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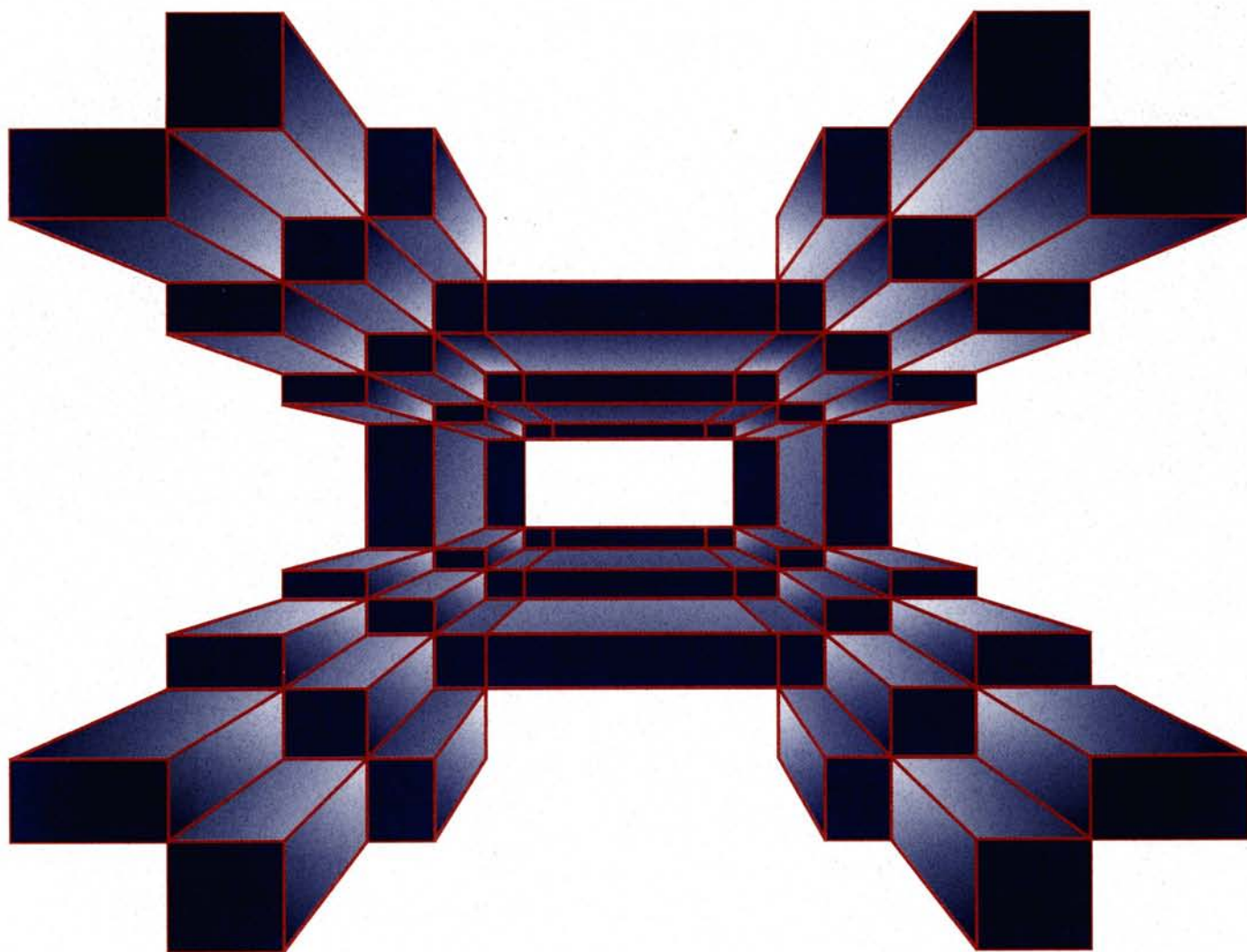
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# BUSINESS OUTLOOK

## for West Michigan



# **W. E. UPJOHN INSTITUTE for Employment Research**

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# BUSINESS OUTLOOK

## for West Michigan

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# WEST MICHIGAN VIEWPOINT

## Industrial Clusters: A New Look at Regional Economic Growth

With a growing list of resources only a mouse click away and just-in-time suppliers being able to deliver their products almost anywhere in the world on any desired schedule, one has to question if location still matters. Cannot any firm in any industry locate anywhere and be successful?

In fact, location still does matter. Michigan is the place for auto industry; New Jersey, pharmaceuticals; New York, finance; Hollywood, movies; and Grand Rapids, office furniture. Equally important, an industry's suppliers and support services also cluster in the same region. These industrial clusters occur when interconnected firms, focused on a particular market, find it advantageous to concentrate in a region. The economic advantages of being in an industrial cluster are many, and they include

- Being able to attract specialized employees and suppliers for the industry.
- Gaining access to specialized information generated by and for the industry.
- Being able to coordinate activities across companies to optimize their collective productivity and marketing. (For example, visiting buyers can see many vendors in a single trip. Recreational attractions can develop a common brochure or "look" that can reach more people and have a greater impact than individual, underfunded marketing efforts.)
- Monitoring the activities of your competitors.
- Working in a highly innovative environment where spinoffs and partnering are everyday affairs.

While industrial clusters can lower business costs, their primary focus is to increase productivity. Industrial clusters provide an environment that demands productivity advancement and innovation.

Cluster analysis has been on the forefront of economic development efforts for several years. The key in conducting an effective cluster analysis, according to Michael Porter, a leader in the field, is to evaluate the four ingredients to a successful cluster:

- **Demanding customers.** If the major end-users of your products do not demand excellence, then it is very difficult for your cluster to maintain the disci-

pline to compete globally. If, on the other hand, the end-users are never satisfied, always wanting it yesterday, with a better design and lower cost, then your cluster should remain highly competitive.

- **Quality suppliers.** Suppliers are vital partners, because a product is only as good as its weakest component.
- **Aggressive competitors.** The core firms in the cluster must be strong competitors, constantly pushing each other to perform better.
- **A quality environment.** The cluster's location must have the quality of life, public services, and proper environment for the industry to grow.

A successful cluster analysis requires more than the gathering of data on the health and status of an area cluster industry; it requires a larger view that can only be met through group meetings with the cluster's member firms. James Golub, another national leader in the field, has described this activity as "convening the market place." A cluster analysis approach opens the opportunity for a cluster's core firms to meet with their suppliers, private and public, and air common concerns. The results of such meetings benefit all. For instance, in Grand Rapids, the office furniture makers have developed common guidelines for their suppliers to use in packaging their components. In southwest Michigan, several recently formed cluster groups under the umbrella of Regional Edge are working with private and public suppliers on training, marketing, and transportation issues that affect the productivity of their particular cluster.

It is important to remember that industry clusters are generated through the market place; they are not planned. Further, clusters seldom move. The financial and pharmaceutical industries could save million of dollars by moving out of the greater New York area, but they do not. Yet, while clusters cannot be made or moved, they can be nurtured. Government, by working with the private sector, can reinforce and build on existing and emerging clusters, knowing that successful new firms often hatch from established ones.



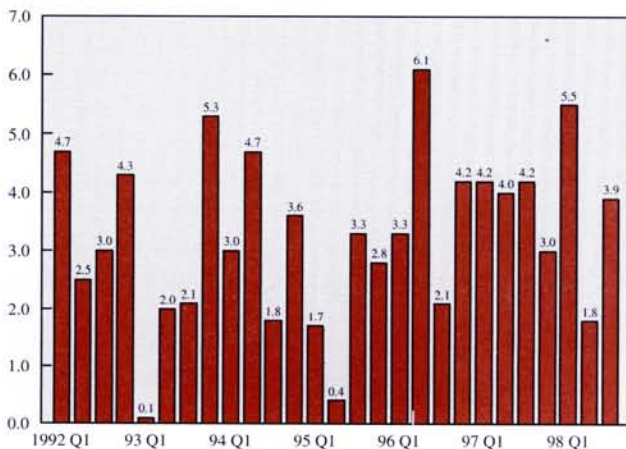
# NATIONAL ECONOMY

## OUTPUT

The national Gross Domestic Product (GDP) grew at a robust 3.9 percent annual rate in the third quarter, up from a 1.8 percent pace in the previous quarter. While on the surface the quarter looked strong, a deeper examination of the data reveals its weaknesses. Growing business inventories alone added nearly a full percentage point to the quarter's growth. In contrast, during the second quarter, a run on inventories took more than 2 percentage points off GDP growth. In short, the General Motor's strike depleted inventories during the second quarter and the auto company and its suppliers restocked in the third quarter. While these inventory fluctuations artificially drove down the second quarter's output and inflated the third quarter's performance, the ratio of nonfarm inventories to final sales remains quite low and does not indicate a growing inventory imbalance.

**Gross Domestic Product**  
(seasonally adjusted annualized rate)

Billions of chained 1992 \$

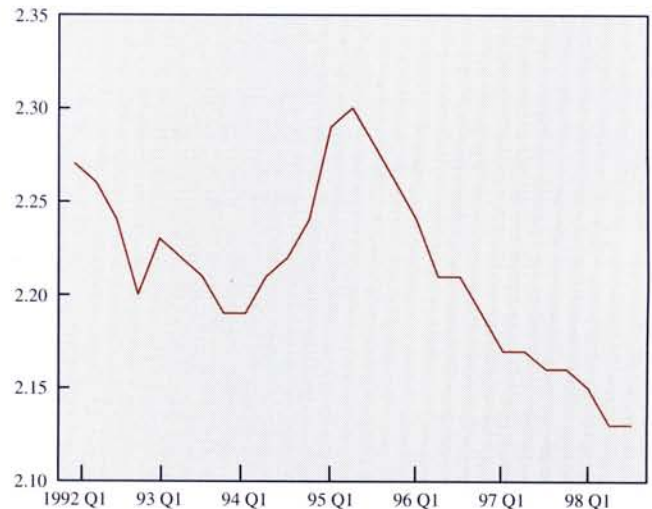


Consumer spending was the true source of growth in the third quarter. Expanding at a 4.1 percent annual rate, consumer expenditures accounted for 2.8 percentage points of the quarter's output growth. Recent statistics suggest that consumer spending may be losing steam, however. While consumer confidence is still strong, indicators suggest that it is falling, and consumer debt is again on the rise.

A greater concern for future growth is that investment slowed substantially in the third quarter. Taking out residential investment and inventories, this sector was actually a drag on growth. Hopefully, businesses are simply taking a breather and the quarter's poor performance is not an indicator of future expectations.

While not as big a problem as in the first and second quarters (where it shaved more than 2 points off GDP

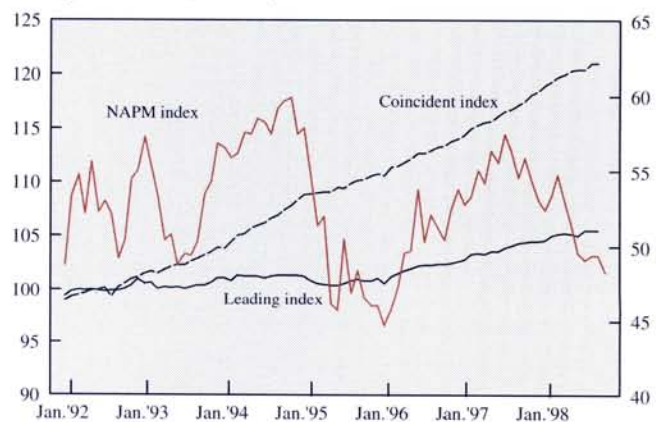
**Ratio of Nonfarm Inventories to Final Sales**



**Cyclical Economic Indicators**

Leading & Coincident (1992=100)

NAPM



growth), net exports continue to be a drag. The third quarter net exports cut 0.4 points off the GDP. While the worst may be over in the Asian crises, it may take a long time before their markets return to pre-crisis levels and for the current worldwide glut of commodities to be sold.

The Conference Board's Index of Leading Indicators is currently flat, which suggests slow but positive growth in the short run. The National Association of Purchasing Managers (NAPM) index is down sharply, and it has been below 50 (the point below which manufacturing is contracting) for four consecutive months. If consumer spending on goods becomes lackluster, manufacturers may face stagnant markets despite a moderating situation in Asia.

Forecasters at the University of Michigan call for GDP to grow at a slower 1.5 percent rate in 1999 and by 1.6 percent in 2000.

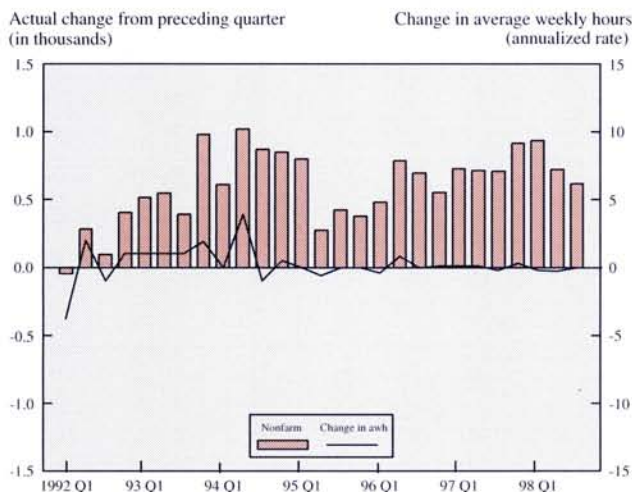


## LABOR MARKETS

While overall third-quarter job growth was fairly strong, monthly data show a continuing downward trend because the bulk of the quarter's jobs were created in August (309,000; falling to 157,000 in September and then to 116,000 in October). A similar trend is found in the quarterly data, as well: in the third quarter, 630,000 jobs were created, compared with 723,000 in the second quarter and 934,000 in the first quarter.

Manufacturing employment continues to be hard hit by the aftermath of the Asian crisis, with the sector cutting 198,000 jobs since March and 52,000 jobs in October alone. Manufacturing, however, is not alone. Investment bankers with exposure in Southeast Asia are also feeling the after-shocks; Merrill Lynch and Bankers Trust were among those announcing significant layoffs.

### Nonfarm Employment and Change in Average Weekly Hours

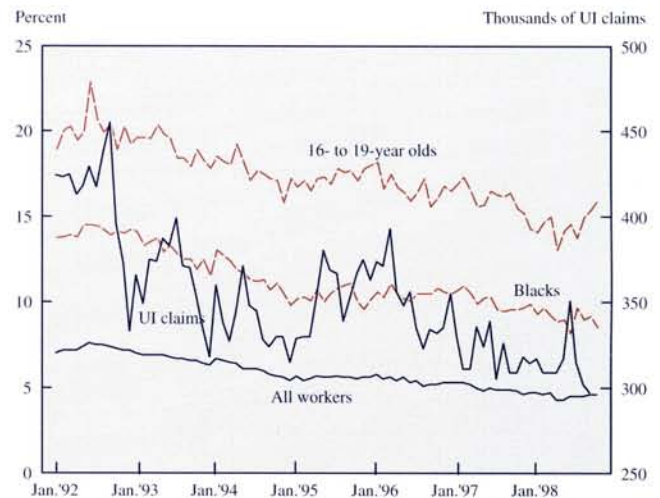


Average weekly hours of production workers, a leading indicator of future economic activity, fell slightly in the third quarter, offering additional evidence of a general slowdown in the national economy.

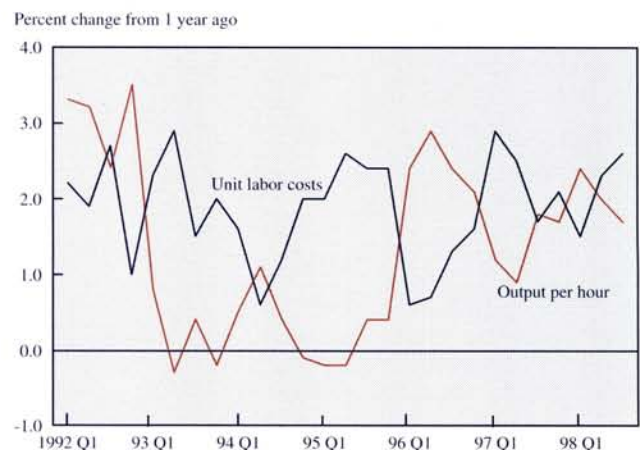
With slowing employment growth, it is not surprising that the nation's unemployment rate has been creeping upward during the past months, but it is still at the low rate of 4.7 percent. Unemployment among blacks has been drifting down over the last few months, while teenage unemployment has been increasing. Initial unemployment claims, discounting the spike caused by the GM strike, remain at low levels. Overall, the labor markets have remained quite tight.

