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Economic Currents: The State of the State Economy

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Economic currents

ILLUSTRATION: NAOMI SHEA

While no longer contracting, the Massachusetts economy has not yet turned the corner, either. Delays in the recovery of the technology sector, along with state government fiscal problems, have offset modest expansion in health, education, and residential real estate. But consumer confidence and spending, buoyed by low interest rates and rising home equity, have been making up for weak business capital spending. Could slow growth be just ahead?

ALAN CLAYTON-MATTHEWS

Massachusetts payroll employment declined by another 12,300 in the first five months of 2002. When excluding manufacturing and business services (employment losses in this sector are related to declines in technology production), payrolls remained steady, with a small gain of 1,300.

The household measure of state resident employment rose a modest 9,400 from January through May, and the state's unemployment rate is unchanged from November of last year. In aggregate, the economy has been balanced between the negative pull of a weak technology sector and a state budget crisis on one hand, and the positive push of strong residential real estate and steady consumer spending on the other. As has been the story for months now, the scale seems ready to tilt to the positive.

The Massachusetts Leading Economic Index is projecting a slow return to growth over the next six months, with real gross state product expected to grow by an annualized rate of 1.4 percent between May and November. This is about half the rate that economists expect the national

Economic Indices for Massachusetts

The Massachusetts Current Economic Index for May was 127.8, down 0.1 percent from April (at annual rates), and down 0.9 percent from May of last year. The current index is normalized to 100 in July 1987 and is calibrated to grow at the same rate as the Massachusetts real gross state product over the 1978–1997 period.

The Massachusetts Leading Economic Index for May was 1.4 percent, and the three-month average for March through May was 1.0 percent. The leading index is a forecast of the growth in the current index over the next six months, expressed at an annual rate. Thus, it indicates that the economy is expected to grow at an annualized rate of 1.4 percent over the next six months (through November). Because of monthly fluctuations in the data on which the index is based, the three-month average of 1.0 percent may be a more reliable indicator of near-term growth.

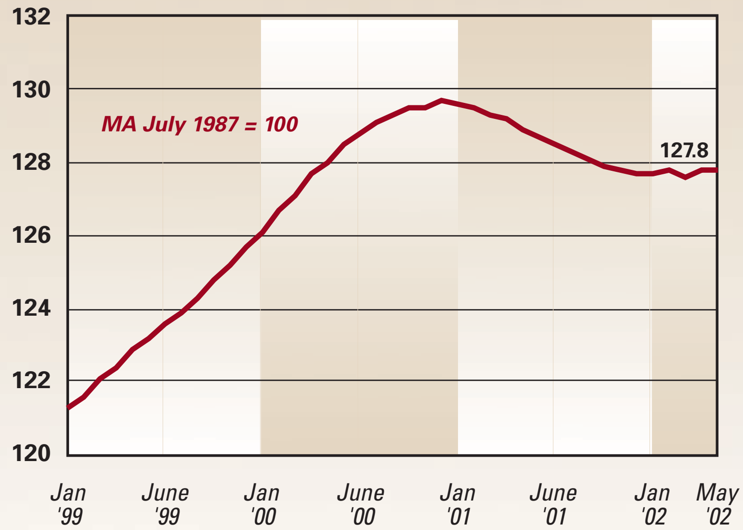
The Massachusetts economy has been essentially flat since November of last year. While no longer contracting overall, the economy has not yet turned the corner, either. Delays in the expected recovery in the technology sector, along with state government fiscal problems, have offset modest expansion in other sectors related to health, education, and residential real estate.

Nevertheless, it appears that the state's economy is poised to begin growing, albeit slowly. Outside of government, private payroll employment edged up slightly in the last three months. Withholding taxes and regular sales taxes—both good indicators of the underlying economy—have been growing in recent months. Most importantly, although the news from the broad IT sector is mixed, there is more good news than bad, especially if one focuses on production and sales measures rather than on stock prices. The tech turnaround, although delayed, is ever still just around the corner.

