing permits issued in both Maine and the United States, although Maine's drop was only one-half that of the country. The level of housing development remains at a high level, however, especially compared to the levels of the early 1980's.

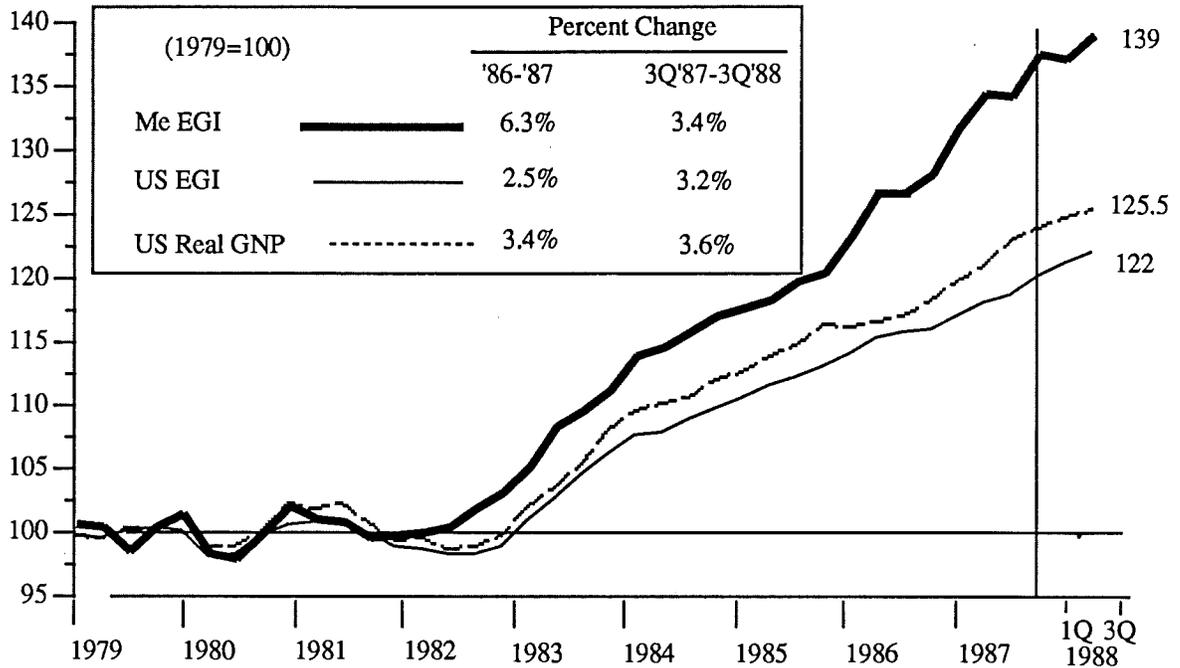
\* The Economic Growth Index (EGI) is a composite figure of resident employment, real consumer retail sales, production hours in manufacturing, and services employment. All data are seasonally adjusted.

\*\* Final data on employment and other key indicators do not become available until early 1989. This assessment of 1988 is based on trends through the first three quarters of the year, compared to the same period in 1987.

## The Maine Economy in 1988

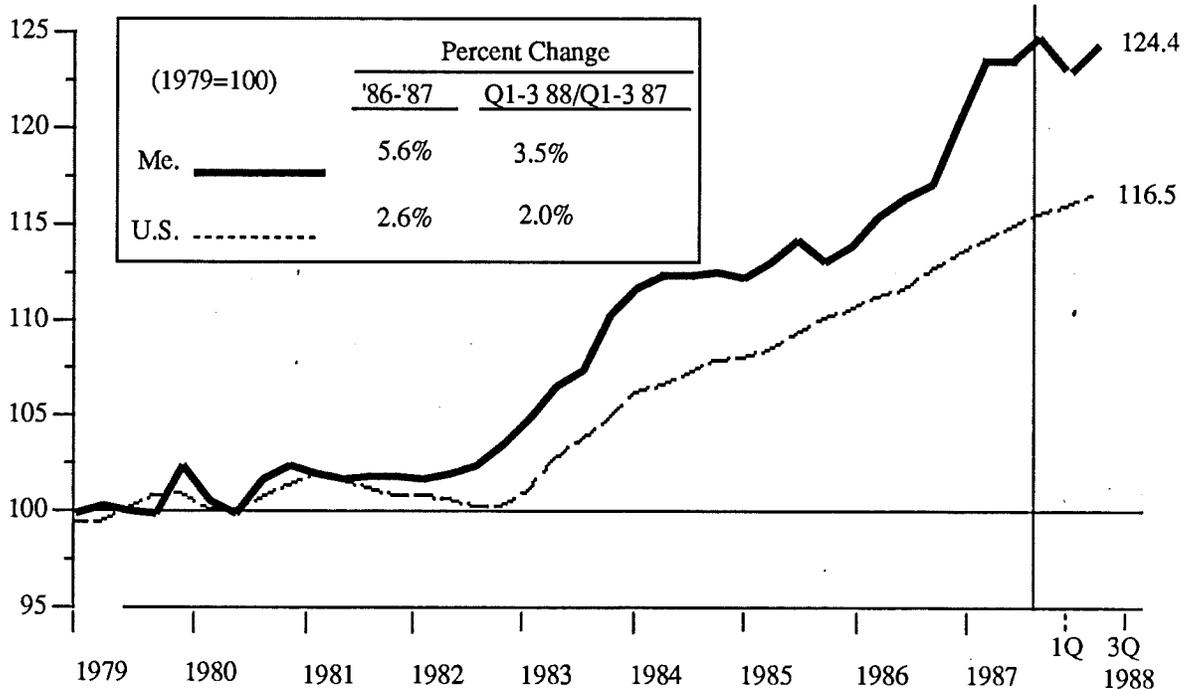
*Overall, the Maine economy grew somewhat slower in 1988 and was somewhat more erratic than in 1987, but still stayed ahead of the U.S., and posted a net gain near the average for the current growth cycle.*

**Economic Growth Index**



*Employment growth dipped in the early part of the year, but resumed strongly in the second part and should finish the year with another impressive gain.*