With a tight labor market, analysts have been carefully watching for any sign of inflationary pressure. Up to this

## Unemployment Rates and Initial Claims



### Productivity and Unit Labor Costs (Fixed-Price Index)



point, wage pressures have been moderate. Average hourly earnings of production workers rose 0.8 percent in the third quarter. According to the third-quarter reading of the Bureau of Labor Statistics comprehensive employment cost index, wages and salaries increased by 4.0 percent during the 12-month period ending in September. Benefit costs rose a much lower 2.6 percent during the same period.

Fortunately, productivity continues to expand, keeping the nation's unit labor costs under control. Productivity rose 1.7 percent in the third quarter from the same quarter last year. The third quarter's productivity growth was below that of the first and second quarters, however.

The third quarter's productivity gains kept the nation's unit labor cost to a 2.6 percent increase over the same quarter last year. During all of 1997, unit labor costs rose 2.3 percent.

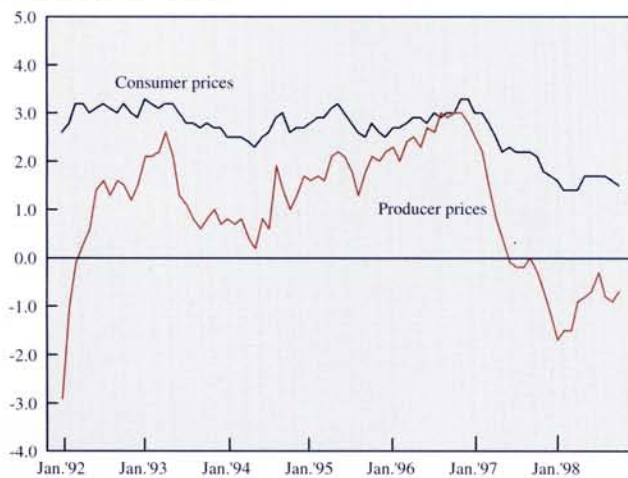


## INFLATION AND INTEREST RATES

In its November meeting, the Federal Reserve Board (Fed) lowered the federal funds rate, the rate banks charge for overnight loans, by a quarter percentage point to 4.75 percent. The Fed has dropped its target for the much-watched, short-term rate three times in seven weeks, including an unusual quarter-percentage-point drop between the regular meetings of its open market committee. According to most analysts, the Fed has been responding to a lack of available credit to even top-grade corporate borrowers. In addition, the nation's low rate of inflation gave the Fed room to lower the rates, while the nation's growing trade deficit added to the urgency to do so.

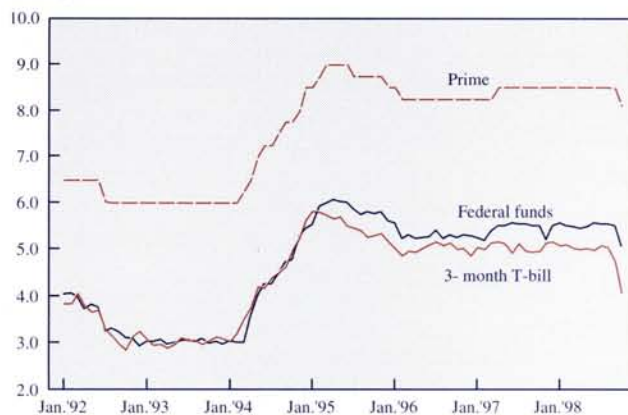
### Price Indexes

Percent change from 1 year ago



### Short-Term Capital Rates

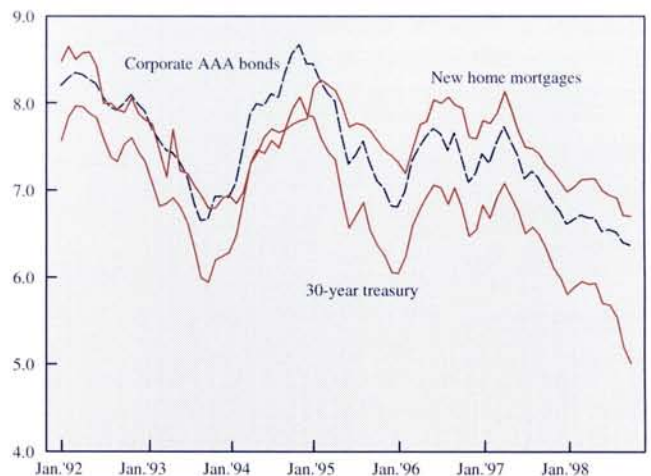
Percent, annual rate



Inflation remains quiet. The Consumer Price Index rose 1.5 percent during the 12-month period ending in October. The core rate, calculated by removing the volatile food and energy sectors, rose 2.5 percent during the 12-month period, up from 2.0 percent in September. Prices in apparel and transportation fell, but medical care continues its upward trend, increasing 3.6 percent over last year.

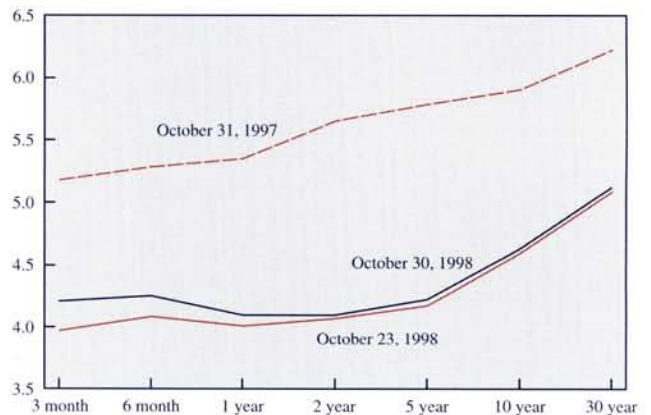
### Long-Term Capital Rates

Percent, annual rate



### Yield Curves

Percent, annual rate



Wholesale prices have increased over the past two months but have not recovered from the large August drop. During the 12-month period ending in October, prices were down 0.7 percent. Even excluding food and energy, the index is down 0.2 percent over the 12-month period. Falling commodity prices have been able to offset rising unit labor costs.

Short-term capital rates were down sharply during the third quarter. With the Russian economy in meltdown and uncertainty in many international markets, there has been a flight to U.S. treasury bills, driving down interest rates. Long-term rates have also dropped. The 30-year Treasury has dropped below 5 percent for the first time in more than 20 years.

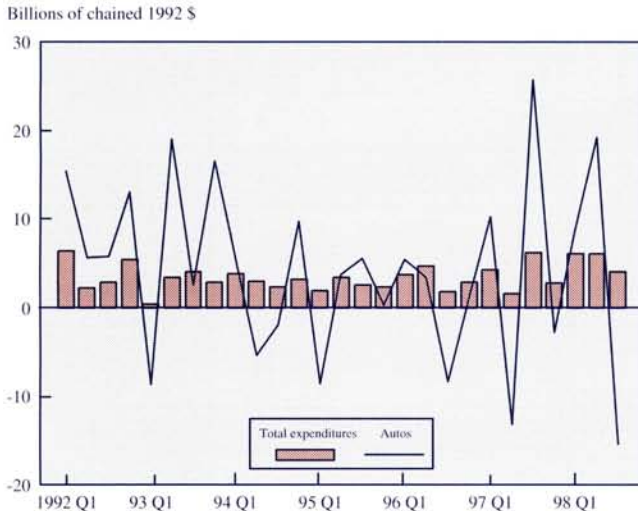
The current yield curve points to a possible slowdown in the national economy. All interest rates are significantly lower than they were a year ago. Usually a major sign of an approaching recession is an inverted yield curve, meaning long-term interest rates are lower than short-term interest rates. We do not have that scenario today, but the interest rate of a 6-month security is higher than that of a 5-year Treasury bond. According to one forecasting model based on the yield curve, the probability of a recession in the coming six months now stands at 15 percent.



## CONSUMER SPENDING

Consumer spending continues to be the main driver of the economy, increasing at a 4.1 percent annual rate in the third quarter. This is down, however, from the clearly unsustainable 6.1 percent annualized rates of the previous two quarters. Retail sales were weak in September, rising only 0.3 percent. Moreover, sales bounced back in October, increasing 1.0 percent for the month.

**Growth in Consumer Spending**  
(seasonally adjusted annualized rates)

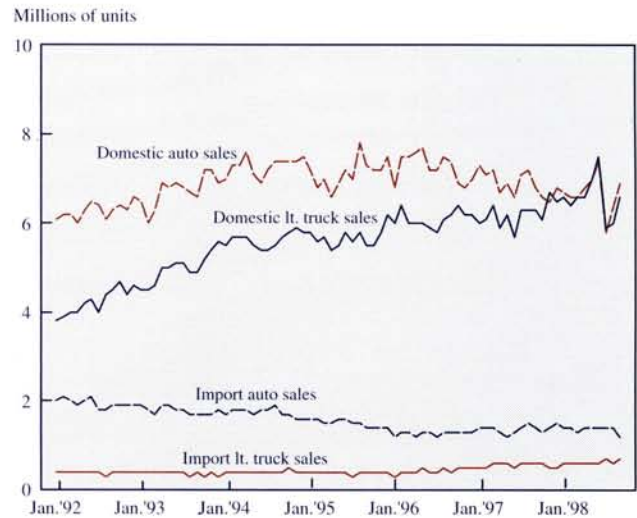


The consumer confidence index, as measured by The Conference Board, decreased to 117.3 in October, down from a 126.4 reading in September and from its high of 138.2 in June. This latest reading suggests that consumers are increasingly uncertain about their current situation, as well as that of the future. The October reading of the University of Michigan Index of Consumer Sentiment also points to a growing uncertainty among consumers.

The third quarter had a marked lack of growth in consumer purchases of durable and nondurable goods. Spending on durable goods rose at a 2.4 percent rate as consumers, frustrated at the lack of selection at auto dealerships due to the July GM strikes, headed for furniture and appliance stores. Consumer expenditures on autos fell at a 9.8 percent annual pace, while spending on furniture and appliances grew at a 16.2 percent annual rate. Consumer spending on nondurable goods increased at a moderate 2.1 percent annual rate. Consumer spending on services, on the other hand, rose a sharp 5.4 percent in the quarter.

While domestic auto sales took a sharp downturn as a result of the GM strike, there appears to be no long-term effect. In the past month, domestic auto sales have rebounded to about the level they were at before the strike. In September and October, the sales of cars and light trucks

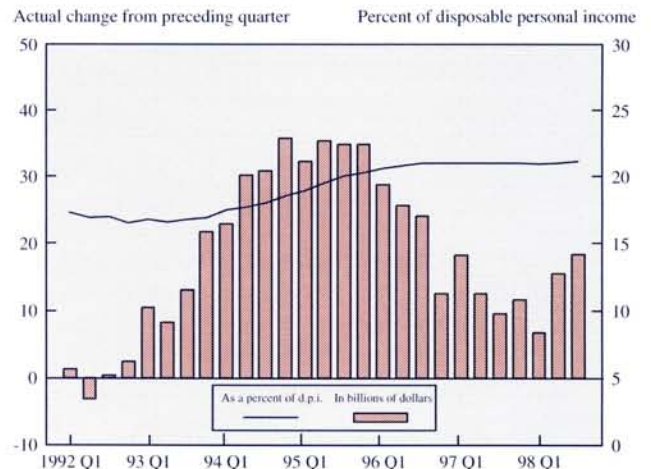
**Motor Vehicle Sales**  
(average annual rates)



reached a 16.0 and 17.0 million unit pace, respectively. An encouraging note to domestic producers is that it does not appear that the strike drove people to purchase imports; import sales were flat during the strike period. With the merger of Daimler-Benz and Chrysler and other consolidations in the global auto industry, the line between domestic vehicles and imports will become more blurred.

Consumer debt is back on the rise. Installment debt increased by \$18.4 billion in the third quarter, up from the previous quarter's \$15.5 billion. Installment debt as a percentage of personal income rose slightly. With debt load increasing, confidence waning, and employment growth slowing, it may become more difficult for consumers to continue to drive economic growth.

**Consumer Installment Debt**



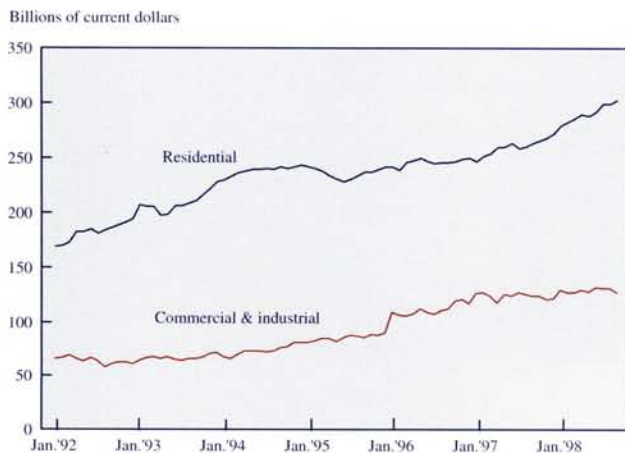


## INVESTMENT

Business investment growth came to a standstill in the third quarter, with excessive international capacity, lower profit margins, and slower orders taking their toll. In addition, the shutdown at General Motors in July trimmed \$16.2 billion (1992) dollars off of the quarter's pace. Producers' durable equipment fell at a 1.1 percent annual rate, down substantially from the second quarter's robust 18.8 percent annualized gain and the first quarter's remarkable 34.3 percent jump. Investment in structures declined at a 1.5 percent annual rate, the third consecutive quarter of decline.

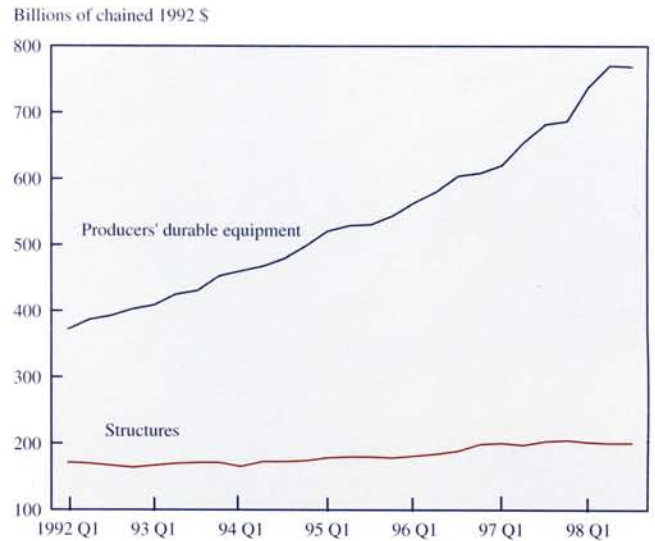
Corporate earnings among the 900 companies monitored by *Business Week* dropped 4 percent in the third quarter, and profit margins fell to 5.6 percent from 6.2 percent a year earlier. With profits being squeezed by modest wage gains and by increased international competition holding down prices, it is unclear if businesses are in a position to renew their investment spending.

### New Residential, Commercial, and Industrial Construction (seasonally adjusted annualized rate)

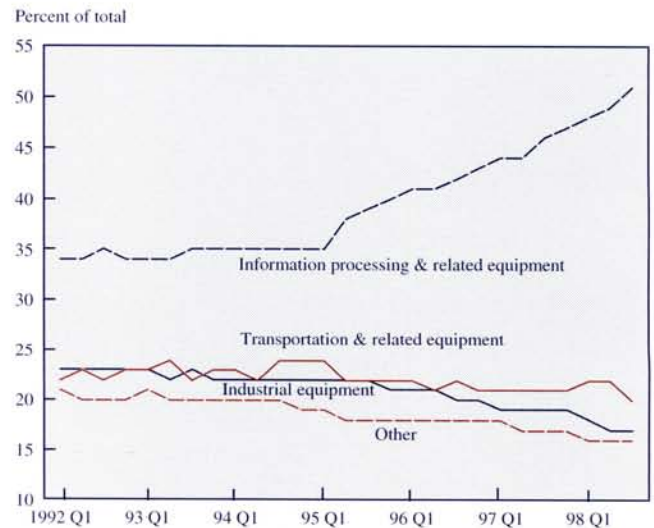


Many firms apparently are trying to escape the squeeze on profits by enhancing productivity through computerization. Information processing (and related) equipment continues to grab an increasing share of the investment pie. Expenditures on such equipment accounted for 51.9 percent of total producer's durable equipment expenditures in the third quarter, up from 35 percent just four years ago. Even in the lackluster third quarter, business investment in computers and peripheral equipment rose at a robust 55.5 percent annual rate. On the other hand, investment spending for industrial machinery rose at only 3.1 percent. Transportation equipment expenditures plunged at a 33.3 percentage annual rate due to the GM strike in July.

### Plant and Equipment Expenditures (seasonally adjusted annualized rate)



### Nonresidential Investment Composition in Producer Variables



Driven by decreasing mortgage rates and a still strong economy, the residential construction boom is continuing. Residential construction rose at a 8.6 percent annual rate in the third quarter after expanding at a 15 percent annualized rate during the first two quarters of the year. However, new housing sales are starting to taper off, with the seasonally adjusted annual rate in September dipping to 822,000 units from 830,000 units in August. While low mortgage rates should keep the housing market strong, the sale peak may have been reached.