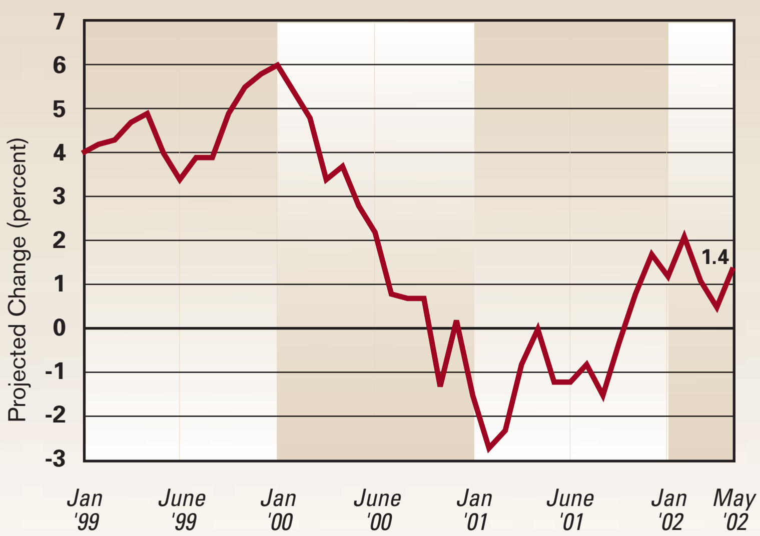
Consumers, whose confidence and spending have been buoyed by low interest rates and rising home equity, are still making up for weak business capital spending.

Submitted June 24, 2002

Massachusetts Current Economic Index



Massachusetts Leading Economic Index



Sources: The Conference Board; University of Massachusetts; Federal Reserve Bank of Boston economy to grow.[1] The turnaround in Massachusetts is still dependent on a pickup in business spending on information technology equipment and services.

When Will Recovery in the Tech Sector Begin?

For almost a year now, analysts following the information technology sector have been expecting a turnaround, but nothing has materialized. Employment in the technology-related manufacturing sectors is still declining, as is related employment in the business services sector. In the three months ending in May, the quarterly declines in employment in Massachusetts, at annualized rates, were 2.4 percent in industrial machinery, 8.1 percent in electronic and electrical equipment, 4.5 percent in instruments, and 7.5 percent in business services. The news from and about individual companies has been mixed, with more bad news—related to downward revisions in revenues or profits—than good. News continues to be especially bad in the telecom sector, where the expected return to growth is still not even "around the corner."

Despite continued job losses, however, declines in production and sales appear to be over and have been for several months. U.S. industrial production of information processing equipment, for example, has essentially been flat since September of last year. The same can be said for shipments of computers and electronics products nationwide.

Conditions seem ready for an expansion to begin in the technology sector, and there is some evidence that it already has. Nationally, business investment in information processing equipment and software grew at an annual rate of 4.7 percent in the first quarter of this year, after four successive quarters of decline. Inventories in the computers and electronics industry have fallen sharply for over a year. They have now returned to levels of the pre-Y2K surge in production and sales. If they continue to fall at this rate, in a month or two they will reach 1997 levels, relative to sales. New orders are now arriving at the same rate as shipments, so any growth in orders will quickly be translated into either sharply declining inventories or increases in production.

The semiconductor industry, which supplies chips for all kinds of information and communications equipment, has begun to turn around. In the three months ending in April, worldwide semiconductor sales were up 10.6 percent over the prior three months at an annualized rate. For American producers, sales were up at a 17.7 percent annual rate. Semiconductor equipment shipments have also begun to rise. In the three months ending in May, shipments were up a modest 6.2 percent over the prior three months at an annualized rate. Orders for semiconductor equipment rose sharply during the first five months of the year and were up almost 50 percent in May from a year earlier. Orders are now running 30 percent higher than shipments, meaning that output should continue to rise over the next several months. This turnaround is significant, because it means that producers of end products—computers, communications equipment, wireless communications, consumer electronics, etc.—are experiencing or anticipating expansions in their own markets. The Semiconductor Industry Association is projecting a modest expansion of 3.1 percent in semiconductor billings in 2002 and a full-fledged recovery beginning next year, with sales growth of 23.2 percent in 2003 and 20.9 percent in 2004.

Even when the technology sector does turn around, it will take a year of double-digit growth to return to 1998 production levels. U.S. shipments in May in the broad computers and electronic products NAICS industry sector was 13 percent below the 1998 average level and 23 percent below the average level in the peak year of 2000.