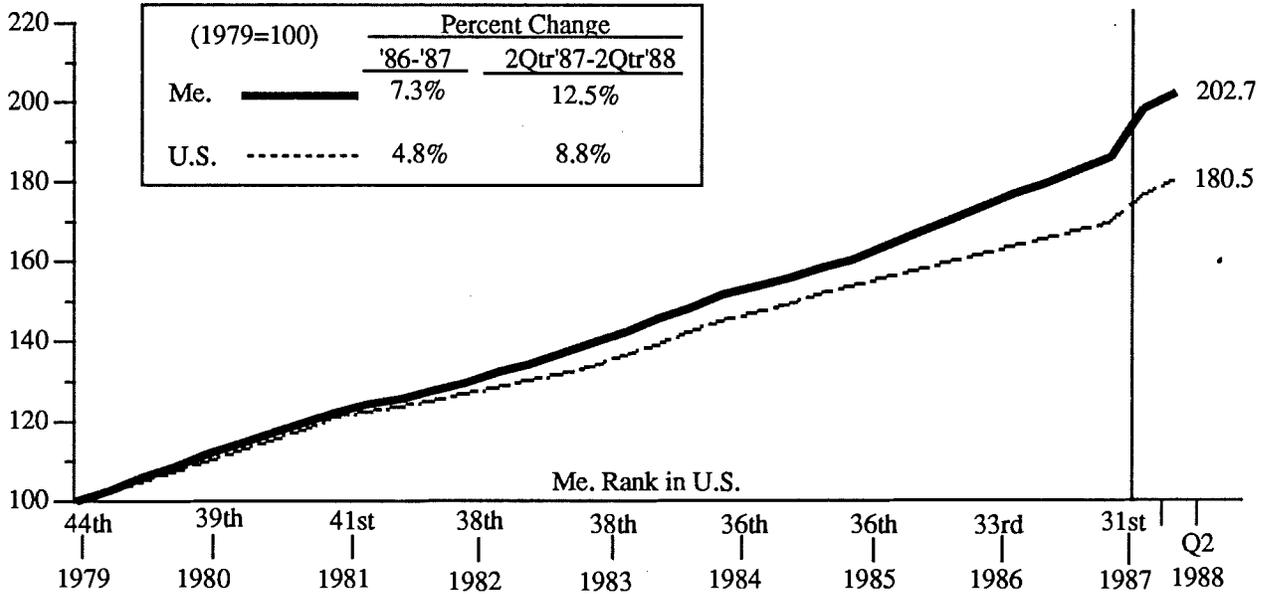
**Employment Growth Index**



# The Maine Economy in 1988

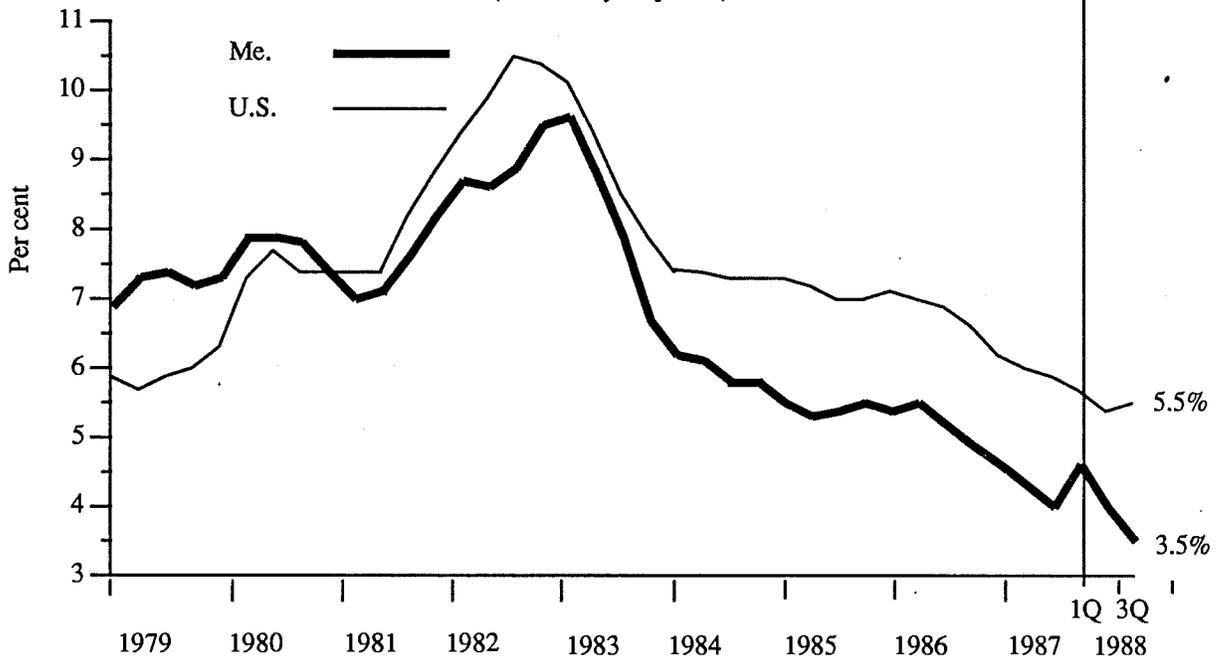
Employment gains and increasing wages meant personal income growth in Maine was well ahead of national trends. The state has moved up 10 places in per capita personal income among the states during this decade.

**Index of Per Capita Personal Income**



A slight rise in the unemployment rate in the first quarter of 1988 was quickly reversed and the downward trend in unemployment rates continued.

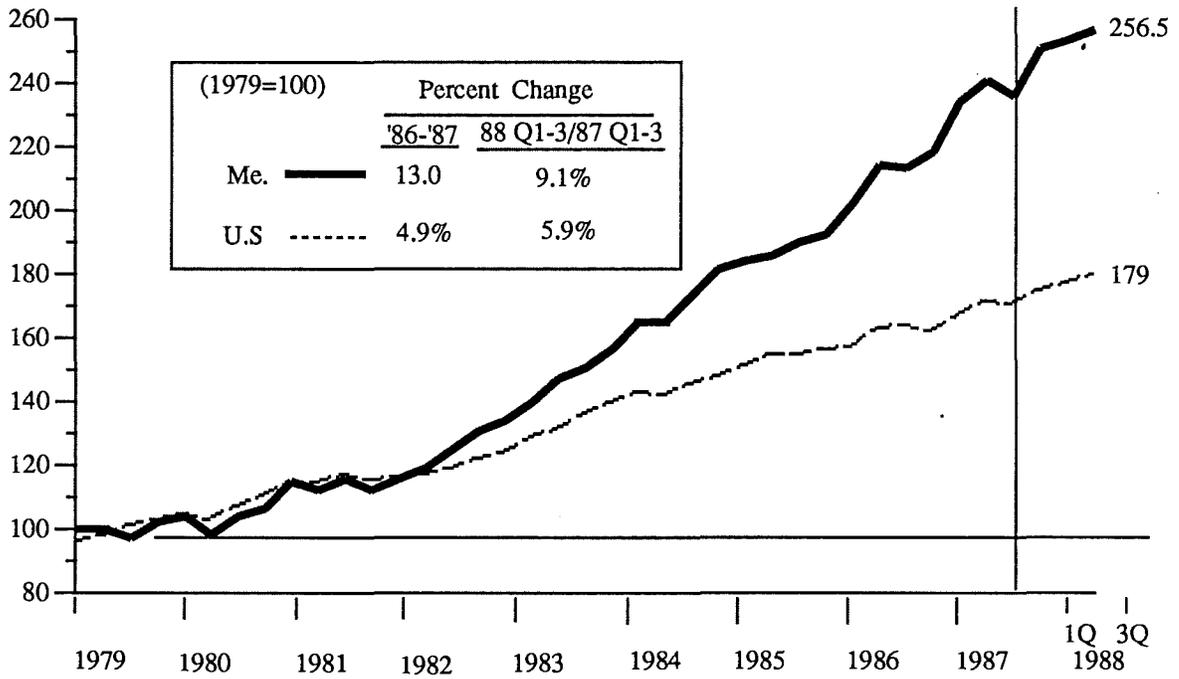
**Unemployment Rates**  
(Seasonally Adjusted)



# The Maine Economy in 1988

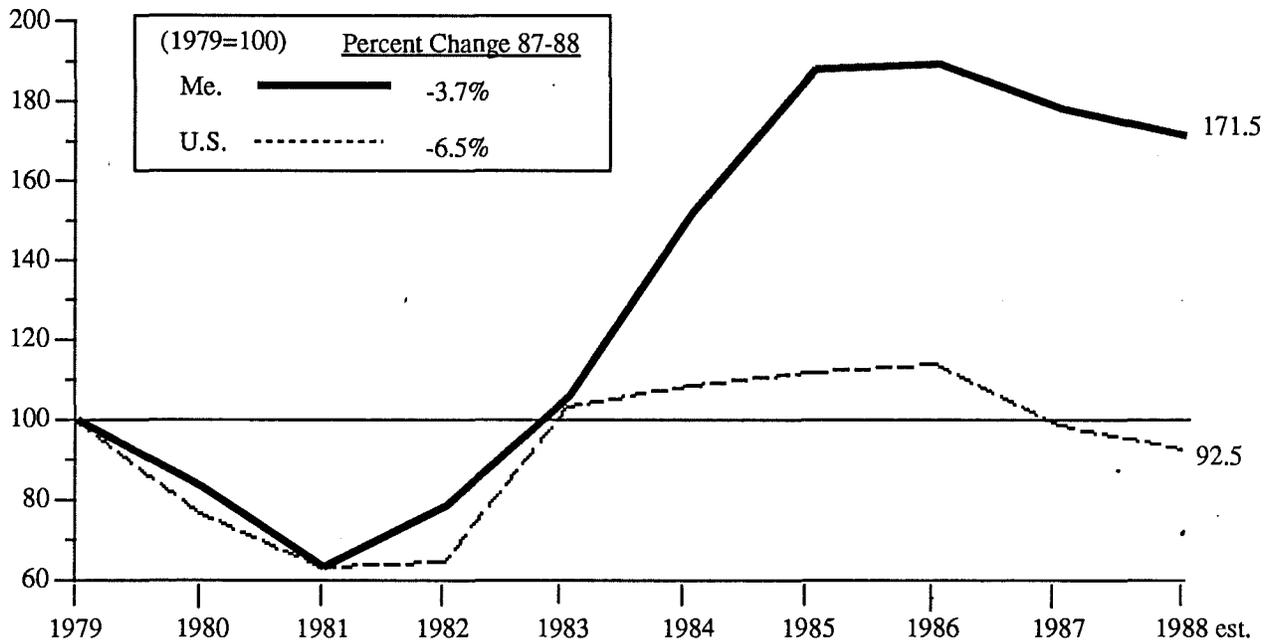
Retail sales continued to grow at a pace near the average of the previous two years