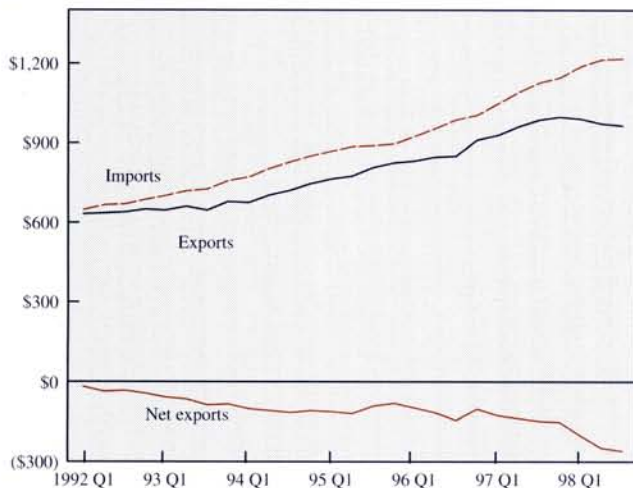
## INTERNATIONAL TRADE

In the wake of the Asian crises, the U.S. trade deficit continues to grow. However, the trade deficit is not being caused by a sharp upturn in imports, because there has been no significant deviation from the general upward trend. Instead, the trade gap is growing due to falling exports. With weak economies around the world, it is becoming increasingly difficult for U.S. producers to sell their wares abroad. There are signs that the worst may be over, but it will probably be a while before the export market recovers.

Imports grew at a paltry 1.3 percent annual rate in the third quarter, below its strong 9.3 percent pace of the second quarter. Exports declined at a 1.9 percent annual rate in the third quarter, following a large 7.7 percent decline in the previous quarter.

### U.S. Trade in Goods and Services (seasonally adjusted annualized rate)

Billions of chained 1992 \$



Export sales are declining, in part, because industrial production is slipping or stagnant among our major trading partners. Industrial production is down in Canada, Germany, and Italy. Production is still below first-of-the-year levels in Japan, although Japan may be finally rebounding from one of its deepest recessions.

The dollar has dropped sharply relative to other currencies since August, reaching down to levels recorded nearly a year ago. The recent decline suggests that global panic has begun to subside and that investors are looking less for the secure shelter offered by U.S. securities. In addition, with the Federal Reserve lowering short-term interest rates, the dollar should continue to weaken. A weaker dollar should help U.S. manufacturers be more competitive abroad and may reverse the decline in export sales. At the same time, the weaker dollar may reduce imports.

The big news in the currency markets, of course, is the introduction of the Euro on January 1, 1999. The Euro will

### Industrial Production (seasonally adjusted annualized rate)

Index: 1992=100



### Performance of the U.S. Dollar Relative to Foreign Currencies

Index: 1992=100



be a unified European currency of 11 European nations (Great Britain and Switzerland being notable exceptions). The exchange rate between the participating countries and the Euro will not be set until December 31, 1998. The major immediate impact is that there will no longer be a direct U.S. dollar exchange rate with any of the affected currencies, such as the German mark (DM). If a payment is specified in DM, for example, the exchange rate has to be determined by the U.S. dollar and Euro exchange rate and then from the Euro to the DM. The added step in the exchange process could be a computer nightmare during the changeover. Indeed, some analysts think it is a more difficult problem to solve than the more well-known year-2000 problem. Euro paper and coin currency will not be introduced for another year or so, and all the participating countries' paper and coin currency will be completely phased out within three years.



# MICHIGAN ECONOMY

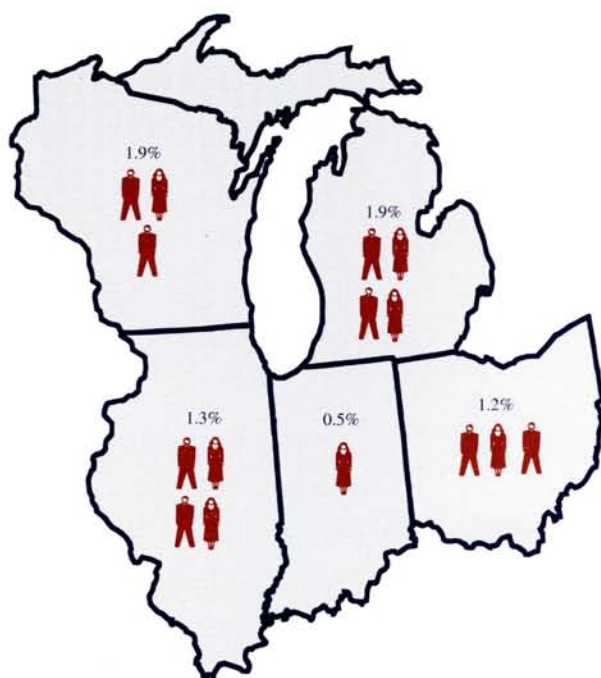
*Total employment in the state fell 0.4 percent in the third quarter, primarily due to the General Motors strikes in July. That work stoppage also contributed to the state unemployment rate inching up to 3.8 percent. Although statewide indicators compiled in the third quarter point to continued sluggish conditions for the state, we foresee moderate employment growth statewide during the final months of the year.*

Analysts at the Chicago Federal Reserve report that the Great Lakes region is still expanding, although its steel and agricultural equipment industries are being adversely affected by depressed international markets. The steel industry, in particular, is facing strong price pressures due to a substantial increase in imported steel. On the other hand, the region's auto companies and suppliers are hopeful that the fourth quarter will remain as strong as the third quarter. Demand for heavy trucks is expected to remain high as well. Researchers found regional retail sale reports to be "generally coming in at or below merchants' expectations." Finally, although the region's labor market remains tight, there are some signs of softening and little evidence of growing wage pressures.

**Percent Change in Total Employment  
September 1997 to September 1998**



Each figure represents an employment addition of 20,000 workers.



Total employment in the Great Lakes states increased 1.4 percent in the 12-month period ending in September. Michigan and Wisconsin tied for top honors for the period and Indiana came in last, with a modest 0.5 percent increase. The unemployment rates for all of the region's states continue to remain below that of the nation.

Employment in the region's manufacturing sector rose 0.5 percent in the 12-month period, with Michigan experiencing the strongest gain, 1.4 percent. Nationwide, manufacturing employment fell 0.1 percent during the period. Although employment in manufacturing rose, the hours logged by production workers declined across the Great Lakes states. Average weekly hours is considered a leading indicator, and the decline suggests a growing sluggishness in the region's manufacturing sector. However, the third quarter performance was negatively impacted by the GM strikes, as well.

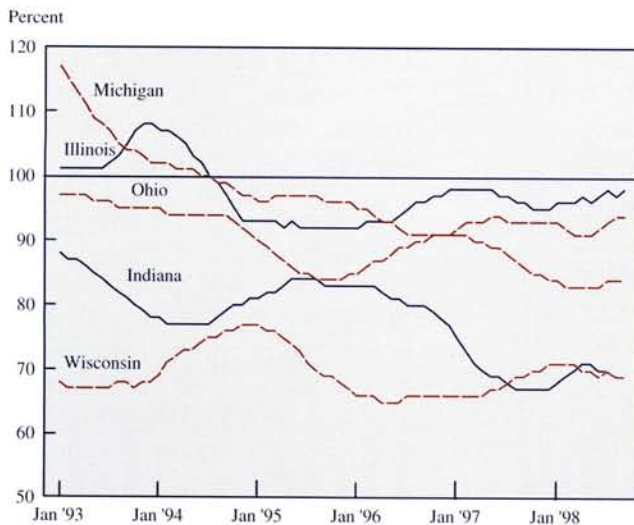
**Manufacturing Employment and Earnings  
(not seasonally adjusted)**

Great Lakes Region	September 1998	September 1997	Percent change
<b>ILLINOIS</b>			
Manufacturing employment	980,100	980,800	-0.1
Average weekly hours	41.6	42.3	-1.7
Average hourly earnings	\$13.83	\$13.35	3.6
<b>INDIANA</b>			
Manufacturing employment	682,300	678,300	0.6
Average weekly hours	40.9	43.8	-6.6
Average hourly earnings	\$14.86	\$14.79	0.5
<b>MICHIGAN</b>			
Manufacturing employment	979,600	966,300	1.4
Average weekly hours	42.8	45.0	-4.9
Average hourly earnings	\$18.35	\$17.28	6.2
<b>OHIO</b>			
Manufacturing employment	1,095,100	1,095,000	0.0
Average weekly hours	43.1	43.8	-1.6
Average hourly earnings	\$16.11	\$15.50	3.9
<b>WISCONSIN</b>			
Manufacturing employment	622,200	618,700	0.6
Average weekly hours	42.2	43.2	-2.3
Average hourly earnings	\$14.21	\$13.69	3.8
<b>UNITED STATES</b>			
Manufacturing employment (000)	18,773	18,784	-0.1
Average weekly hours	41.5	42.4	-2.1
Average hourly earnings	\$13.56	\$13.23	2.5

NOTE: September 1998 lists preliminary numbers.



### Unemployment Rates Relative to the Nation (moving 12-month average)



Even with falling consumer confidence and modest employment gains, the nationwide light vehicles sales in October reached 16.4 million units, above September's 15.5 million unit pace. With General Motors working to recapture market share lost during the strike, dealers are offering tempting incentives and price cuts to fuel demand. Analysts are predicting that the fourth and first quarters will be strong as well. Vehicle-buying attitudes have rebounded from the lows hit during the General Motors strike, and interest rates remain low. Many forecasters are calling for sales in 1999 to reach 15 million units.

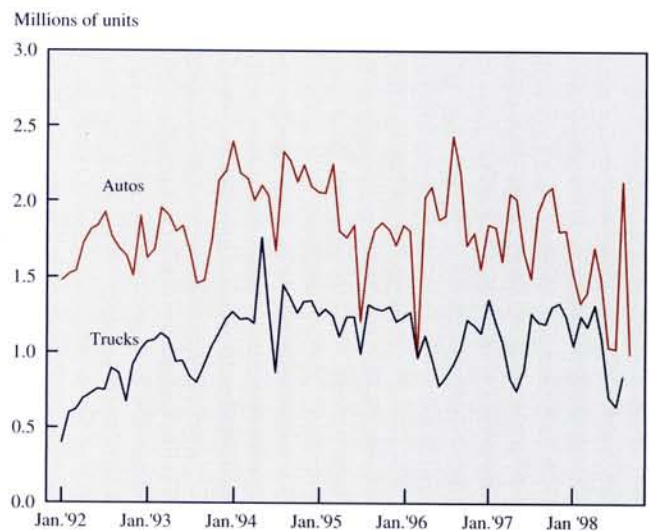
The auto industry's third-quarter financial statements were more robust than analysts expected. While General Motors posted a loss of \$809 million for the third quarter, the loss was not as great as analysts had feared, due to cost-cutting; company officials claim that it has cut \$2.9 billion through the reduction of purchased materials prices and manufacturing efficiencies. Third quarter earnings at Ford fell 11 percent, due in large part to the spinoff of Associates First Capital financing unit. Excluding the sale, the company's net income rose 10 percent, with the company cutting \$600 million in costs during the quarter. Finally, Chrysler posted a record-breaking 55 percent increase in net income for the quarter.

Employment in the state's goods-producing sector fell 2.1 percent due to the July strikes at General Motors. Relative to a year ago, employment in the state's auto-dominated transportation equipment industry was off by nearly 5.0 percent. On the plus side, especially for west Michigan, furniture employment increased by 4.3 percent during the past year. However, the work stoppage at GM cannot be blamed for all

of the state's decline in goods-producing employment; construction employment also fell 2.9 percent.

The negative impact of the GM work stoppage spilled over to the state's service-producing sector, as well. Employment inched up only 0.2 percent and was held back by employment reductions in retail, finance services, and transportation and public utilities. Government employment was off by 0.1 percent. While July was a tough month for many retailers, the industry as a whole reported its best August since 1994, according to the Michigan Retail Index survey conducted by the Michigan Retailers in association with the Federal Reserve Bank of Chicago. Moreover, the state's retailers remain optimistic about fall sale volumes.

### Michigan Motor Vehicle Production (monthly)



The state's unemployment rate rose to 3.8 percent in the quarter. The state's indicators point to continued sluggish employment conditions. Its Index of Leading Indicators dropped by 6.4 percent, while the Detroit's Help-Wanted Advertising index was off by 7.7 percent. All of the state's components of the Leading Indicator Index deteriorated in the quarter, but in large part reflect the impact of the General Motors strike rather than future conditions. Despite the indicator declines, we expect employment to pick up in the final quarter of the year.

The University of Michigan is forecasting statewide employment to increase by 1.4 percent in 1999 and by a further 1.0 percent in 2000. The expected job gains will be powered by the state's service-producing sector, as its manufacturing sector is expected to shed workers during both years, by 0.4 percent in 1999 and by a further 1.7 percent in 2000.



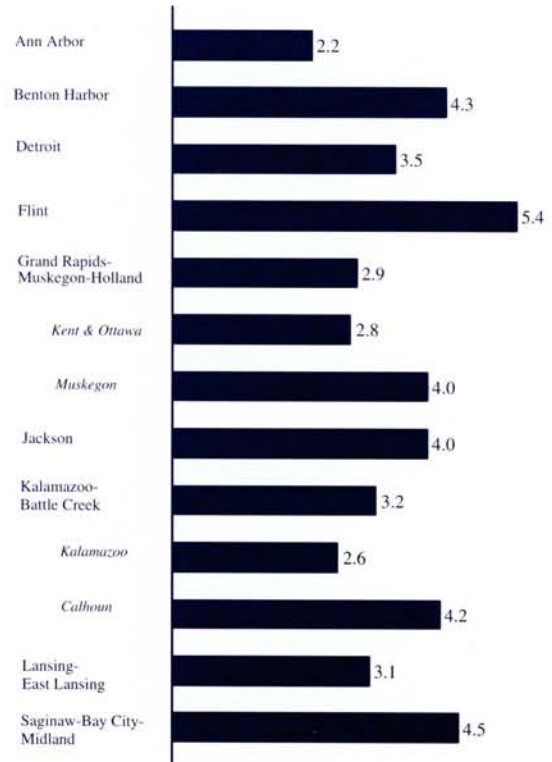
# WEST MICHIGAN ECONOMY

Total employment in west Michigan grew by 0.4 percent during the third quarter, despite the fallout from the July strikes at General Motors. The modest gain in employment was not enough to stop the region's unemployment rate from inching up to 3.4 percent. Employment at the region's manufacturers is expected to rebound during the current fourth quarter. We are forecasting total employment to increase 0.8 percent in the final quarter of the year and by an additional 0.3 percent in the first quarter of 1999.

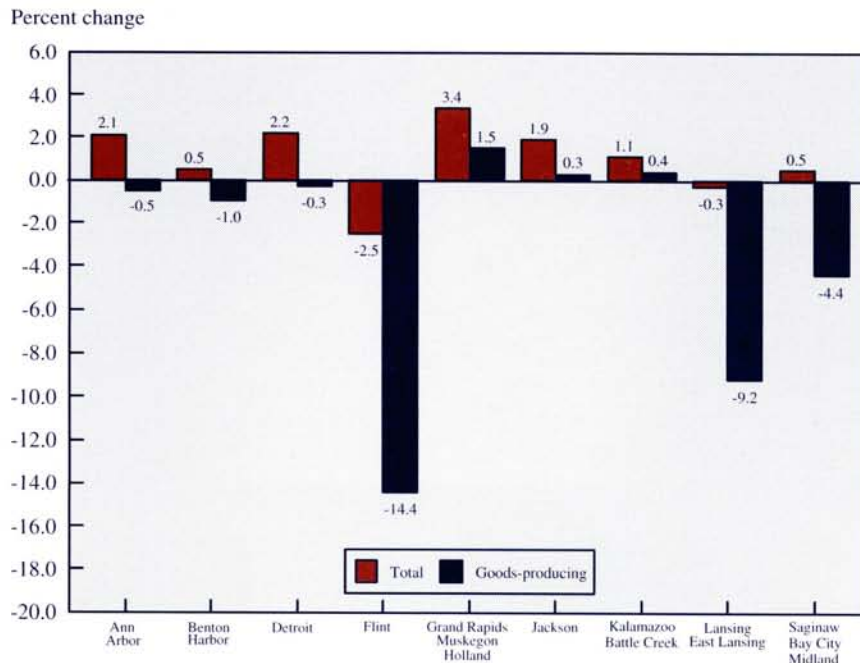
Employment gains in the state's nine metropolitan areas during the past four quarters were mixed, with the heavily auto-dependent metropolitan areas of Flint and Lansing dipping into negative territory. Grand Rapids experienced the strongest growth during the period, with its employment jumping by 3.4 percent, powered by its robust goods-producing sector.