The Labor Market Appears to Be Stabilizing

While job losses in Massachusetts in the year ending in May were concentrated in business services (-31,800) and manufacturing (-23,600), there were also significant declines in transportation (-7,400, related to a drop-off in business travel as well as the effects of 9/11), wholesale trade (-5,800, related to the fall in sales of manufacturing), state government (-3,400), nondepository financial institutions (-2,800, primarily in stock, mutual funds, and money management), and retail trade (-2,100). Outside of manufacturing and business services, the number of payroll jobs in May was the same as in the prior year. Losses in other sectors were offset by job growth in health services (5,500, primarily in hospitals), private educational services (4,200), local public education (3,000), social services (2,900, concentrated in child care services), and construction (2,800). The job count in other sectors has changed little.

These patterns reflect weaknesses related to the troubles in technology production, tax revenues and the state budget, and stock markets. Strengths are related to consumer spending and residential real estate.

On net, conditions in the labor market appear to have stabilized and may in fact be improving. In contrast to the moderate job loss of 12,300 from January to May given by the state payroll survey, the household survey indicates that residential employment grew by 9,400 over the same period of time and that the labor force grew by 11,300. Differences of this magnitude in the two job counts are common, as both are surveys and are subject to error. Other positive signs include the fall in the state's unemployment rate in May back to 4.4 percent.

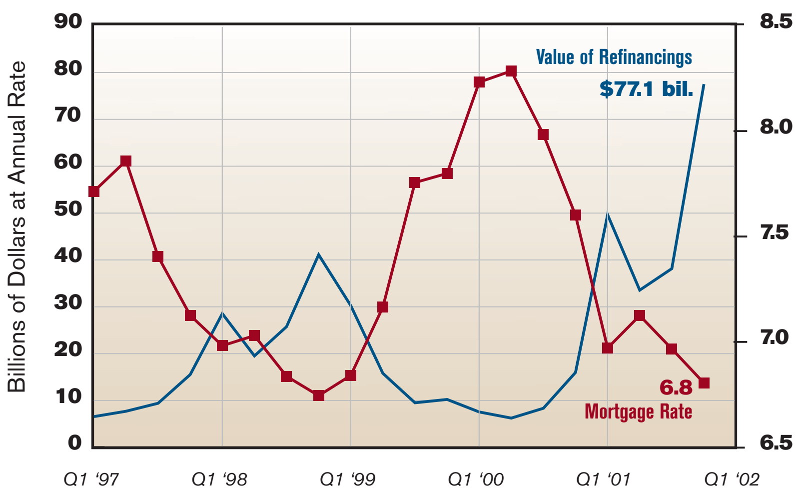
Two indicators with a good track record of reliability, largely because they are not surveys, are giving somewhat different signals. On the positive side, the withholding tax base—a good indicator of total wages paid by Massachusetts employers—was up for the third month in a row in May. According to this measure, total wages paid in the three months ending in May were up 4.0 percent at annual rates over the prior three months. This is the first significant increase in the withholding tax base in over year, which was down 6.3 percent from its peak in April 2001 and down 3.2 percent from a year ago.

On the negative side, initial unemployment claims were still high in May, at 44,000 on a seasonally adjusted basis. They have been above 40,000 since July 2001. This level is not inconsistent with the beginning of a turnaround, but neither is it inconsistent with a stalled recovery or even a double-dip recession. It does indicate that many employers in the technology sector are still shedding jobs.

Housing Wealth Is Buoying Consumers

The real estate sector, which is usually very weak during recessions, has been a source of strength during this downturn, thanks in large part to the low interest and mortgage rates that were fostered by aggressive monetary policy. Unlike the residential market of the last cycle, housing prices have continued to grow, countering stock market losses and maintaining household wealth. Massachusetts house prices rose 10.1 percent in the year ending in the first quarter of 2002, the third highest rate of appreciation in the country, behind Rhode Island and the District of Columbia.[2] Weak stock markets and low money market rates contributed to the demand for housing, as households shifted assets from equities and money markets to residential real estate.

