

ECONOMIC FORECAST

INTRODUCTION

All signs appear to be pointing to a recession in the second half of the year. Real GNP increased only 1.2 percent in 1990 II (see Exhibit 1), and all the growth was in inventories. Final demand—spending by consumers, business, government, and foreigners—fell 1.5 percent, the first decline since the last recession. The bad news continued in July as auto sales dropped 3.3 percent; housing starts fell 2.6 percent, to their lowest level since 1982; U.S. employment fell 220,000; and the unemployment rate jumped 0.3 percentage points (to 5.5 percent, the highest since August 1988). The Conference Board's consumer confidence index declined 0.6 percent, to the lowest level since the 1987 stock market crash.

Then came the Iraqi invasion of Kuwait, which sent energy prices skyrocketing and threatens to raise inflation and further dampen economic growth. No major sector is doing well, although there is hope that exports will continue to provide some stimulus. The best chance for avoiding a recession is lower interest rates, but the Federal Reserve Board is still concerned about inflation, particularly with the prospect of higher energy prices. Nevertheless, the Fed may have little choice, and interest rates are likely to be quite a bit lower by year-end. This may not be enough to stave off a recession, however, given the widespread weakness, particularly in the all-important consumer sector. Even if there is no recession, we can look for very slow growth over the next twelve months, possibly longer. It appears that the IOUs from the overspending, overborrowing, and overpromising of the 1980s are coming due.

As the old saying goes, when the nation catches a cold, Michigan catches pneumonia. This is less true today, because manufacturing has declined sharply in relative importance to the state's economy, but we are still heavily dependent on the auto industry. Our view is that Michigan already is experiencing a recession, the continued slump in auto sales will deepen it, and higher gas prices will further dampen motor vehicle sales. Employment has not grown in the past year, and manufacturing employment is off 2.7 percent. The unemployment rate has remained fairly steady (7.7 percent in July), but a significant jump is likely in the next few months.

This recession probably will not be nearly as bad as the last, but a conflict in the Middle East could result in a sustained period of economic decline. At best, the downturn will be short and mild if the Persian Gulf crisis is resolved peacefully, the Fed drives down interest rates, and progress is made in reducing the federal deficit. As *Business Week* said in the August 13 issue: "Fasten your seat belts, it's going to be a bumpy second half."

THE NATIONAL ECONOMY

GNP, Income, and Employment

Review

The national economy continued to weaken in 1990 II, turning in one of the poorest performances since the expansion began in 1982. Real GNP rose only 1.2 percent, down from a revised 1.7 percent increase in 1990 I (see Exhibit 2). (The 1.1 percent growth rate in 1989 IV was revised to 0.4 percent.) Only a buildup in business inventories and a rise in government spending kept the economy from contracting. After dropping \$2.2 billion in 1990 I, inventories in the second quarter increased an unhealthy \$26.2 billion. Excluding these, real GNP declined at an annual rate of 1.5 percent; excluding government spending as well, real GNP fell 3.4 percent. The continued caution in consumer spending resulted in an annual rate of decline of 0.3 percent. Housing and business investment have been major contributors to growth during the current expansion, but in the second quarter of 1990, residential fixed investment dropped at an annual rate of 13.5 percent, and the nonresidential category fell 6.1 percent.

U.S. personal income rose at an annual rate of 4 percent (seasonally adjusted), down sharply from a 9.6 percent increase in the first quarter.

Wage and salary employment growth slowed nationally in 1990 II. The job gain of 431,000 was well below the gain of 743,000 in the first quarter and slightly below the 1989 IV increase of 473,000 (see Exhibit 3). Government employment rose 347,000 in the second quarter, due mainly to the hiring of temporary census workers, but private sector jobs increased at an annual rate of only 0.4 percent. Manufacturing employment continued to drop, although the 1990 II decrease of 0.8 percent was an improvement over the 2 percent decline in the first quarter. Employment in the ser-

MICHIGAN FORECAST AT A GLANCE

Employment—Flat to Down
Unemployment—Up
Real Personal Income—Down
Prices—Up
Auto Sales—Down
Auto Production—Down
Housing—Down
Interest Rates—Down

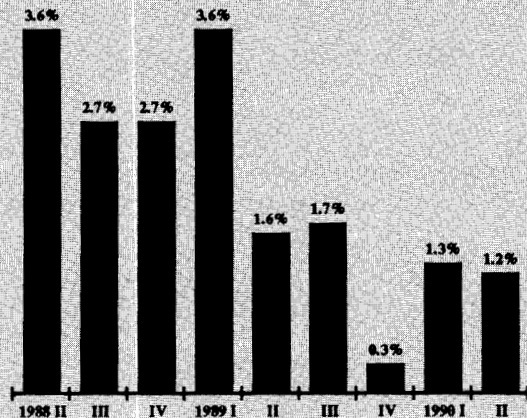
EXHIBIT 1
Summary Forecast

	1988 (actual)	1989 (actual)	1990 (estimate)
U.S. GNP, 1982 \$ (percentage change)	3.8%	2.9%	1.2%
U.S. motor vehicle sales (millions)	16.1	15.1	14.3
Michigan wage and salary employment (percentage change)	1.7%	1.7%	0.5%
Michigan unemployment rate (percentage)	7.6%	7.3%	8.3%
Michigan personal income (percentage change)	7.4%	7.6%	4.5%
Michigan motor vehicle production (millions)	3.2	3.3 ^a	3.1
Detroit-Ann Arbor consumer price index (percentage change) (1982-1984=100)	4.0%	5.2%	4.0%