## Index of Retail Sales



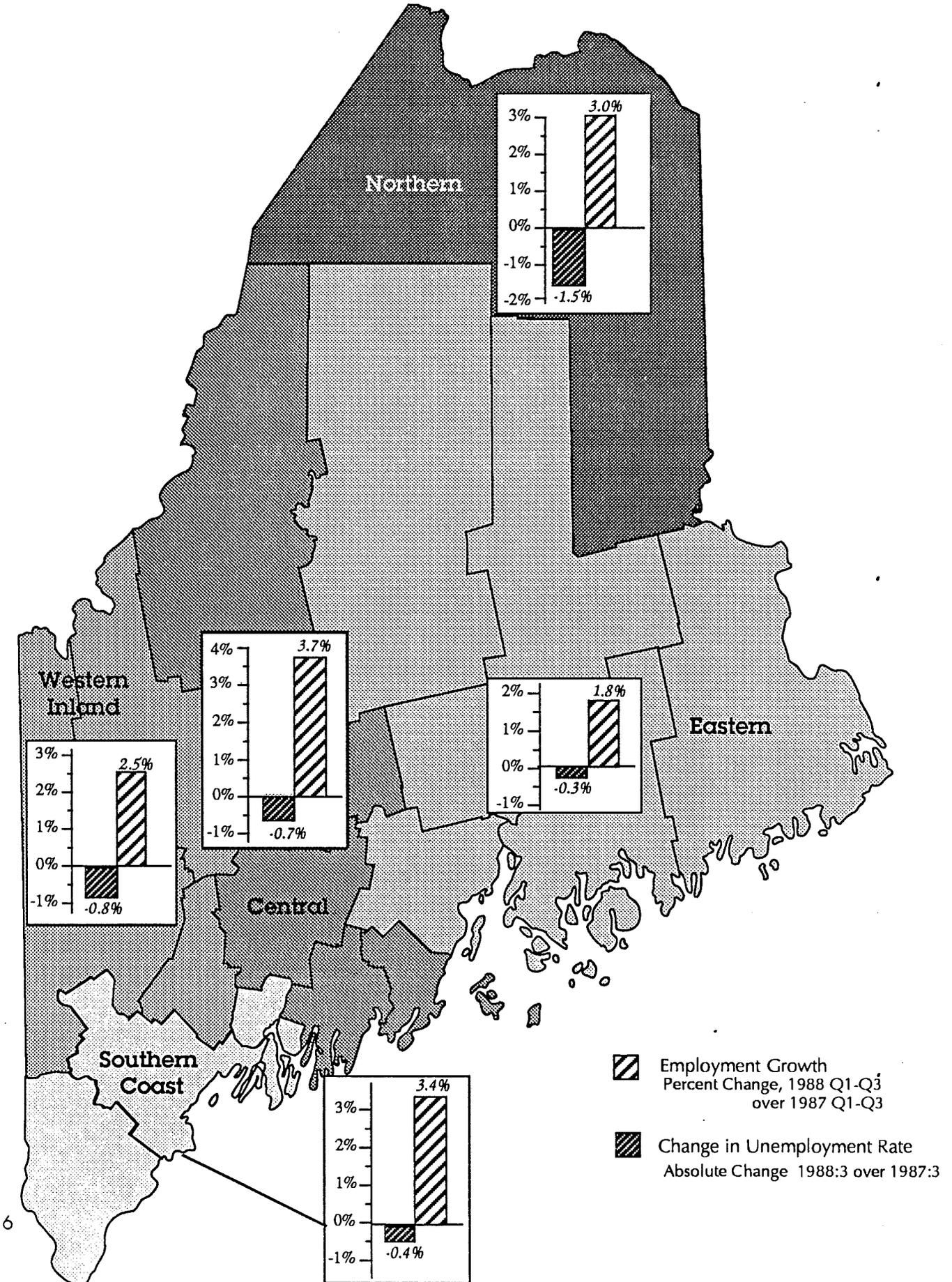
New housing development continued to slow in Maine, although the pace of activity remains high compared to the rest of the country.

## Index of Housing Permits



# The Maine Economy in 1988

Regional trends show strong job growth throughout the state, with especially strong gains in regions such as the Central, Western Inland, and Northern regions where growth has lagged.



## **The 10 Most Significant Economic Events in Maine in 1988**

At the end of each year, various listings appear of the "10 most", "10 least", etc. The following list consists, in no particular order, of a number of events that occurred in Maine in 1988 that we think indicate important trends in the economy, some of which are not captured in any of the statistics.

**The Budget Surplus** A robust economy produced the largest surplus of revenues in the state's history, over \$100 million. Two thirds of this money was returned directly to Maine taxpayers.

**U.S. Canada Free Trade Agreement** Legislation enacting the Free Trade Agreement, concluded between the United States and Canada in January, was passed by the Congress and signed into law. The reelection of the Progressive Conservative Party in Canada clears the way for the necessary legislation to be enacted in Canada. This Agreement, the most sweeping bilateral trade liberalization agreement entered into by the United States, will become effective on January 1, 1989, inaugurating a 10 year phase out of trade barriers. The results will be significantly enhanced trade opportunities, and perhaps trade conflicts, for Maine businesses.

**L.L. Bean goes to Lewiston and Bangor** No event symbolizes the changing patterns of growth within Maine as well as L.L. Bean's development of a telecommunications service center in Lewiston and the announcement of plans to open a major distribution facility in the Bangor area.

**Record Low Unemployment** This one made the 1987 list, but since a new record was set in September 1988, it has to be on this year's list as well. What was even more remarkable about this year's record was that it represented the fewest people unemployed since 1956, a year in which the population of Maine was 250,000 smaller than today.

**Real Estate Slowdown** A slowdown in real estate sales and development, especially in southern Maine, occurred in 1988, cooling off what had been an extraordinarily fast-paced market. This slowdown worried many in the industry, but in fact appears to have been a descent from record highs to a more normal, sustainable, pace of activity. It is also a sign of the strengthening of regional economies.

**Maine Turnpike to expand** Last year we listed the decision to postpone the expansion of the Maine turnpike, a sign of Maine's increased skepticism over the side effects of growth. Following a second study, the decision

was made to expand the turnpike. Whether the consequences of that decision are increased economic development with few adverse effects or a new round of uncontrolled growth in southern Maine we will now find out.

**The Recovery of Manufacturing** The most dramatic change in the Maine economy this year was the fact that manufacturing jobs actually grew by about 4000. This is the first year this decade that manufacturing jobs have been added to the Maine economy. In fact, Maine was adding manufacturing jobs while our neighbors in southern New England continued to lose them.

**Blue Cross/Blue Shield experiences losses, health insurance premiums skyrocket.** Blue Cross and Blue Shield, the insurance company that underwrites well over half of the health insurance in Maine, announced that it was suffering operating losses for the first time in its fifty year history. Complex forces, including ever rising health care costs and the shifting of reduced federal funding for medicare and medicaid onto private health insurers, were at work to create the losses and the large increases in premiums. This focused attention on a wide range of health care issues— from health care for the uninsured to hospital cost regulation— and assured that health care would become a major economic issue.

**End of the International Paper Strike.** The IP strike, which dominated the news in 1987, came to a quiet end when the national union called off the strike. The result will influence the overall labor relations climate in Maine for some time to come. The agreement at the end of 1988 between Boise Cascade and its unions for a six year contract with little pay increase and substantial work rule modifications is a sign of these changes.

**Aegis Destroyers and New Paper Machines** The announcements that Scott Paper's Hinckley Mill would expand and that BIW would get to build three additional Aegis destroyers through the mid-1990's is evidence of continued strength in some of Maine's traditional industries, despite all the changes occurring in other sectors of the economy.

And one item whose significance is yet unclear:

**Loring Air Force Base: Round 2.** Talk is in the air again about closing Loring Air Base in Aroostook County. A special commission is examining which bases should be closed and will make its recommendations at the end of the year. Whichever recommendation is made will have significant effects on northern Maine, where the base accounts for over 10% of the economy.

## U.S. and New England Outlook to 1990

The big question about the U.S. economy at the end of 1988 is the same as it was in 1987: How long can this keep going on? The economy made it through the sixth year of the expansion that began in 1982. There is near-universal expectation that the expansion must come to an end some time, but when?

Trends at the end of 1988 do not foretell a recession in the next two years. U.S. growth will continue through 1990, though the pace of growth will likely slow again. From a relatively robust 1988 Gross National Product (GNP) growth rate between 3.5 and 4%, the growth rate is forecast to fall to a little over 2% in 1989 and a little under 2% in 1990.

Three components of GNP will account for continued growth. Consumer spending, which accounts for two-thirds of the GNP, continues to expand along with healthy increases in personal income. This should also allow the savings rate to be increased slightly. Consumer spending does not appear to have been affected in any long lasting way by the stock market crash of October 1987, a major reason why that event does not appear to have had substantial negative consequences for the economy.

The fastest growing segment of the economy will be exports, which a falling dollar will boost at a rate near 10% a year for each of the next two years (a slower rate than the 17.5% rate of 1988). The other fast growing sector, at least for 1989, will be investments in equipment for manufacturers struggling to keep up with the expanded export orders after years of depressed output.

Growth in consumer spending and exports will hold up through 1990. But there are soft spots forecast for that year that are likely to pull overall growth down to very low levels. Construction of both residential and non-residential buildings will likely decline in the next two years as relatively high mortgage rates depress home building and the continuing effects of federal tax reform and overbuilding cut into commercial building.

The increase in exports that began in 1987 has started to make a major dent in the nation's trade deficit. Forecasts are for export growth to reduce the merchandise trade balance (the balance of goods imported and exported) by more than 25% in the next two years. Imports, while slowing, will continue high as foreign producers cut their margins to stay in the American market. Thus a merchandise trade surplus is not on the horizon.

Slower growth is generally seen as a positive development, since it means that no recession is in sight. It also means that near full employment and near full industrial capacity will not be likely to reignite rapid inflation.

Inflation at the consumer level is expected to be higher than current levels, approaching 5% next year. But absent any major external pressures on financial markets or a dramatic reversal of OPEC's recent inability to control oil prices, this should not be enough to so worry the Federal Reserve Board about inflation that a major hike in interest rates will be imposed. Interest rates should rise somewhat, but not enough to choke off economic growth.

Trends in the New England economy are as important in determining the trends in Maine as are trends in the national economy as a whole. The New England economy has generally been the strongest regional economy during the decade of the 1980's. For the most part, the region's strength will be maintained through the next two years, although growth rates for some economic indicators will be noticeably slower than national figures.

This is particularly true in the case of employment and housing. Unemployment rates in New England will continue to be at least 2 percentage points below the national average, and this relatively full employment situation will limit additional job growth. This is most noticeable in 1988 and 1989, when New England job growth will be a full percentage point below the national figure. New England will about equal U.S. job growth in 1989, and in 1990, forecast to be a very weak year nationally, New England should regain its lead over the nation.

Housing growth will be more severely affected in New England, however. Housing starts are forecast to decline in each of the next two years, with almost 12,000 fewer units forecast for 1990 than will be built in 1988; this would also be more than 35,000 units fewer than in 1986, the high period of housing starts in recent years. High land prices throughout the region are undoubtedly a major restraining factor in housing construction in the region.