Value of MA Mortgage Refinancings



The low rate of new residential construction throughout the last expansion also restrained supply, allowing housing prices to rise even during the recession. Low mortgage interest rates and rising house prices in turn led to a surge in mortgage refinancing that peaked at an annual rate of $77.5 billion in Massachusetts in the fourth quarter of 2001. To put this number in perspective, the prior peak, in the fourth quarter of 1998, was just over $40 billion. The underlying usual rate of refinancing in recent years has been about $10 billion annually. This refinance boom was national in scope. It was an important buttress to consumer spending that offset the decline in capital expenditures by businesses.

Consumer spending (excluding autos, food, and clothing) by Massachusetts households, as proxied by the sales tax base, appears to be on an upward trend since December, a reversal of a downward slide that began in the summer of 2000. It is difficult to make definite conclusions about short-run changes in consumer spending with these data for several reasons: regular state sales tax receipts, on which this proxy is based, are highly volatile from month to month; most food and clothing are exempt; and business spending accounts for perhaps 20 percent of such sales tax revenues. Nevertheless, the sales tax is a good indicator of medium- and long-term trends.

It appears that spending on taxable items in Massachusetts grew stronger than retail sales nationally during the last half of the 1990s and was much weaker from mid-2000 to the end of 2001. Interestingly, the Massachusetts real sales tax base has tracked New England consumer confidence (monthly consumer confidence is not available for the state) fairly well for several years. It followed the fall in consumer confidence from May 2000 to November 2001 (the real sales tax base fell from July 2000 to December 2001), and the subsequent rise in consumer confidence since November. In the first half of this year, consumers in Massachusetts, as in the nation as a whole, have made up for weak business spending in keeping the economy growing (nationally), or from contracting further (Massachusetts).

Trends in automobile purchases in Massachusetts, as measured by state motor vehicle sales taxes, reflect national patterns. Spending on automobiles in May reached levels attained at the peak of the last expansion. They have not, however, repeated the superlative peaks recorded in the fall and early winter in response to the generous incentives offered by automakers.

The Bust Is Still Decimating Tax Revenues

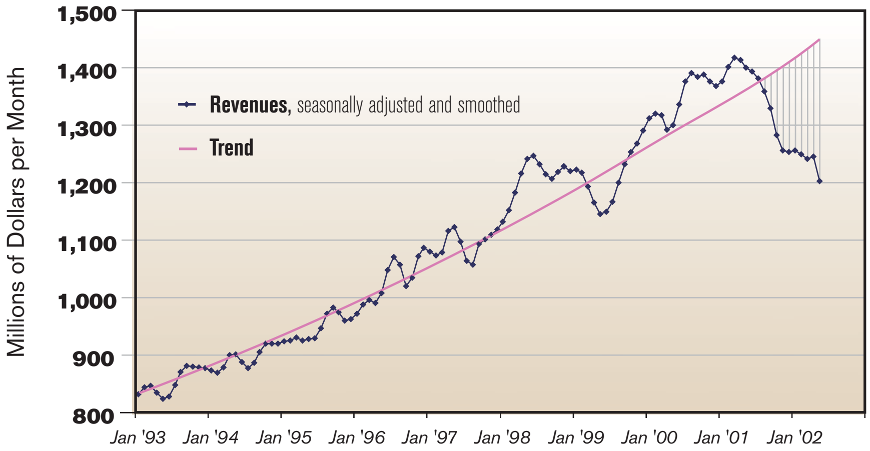
State tax revenues have been whipsawed by the boom and bust in the technology bubble to an extent that is unprecedented in recent history. It is way out of proportion to the swings in employment or production of the past few years. The bulk of the revenue losses has been in three tax components: personal income capital gains, personal income withholding taxes, and corporate excise tax revenues. According to DOR estimates for fiscal year 2002, which ended on June 30, personal income capital gains are expected to be down almost $640 million from the prior fiscal year, withholding about $560 million, and corporate taxes about $350 million. Total taxes are expected to be down almost $2 billion from fiscal year 2001.[3]

Most of the losses in withholding tax revenues from the prior fiscal year can be attributed to a fall in revenues derived from lump-sum payments to workers, essentially bonuses and realized stock options. In fiscal years 1996–99, withholding tax revenues derived from bonuses and other lump-sum payments amounted to $200 million to $300 million per year. In FY 2000 and 2001, they jumped to approximately $600 million and $700 million, respectively. In the first three quarters of FY 2002, which should account for essentially all of such revenues for the year, bonus and stock option revenue declined to about $140 million, a drop of over $550 million.[4]