Employment in the region's goods-producing sector was down 0.7 percent in the third quarter due to July's temporary layoffs among suppliers of General Motors. Work stoppages at the region's General Motors fabrication plants, Prince, Gentex, Eaton, Benteler, and other auto suppliers (excluding plastics) contributed to the third quarter's 1.5 percent decline in durable goods employment. Employment in the region's more diversified nondurable goods industry was off by only 0.1 percent.

**Michigan Metropolitan Areas  
3rd Quarter Unemployment Rates**  
(seasonally adjusted)



**Metropolitan Comparison**  
**Percent Change in Employment 1997 Q3 to 1998 Q3**  
(seasonally adjusted)





Employment in the region's service-producing sector rose a healthy 1.0 percent in the quarter, suggesting that the month-long, strike-related layoffs had little effect on the rest of the economy. Employment in retail trade rose 0.8 percent and services jumped up by 1.4 percent. In fact, all service-producing industries reported employment gains. Government employment was also up 0.6 percent in the quarter.

Our forecast for the region's third-quarter employment was on the money, but because of offsetting errors. We underestimated the region's robust employment growth in its service-producing sector and overestimated the strength of its goods-producing sector. Our metropolitan forecasts were on target with the exception of the Benton Harbor MSA, where we were off by 0.6 percent.

The region's indexes of economic activity were mixed in the third quarter. The Help-Wanted Advertising Index was

up 2.1 percent, suggesting continued growth in the region's service-producing sector. On the other hand, the area's Index of Leading Indicators was down by 6.4 percent, as all three components of the index deteriorated in the quarter. Two of the three components of the index, average weekly hours of production workers and the number of new claims for unemployment insurance, are, however, more reflective of the impact of the General Motors's strikes than they are a bellwether for the future.

We forecast employment in the three metropolitan areas to increase 0.8 percent in the final quarter and an additional 0.3 percent in the first quarter of 1999. The region's powerful goods-producing sector is expected to rebound a full 0.8 percent in the fourth quarter and then hold steady in the first quarter of 1999.

#### Major Economic Developments

##### Benton Harbor

Atlantic Automotive Components, a subsidiary of Ford, announced plans to construct its second local plant in Benton Harbor, which could provide up to 200 new jobs.

Precision Industrial Automation Inc., which recently purchased Wel-dun International, has eliminated about a third of the work force, 80 workers, due to a lack of business.

Reiter Automotive, a maker of acoustical materials for vehicle interiors, plans to create at least 125 jobs during the next two years.

##### Battle Creek

Kellogg announced it is reducing its salaried workforce in the area by 311 and terminating approximately 180 contract workers.

EPI Inc., a printer of books, manuals, and other materials, is adding 80 to 90 jobs.

Specialty Foods Corporation, an Illinois company, bought Archway. The purchase could eliminate 60 local positions at Archway's former headquarters.

More job cuts at Battle Creek's Grand Trunk Western Railroad yard are expected, as Canadian National said that it will eliminate 3,000 jobs.

##### Grand Rapids

Amway Corporation reduced its west Michigan workforce by 428 through its early retirement offer and involuntary layoffs.

Kentwood's Diesel Technology plant announced that it will create 250 new jobs as part of a \$50 million investment.

Bil-Mar Foods has reversed its previous announcement that it will close its Holland area plant and eliminate 390 jobs. The company now plans to expand the meat processing and packaging operation, which will

retain existing jobs and add as many as 120 positions in the next three or four years.

CommonPoint Mortgage Co. in Grand Rapids is closing, eliminating 120 local jobs from its already reduced workforce.

Huntington Bank may cut as many as 130 jobs, the cuts resulting from its purchase of First Michigan last year.

Autodie has laid off 125 workers from its workforce of 860 because orders have slipped.

In Greenville (Montcalm County), Frigidaire announced that poor market conditions are forcing it to shut down its second shift, affecting 900 of its 3,000 workers.

In Otsego (Allegan County), Rock-Tenn Corporation announced that it is closing its paperboard converting activities, eliminating about 74 jobs.

##### Kalamazoo

General Motors announced that its Comstock Township plant will close in July 1999. Currently the plant employs 1,100.

Benteler Industries announced that it is hiring for 140 new jobs as they make a \$44 million expansion.

Parker Abex NWL, an aircraft components maker, announced that it will lay off 71 workers in January.

In Van Buren County, Lincoln Plating Company announced that it is adding 75 jobs in its Bangor nickel-chrome metal finishing plant, and Scott Technologies will add 92 workers.

##### Muskegon

Howmet, the county's largest employer, picked Whitehall over a competing site in Texas for a \$50 million expansion that will employ an additional 580 workers.

Brunswick is eliminating nearly 50 positions as it moves its electronics operation to Indiana.

#### West Michigan Employment Forecasts

West Michigan (3 MSAs)	Q3 forecast results			Short-term forecasts			
	Actual	Forecast	Percent error	1998 Q4	Percent change	1999 Q1	Percent change
Benton Harbor	71,670	72,080	0.6	72,120	0.6	72,240	0.2
Grand Rapids-Muskegon-Holland	572,040	571,830	0.0	576,890	0.8	578,670	0.3
Kalamazoo-Battle Creek	211,850	211,290	-0.3	213,290	0.7	213,590	0.1
West Michigan							
Goods-producing	263,450	265,080	0.6	265,510	0.8	265,380	0.0
Service-producing	493,860	492,280	-0.3	498,150	0.9	500,180	0.4
Government	98,310	97,840	-0.5	98,640	0.3	98,950	0.3
Total	855,620	855,200	0.0	862,300	0.8	864,510	0.3

NOTE: Individual areas may not sum to total due to rounding in the seasonal adjustment procedure.



**Michigan Statistics**  
(adjusted for seasonal variations)

Measure	1998 Q3	1998 Q2	Percent change Q2 to Q3	1997 Q3	Percent change Q3 to Q3
<b>Employment</b>					
Total employment	4,506,470	4,526,200	-0.4	4,436,150	1.6
Goods-producing	1,143,220	1,167,620	-2.1	1,147,170	-0.3
Construction & mining	186,430	192,000	-2.9	182,170	2.3
Manufacturing	956,790	975,630	-1.9	965,010	-0.9
Durable goods	712,930	730,510	-2.4	723,130	-1.4
Nondurable goods	243,860	245,120	-0.5	241,870	0.8
Private service-producing	2,705,920	2,700,560	0.2	2,643,810	2.3
Transportation & pub. utilities	175,130	175,460	-0.2	172,760	1.4
Wholesale trade	232,470	232,270	0.1	227,790	2.1
Retail trade	828,680	829,100	-0.1	816,350	1.5
Finance, insurance & real estate	207,810	208,540	-0.4	205,760	1.0
Services	1,261,820	1,255,200	0.5	1,221,150	3.3
Government	657,330	658,020	-0.1	645,170	1.9
<b>Unemployment</b>					
Number unemployed	193,660	182,120	6.3	193,630	0.0
Unemployment rate	3.8	3.6	5.6	4.0	-4.3
<b>State indexes</b>					
Help-wanted ads:					
Detroit	144	156	-7.7	143	0.7
West Michigan (2 MSAs)	148	145	2.1	137	8.0
Leading indicators <sup>a</sup>	102	109	-6.4	112	-8.9
Local components:					
Average weekly hours	42.8	44.5	-4.0	44.4	-3.6
UI initial claims	18,243	12,980	40.5	12,976	40.6
New dwelling units <sup>b</sup>	43,694	44,112	-0.9	40,070	9.0

SOURCE: W.E. Upjohn Institute for Employment Research. Based on dwelling data from F. W. Dodge Division, McGraw Hill Information Systems Company. Detroit Help-Wanted Index from The Conference Board, and employment data from MESA.

NOTE: Categories may not sum to total due to rounding.

<sup>a</sup>National components of the leading indicators are in Table A-3.

<sup>b</sup>Seasonally adjusted annual rates.

**Michigan Industry Employment Change**  
**Third Quarter to Third Quarter**  
(unadjusted for seasonal variations)

Industry	1998 Q3	1997 Q3	Percent change	Industry	1998 Q3	1997 Q3	Percent change
<b>Goods-producing</b>	1,160,600	1,164,633	-0.3	Auto dealers & serv. stations	89,133	89,533	-0.4
Lumber & wood products	17,567	17,467	0.6	Apparel & accessory stores	31,000	32,933	-5.9
Furniture & fixtures	40,233	38,567	4.3	Home furn. & equip. stores	33,933	34,233	-0.9
Primary metals	36,733	36,200	1.5	Eating & drinking places	300,867	294,967	2.0
Fabricated metals	124,233	125,333	-0.9	Business services	301,767	287,567	4.9
Industrial machinery	135,400	135,367	0.0	Health services	373,100	367,933	1.4
Electronic equipment	35,933	34,233	5.0	Private educational services	39,167	38,333	2.2
Transportation equipment	270,367	284,233	-4.9	Social services	94,933	89,867	5.6
Food & kindred products	43,067	42,100	2.3	<b>Government</b>	615,000	603,567	1.9
Apparel	18,067	18,533	-2.5	Federal government	57,100	55,933	2.1
Paper & allied products	20,667	21,100	-2.1	State government	161,633	155,967	3.6
Printing & publishing	44,833	43,600	2.8	Local government	396,267	391,667	1.2
Plastics & rubber	65,300	67,800	-3.7	Local gov't health services	13,233	13,167	0.5
<b>Private service-producing</b>	2,728,700	2,667,233	2.3	Local gov't education	211,833	207,800	1.9
General merchandise stores	134,233	128,867	4.2				
Food stores	108,533	108,233	0.3				



**West Michigan (3 MSAs) Statistics**  
(adjusted for seasonal variations)

Measure	1998 Q3	1998 Q2	Percent change Q2 to Q3	1997 Q3	Percent change Q3 to Q3	Forecast 1998 <sup>a</sup>		Forecast 1999 <sup>a</sup>	
						Q4	Percent change	Q1	Percent change
<b>Employment</b>									
Total employment	855,620	852,230	0.4	834,600	2.5	862,300	0.8	864,510	0.3
Goods-producing	263,450	265,310	-0.7	260,850	1.0	265,510	0.8	265,380	0.0
Construction & mining	37,700	37,320	1.0	36,140	4.3				
Manufacturing	225,760	227,980	-1.0	224,710	0.5				
Durable goods	141,320	143,470	-1.5	140,520	0.6				
Nondurable goods	84,430	84,510	-0.1	84,200	0.3				
Private service-producing	493,860	489,190	1.0	477,920	3.3	498,150	0.9	500,180	0.4
Transportation & pub. utilities	29,240	29,130	0.4	28,370	3.1				
Wholesale trade	46,380	46,110	0.6	45,030	3.0				
Retail trade	159,100	157,870	0.8	154,630	2.9				
Finance, ins. & real estate	36,170	36,120	0.1	35,760	1.1				
Services	222,980	219,960	1.4	214,140	4.1				
Government	98,310	97,730	0.6	95,830	2.6	98,640	0.3	98,950	0.3
<b>Unemployment</b>									
Number unemployed	25,520	25,360	0.6	26,490	-3.7				
Unemployment rate	3.4	3.3	1.2	3.8	-11.1				
<b>Local indexes</b>									
Help-wanted ads (2 MSAs)	148	145	2.1	137	8.0				
Leading indicators <sup>b</sup>	103	110	-6.4	113	-8.8				
Local components:									
Average weekly hours	41.8	42.1	-0.7	42.8	-2.5				
UI initial claims	2,149	1,584	35.7	1,685	27.5				
New dwelling units <sup>c</sup>	8,080	8,835	-8.5	7,515	7.5				

SOURCE: W.E. Upjohn Institute for Employment Research. Based on dwelling data from F.W. Dodge Division, McGraw Hill Information Systems Company, ad count from the five major daily newspapers, and employment data from MESA.

NOTE: Categories may not sum to total due to rounding.

<sup>a</sup>Percent change from the preceding quarter.

<sup>b</sup>National components of the leading indicators are in Table A-3.

<sup>c</sup>Seasonally adjusted annual rates; does not include Allegan County or Van Buren County.

**West Michigan Industry Employment Change**  
**Third Quarter to Third Quarter**  
(unadjusted for seasonal variations)

Industry	1998 Q3	1997 Q3	Percent change	Industry	1998 Q3	1997 Q3	Percent change
<b>Goods-producing</b>	266,467	263,767	1.0	<b>Private service-producing</b>	497,300	481,333	3.3
Primary metals	8,900	9,033	-1.5	Health services	61,700	60,600	1.8
Fabricated metals	28,500	29,300	-2.7				
Industrial machinery	31,767	31,700	0.2	<b>Government</b>	90,767	88,400	2.7
Food & kindred products	19,567	19,500	0.3	Federal government	9,967	9,367	6.4
Printing & publishing	10,733	10,367	3.5	State government	14,367	13,767	4.4
Plastics & rubber	17,000	17,500	-2.9	Local government	66,433	65,167	1.9

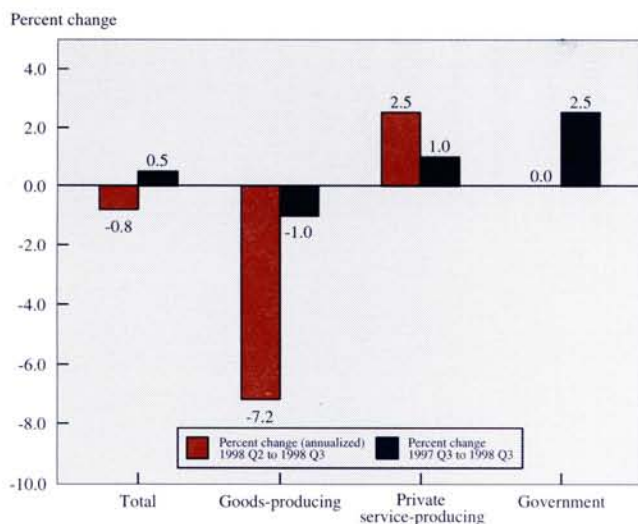
# BENTON HARBOR MSA

Total employment slipped 0.2 percent during the third quarter, in large part due to temporary layoffs at the county's auto suppliers caused by the July General Motors strikes. Surprisingly, the drop in the quarter's total employment did not stop the county's unemployment rate from declining to 4.3 percent. We expect employment to bounce back by 0.6 percent in the fourth quarter and to increase by a more modest 0.2 percent in the first quarter of the new year.

Employment in Berrien County's goods-producing sector dropped 1.9 percent in the third quarter due to a 2.2 percent decline in manufacturing employment. Employment in the county's construction industry rose 2.0 percent.

Workers who returned to work at the county's GM suppliers in August will be reflected in the fourth-quarter statistics. Recent announcements suggest further employment gains in the coming months. Atlantic Automotive Components, a subsidiary of Ford, announced tentative plans to construct its second local plant in Benton Harbor, creating up to 200 new jobs. Reiter Automotive, a maker of acoustical materials for vehicle interiors, will consolidate its operations into the former Zenith Data Systems building, generating at least 125 jobs during the next two years.

**Benton Harbor MSA Employment Growth**  
(seasonally adjusted)



**Benton Harbor**  
**Labor Market Conditions**

Industry	Average weekly wages		Percent change
	1997 Q2	1996 Q2	
Total	\$502.57	\$482.11	4.2
Manufacturing	723.83	660.34	9.6
Retail	236.02	226.82	4.1
Services	409.01	403.34	1.4
Finance	530.96	515.57	3.0

NOTE: Data not available for third quarter.

However, the county received some bad news as well. Precision Industrial Automation Inc., which recently purchased Weldun International, has eliminated about a third of the work force, 80 workers, due to lack of business. In addition, National-Standard, a maker of wire and wire products, announced minor employment reductions.

Employment in the area's service-producing sector rose 0.6 percent in the third quarter. Employment grew across all of the area's sectors except for transportation and public utilities. The 0.5 percent jump in retail trade points to a strong tourism season. Government employment was flat for the quarter.

As in the previous quarter, Berrien County's unemployment rate continues to fall even though the area lost jobs. Employers trimmed 150 workers from their payrolls, yet the ranks of the county's unemployed fell by 160 individuals and its unemployment rate fell to 4.3 percent. Assuming that the furloughed employees were not all out-of-county commuters, these statistics suggest that more and more residents are commuting out of the county to work or, worse, some of the unemployed have simply given up looking for work.