However, the most important New England regional trend for Maine is likely to continue strong. Personal income growth should continue to outpace the nation's throughout the region, staying above 7% per year (in current dollars) through 1990.

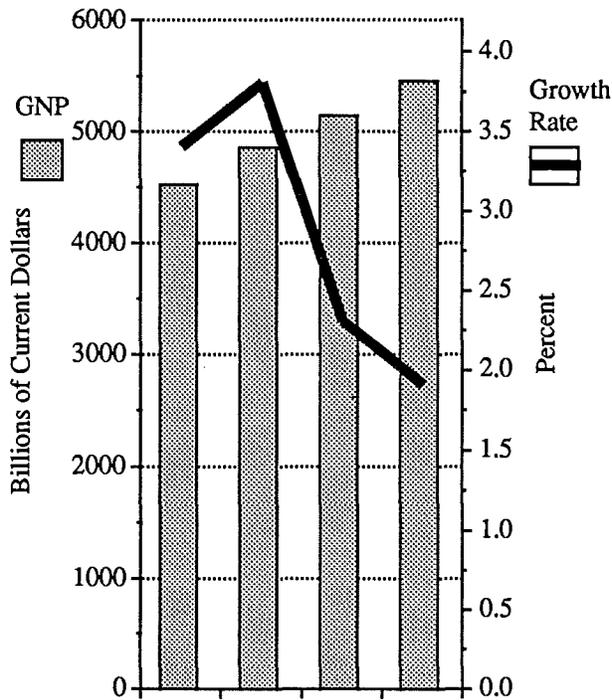
While economic trends are generally favorable for continued U.S. economic growth, substantial risks remain. Monetary and fiscal policy makers are walking a very fine line between growth and recession, and wrong choices with respect to the federal deficit or interest rate policies could easily make these forecasts appear too optimistic. The large debt that America now owes to foreigners presents another uncertainty that could significantly alter this outlook.

# U.S. and New England Outlook to 1990

No recession in sight, but slower growth...

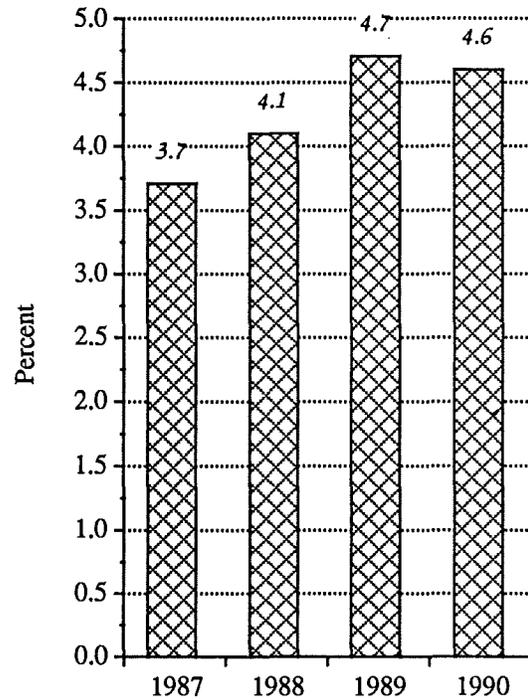
with inflation rising a little, but hopefully not to worrisome levels, to avoid...

## GROSS NATIONAL PRODUCT

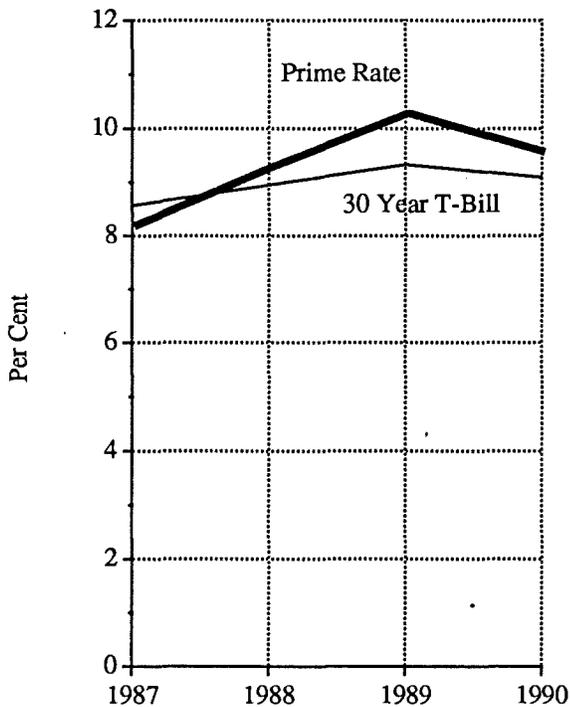


## INFLATION

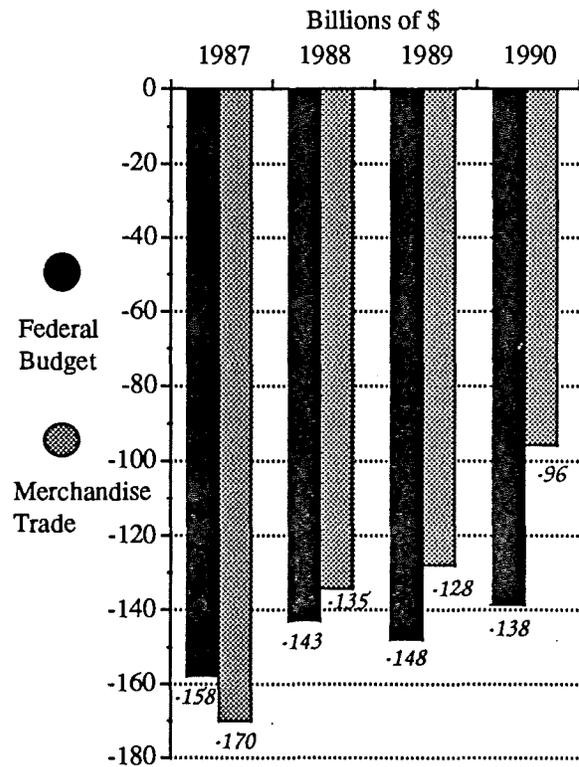
(Consumer Price Index)



## KEY INTEREST RATES



## BUDGET AND TRADE DEFICITS



already rising interest rates being pushed even higher out of inflationary fears.

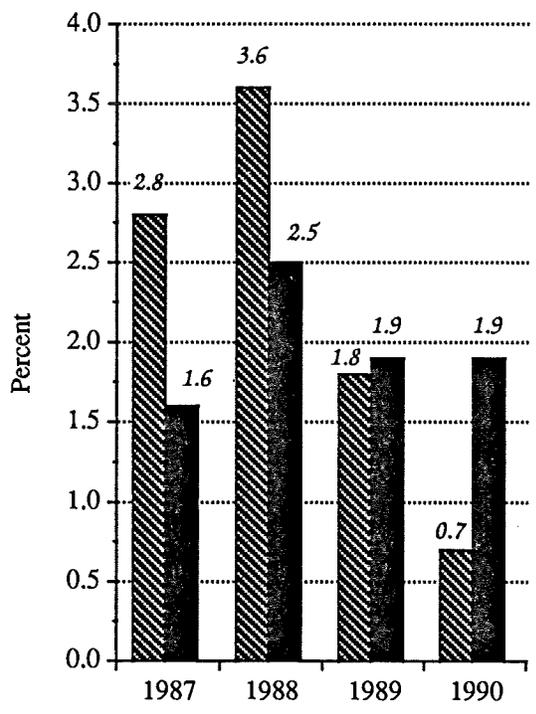
Good news on the trade deficit will not be matched on the federal budget deficit.

# U.S. and New England Outlook to 1990

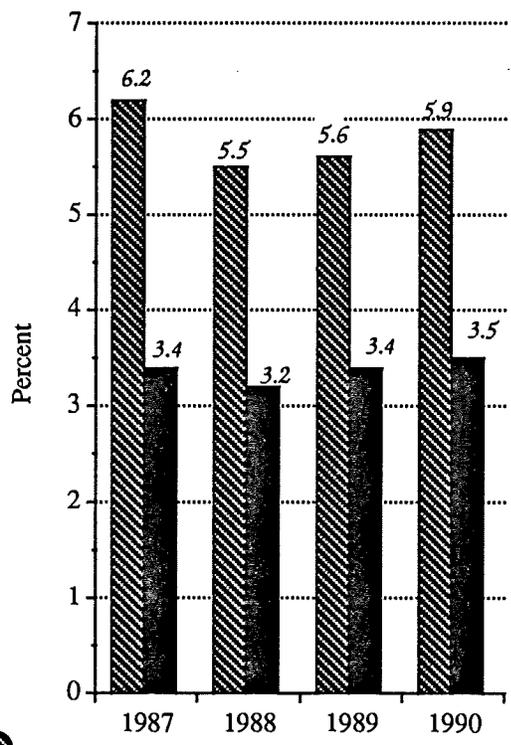
*Tight labor markets keep job growth down in New England...*