These losses understate the magnitude of the budget problem, of course, because they do not take into account necessary increases on the expenditure side. Neither do they account for trends in revenue growth over the past several years, which tacitly get incorporated into the budgetary process through expectations about future revenue growth. The trend rate of growth from 1993 to the present in total state tax revenues (unadjusted for changes in tax rates or laws) was 6 percent per year. In calendar year 2000 and the first half of 2001, revenue collections were coming in at an annual rate of about $600 million above trend. In March of 2001, revenues began falling. They fell below trend in the second month of FY 2002 (August 2001), and have continued to fall, almost without interruption. Fiscal year 2002 revenues through May were running below trend at an annualized rate of $2.1 billion.

MA Tax Revenue

The gap from trend in fiscal year 2002 is $2.1 billion, at an annual rate.



Source: MA Department of Revenue; author's calculations

A Double-Dip Recession Is Possible, but Unlikely

There is enough bad news in the economy—accounting scandals, weak stock markets, the falling dollar, declines in foreign investment, and falling consumer confidence (at least nationally)—to make economists worry that the national economy could enter a recession again, even after two successive quarters of growth in GDP. Certainly, this is also a possibility for Massachusetts, whose economy has been on the edge of expanding and contracting for several months. However, the possibility remains small. The main question is whether consumer spending will tide the economy over until business spending picks up again. The answer appears to be yes.

Low interest rates, rising house values, a stabilizing job market, low consumer inflation, and rising labor earnings should tide households over for several more months of stagnant business spending, at which point the job market will begin to improve significantly. There are already signs that the turnaround in technology spending has begun, and even if it has not yet gained momentum, each month that passes increases the likelihood that it will. The nature of these products is that innovation quickly makes them obsolete, and lower-cost, more efficient equipment and products become available. As firms compete by minimizing costs, the benefit of replacing old equipment increases rapidly over time.

When the turnaround in such business investment does gain steam, the Massachusetts economy, which has been weaker than the nation's for more than a year, will be well positioned to "catch up" and grow quickly. In fact, it is likely that Massachusetts will emerge with an even stronger economy than a decade ago. Not only is the state one of the dominant locations for providing information technology and services, it also has a growing medical science sector, including pharmaceuticals, biotechnology, and medical devices. Its large pool of highly skilled and educated workers and its concentration of higher educational institutions make it an attractive location for businesses dependent on research and development. These businesses not only provide high-paying jobs, they are also the ones with the best long-term growth prospects.

It may be that Massachusetts is even better situated to draw such development than it has been in the past. According to the decennial census, this is the most highly educated state, behind the District of Columbia, in terms of the proportion of its population with four-year college educations and graduate degrees. Furthermore, over each of the last two decades, the proportion of Massachusetts residents with college and graduate educations has increased not only more rapidly than in the nation as a whole, but also more rapidly than other leading states. Assuming that the Commonwealth can retain its labor force (see Street Signs, page 21), this education advantage is perhaps the best single indicator of long-term economic health.

1 According to a recent *Business Week* poll of U.S. economy forecasters.

2 This is based on the Office of Federal Housing Enterprise Oversight's (OFHEO) house price indices for the United States, states, and metropolitan areas. The index is based on repeat sales or refinancings on the same single-family properties from data obtained from Fannie Mae and Freddie Mac. These indices control for quality, unlike the National Association of Realtors' indices, which are affected by changing quality of the mix of homes sold. However, they are limited to homes whose mortgages have been purchased or securitized by Fannie Mae or Freddie Mac, and thus underrepresent the high end of the housing market.

3 The capital gains estimate is from the Department of Revenue's *Briefing Book*, FY2003 Consensus Revenue Estimate Hearing, March 6, 2002. The other estimates are from DOR's *Monthly Report of Tax Collections through May 31, 2002.*

4 The methodology for these estimates is available from the author. For purposes of inter-year comparisons, all estimates reflect a withholding tax rate of 5.3 percent, the current tax rate.

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