The area's Index of Leading Indicators fell 7.5 percent in the third quarter, with all of the local components of the index declining. However, part of the drop in the county's average weekly hours of production workers, as well as the jump in new claims for unemployment insurance, are related to the summer strikes at General Motors and do not reflect current or future trends. Indeed, our forecast for the last quarter of the year calls for employment to increase 0.6 percent due to a rebound in goods-producing employment. More modest growth is expected in the first quarter of 1999.



**Benton Harbor MSA**  
(adjusted for seasonal variations)

Measure	1998 Q3	1998 Q2	Percent change Q2 to Q3	1997 Q3	Percent change Q3 to Q3	Forecast 1998 <sup>a</sup>		Forecast 1999 <sup>a</sup>	
						Q4	Percent change	Q1	Percent change
<b>Employment</b>									
Total employment	71,670	71,820	-0.2	71,280	0.5	72,120	0.6	72,240	0.2
Goods-producing	22,140	22,560	-1.9	22,360	-1.0	22,270	0.6	22,120	-0.7
Construction & mining	2,530	2,480	2.0	2,460	2.8				
Manufacturing	19,620	20,070	-2.2	19,900	-1.4				
Durable goods	14,660	15,050	-2.6	14,890	-1.5				
Nondurable goods	4,950	5,030	-1.6	5,010	-1.2				
Private service-producing	40,920	40,670	0.6	40,530	1.0	41,240	0.8	41,500	0.6
Transportation & pub. utilities	2,920	2,940	-0.7	2,950	-1.0				
Wholesale trade	2,560	2,550	0.4	2,530	1.2				
Retail trade	13,630	13,560	0.5	13,440	1.4				
Finance, ins. & real estate	2,370	2,340	1.3	2,560	-7.4				
Services	19,440	19,280	0.8	19,050	2.0				
Government	8,600	8,600	0.0	8,390	2.5	8,610	0.1	8,620	0.1
<b>Personal income<sup>b</sup></b>	3,643	3,634	0.2	3,568	2.1	3,828	5.1	3,852	0.6
<b>Unemployment</b>									
Number unemployed	3,550	3,710	-4.3	3,750	-5.3				
Unemployment rate	4.3	4.5	-4.5	4.6	-6.6				
<b>Local indexes</b>									
Leading indicators <sup>c</sup>	101	109	-7.5	111	-9.2				
Local components:									
Average weekly hours	41.7	42.1	-1.0	42.6	-2.1				
UI initial claims	204	172	18.6	173	17.9				
New dwelling units <sup>d</sup>	549	840	-34.7	465	17.9				

SOURCE: W.E. Upjohn Institute for Employment Research. Based on dwelling data from F.W. Dodge Division, McGraw Hill Information Systems Company, and employment data from MESA.

NOTE: Categories may not sum to total due to rounding.

<sup>a</sup>Percent change from the preceding quarter.

<sup>b</sup>Millions of dollars.

<sup>c</sup>National components of the leading indicators are in Table A-3.

<sup>d</sup>Seasonally adjusted annual rates.

**Industry Employment Change**  
**Third Quarter to Third Quarter**  
(unadjusted for seasonal variations)

Industry	1998 Q3	1997 Q3	Percent change	Industry	1998 Q3	1997 Q3	Percent change
<b>Goods-producing</b>	22,400	22,700	-1.3	<b>Private service-producing</b>	41,500	41,000	1.2
Primary metals	2,167	2,167	0.0	Business services	4,667	4,533	2.9
Fabricated metals	1,400	1,400	0.0	Health services	6,167	6,033	2.2
Industrial machinery	4,667	4,633	0.7				
Food & kindred products	900	1,000	-10.0	<b>Government</b>	8,200	8,000	2.5
Printing & publishing	1,600	1,600	0.0	Federal government	433	400	8.3
Plastics & rubber	1,933	2,000	-3.3	State government	500	500	0.0
				Local government	7,267	7,033	3.3
				Local gov't education	4,567	4,367	4.6



# GRAND RAPIDS-MUSKEGON-HOLLAND MSA

Total employment rose 0.6 percent in the third quarter of 1998 in the four-county MSA. The job gains were impressive given the area's layoffs resulting from the July General Motors strikes. The region's increase in employment did not lower its 2.9 percent unemployment rate, however. We are forecasting that employment in the area will grow an even stronger 0.8 percent during the final quarter of 1998.

Employment in the region's goods-producing sector fell 0.6 percent in the third quarter, due in large part to the General Motors strikes. Many of the area's auto suppliers, including Prince, Gentex, and the area's General Motors plants, temporarily furloughed their production workers. Although all of these workers are back on the job, the temporary layoffs were enough to push the area's manufacturing employment statistics into negative territory. A longer view clearly shows the strength of the area's manufacturing base. For example, during the four-quarter period ending in September, employment in furniture production was up 3.4 percent, and in transportation equipment, 5.0 percent. Employment in the region's construction and mining industries rose 0.6 percent during the quarter, despite a 8.9 percent decline in the number of dwelling units put under construction.

The latest reading by the greater Grand Rapids purchasing managers in October suggests that the area's manufacturing is still very active. Sales, production, and employment indexes were still above their five-year trend, although not as robust as in spring. Falling prices were reported in 17 commodities, including steel and some

grades of plastic resin, while price increases were reported for only six items.

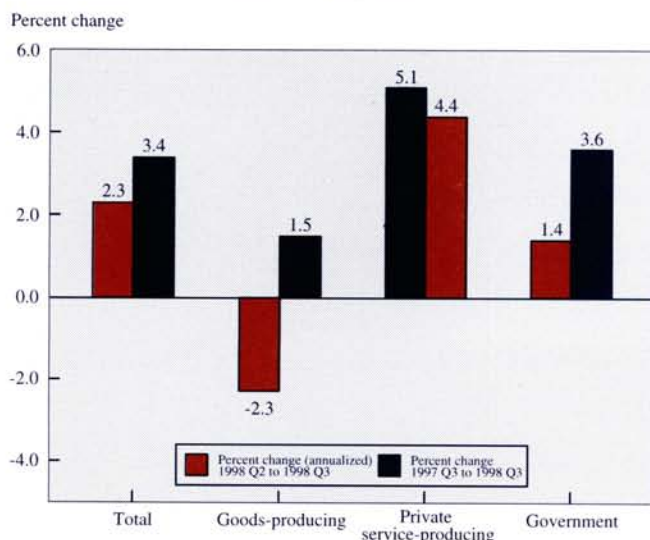
Employment in the area's service-producing sector rose a strong 1.2 percent in the third quarter, as job gains were posted in all major industries. The employment gains in retail suggest that workers affected by the strike-related work stoppage viewed it as a temporary event and did not alter their consumer spending. Government employment was up 0.3 percent.

The area's unemployment rate remained at 2.9 percent in the third quarter, although the number of individuals unemployed rose by 600.

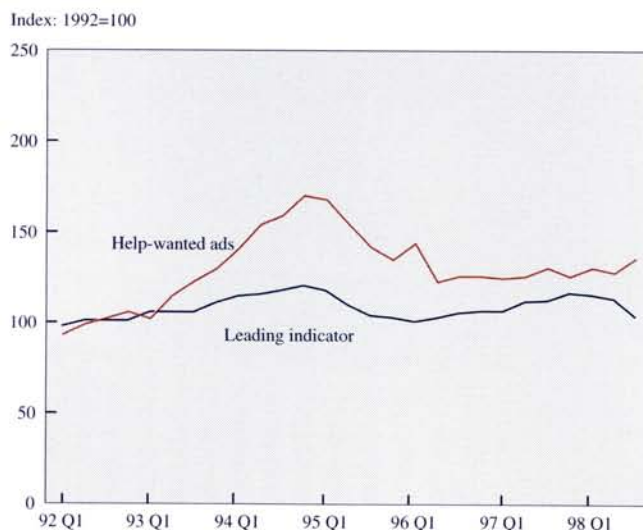
The area's economic indices are mixed. The area's Index of Leading Indicators dropped by 8.3 percent, as all three of the local components deteriorated in the quarter. However, in this instance these indicators reflected the impact of the GM strike on the third-quarter statistics more than they did current and future trends. The Index of Help-Wanted Advertising rose 4.6 percent.

Our forecast calls for employment in the four-county area to increase 0.8 percent in the final quarter of 1998 and then to slow to a 0.3 percent pace in the first quarter of 1999. The area's manufacturing sector is expected to rebound in the current fourth quarter, jumping up 0.7 percent. In addition, employment in the area's service-producing sector is expected to rise by 1.0 percent.

**Grand Rapids-Muskegon-Holland MSA**  
**Employment Growth**  
(seasonally adjusted)



**Grand Rapids-Muskegon-Holland MSA**  
**Employment Indexes**



**Grand Rapids-Muskegon-Holland MSA**  
(adjusted for seasonal variations)

Measure	1998 Q3	1998 Q2	Percent change Q2 to Q3	1997 Q3	Percent change Q3 to Q3	Forecast 1998 <sup>a</sup>		Forecast 1999 <sup>a</sup>	
						Q4	Percent change	Q1	Percent change
<b>Employment</b>									
Total employment	572,040	568,810	0.6	553,420	3.4	576,890	0.8	578,670	0.3
Goods-producing	183,220	184,270	-0.6	180,600	1.5	184,500	0.7	184,840	0.2
Construction & mining	26,310	26,150	0.6	25,320	3.9				
Manufacturing	156,910	158,120	-0.8	155,280	1.0				
Durable goods	103,530	104,810	-1.2	102,190	1.3				
Nondurable goods	53,380	53,310	0.1	53,090	0.5				
Private service-producing	333,640	329,550	1.2	319,570	4.4	336,990	1.0	338,140	0.3
Transportation & pub. utilities	19,120	19,010	0.6	18,520	3.2				
Wholesale trade	37,150	36,970	0.5	35,930	3.4				
Retail trade	104,990	103,910	1.0	101,210	3.7				
Finance, ins. & real estate	23,000	22,950	0.2	22,340	3.0				
Services	149,370	146,700	1.8	141,580	5.5				
Government	55,180	54,990	0.3	53,250	3.6	55,400	0.4	55,690	0.5
<b>Personal Income<sup>b</sup></b>	27,590	27,260	1.2	26,850	5.8	27,960	1.3	28,260	1.1
<b>Unemployment</b>									
Number unemployed	17,670	17,070	3.5	17,950	-1.6				
Unemployment rate	2.9	2.9	2.3	3.1	-6.5				
<b>Local indexes</b>									
Help-wanted ads	136	130	4.6	130	4.6				
Leading indicators <sup>c</sup>	104	113	-8.3	114	-8.8				
Local components:									
Average weekly hours	41.1	41.5	-0.9	42.2	-2.6				
UI initial claims	1,236	830	49.0	1,001	23.5				
New dwelling units <sup>d</sup>	5,626	6,175	-8.9	5,459	3.1				

SOURCE: W.E. Upjohn Institute for Employment Research. Based on dwelling data from F.W. Dodge Division, McGraw Hill Information Systems Company, ad count from the *Grand Rapids Press* and the *Muskegon Chronicle*, and employment data from MESA.

NOTE: Categories may not sum to total due to rounding.

<sup>a</sup>Percent change from the preceding quarter.

<sup>b</sup>Millions of dollars.

<sup>c</sup>National components of the leading indicators are in Table A-3.

<sup>d</sup>Seasonally adjusted annual rates; does not include Allegan County.

**Industry Employment Change**  
**Third Quarter to Third Quarter**  
(unadjusted for seasonal variations)

Industry	1998 Q3	1997 Q3	Percent change	Industry	1998 Q3	1997 Q3	Percent change
<b>Goods-producing</b>	185,167	182,433	1.5	Auto dealers & service	10,567	10,267	2.9
Furniture & fixtures	24,633	23,833	3.4	Eating & drinking places	36,833	35,667	3.3
Primary metals	5,333	5,467	-2.4	Depository institutions	7,900	7,700	2.6
Fabricated metals	21,600	21,967	-1.7	Business services	40,633	36,367	11.7
Industrial machinery	22,967	23,033	-0.3	Health services	39,067	38,033	2.7
Transportation equipment	9,833	9,367	5.0	Educational services	7,467	7,333	1.8
Food & kindred products	12,233	12,133	0.8	Social services	11,433	10,467	9.2
Apparel & other textiles	7,100	6,933	2.4	<b>Government</b>	50,700	48,900	3.7
Printing & publishing	6,267	6,100	2.7	Federal government	4,533	4,000	13.3
Plastics & rubber	10,000	10,367	-3.5	State government	6,200	5,833	6.3
<b>Private service-producing</b>	335,667	321,600	4.4	Local government	39,967	39,033	2.4
Gen'l merchandise stores	18,467	17,200	7.4	Local gov't education	24,400	23,133	5.5
Food stores	12,533	12,467	0.5				



# Grand Rapids-Holland Area (Kent and Ottawa Counties)

Total employment in Kent and Ottawa counties was estimated to increase 0.5 percent in the third quarter. The moderate gain in employment was not enough to keep the two-county unemployment rate from rising to 2.8 percent. During the fourth quarter, we expect employment to increase 0.9 percent in the two-county area, due in part to a 0.8 percent rebound in goods-producing employment.

Employment in the area's goods-producing sector fell an estimated 0.7 percent in the third quarter due the temporary layoffs at GM's auto suppliers in July. Latest reports from the area's manufacturing sector suggest a return to stable and sustainable growth. Kentwood's Diesel Technology announced that it will create 250 new jobs. Reversing itself, Bil-Mar Foods decided not to close its Holland area plant but will instead invest \$8.7 million to expand meat processing and packaging operations at that plant. In addition to retaining most, if not all, of its current 390 workers, the move will bring in as many as 120 jobs over the next four years.

On the downside, Amway Corporation has been affected by the Southeast Asian problems, reporting an 18.6 percent drop in sales. In response, the company is reducing its west Michigan workforce by 428 through an early retirement program and involuntary layoffs. Finally, Autodie laid off 125 workers from its workforce of 860 employees because orders have slipped.

The area's service-producing sector rose an estimated 1.2 percent in the third quarter. However, recent announcements indicate that this rate may slow. Spartan Foods announced that it is streamlining its distribution system and could eliminate 100 jobs locally. In the area's financial sector, Huntington Bank may eliminate 130 former workers of First Michigan Bank, and CommonPoint Mortgage Company (Grand Rapids) is eliminating 120 positions.

The area's economic indexes were mixed. The Index of Help-Wanted Advertising was up 4.3 percent, while the strike-affected initial claims for unemployment insurance shot up 61.1 percent. We are forecasting employment to increase 0.9 percent in the fourth quarter, due in part to a 0.8 percent rebound in goods-producing employment. Employment in the area's services-producing sector is expected to increase by 1.0 percent.

## Grand Rapids Labor Market Conditions

	Average weekly wages		Percent change
	1997 Q2	1996 Q2	
Total	\$547.54	\$526.42	4.0
Manufacturing	735.45	686.40	7.1
Retail	290.06	285.10	1.7
Services	448.22	449.02	-0.2
Finance	653.39	616.93	5.9

NOTE: Data not available for third quarter.

## Grand Rapids-Holland Area

Measure	1998 Q3	1998 Q2	Percent change Q2 to Q3	1997 Q3	Percent change Q3 to Q3	Forecast 1998 <sup>a</sup>		Forecast 1999 <sup>a</sup>	
						Q4	Percent change	Q1	Percent change
<b>Employment</b>									
Total employment	468,380	465,860	0.5	453,038	3.4	472,610	0.9	474,170	0.3
Goods-producing	146,010	147,070	-0.7	144,200	1.2	147,150	0.8	147,530	0.3
Service-producing	282,140	278,710	1.2	270,210	4.4	285,040	1.0	285,970	0.3
Government	40,230	40,070	0.4	38,630	4.1	40,420	0.5	40,670	0.6
<b>Personal Income<sup>b</sup></b>	22,610	22,340	1.2	21,350	5.9	22,920	1.4	23,180	1.1
<b>Unemployment</b>									
Number	12,767	13,460	-5.1	12,636	1.0				
Rate	2.8	2.6	6.5	2.9	-4.3				
<b>Indicators</b>									
Help-wanted ads	133	128	4.3	128	4.3				
UI claims	886	550	61.1	710	24.8				
New dwelling units <sup>c</sup>	4,705	5,256	-10.5	4,657	1.0				
		<b>Latest month (Oct.)</b>		<b>Previous month (Sept.)</b>					
Local Purchasing Management Index*		59.5		59.5					

NOTE: Figures are seasonally adjusted. \*Index = (percent survey reporting improvement) + 0.5 (percent survey reporting no change).

<sup>a</sup>Percent change from preceding quarter. <sup>b</sup>Millions of dollars. <sup>c</sup>Seasonally adjusted annual rates.



## Muskegon Area (Muskegon County)

Total employment moved up an estimated 0.7 percent in Muskegon County during the third quarter. The area's manufacturers were not as affected by the GM strikes as other areas. The quarter's employment gain was sufficient to push the area's unemployment rate down to 4.0 percent. We forecast area employment to increase by 0.6 percent in the final quarter of the year.