*as unemployment rates remain the lowest in the country...*

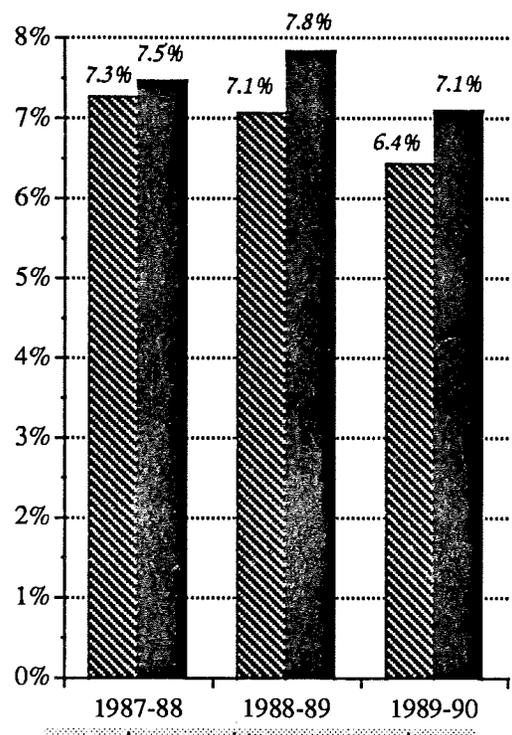
**EMPLOYMENT GROWTH RATES**



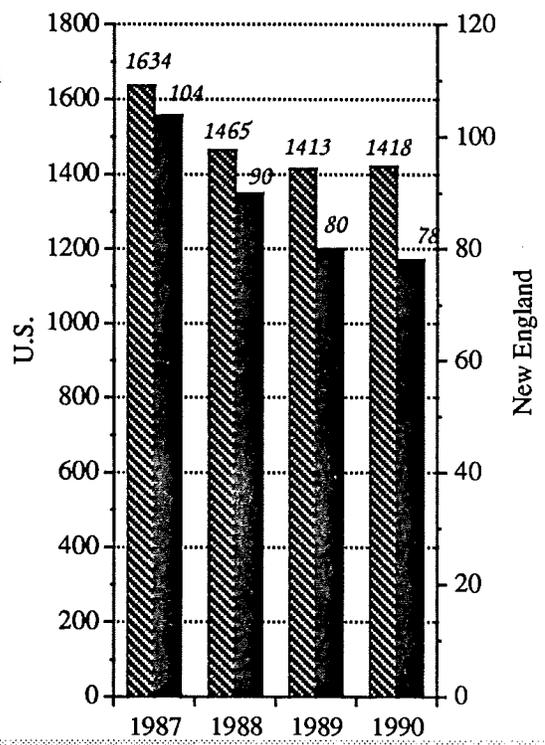
**UNEMPLOYMENT RATE**



**PERSONAL INCOME GROWTH**



**HOUSING STARTS**  
Thousands of Units



*and personal income growth continues to outpace the nation.*

*Housing shortages will remain a problem with no major increase in housing on the horizon in the region.*

The Maine economy will experience continued growth in 1989 and 1990, but at a slower pace than in the last two years. This slowdown reflects continued deceleration in both the National and New England economies. But it is not a trend that should be viewed with too much concern, since slower growth is really a return to more moderate growth trends following a flurry of activity in 1987 and 1988.

In 1989 and 1990, Maine is expected to grow at a pace more reminiscent of the mid-1980's but with some important differences in structure and location. Annual average unemployment rates will not change dramatically from current levels, varying one or two tenths of a percent.

**The employment "bubble"** 1987 and early 1988 was a period of exceptional economic growth in Maine. Fueled in large part by rapid New England personal income growth, Maine retail, service and construction employment jumped 12%. The strengthening of important manufacturing sectors, especially paper, electrical equipment, non-electrical machinery, and transportation equipment added to Maine employment and income and further strengthened consumer spending. Maine also benefited from lower oil prices and interest (mortgage) rates in 1987. These combined forces produced an employment "bubble" of very rapid growth at the end of 1987 and beginning of 1988 which could not be sustained.

**Manufacturing** Most significantly, the recovery in manufacturing that was evident in 1988 should continue through 1989 at least, with 1990 forecast to be a year of fairly stable manufacturing employment. Even stable manufacturing employment will be a relief after nearly a decade of manufacturing job losses.

Manufacturing's recovery will benefit from a reasonably robust market for durable goods and for exports. While cost constraints on growth exist in Maine, the state will continue to have advantages over other New England states in the availability of labor, the affordability of land and the quality of amenities necessary to continued growth. As a result, manufacturers of electric and electronic equipment, non-electrical machinery, metal products and printing and publishing are expected to add 1900 jobs by the end of 1990. The outlook for paper products should stay strong, as evidenced by the Scott Paper Company plan to build a new paper machine in Skowhegan, adding 200 jobs to this industry.

**Nonmanufacturing** Non-manufacturing employment growth will continue to provide the great majority of new jobs, but growth is expected to slow in the face of reduced consumer spending, slower housing and commercial construction and the effects of a more competitive labor

market. Retail trade, construction and health services growth will add 1500 jobs by 1990. This represents an annual rate of 2.6% compared to 7.2% between 1986 and 1988.

**Changing Regional Growth** A major change is already occurring within the state and this trend will continue over the next few years. The stereotypical Maine growth pattern in the 1980's, with growth in the south and stagnation in the North is being decisively changed. The fastest growth in 1989-90 will be centered around Bangor and Lewiston-Auburn. Employment growth in the Greater Portland area will slow to 3% per year, down from an annual rate of more than 6% between 1987 and 1988. In the Bangor area, jobs will increase at an annual rate of nearly 6% in 1989, compared to this year's 4%. Lewiston-Auburn will continue at a steady pace of about 3.5% a year. While these forecasts do not include all regions of the state\*, the trends of growth in the state's major metropolitan regions are a key indicator of regional economic trends within the state.

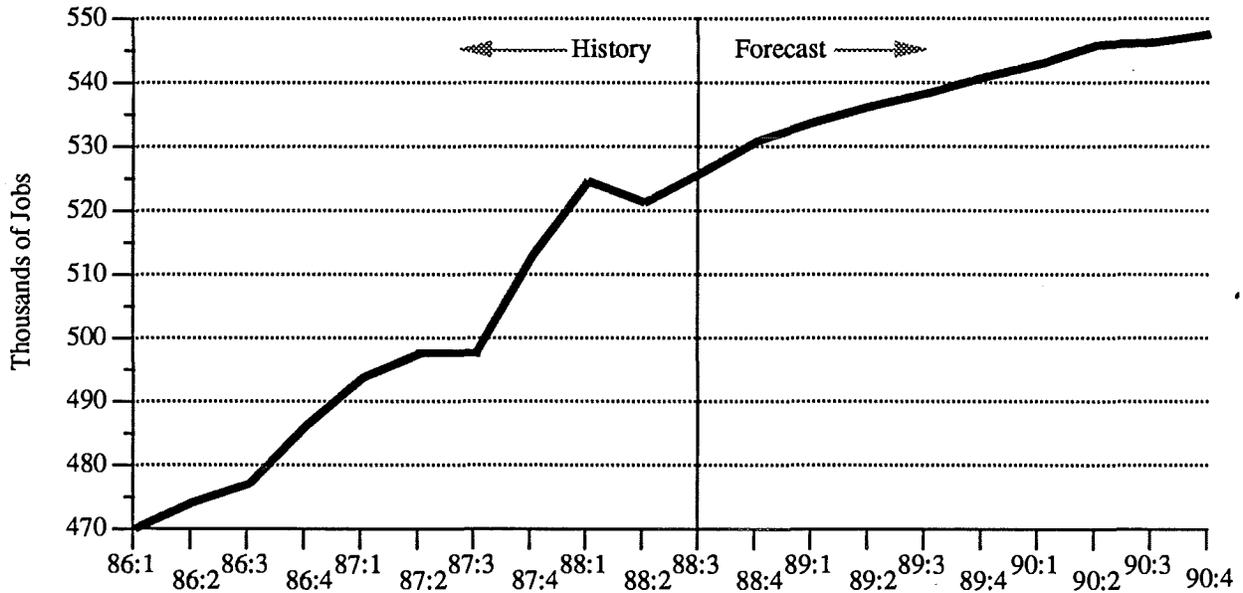
**Housing and construction** Maine has been experiencing an extraordinary housing and construction boom over the past few years, but this boom is already beginning to slow and will continue to do so through 1989. Rising incomes, shrinking household sizes, and lifestyle changes have resulted in households being formed at three times the rate of population growth. While the demographic forces will still be at work, the economic forces of higher interest rates and rising prices will push housing starts down about 8% from current levels near 10,000 units. The forecast is for a rebound to near current levels in 1990.

**Maine and New England** Maine's economy has traditionally lagged behind the larger region, but Maine has had significantly more robust growth than the New England region in the past two years. For example, Maine's manufacturing employment turned around and grew in 1988, something that none of the southern New England states did. The slowdown in growth forecast for the Maine economy in 1989 will bring Maine back in line with the rest of the region in job growth, but Maine will continue to outpace the region in personal income growth.

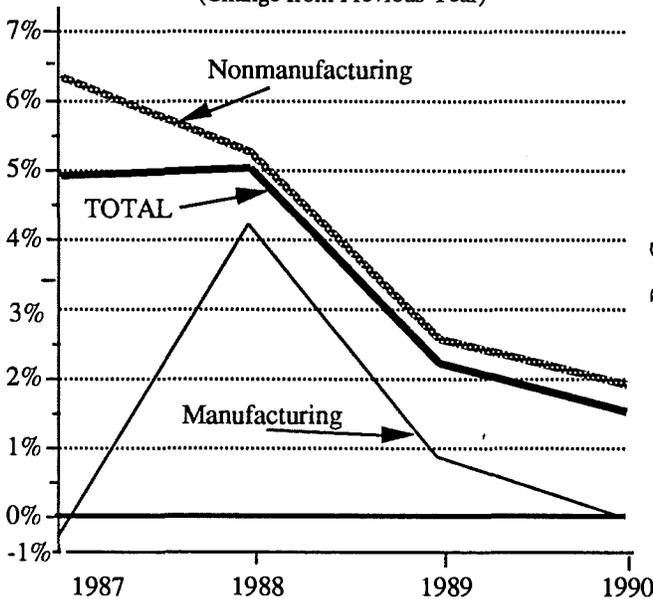
\*The forecasts for the metropolitan areas of the state were prepared by Professor James Breece of the University of Maine under a cooperative arrangement with the State Planning Office. The forecasting model being developed by Professor Breece provides another approach to analysing the state's economy. The metropolitan areas used for analysis are the Standard Metropolitan Statistical Areas as defined by the U.S. Department of Commerce.

*Employment growth continues, but noticeably slows, particularly from the large surge that occurred in the second half of 1987.*

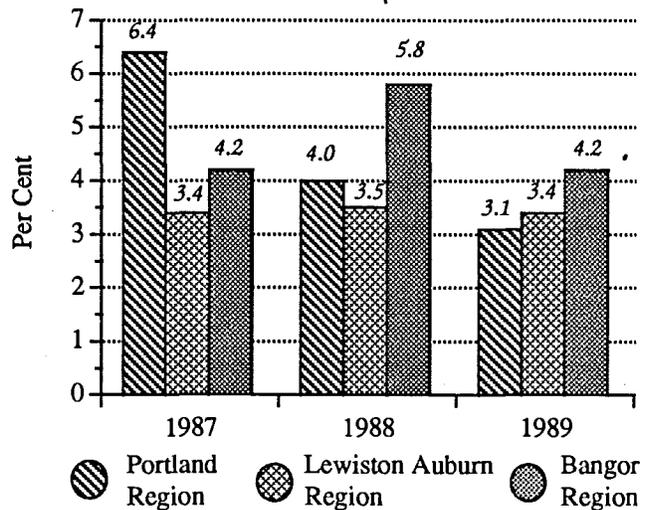
## Quarterly Employment



## Employment Growth Rates (Change from Previous Year)



## Employment Growth in Major Metropolitan Areas



*Manufacturing employment growth- one of the remarkable features of 1988- continues in 89, as non manufacturing growth slows.*

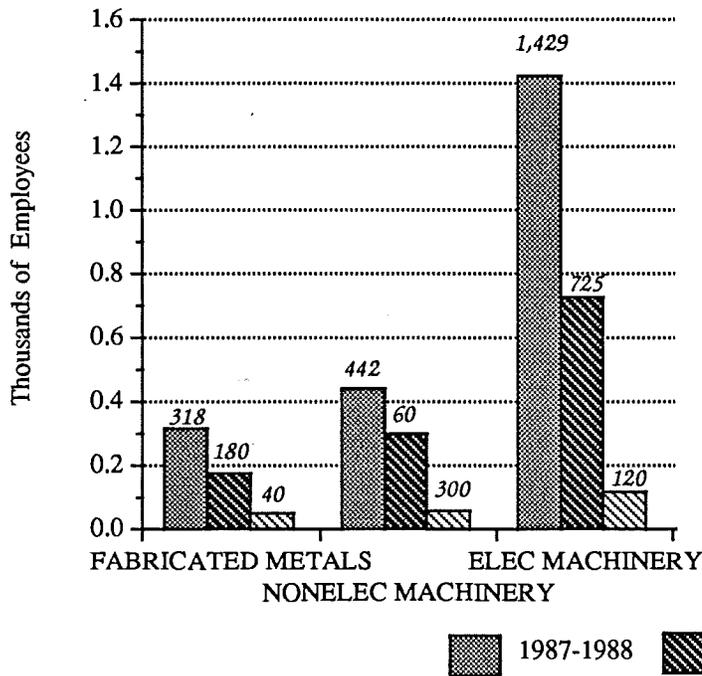
*Job growth shifts north as both Lewiston-Auburn and Bangor regions outpace Portland by 1990.*

# The Maine Economy to 1990

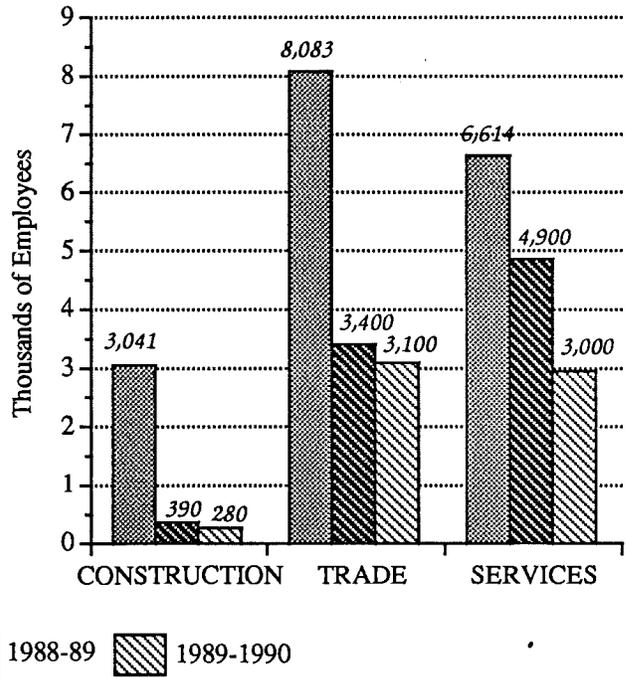
The manufacturing sectors producing the most new jobs over the next two years...

In nonmanufacturing trade and services stay strong, but construction employment hardly grows at all.

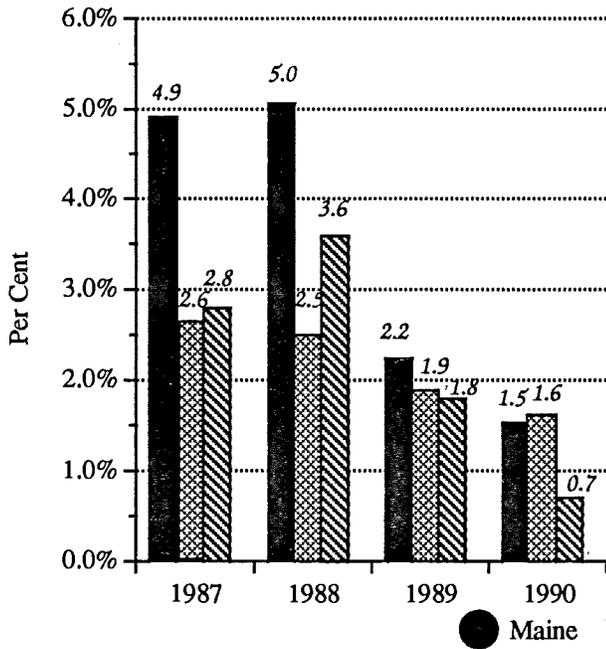
**New Employees in Manufacturing**



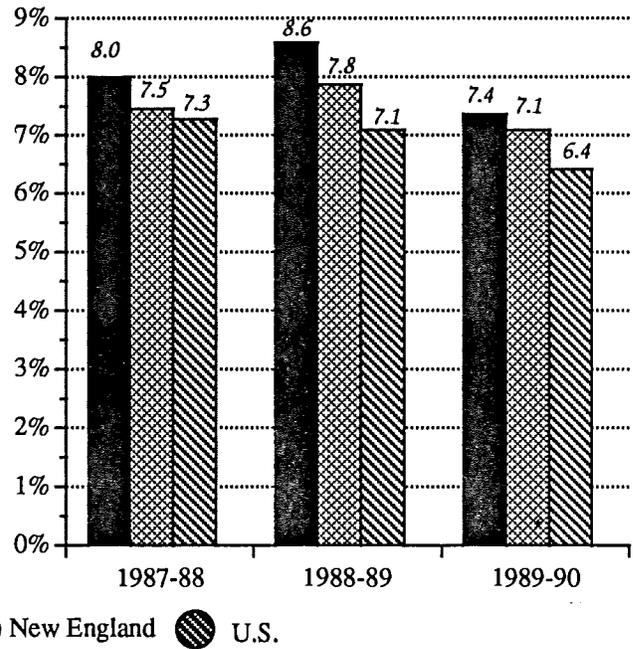
**New Employees in Nonmanufacturing**



**EMPLOYMENT GROWTH**



**PERSONAL INCOME**



Maine will continue to exceed New England in job growth through 1990 and to outpace the U.S. through at least 1989,

and will outperform both New England and the United States in personal income growth.

Maine, like the rest of the United States, has reached a critical juncture in its economic development. The relentless acceleration of technological change has combined with expanding international competition to reduce the time available to make crucial decisions that will shape our future. The way of life enjoyed by Maine citizens in the year 2000 will depend in large part upon the decisions made today, in the first instance by the State's businesses, and in the second, by state and local governments, and perhaps most importantly by Maine's educational institutions.

Between 1988 and the year 2000, Maine will experience a moderate slowing of employment growth from the break-neck pace of the last six years. Growth in economic production (value-added), however, is expected to continue at a strong pace. Job growth is expected to slow to an average 1.7% per year between 1988 and 2000, down from the 3.1% annual growth experienced since 1984. At the same time, Gross State Product (the value of all goods and services produced in Maine) will increase 2.5% per year partly the result of productivity gains in the manufacturing sector.