Employment in the county's goods-producing sector fell 0.3 percent in the third quarter, though many of the job losses were temporary.

Howmet, the county's largest employer, announced a \$50 million expansion that will generate up to 580 new jobs; 350 workers could be on board as early as July 1999. The county was competing for the expansion with sites in Texas and New Jersey. The plant will produce precision airfoil castings for aircraft turbine engines. Company managers and UAW Local 1243 leaders hammered out an award-winning (Harold Workman Labor/Management Award for labor-management cooperation), three-year contract extension that strongly contributed to the Whitehall site selection.

On the downside, Brunswick is eliminating nearly 50 positions as it moves its electronics operation to Indiana. In Newaygo County, Gerber announced that it is reorganizing the company headquarters in Fremont and could transfer or lay off approximately 100 white-collar workers. The plant,

which employs 600 production workers to make dry cereals, food for toddlers, and juices, will remain in Fremont.

Employment in the area's service-producing sector rose an estimated 1.3 percent, while government employment inched up only 0.1 percent.

The area's employment gains pushed its unemployment rate down to 4.0 percent in the third quarter. Indicators suggest that the joblessness rate may be taken down a few more percentage points in the coming months. The area's Index of Help-Wanted Advertising rose 3.9 percent. On the downside, initial claims for unemployment insurance rose 18.1 percent, and the number new dwelling units put under construction was down 3.6 percent. Still, we expect employment to increase by 0.6 percent in the final quarter and by an additional 0.3 percent in the first quarter of 1999.

**Muskegon  
Labor Market Conditions**

	Average weekly wages		Percent change
	1997 Q2	1996 Q2	
<b>Total</b>	\$500.65	\$478.52	4.6
Manufacturing	728.73	692.06	5.3
Retail	244.43	243.15	0.5
Services	434.12	418.70	3.7
Finance	533.41	513.39	3.9

NOTE: Data not available for third quarter.

**Muskegon Area**

Measure	1998 Q3	1998 Q2	Percent change Q2 to Q3	1997 Q3	Percent change Q3 to Q3	Forecast 1998 <sup>a</sup>		Forecast 1999 <sup>a</sup>	
						Q4	Percent change	Q1	Percent change
<b>Employment</b>									
Total employment	65,890	65,440	0.7	63,650	3.5	66,320	0.6	66,520	0.3
Goods-producing	18,380	18,430	-0.3	18,010	2.0	18,440	0.3	18,440	0.0
Service-producing	38,090	37,590	1.3	36,480	4.4	38,090	1.3	38,440	0.9
Government	9,430	9,420	0.1	9,160	2.9	9,440	0.1	9,470	0.3
<b>Personal Income<sup>b</sup></b>	3,510	3,460	1.2	3,320	5.5	3,550	1.2	3,590	1.1
<b>Unemployment</b>									
Number	3,802	3,660	3.9	4,744	-19.9				
Rate	4.0	4.2	-5.3	4.7	-14.0				
<b>Indicators</b>									
Help-wanted ads	146	141	3.6	138	6.1				
UI claims	336	284	18.1	279	20.6				
New dwelling units <sup>c</sup>	897	931	-3.6	777	15.5				

NOTE: Figures are seasonally adjusted. <sup>a</sup>Percent change from preceding quarter. <sup>b</sup>Millions of dollars. <sup>c</sup>Seasonally adjusted annual rates.



# KALAMAZOO-BATTLE CREEK MSA

Total employment rose only 0.1 percent in the third quarter in the three-county MSA. Employment declines in the area's manufacturing sector due to the July General Motors strikes nearly offset modest gains in the service-producing sector and government. The quarter's stagnant employment conditions did not stop the area's unemployment rate from inching down to 3.2 percent, however. We expect employment to rebound by 0.7 percent in the final quarter of 1998.

Employment in the area's goods-producing sector fell a full 1.0 percent in the third quarter, due in large part to temporary layoffs at the area's automotive-related employers, including the General Motors's Comstock plant and Benteler and Checker Motors in Kalamazoo County. Employment in the area's construction industry, on the other hand, rose 1.4 percent. The most recent (October) survey of the Kalamazoo area purchasing managers points to more positive conditions. While the area's paper industry remained flat, the area's auto suppliers reported increased production.

During the past four quarters, employment growth in the area's major manufacturing industries has been mixed, at best. Employment in the fabricated metal plants, including the GM Comstock plant, fell 7.3 percent during the past year. Additional employment reductions were reported in chemicals (which includes Pharmacia & Upjohn), paper, and plastics.

Employment in the area's service-producing sector grew a modest 0.3 percent in the quarter. Employment reductions were reported in only the finance, insurance, and real estate

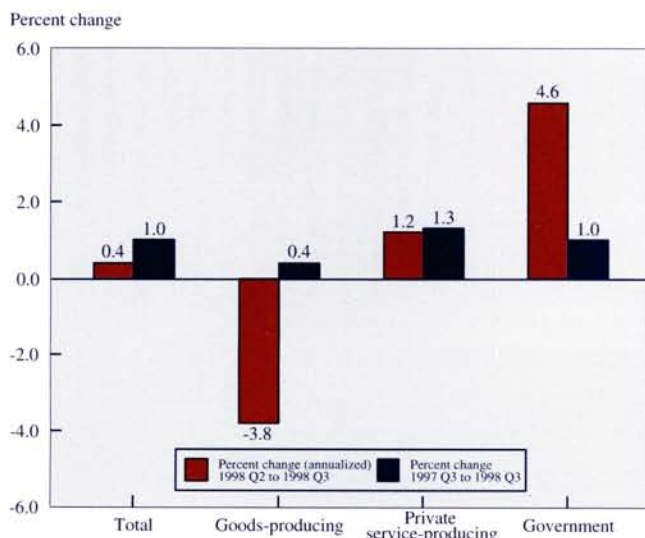
industries and may reflect employment reductions at National City Corp. as it continues to consolidate operations at the former First of America. Government employment rose a sharp 1.1 percent in the quarter due to an above-average increase in state education employment.

The three-county unemployment rate inched down to 3.2 percent. During the quarter, 200 jobs were created by area employers, while the number of unemployed persons fell by only 40, suggesting that either a large number of the new hires are commuting into the area or that the new hires are coming from outside the labor force.

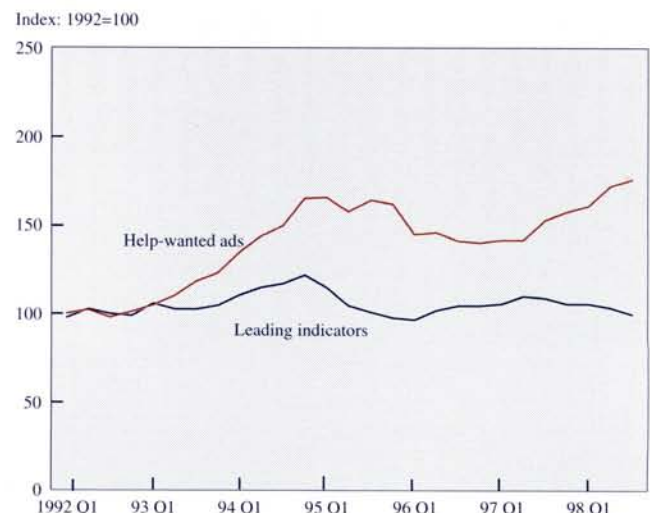
The area's economic indicators were mixed. Help-Wanted Advertising rose 1.9 percent, but the Index of Leading Indicators fell by 3.3 percent. The local components of the Leading Index were mixed, with average weekly hours slipping a slight 0.3 percent and the number of new unemployment claims jumping up by 19.1 percent. The number of new dwelling units put under construction rose a slight 1.6 percent. We are forecasting employment in the three-county MSA to increase by 0.7 percent in the fourth quarter and by a smaller 0.1 percent in the first quarter of 1999.

A new regional economic development effort is underway in the greater Kalamazoo-Battle Creek area. The Regional Edge is working to address the key economic development issues, identified by the community's core industries, that are hindering their growth potential. The industries involved include cereal, paper/printing, plastics, automotive, medical instruments, medical services, chemicals, and tourism.

**Kalamazoo-Battle Creek MSA**  
**Employment Growth**  
(seasonally adjusted)



**Kalamazoo-Battle Creek MSA**  
**Economic Indexes**



**Kalamazoo–Battle Creek MSA**  
(adjusted for seasonal variations)

Measure	1998 Q3	1998 Q2	Percent change Q2 to Q3	1997 Q3	Percent change Q3 to Q3	Forecast 1998 <sup>a</sup>		Forecast 1999 <sup>a</sup>	
						Q4	Percent change	Q1	Percent change
<b>Employment</b>									
Total employment	211,850	211,650	0.1	209,810	1.0	213,290	0.7	213,590	0.1
Goods-producing	57,990	58,550	-1.0	57,780	0.4	58,740	1.3	58,420	-0.5
Construction & mining	8,840	8,720	1.4	8,350	5.9				
Manufacturing	49,160	49,840	-1.4	49,430	-0.5				
Durable goods	23,010	23,640	-2.7	23,300	-1.2				
Nondurable goods	26,150	26,190	-0.2	26,140	0.0				
Private service-producing	119,330	118,970	0.3	117,850	1.3	119,920	0.5	120,540	0.5
Transportation & pub. utilities	7,200	7,170	0.4	6,900	4.3				
Wholesale trade	6,680	6,620	0.9	6,590	1.4				
Retail trade	40,480	40,350	0.3	40,000	1.2				
Finance, ins. & real estate	10,820	10,850	-0.3	10,880	-0.6				
Services	54,150	53,980	0.3	53,490	1.2				
Government	34,520	34,130	1.1	34,180	1.0	34,630	0.3	34,640	0.0
<b>Personal Income<sup>b</sup></b>	11,040	10,940	0.9	10,690	3.3	11,160	1.1	11,240	0.7
<b>Unemployment</b>									
Number unemployed	7,460	7,500	-0.5	8,220	-9.2				
Unemployment rate	3.2	3.3	-1.4	3.7	-12.3				
<b>Local indexes</b>									
Help-wanted ads	176	173	1.9	155	13.8				
Leading indicators <sup>c</sup>	100	103	-3.3	110	-9.5				
Local components:									
Average weekly hours	44.0	44.1	-0.3	44.9	-2.0				
UI initial claims	698	586	19.1	503	38.8				
New dwelling units <sup>d</sup>	1,876	1,847	1.6	1,566	19.8				

SOURCE: W.E. Upjohn Institute for Employment Research. Based on dwelling data from F.W. Dodge Division, McGraw Hill Information Systems Company, ad count from the *Kalamazoo Gazette* and the *Battle Creek Enquirer*, and employment data from MESA.

NOTE: Categories may not sum to total due to rounding.

<sup>a</sup>Percent change from preceding quarter.

<sup>b</sup>Millions of dollars.

<sup>c</sup>National components of the leading indicators are in Table A-3.

<sup>d</sup>Seasonally adjusted annual rates; does not include Van Buren County.

**Industry Employment Change**  
**Third Quarter to Third Quarter**  
(unadjusted for seasonal variations)

Industry	1998 Q3	1997 Q3	Percent change	Industry	1998 Q3	1997 Q3	Percent change
<b>Goods-producing</b>	58,900	58,633	0.5	<b>Private service-producing</b>	120,133	118,733	1.2
Primary metals	1,400	1,400	0.0	Gen'l merchandise stores	6,733	6,800	-1.0
Fabricated metals	5,500	5,933	-7.3	Auto dealers & service	4,433	4,400	0.8
Industrial machinery	4,133	4,033	2.5	Eating & drinking places	15,900	15,600	1.9
Food & kindred products	6,433	6,367	1.0	Health services	16,467	16,533	-0.4
Paper & allied products	4,500	4,633	-2.9	<b>Government</b>	31,867	31,500	1.2
Printing & publishing	2,867	2,667	7.5	Federal government	5,000	4,967	0.7
Chem. & allied products	6,900	7,033	-1.9	State government	7,667	7,433	3.1
Plastics & rubber	5,067	5,133	-1.3	Local government	19,200	19,100	0.5



# Kalamazoo Area

## (Kalamazoo County)

Total employment in Kalamazoo County fell an estimated 0.4 percent in the third quarter due in large part to the General Motors strike. The area's unemployment rate remained unchanged at 2.6 percent. We are forecasting employment to rebound by 0.6 percent in the final quarter of 1998 and increase 0.2 percent during the first quarter of 1999.

Employment in the county's goods-producing sector fell an estimated 2.0 percent in the third quarter due to the General Motors strikes. Unfortunately, recent announcements suggest that the county may continue to suffer employment losses well into next year. First, General Motors announced that it will close its Comstock Plant in July 1999; the plant was originally scheduled to close in 1995. Nearly all of the plant's current work force of 1,100 workers will be laid off. In addition, Mail-Well has closed its recently purchased Illinois Envelope Inc., putting 67 people out of work. Finally, Parker Abex NWL announced that it is eliminating 71 positions in January.

On the positive side, Benteler Industries is hiring 140 new workers at its Comstock Township plant as it expands the auto chassis facility.

Employment in the county's service-producing sector fell an estimated 0.1 percent in the third quarter. On November 2, National City Corporation signs replaced those of First of America throughout the area, but the employment impact of the merger is still unclear. Amer-

itech Corp. may add or transfer more than 60 full-time workers to its Kalamazoo office beginning in November as it consolidates its administrative functions. Returning faculty and staff at the area's educational institutions pushed the county's seasonally adjusted government employment up by 1.3 percent.

The area's economic indicators were mixed in the third quarter. The Index of Help-Wanted Advertising rose 2.2 percent, the purchasing management index rose to 60.5, and the number of new dwelling units put under contract increased 2.4 percent. Still, new claims for unemployment insurance rose 23.3 percent, in large part due to the July strikes at General Motors.

We are forecasting employment to increase 0.6 percent in the fourth quarter and by a small 0.2 percent in the first quarter of 1999.

### Kalamazoo Labor Market Conditions

	Average weekly wages		Percent change
	1997 Q2	1996 Q2	
<b>Total</b>	\$538.31	\$554.20	-2.9
Manufacturing	842.92	904.60	-6.8
Retail	249.56	248.02	0.6
Services	471.80	467.59	0.9
Finance	540.94	507.85	6.5

NOTE: Data not available for third quarter.

### Kalamazoo Area

Measure	1998 Q3	1998 Q2	Percent change Q2 to Q3	1997 Q3	Percent change Q3 to Q3	Forecast 1998 <sup>a</sup>		Forecast 1999 <sup>a</sup>	
						Q4	Percent change	Q1	Percent change
<b>Employment</b>									
Total employment	123,750	124,250	-0.4	123,320	0.4	124,468	0.6	124,750	0.2
Goods-producing	31,750	32,410	-2.0	32,080	-1.0	32,330	1.8	32,150	-0.6
Service-producing	74,260	74,320	-0.1	73,600	0.9	74,430	0.2	74,900	0.6
Government	17,740	17,520	1.3	17,650	1.3	17,710	-0.2	17,700	0.0
<b>Personal Income<sup>b</sup></b>	6,290	6,260	0.5	6,040	4.1	6,350	0.8	6,390	0.6
<b>Unemployment</b>									
Number	3,249	3,330	-2.4	3,700	-12.2				
Rate	2.6	2.6	-3.0	3.0	-15.2				
<b>Indicators</b>									
Help-wanted ads	186	182	2.2	159	17.0				
UI claims	376	305	23.3	260	44.6				
New dwelling units <sup>c</sup>	1,187	1,159	2.4	1,044	13.7				
	<b>Latest month (Oct.)</b>			<b>Previous month (Sept.)</b>					
Local Purchasing Management Index*	60.5			59.5					

NOTE: Figures are seasonally adjusted. \*Index = (percent survey reporting improvement) + 0.5 (percent survey reporting no change).

<sup>a</sup>Percent change from preceding quarter. <sup>b</sup>Millions of dollars. <sup>c</sup>Seasonally adjusted annual rates.



# Battle Creek Area

## (Calhoun County)

Total employment in Calhoun County rose an estimated 0.7 percent in the third quarter, but this employment gain was not enough to stop the unemployment rate from inching up to 4.2 percent. We forecast employment to increase 0.9 percent in the fourth quarter but to be flat in the first quarter of 1999.

Employment in the county's goods-producing sector rose a scant 0.1 percent in the third quarter. The county's automotive sector was spared from the General Motors strike, except for one or two plants such as the Eaton plant in Marshall.

Kellogg announced it is reducing its salaried workforce in the area by 311. In addition, it is terminating approximately 180 contract workers. The effort is part of the troubled cereal-maker's plans to reduce its global costs by \$100 million annually. Kellogg has also unveiled a long-anticipated products line called "functional foods." Specialty Foods Corporation, an Illinois company, has bought Archway. The purchase could eliminate 60 local positions at Archway's former headquarters.

On a positive note, EPI Inc., a printer of books, manuals, and other materials, will add 80 to 90 jobs to its current workforce of 400 persons. Waco Classic Aircraft Corp. is relocating its biplane manufacturing business from

Lansing to Battle Creek and plans to transfer or hire about 35 workers.

Employment at the area's service-producing sector rose 0.9 percent in the third quarter. Returning teachers and staff pushed government employment up an estimated 0.9 percent. However, more job cuts at Battle Creek's Grand Trunk Western Railroad yard are expected, as Canadian National said that it will eliminate 3,000 jobs by the end of next year to reduce costs and increase productivity. There are about 500 employees at the railroad yard in Battle Creek.

Although the area's Index of Help-Wanted Advertising fell 9.7 percent in the third quarter, we are forecasting employment to increase 0.9 percent in the final quarter of 1998, before being flat during the first quarter of 1999.

**Battle Creek  
Labor Market Conditions**

	Average weekly wages		Percent change
	1997 Q2	1996 Q2	
<b>Total</b>	\$523.38	\$517.25	1.2
Manufacturing	794.27	779.27	1.9
Retail	240.99	242.70	-0.7
Services	417.09	404.12	3.2
Finance	655.50	632.07	3.7

NOTE: Data not available for third quarter.

**Battle Creek Area**

Measure	1998 Q3	1998 Q2	Percent change Q2 to Q3	1997 Q3	Percent change Q3 to Q3	Forecast 1998 <sup>a</sup>		Forecast 1999 <sup>a</sup>	
						Q4	Percent change	Q1	Percent change
<b>Employment</b>									
Total employment	67,050	66,600	0.7	66,100	1.4	67,660	0.9	67,630	0.0
Goods-producing	19,580	19,550	0.1	19,370	1.1	19,700	0.7	19,560	-0.7
Service-producing	36,340	36,020	0.9	35,750	1.6	36,690	1.0	36,830	0.4
Government	11,130	11,030	0.9	10,980	1.3	11,250	1.1	11,240	-0.1
<b>Personal Income<sup>b</sup></b>	3,250	3,220	0.8	3,120	4.3	3,290	1.2	3,310	0.6
<b>Unemployment</b>									
Number	2,824	2,650	6.6	2,755	2.5				
Rate	4.2	3.9	6.7	4.1	0.5				
<b>Indicators</b>									
Help-wanted ads	131	145	-9.7	138	-5.1				
UI claims	309	270	14.4	257	20.2				
New dwelling units <sup>c</sup>	738	683	8.0	513	43.9				

NOTE: Figures are seasonally adjusted.

<sup>a</sup>Percent change from preceding quarter. <sup>b</sup>Millions of dollars. <sup>c</sup>Seasonally adjusted annual rates.



# Appendix Tables

**Table A-1**  
**Index of Help-Wanted Advertising (1992=100)**

Area	Annual averages (Selected years)						Quarters adjusted for seasonal variations				
	1987	1993	1994	1995	1996	1997	1997		1998		
							Q3	Q4	Q1	Q2	Q3
Battle Creek	181	102	125	140	128	126	138	140	142	145	131
Benton Harbor	101	167	180	218	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Rapids	120	119	158	149	129	126	128	126	129	128	133
Kalamazoo	141	118	156	170	147	155	159	164	169	182	186
Muskegon	118	109	145	154	133	135	138	134	139	141	146
West Michigan, 2 MSAs	130	116	153	154	134	134	137	137	141	145	148
Detroit, Michigan LMA	159	124	178	168	131	135	N/A	N/A	171	156	144
United States	161	111	134	137	133	137	143	143	147	146	146

SOURCE: West Michigan indexes based on ad counts from the *Battle Creek Enquirer*, *Grand Rapids Press*, *Kalamazoo Gazette*, and *Muskegon Chronicle*; United States and Detroit indexes derived from The Conference Board.

**Table A-2**  
**Selected Labor Market Indicators**  
**(not adjusted for seasonal variations)**

Labor market area	Average for manufacturing production workers <sup>a</sup> September 1998			Civilian labor force unemployment rate <sup>b</sup>	
	Weekly hours	Hourly earnings	Weekly earnings	July 1998	September 1998
United States	41.5	\$13.60	\$ 564.40	4.7	4.4
Michigan	42.8	18.35	785.38	3.4	3.8
West Michigan MSAs:					
Benton Harbor	40.8	12.90	526.32	4.2	3.8
Grand Rapids-Muskegon-Holland	40.5	15.27	618.44	3.5	2.6
Kalamazoo-Battle Creek	43.7	16.23	709.25	3.6	2.8
Other labor market areas:					
Ann Arbor	44.3	19.63	869.61	3.2	2.1
Detroit	43.6	20.41	889.88	4.6	3.3
Flint	43.1	27.21	1,172.75	12.3	4.5
Jackson	39.3	12.79	502.65	3.6	3.1
Lansing-E. Lansing	43.2	19.74	852.77	6.1	2.1
Saginaw-Bay City-Midland	46.8	22.26	1,041.71	6.1	3.3

SOURCE: U.S. Department of Labor and the Michigan Employment Security Agency (most recent benchmark).

<sup>a</sup>Preliminary. Earnings include overtime and part-time wages.

<sup>b</sup>Seasonally adjusted rate for U.S. was 4.5 percent in July 1998 and 4.6 percent in September 1998. Seasonally adjusted rate for Michigan was 4.3 percent in July 1998 and 3.6 percent in September 1998.

**Table A-3**  
**Components of the Index of Leading Indicators**

<b>1. Index of Leading Indicators (1992=100)</b>											
<b>MSA</b>	<b>Annual averages (Selected years)</b>						<b>Quarters adjusted for seasonal variations</b>				
	<b>1987</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1997</b>		<b>1998</b>		
							<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>
Benton Harbor	105	106	119	109	101	110	111	113	111	109	101
Grand Rapids-Muskegon-Holland	110	107	118	109	104	112	114	116	114	113	104
Kalamazoo-Battle Creek	106	104	116	104	102	109	110	111	106	103	100
West Michigan, 3 MSAs	108	106	117	107	104	111	113	114	111	110	103
Michigan	111	106	119	109	106	111	112	113	109	109	102
<b>2. Average Weekly Hours of Production Workers</b>											
<b>MSA</b>	<b>Annual averages (Selected years)</b>						<b>Quarters adjusted for seasonal variations</b>				
	<b>1987</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1997</b>		<b>1998</b>		
							<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>
Benton Harbor	40.8	43.2	43.4	42.6	42.3	42.5	42.6	42.4	42.0	42.1	41.7
Grand Rapids-Muskegon-Holland	40.5	42.3	42.8	41.9	41.7	42.2	42.2	42.3	41.5	41.5	41.1
Kalamazoo-Battle Creek	43.1	43.7	44.3	43.3	43.4	44.9	44.9	45.7	44.6	44.1	44.0
West Michigan, 3 MSAs	41.2	42.7	43.2	42.3	42.2	42.8	42.8	43.1	42.3	42.1	41.8
Michigan	42.2	43.0	44.9	44.3	43.8	44.4	44.4	44.4	43.6	44.5	42.8
United States	41.0	41.4	42.0	41.6	41.6	42.0	42.0	42.0	42.0	41.6	41.6
<b>3. Initial Claims for Unemployment Insurance (Average per week)</b>											
<b>MSA</b>	<b>Annual averages (Selected years)</b>						<b>Quarters adjusted for seasonal variations</b>				
	<b>1987</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1997</b>		<b>1998</b>		
							<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>
Benton Harbor	236	210	183	192	228	183	173	164	168	172	204
Grand Rapids-Muskegon-Holland	1,380	1,290	1,145	1,237	1,425	1,097	1,001	891	863	830	1,236
Kalamazoo-Battle Creek	656	605	581	640	620	523	503	515	554	586	698
West Michigan, 3 MSAs	2,274	2,105	1,909	2,069	2,269	1,803	1,685	1,560	1,588	1,584	2,149
Michigan	17,212	16,731	12,958	14,919	15,969	13,696	12,976	12,388	13,669	12,980	18,243
United States	324,350	341,000	341,900	358,200	351,700	319,300	313,200	313,700	311,400	325,400	304,800
<b>4. New Dwelling Units Put under Contract</b>											
<b>MSA</b>	<b>Annual averages (Selected years)</b>						<b>Quarters adjusted for seasonal variations</b>				
	<b>1987</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1997</b>		<b>1998</b>		
							<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>
Benton Harbor	359	514	541	544	563	493	465	647	780	840	549
Grand Rapids-Muskegon-Holland	6,005	4,521	4,879	4,827	5,398	5,410	5,459	5,751	5,872	6,175	5,626
Kalamazoo-Battle Creek	1,372	1,255	2,564	1,536	1,806	1,684	1,566	2,037	1,589	1,847	1,876
West Michigan, 3 MSAs	7,752	6,289	7,985	6,908	7,768	7,586	7,515	8,376	8,339	8,835	8,080
Michigan	51,400	37,394	39,643	39,125	44,880	40,886	40,070	43,027	42,395	44,112	43,694
<b>5. National Association of Purchasing Management Survey (Selected components indexed)<sup>a</sup></b>											
<b>Component</b>	<b>Annual averages (Selected years)</b>						<b>Quarters adjusted for seasonal variations</b>				
	<b>1987</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1997</b>		<b>1998</b>		
							<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>
New orders	123	114	125	100	106	117	119	112	112	107	103
Change in inventories	97	90	92	89	85	89	91	91	93	88	89
Vendor performance	91	104	120	105	101	108	110	110	105	103	102
Changes in material prices	143	104	145	124	91	104	106	103	91	83	73

SOURCE: National index from U.S. Department of Commerce, all others from the W. E. Upjohn Institute. Average weekly hours and initial claims based on information from the Michigan Employment Security Agency; number of housing units put under contract, F.W. Dodge Division, McGraw Hill Information Systems Company; survey data from the National Association of Purchasing Management. Seasonal adjustments by the Institute.

<sup>a</sup>Survey results shown here are based on percent reporting conditions favorable to economic growth minus percent reporting conditions unfavorable to economic growth plus 100.



**Table A-4**  
**Employment Data for West Michigan MSAs and Michigan**  
(thousands of jobs - by place of work)

Total Employment <sup>a</sup>											
MSA	Annual averages (Selected years)						Quarters adjusted for seasonal variations				
	1987	1993	1994	1995	1996	1997	1997		1998		
							Q3	Q4	Q1	Q2	Q3
Benton Harbor	63.6	67.6	70.0	71.0	71.3	72.0	71.3	72.1	71.7	71.8	71.7
Grand Rapids-Muskegon-Holland	396.1	471.5	497.7	519.2	534.2	551.5	553.4	558.6	563.3	568.8	572.0
Grand Rapids-Holland <sup>d</sup>	314.9	377.5	401.8	423.3	434.4	450.0	453.0	457.6	461.2	465.9	468.4
Muskegon <sup>d</sup>	56.5	56.0	59.2	60.7	62.0	64.1	63.6	64.2	64.8	65.4	65.9
Kalamazoo-Battle Creek	177.6	196.2	201.7	205.5	206.3	208.0	209.8	210.5	211.1	211.7	211.9
Kalamazoo <sup>d</sup>	104.4	115.5	119.1	120.3	122.3	123.5	123.3	123.7	124.4	124.3	123.8
Battle Creek <sup>d</sup>	57.6	60.4	63.4	65.9	65.7	66.2	66.1	66.2	66.1	66.6	67.0
West Michigan, 3 MSAs	637.4	735.3	769.4	795.7	811.8	831.5	834.6	841.1	846.3	852.2	855.6
Michigan	3,717.9	3,997.1	4,139.2	4,265.5	4,337.6	4,402.1	4,436.2	4,475.7	4,514.6	4,526.2	4,506.5
Goods-Producing Employment <sup>b</sup>											
MSA	Annual averages (Selected years)						Quarters adjusted for seasonal variations				
	1987	1993	1994	1995	1996	1997	1997		1998		
							Q3	Q4	Q1	Q2	Q3
Benton Harbor	23.4	21.8	22.8	23.4	23.1	23.3	22.4	22.6	22.5	22.6	22.1
Grand Rapids-Muskegon-Holland	144.2	154.9	165.2	172.9	175.9	181.1	180.6	181.0	182.2	184.3	183.2
Grand Rapids-Holland <sup>d</sup>	111.1	123.5	131.8	137.9	139.3	142.6	144.2	144.6	145.3	147.1	146.0
Muskegon <sup>d</sup>	19.8	16.7	16.9	17.2	17.5	18.0	18.0	18.0	18.2	18.4	18.4
Kalamazoo-Battle Creek	54.3	55.8	56.7	58.1	57.6	57.5	57.8	58.1	58.2	58.6	58.0
Kalamazoo <sup>d</sup>	33.0	31.9	32.1	32.1	32.2	32.1	32.1	32.2	32.4	32.4	31.8
Battle Creek <sup>d</sup>	17.1	18.2	19.0	20.0	19.7	19.7	19.4	19.4	19.4	19.6	19.6
West Michigan, 3 MSAs	221.9	232.5	244.7	254.4	256.6	261.9	260.9	261.7	263.0	265.3	263.5
Michigan	1,093.4	1,041.2	1,094.4	1,132.6	1,134.6	1,142.7	1,145.7	1,155.6	1,173.6	1,171.7	1,143.2
Private Service-Producing Employment <sup>c</sup>											
MSA	Annual averages (Selected years)						Quarters adjusted for seasonal variations				
	1987	1993	1994	1995	1996	1997	1997		1998		
							Q3	Q4	Q1	Q2	Q3
Benton Harbor	31.7	36.8	38.2	38.9	39.7	40.2	40.5	40.9	40.5	40.7	40.9
Grand Rapids-Muskegon-Holland	208.2	266.1	281.4	294.8	306.2	317.4	319.6	323.7	326.5	329.5	333.6
Grand Rapids-Holland <sup>d</sup>	203.8	216.8	234.3	248.4	257.4	268.5	270.2	273.9	276.2	278.7	282.1
Muskegon <sup>d</sup>	36.8	30.3	33.2	34.5	35.3	36.9	36.5	36.9	37.2	37.6	38.1
Kalamazoo-Battle Creek	91.2	106.7	111.3	113.7	115.1	116.6	117.9	118.4	118.7	119.0	119.3
Kalamazoo <sup>d</sup>	71.3	66.2	69.7	70.9	72.9	74.0	73.6	73.9	74.4	74.3	74.3
Battle Creek <sup>d</sup>	40.5	30.9	33.4	34.7	34.8	35.3	35.8	35.9	35.8	36.0	36.3
West Michigan, 3 MSAs	331.1	409.6	430.9	447.4	461.0	474.2	477.9	482.9	486.0	489.2	493.9
Michigan	2,018.1	2,316.8	2,405.3	2,492.1	2,560.0	2,618.3	2,643.8	2,670.6	2,688.4	2,700.6	2,705.9
Government Employment											
MSA	Annual averages (Selected years)						Quarters adjusted for seasonal variations				
	1987	1993	1994	1995	1996	1997	1997		1998		
							Q3	Q4	Q1	Q2	Q3
Benton Harbor	8.5	9.1	8.9	8.7	8.4	8.5	8.4	8.6	8.6	8.6	8.6
Grand Rapids-Muskegon-Holland	80.3	50.5	51.1	51.4	52.2	53.0	53.3	53.9	54.6	55.0	55.2
Grand Rapids-Holland <sup>d</sup>	31.1	37.2	35.7	37.2	37.7	38.7	38.6	39.2	39.7	40.1	40.2
Muskegon <sup>d</sup>	8.9	9.0	9.1	9.2	9.2	9.2	9.2	9.3	9.4	9.4	9.4
Kalamazoo-Battle Creek	32.1	33.7	33.6	33.7	33.5	33.9	34.2	34.1	34.1	34.1	34.5
Kalamazoo <sup>d</sup>	16.7	17.4	17.3	17.3	17.3	17.4	17.6	17.6	17.6	17.5	17.7
Battle Creek <sup>d</sup>	11.3	11.3	11.0	11.1	11.1	11.2	11.0	10.9	10.9	11.0	11.1
West Michigan, 3 MSAs	84.4	93.3	93.6	93.8	94.2	95.3	95.8	96.5	97.4	97.7	98.3
Michigan	606.3	639.1	639.5	640.7	643.1	641.1	645.2	649.6	654.1	658.0	657.3

<sup>a</sup>Components may not add to totals because of rounding.

<sup>b</sup>Manufacturing and construction and mining.

<sup>c</sup>Transportation and public utilities, wholesale trade, retail trade, finance, insurance and real estate, and services.