Maine's population in 2000 will be nearly 1.35 million, a modest 12% increase over 1988's figure. But it will be a significantly older population, with more people over 40 than under. The number of households will continue to increase much faster than the population.

Maine's employment structure will continue its shift toward non-manufacturing industries. This sector will make up fully 75% of all private non-farm jobs in Maine in 2000. While significant, this represents a slowing of this trend from the previous 8 years. Between 1980 and 1988 non-manufacturing's share of private non-farm employment grew from 66% to 70%. The predicted slowdown in this long term shift will be the result of a combination of two factors: a relative strengthening of the State's manufacturing industries, as the declines of the past decade in traditional industries slow (but do not abate) and the faster growing manufacturing industries continue their growth, and a noticeable deceleration of non-manufacturing job creation from the 1980's rates.

### Diversification of Maine's Industrial Mix

Maine manufacturing employment will be 4% lower in 2000 than in 1988, a significant change from the trend of the last 8 years when manufacturing jobs declined by 7%. This strengthening is largely the result of a shift in Maine's industrial base from one dominated by mature non-durable industries to a more diverse mix of industries, in which durable goods employment will make up about 55% of all manufacturing by the year 2000, up from 48% in 1988 and only 39% in 1980.

The bulk of Maine's manufacturing strength will come from the nonelectrical machinery and electric & electronic equipment industries. Together these two industries will add 6400 jobs to the State economy. Stable employment in other major industries, notably shipbuilding and paper products, and a slowing in the decline of other non-durables producers will be of equal importance in strengthening Maine's manufacturing base. But, continued problems in footwear, apparel and textiles will probably require further reductions of 6600 jobs in these sectors to offset the 6400 new manufacturing jobs.

Despite a net loss of jobs, Maine's manufacturing output will continue to add significantly to the Gross State Product. In the year 2000 output of goods producers will maintain the 31% share of private non-farm Gross State Product it enjoyed in 1988. This performance will be a direct result of the shift to durables-producing industries from nondurables-producing industries. For the most part, durable goods industries enjoy stronger productivity growth and add more value to their final product than nondurables (with some exceptions, such as paper).

### Nonmanufacturing Continues to Produce Most Jobs

As in the last 30 years, nonmanufacturing will produce the vast majority of new jobs in Maine between 1988 and 2000. Growing at nearly 2% per year, the nonmanufacturing sector (including government and construction) will employ 664,300 people, or nearly 8 of every 10 Mainers in the year 2000. Retail trade will add the greatest number of jobs at 34,000. Rapid growth in business, professional and health services will add close to 43,000 jobs to the Maine economy by 2000, 60% more than in 1988.

This represents a considerable slowing of past growth trends in the nonmanufacturing sector. Jobs in this sector are expected to grow at a rate of 2% per year, to the year 2000—down from the 4.4% seen between 1980 and 1987. Even the strong performance expected from business and professional service employment represents a slowdown in annual growth to 4% from the 5.4% enjoyed since 1980.

It should be noted that the period between 1980 and 1988 was unusual in that it began in a recession year and ended near the peak of the longest peace-time expansion in U.S. history. The recession that occurred in 1982 was at the very beginning of the period and was among the shortest in recent history. In contrast, the forecast assumes 2 recessions in the 12 intervening years, occurring in a more evenly distributed manner (see page 18).

Moreover, as expansion of the Maine labor force continues to slow, employment growth becomes less meaning-

ful as a measure of economic progress. Increasingly scarce labor combined with international competition will accelerate the pace of modernization among Maine industries. As noted above, the result will be higher levels of economic production with fewer workers. Maine's textile industry provides an illustration of this phenomenon. While reducing employment by 23% between 1979 and 1986, real output (inflation-adjusted value-added) has increased by 10%. This trend is expected to continue through the year 2000 with employment dropping by an additional 23% and real output expanding by 42%.

### Competition & Labor Force—Risks to Long-term Economic Strength

The predicted economic growth is premised on the ability of Maine to enhance its position as a location for business activity. Economic competition and labor force dynamics present Maine with the opportunity to enter the 21st Century with a healthy economy and prosperous citizenry. These same forces place Maine at risk of falling dangerously behind in a rapidly evolving world economy.

This forecast assumes that Maine industry is able to achieve significant productivity gains necessary to reduce costs relative to competitors and to support wage increases. The forecast assumes average annual productivity growth of 3.3%, compared with 2% over the period from 1976-1987. Failure to achieve these improvements will drastically undercut the ability of Maine industry to compete in the expanding international marketplace. It will also lead to a decline in the standard of living enjoyed by Maine workers.

Maine's labor force will grow more slowly in the future. The size of the pool of young entrants will decline resulting in a significant tightening of the labor market. A more competitive labor market offers some opportunities for Maine's economic health. It can provide for gradual increases in wages earned by Maine workers and improvements in their work environment as firms compete for workers. The slow-down in labor force growth will also continue to challenge Maine businesses to make the changes in operating procedures necessary to produce more with fewer workers.

These labor force pressures will be alleviated somewhat by the maturing of the baby-boom generation. By 1995, the small depression-era population will turn 65. At this time, the bulk of the work force will be made up of the baby-boom generation who will be between the ages 44 and 55, an age group with the highest participation rates and which are generally the most productive workers.

A tightening of the labor force also provides an opportunity for special populations to be more active participants in the State's economy. Older workers, handicapped workers, minorities and other groups, who have traditionally experienced high unemployment, will become increasingly sought after by employers. In the same way, labor market tightness in high-growth areas of Maine and Southern New England can provide a valuable impetus to pushing growth into Western, Northern and Eastern Maine.

At the same time, Maine is already suffering the effects of a critical skills shortage. The fundamental transformation of Maine's industrial base, driven by technology and competition, is resulting in ever more sophisticated work environments and tasks. Many firms currently facing strong market demand cannot find workers with the ability to operate in this more sophisticated environment. Clearly, even if the labor force exists to fill future jobs, their skill level may not adequately support the quality jobs that the U.S. economy will be producing.

In addition to the demands of industry, higher education centers will see a decline in the population group (18-24) from which they have traditionally sought students. Thus, it is critical that Maine's educational institutions reconfigure themselves to provide both working members of the labor force, and new entrants the skills to adapt with, and participate in, the evolving world economy.

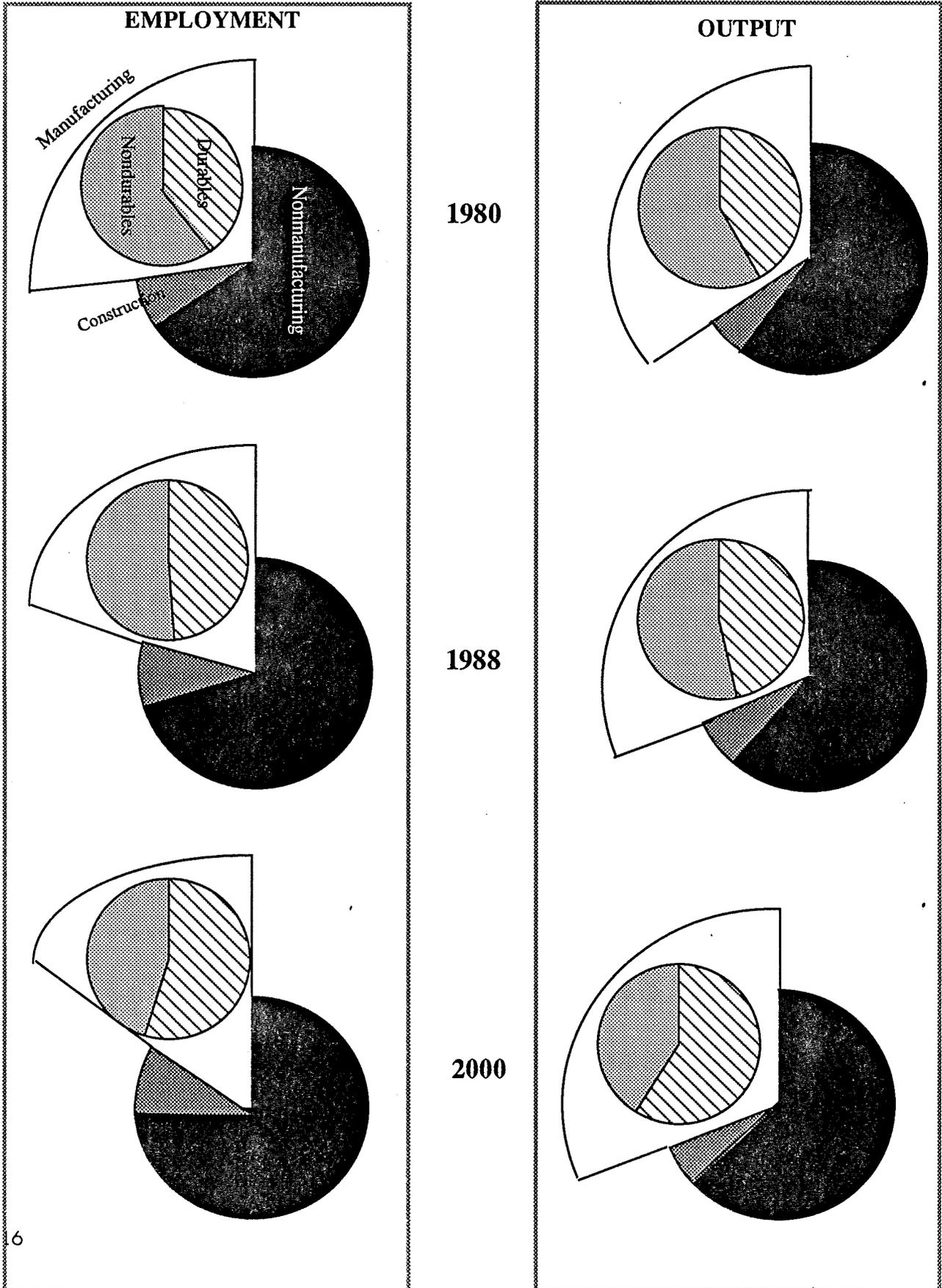
#### THE NATIONAL CONTEXT: ASSUMPTIONS DRIVING THE LONG TERM FORECAST

The SPO forecast is based on projections of U.S. economic trends developed by the Bureau of Labor Statistics, U.S. Department of Labor. Among the assumptions incorporated into this forecast are:

- Two recessions in the 12 years between 1988 and 2000\*.
- Real GNP growth averaging 2.4% per year. This is below the growth experienced between 1972 and 1987, but slightly above the 1979-1987 period which included two recessions.
- Labor productivity growth (business sector output per hour) increasing to 1.6% per year, up from 1.0% between 1979 and 1986.
- Substantial improvement of the U.S. foreign trade deficit over the period, shrinking to \$99 billion in 2000.
- Gradual improvement in the Federal budget deficit.
- Inflation averaging about 5% per year, with imported oil prices doubling from 1986 to 2000.
- BLS has concluded that assuming steady uninterrupted growth led to overestimation of cyclically sensitive industries. Thus, two recessions of one-year duration are assumed to occur between 1988 and 2000. (This should not be read as a prediction of a recession in any specific year, but rather as a recognition of the inevitability of the business cycle and its affect on long-term growth.)

# The Maine Economy to 2000

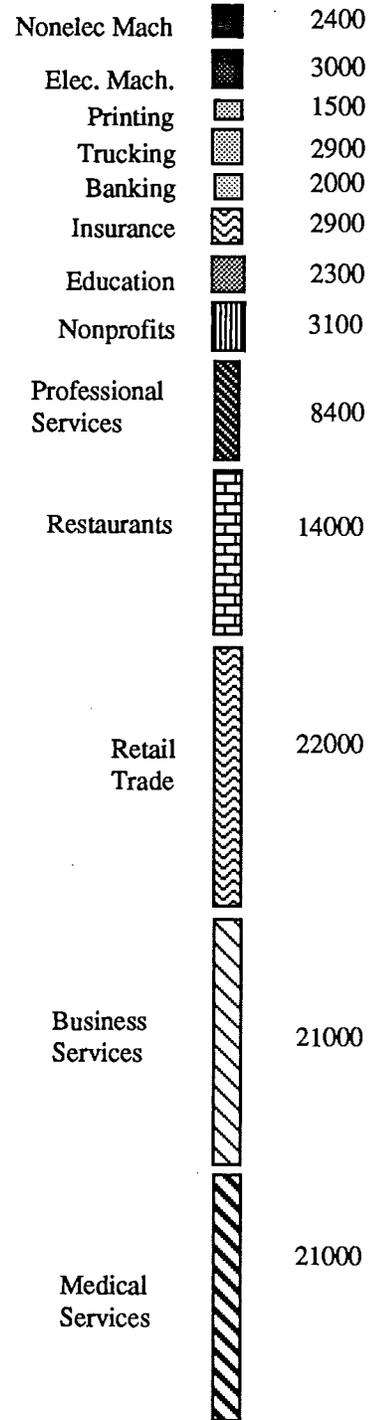
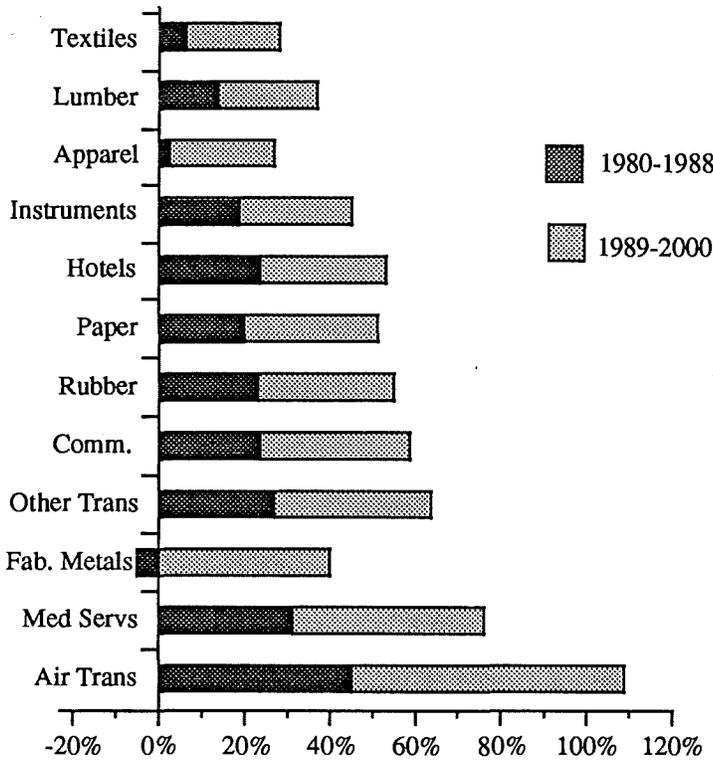
Two historic changes are occurring in the Maine economy. A long term shift towards nonmanufacturing jobs has been going on for some time, and will continue throughout the next decade despite recent improvements in manufacturing employment. At the same time, within manufacturing the state's traditional natural resources and clothing industries are being overtaken in both employment and output by machinery and electronics manufacturing.



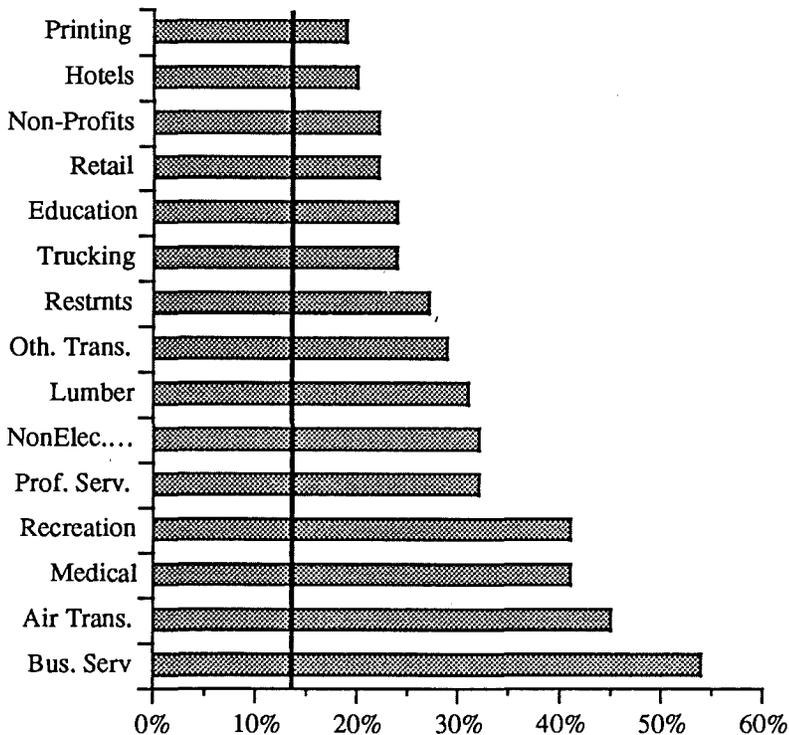
# The Maine Economy to 2000

*These sectors will increase production faster in the 1990's than in the 1980's,...*

*while these sectors are the ones that will produce the most new jobs in the 1990's,...*



*and these sectors will see employment grow faster than the statewide average (of about 14%)*



## WHAT WILL HAPPEN TO MAINE IF THERE IS A RECESSION?

With the arrival of 1989, the U.S. economy will have enjoyed 74 recession-free months—the longest in peace time history. While current trends do not indicate a recession in the next two years, most economists agree that a downturn must occur sometime in the future. The U.S. forecast which drives our projections of Maine growth assumes that two recessions occur between 1988 and the year 2000. This offers the opportunity to investigate how well Maine will weather the next recession.

If the next national downturn occurs as predicted by BLS (see page 15), with a relatively short-lived one year recession, economic growth in Maine will slow substantially, but not as much as the nation as a whole. Like the U.S., Maine employment is likely to be carried through the next recession by a strong non-manufacturing sector. Even Maine's manufacturing sector, projected to decline by nearly 2% is expected to be less severely affected than the nation. Consequently, Maine Gross State Product will decline, but less than the U.S. Gross National Product.

While outperforming the nation, Maine manufacturing employment and output may be somewhat more adversely affected in the next downturn than in the recession of the early 1980's. Because the State's industrial base has shifted toward metal products, machinery and electronics, Maine has lost some of the buffer offered by nondurable goods like paper, textiles and food processing which tend to react less severely to cyclical downturns.

Although it has become somewhat more sensitive to cyclical change, the improved diversity of Maine's economy base should provide the resiliency to bounce back rapidly from adversity.