<sup>d</sup>Employment levels from 1983 to 1993 are from the Michigan Employment Security Agency. Employment levels for 1993 to present are calculated by the W.E. Upjohn Institute using ES202 quarterly employment statistics from MESA.



**Table A-5**  
**Personal Income and Earnings by Industry (current dollars)**

Area	Income distribution	1996	1995	1994	1993	1992	1991	1990
<b>Benton Harbor MSA (Berrien County)</b>	Total personal income (\$, 000)	3,523,389	3,421,612	3,234,201	3,080,063	2,900,578	2,718,321	2,630,996
	Per capita personal income (\$)	21,861	21,168	20,063	19,089	17,978	16,858	16,306
	Earnings per worker (\$)	26,705	26,271	26,001	26,132	24,286	22,485	21,897
	Manufacturing	41,966	40,619	40,940	41,254	36,384	32,465	31,178
	Services	21,527	20,269	19,605	20,482	19,216	17,540	17,015
<b>Grand Rapids- Muskegon-Holland MSA</b>	Total personal income (\$, 000)	24,508,134	23,212,965	21,577,066	20,091,132	19,054,935	17,686,369	16,812,006
	Per capita personal income (\$)	24,139	23,158	21,807	20,553	19,715	18,518	17,852
	Earnings per worker (\$)	29,821	28,841	28,066	27,039	25,955	24,416	23,819
	Manufacturing	43,140	41,453	40,944	39,109	37,610	35,132	34,002
	Services	24,168	23,277	22,261	21,836	21,194	20,132	20,053
Kent County	Total personal income (\$, 000)	13,718,768	13,019,444	12,119,729	11,390,231	10,865,834	10,031,183	9,504,575
	Per capita personal income (\$)	25,603	24,523	23,070	21,924	21,118	19,701	18,919
	Earnings per worker (\$)	30,971	30,012	29,088	28,041	26,830	25,349	24,618
	Manufacturing	44,576	43,248	42,459	40,402	38,743	36,483	35,516
	Services	26,229	25,246	24,129	23,901	22,996	22,086	21,850
Ottawa County	Total personal income (\$, 000)	5,393,426	5,067,538	4,682,346	4,262,317	3,977,196	3,669,904	3,523,338
	Per capita personal income (\$)	25,014	24,098	22,827	21,218	20,180	18,982	18,635
	Earnings per worker (\$)	28,652	27,247	26,590	25,517	24,640	22,703	22,686
	Manufacturing	41,572	38,471	38,381	37,073	35,367	32,464	31,545
	Services	19,745	18,885	18,076	17,182	17,611	15,985	16,797
Muskegon County	Total personal income (\$, 000)	3,205,751	3,056,602	2,861,051	2,686,855	2,573,006	2,451,667	2,345,088
	Per capita personal income (\$)	19,451	18,677	17,552	16,529	15,905	15,259	14,718
	Earnings per worker (\$)	27,840	27,299	26,664	25,852	24,898	23,313	22,671
	Manufacturing	45,449	44,740	43,589	41,339	39,737	36,130	34,629
	Services	22,669	22,036	20,969	20,250	19,462	18,269	17,852
Allegan County	Total personal income (\$, 000)	2,190,189	2,069,381	1,913,940	1,751,729	1,638,899	1,533,615	1,439,005
	Per capita personal income (\$)	22,118	21,221	19,947	18,531	17,599	16,684	15,820
	Earnings per worker (\$)	26,745	25,971	25,808	24,647	23,766	22,770	21,701
	Manufacturing	38,253	36,992	36,972	34,971	34,506	32,690	30,550
	Services	16,743	16,265	16,189	15,743	14,464	14,084	13,625
<b>Kalamazoo-Battle Creek MSA</b>	Total personal income (\$, 000)	10,204,046	9,771,268	9,240,763	8,738,728	8,321,704	7,913,385	7,512,007
	Per capita personal income (\$)	22,962	22,078	20,967	19,898	19,094	18,300	17,455
	Earnings per worker (\$)	29,592	28,512	27,871	27,135	26,455	25,189	24,556
	Manufacturing	51,400	48,490	47,342	45,661	44,863	42,438	40,228
	Services	22,710	21,993	21,232	20,985	20,077	19,412	19,072
Kalamazoo County	Total personal income (\$, 000)	5,824,600	5,528,925	5,220,788	4,950,833	4,699,585	4,501,826	4,274,541
	Per capita personal income (\$)	25,431	24,241	22,959	21,805	20,837	20,093	19,103
	Earnings per worker (\$)	30,148	28,905	28,041	27,354	26,737	25,630	24,829
	Manufacturing	55,078	50,810	49,182	47,311	46,535	45,329	42,602
	Services	23,996	23,143	22,288	22,057	21,051	20,430	20,123
Calhoun County	Total personal income (\$, 000)	3,020,680	2,931,271	2,781,082	2,623,792	2,516,514	2,367,592	2,245,285
	Per capita personal income (\$)	21,553	20,913	19,930	18,879	18,219	17,249	16,472
	Earnings per worker (\$)	30,529	29,499	29,297	28,397	27,674	26,131	25,808
	Manufacturing	50,661	49,375	48,581	47,095	45,724	41,308	39,855
	Services	21,400	20,968	20,357	20,116	19,408	18,701	18,365
Van Buren County	Total personal income (\$, 000)	1,358,766	1,311,072	1,238,893	1,164,103	1,105,605	1,043,967	992,181
	Per capita personal income (\$)	18,068	17,635	16,789	15,914	15,322	14,676	14,116
	Earnings per worker (\$)	23,779	23,355	22,606	22,063	21,115	19,794	19,294
	Manufacturing	33,804	32,941	32,057	30,646	31,170	27,779	25,992
	Services	16,617	15,829	15,311	14,992	14,231	13,660	13,247

SOURCE: Bureau of Economic Analysis, 1990 to 1996.

NOTE: Services do not include trades, finance, or transportation and public utilities.



**Table A-6**  
**Consumer Price Index**

Consumer Price Index (CPI), U.S. City Average (1982-84=100)													
Year	Annual												
	Avg.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
CPI for All Urban Consumers (CPI-U)													
1984	103.9	101.9	102.4	102.6	103.1	103.4	103.7	104.1	104.5	105.0	105.3	105.3	105.3
1985	107.6	105.5	106.0	106.4	106.9	107.3	107.6	107.8	108.0	108.3	108.7	109.0	109.3
1986	109.6	109.6	109.3	108.8	108.6	108.9	109.5	109.5	109.7	110.2	110.3	110.4	110.5
1987	113.6	111.2	111.6	112.1	112.7	113.1	113.5	113.8	114.4	115.0	115.3	115.4	115.4
1988	118.3	115.7	116.0	116.5	117.1	117.5	118.0	118.5	119.0	119.8	120.2	120.3	120.5
1989	124.0	121.1	121.6	122.3	123.1	123.8	124.1	124.4	124.6	125.0	125.6	125.9	126.1
1990	130.7	127.4	128.0	128.7	128.9	129.2	129.9	130.4	131.6	132.7	133.5	133.8	133.8
1991	136.2	134.6	134.8	135.0	135.2	135.6	136.0	136.2	136.6	137.2	137.4	137.8	137.9
1992	140.3	138.1	138.6	139.3	139.5	139.7	140.2	140.5	140.9	141.3	141.8	142.0	141.9
1993	144.5	142.6	143.1	143.6	144.0	144.2	144.4	144.4	144.8	145.1	145.7	145.8	145.8
1994	148.2	146.2	146.7	147.2	147.4	147.5	148.0	148.4	149.0	149.4	149.5	149.7	149.7
1995	152.4	150.3	150.9	151.4	151.9	152.2	152.5	152.5	152.9	153.2	153.7	153.6	153.5
1996	156.9	154.4	154.9	155.7	156.3	156.6	156.7	157.0	157.3	157.8	158.3	158.6	158.6
1997	160.5	159.1	159.6	160.0	160.2	160.1	160.3	160.5	160.8	161.2	161.6	161.5	161.3
1998		161.6	161.9	162.2	162.5	162.8	163.0	163.2	163.4	163.6			
CPI for Urban Wage Earners and Clerical Workers (CPI-W)													
1984	103.3	101.6	101.8	101.8	102.1	102.5	102.8	103.2	104.2	104.8	104.8	104.7	104.8
1985	106.9	104.9	105.4	105.9	106.3	106.7	107.0	107.1	107.3	107.6	107.9	108.3	108.6
1986	108.6	108.9	108.5	107.9	107.6	107.9	108.4	108.4	108.6	109.1	109.1	109.2	109.3
1987	112.5	110.0	110.5	111.0	111.6	111.9	112.4	112.7	113.3	113.8	114.1	114.3	114.2
1988	117.0	114.5	114.7	115.2	115.7	116.2	116.7	117.2	117.7	118.5	118.9	119.0	119.2
1989	122.6	119.7	120.2	120.8	121.8	122.5	122.8	123.2	123.2	123.6	124.2	124.4	124.6
1990	129.0	125.9	126.4	127.1	127.3	127.5	128.3	128.7	129.9	131.1	131.9	132.2	132.2
1991	134.3	132.8	132.8	133.0	133.3	133.8	134.1	134.3	134.6	135.2	135.4	135.8	135.9
1992	138.2	136.0	136.4	137.0	137.3	137.6	138.1	138.4	138.8	139.1	139.6	139.8	139.8
1993	142.1	140.3	140.7	141.1	141.6	141.9	142.0	142.1	142.4	142.6	143.3	143.4	143.3
1994	145.6	143.6	144.0	144.4	144.7	144.9	145.4	145.8	146.5	146.9	147.0	147.3	147.2
1995	149.8	147.8	148.3	148.7	149.3	149.6	149.9	149.9	150.2	150.6	151.0	150.9	150.9
1996	154.1	151.7	152.2	152.9	153.6	154.0	154.1	154.3	154.5	155.1	155.5	155.9	155.9
1997	157.6	156.3	156.8	157.0	157.2	157.2	157.4	157.5	157.8	158.3	158.5	158.5	158.2
1998		158.4	158.5	158.7	159.1	159.5	159.7	159.8	160.0	160.2			

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

NOTE: Monthly data are shown above unadjusted for seasonal variations. Unadjusted CPI data are used extensively for escalation purposes. Although the CPI is often called the "Cost-of-Living Index," it measures only price change, which is just one of several important factors affecting living costs. All CPI series are linked historically to the original CPI Index for Urban Wage Earners and Clerical Workers.

These series contain no revision but are reprinted for the convenience of the user.

PERCENT CHANGE: Movements of these indexes from one time period to another are usually expressed as percent changes rather than changes in index points. Index point changes are affected by the level of the index in relation to its base period while percent changes are not. Examples of computation follow:

$$\frac{100 \times [108.6 \text{ (1986 annual avg.)} - 106.9 \text{ (1985 annual avg.)}]}{106.9 \text{ (1985 annual avg.)}} = 1.6\% \text{ change 1985 to 1986, CPI-W.}$$

$$\frac{100 \times [109.3 \text{ (1986 December)} - 108.6 \text{ (1985 December)}]}{108.6 \text{ (1985 December)}} = 0.6\% \text{ change December 1985 to December 1986, CPI-W.}$$

$$\frac{100 \times [110.0 \text{ (1987 January)} - 109.3 \text{ (1986 December)}]}{109.3 \text{ (1986 December)}} = 0.6\% \text{ change December 1986 CPI-W to January 1987, CPI-W.}$$

**Table A-7**  
**Population Update for Selected Areas**

Area	1997	1996	1995	1990	1980	Annual percent change	
						1990-1996	1980-1990
Michigan	9,773,892	9,730,925	9,655,305	9,310,450	9,262,078	0.8	0.1
West Michigan Metropolitan Areas:							
Benton Harbor MSA	160,713	161,175	161,637	161,378	171,276	-0.1	-0.6
Benton Harbor		11,824	11,942	12,818	14,707	-1.4	-1.4
Niles (part)		11,811	11,948	12,456	13,115	-0.9	-0.5
St. Joseph		8,766	8,865	9,214	9,622	-0.8	-0.4
Grand Rapids-Muskegon-Holland MSA	1,026,295	1,015,273	1,002,358	937,891	840,824	1.4	1.1
Kent County	539,425	535,827	530,898	500,631	444,506	1.2	1.2
Grand Rapids		188,242	188,819	189,126	181,843	-0.1	0.4
Kentwood		41,816	41,431	37,826	30,438	1.7	2.2
Walker		18,971	18,713	17,279	15,088	1.6	1.4
Wyoming		66,571	66,272	63,891	59,616	0.7	0.7
Ottawa County	220,403	215,612	210,289	187,768	157,174	2.3	1.8
Grand Haven		12,142	12,175	11,951	11,763	0.3	0.2
Holland (part)		26,737	26,673	25,086	26,281	1.1	-0.5
Muskegon County	165,882	164,810	163,657	158,983	157,589	0.6	0.1
Muskegon		39,518	39,758	39,809	40,823	-0.1	-0.3
Muskegon Heights		12,564	12,669	13,176	14,611	-0.8	-1.0
Norton Shores		22,710	22,503	21,755	22,025	0.7	-0.1
Allegan County	100,585	99,024	97,514	90,509	81,555	1.5	1.0
Kalamazoo-Battle Creek MSA	446,699	444,389	442,584	429,453	420,771	0.7	0.2
Kalamazoo County	229,192	229,034	228,077	223,411	212,378	0.4	0.5
Kalamazoo		77,460	77,815	80,277	79,722	-0.6	0.1
Portage		43,317	43,008	41,042	38,157	0.9	0.7
Calhoun County	141,821	140,152	140,163	135,982	141,579	0.5	-0.4
Battle Creek		53,430	53,583	53,516	35,724	0.0	4.1
Marshall		7,251	7,185	6,941	7,201	0.7	-0.4
Van Buren County	75,686	75,203	74,344	70,060	66,814	1.2	0.5
Total	1,633,707	1,620,837	1,606,579	1,528,722	1,432,871	1.1	0.6
Rural Southwest Michigan:							
Barry County	53,533	53,227	52,619	50,057	45,781	1.1	0.9
Branch County	43,628	42,933	42,657	41,502	40,188	0.9	0.3
Cass County	49,967	49,901	49,633	49,477	49,499	0.2	0.0
Newaygo County	45,059	44,269	43,445	38,206	34,917	2.8	0.9
Oceana County	24,599	24,319	23,980	22,454	22,002	1.6	0.2
St. Joseph County	61,234	60,989	60,516	58,913	56,083	0.7	0.5
Total	278,020	275,638	272,850	260,609	248,470	1.1	0.5

SOURCE: State of Michigan Department of Management and Budget and U.S. Bureau of the Census.



## **Data Sources for Business Outlook**

### **NATIONAL ECONOMY**

#### **Output**

Gross Domestic Product—*Survey of Current Business*  
Cyclical Economic Indicators—National Association of Purchasing Management *News Release*, and U.S. Department of Commerce *News*  
Change in Nonfarm Business Inventories and Percent Change in the Ratio of Inventories to Final Sales of Goods and Structures—*Survey of Current Business*

#### **Labor**

Nonfarm Employment and Change in Average Weekly Hours—*Employment and Earnings*  
Productivity and Unit Labor Costs—*Monthly Labor Review*  
Unemployment Rates and Initial Claims—*Economic Indicators*

#### **Inflation and Interest Rates**

Price Indexes—National Association of Purchasing Management *News Release*, CPI *Detailed Report*, and PPI *Detailed Report*  
Short-Term Capital Rates—*Federal Reserve Bulletin* and *Economic Indicators*  
Long-Term Capital Rates—*Federal Reserve Bulletin* and *Economic Indicators*  
Yield Curves—*The Wall Street Journal*

#### **Consumer Spending**

Growth in Consumer Spending—*Survey of Current Business*  
Consumer Debt—*Economic Indicators*  
Motor Vehicle Sales—U.S. Department of Commerce

#### **Investment**

New Residential, Commercial, and Industrial Construction—*Economic Indicators*  
Plant and Equipment Expenditures—*Survey of Current Business*  
Nonresidential Investment Composition—*Survey of Current Business*

#### **International Trade**

U.S. Trade in Goods and Services—*Survey of Current Business*  
International Industrial Production—*Economic Indicators*  
Trade-Weighted Dollar—*Federal Reserve Bulletin*

### **MICHIGAN ECONOMY**

Percent Change in Total Employment—*Employment and Earnings*  
Manufacturing Employment and Earnings—*Employment and Earnings*  
Unemployment Rates Relative to the Nation—*Employment and Earnings*  
Michigan Motor Vehicle Production—*Michigan Economic Indicators*  
Percentage Change in Retail Sales—*Monthly Retail Trade*

### **WEST MICHIGAN ECONOMY**

West Michigan Residential Construction Trends—*Dodge Construction Reports*

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