^aRetimate

EXHIBIT 2

**U.S. Gross National Product,
Quarterly Changes at Annual Rates,
1988 II-1990 II (1982 \$)**



SOURCE: Council of Economic Advisors, *Economic Indicators*, selected issues.

vices sector slowed sharply, to an annual growth rate of 2.5 percent. In July, nonfarm employment fell 220,000, due mainly to a 175,000 decline in federal government employment as temporary census jobs were eliminated. Private employment declined 45,000, due to a 51,000 job decline in construction.

The U.S. civilian unemployment rate averaged 5.2 percent in 1990 II, unchanged from the first quarter (see Exhibit 4). The rate for adult men, a leading indicator of changes in the economy, increased 0.2 percentage points, to 4.8 percent, in the second quarter of 1990. In July, the unemployment rate jumped to 5.5 percent. Another negative indicator in the second quarter was an increase of 150,000 (to 900,000) in the number of discouraged workers—persons who report they want work but no longer are looking because they believe no jobs are available. This was the largest quarterly jump since the government began keeping records in 1970.

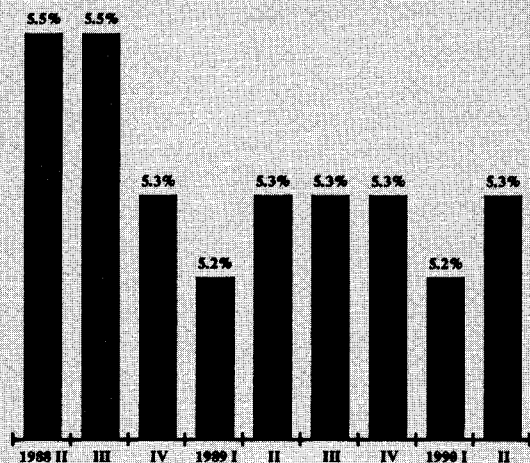
EXHIBIT 3

**U.S. Wage and Salary Employment and Percentage Changes,
1990 II, July 1990, and 1989 (seasonally adjusted)**

Sector	1990 II (thousands)	Percentage Change from 1990 I (annual rate)	Percentage Change from 1989 II	July 1990 (thousands)	Change from June 1989 (thousands)
Manufacturing	19,375	-0.8%	-1.5%	19,353	-7
Services	27,858	2.5	4.1	27,971	-11
Retail and wholesale trade	26,166	0.5	1.6	26,200	14
Government	18,371	7.7	3.9	18,337	-174
Other	18,882	-1.8	3.2	18,845	-41
TOTAL	110,652	1.6%	2.1%	110,706	-219

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, "The Employment Situation," *News*, selected issues.

EXHIBIT 4

Quarterly U.S. Unemployment Rates,
1988 II-1990 II (seasonally adjusted)SOURCE: Council of Economic Advisors, *Economic Indicators*, selected issues.

Outlook

A recession is probable in the second half. Government spending, one of the few sources of growth in 1990 II, is likely to slow as the president and Congress agree on a deficit reduction plan, and inventories will not increase as fast as in the second quarter. The consumer has contributed little to economic growth this year, and there is no sign of a turnaround. Exports, which declined at an annual rate of 3.7 percent in 1990 II after two years of steady growth, may be a source of growth in the second half. The big hope is that the Fed will push interest rates down, thereby stimulating consumption, housing, and business investment. The steady inflation rate (the GNP deflator rose 3.9 percent in 1990 II) should make the Fed more willing to loosen credit. In our last forecast we estimated that real GNP would rise 2 percent in 1990. Given the downward revisions for recent quarters and the weakness in 1990 II, we now project an increase of only 1.2 percent (annual average).

The labor markets are sending out a recession warning. Job gains in the private sector averaged only 112,000 per month in the first half of 1990, compared with 136,000 in the second half of 1989 and 218,000 in the first half of last year. The unemployment rate has been held down by slow growth in the labor force, but more people are expected to enter the labor market (seasonally adjusted) in the next few months.¹ As a result, the unemployment rate should rise in the second half, possibly reaching 6 percent by year-end. In our last forecast we estimated that the rate would average 5.6 percent in 1990, and our forecast is unchanged.

¹ The slow growth of the labor force is thought to be the result, in part, of a statistical aberration within the seasonal adjustment factor, which should be corrected by July or August.

Leading Indicators

The index of leading economic indicators recorded a revised 0.2 percent decline in April, gained 0.7 percent in May, and remained flat in June. The index is designed to foretell the direction of the economy during the coming six to nine months. During the first half of 1990 it increased 0.5 percent, which the Bureau of Economic Analysis of the U.S. Department of Commerce notes is consistent with the administration's forecast of 2 percent growth for the national economy in 1990.

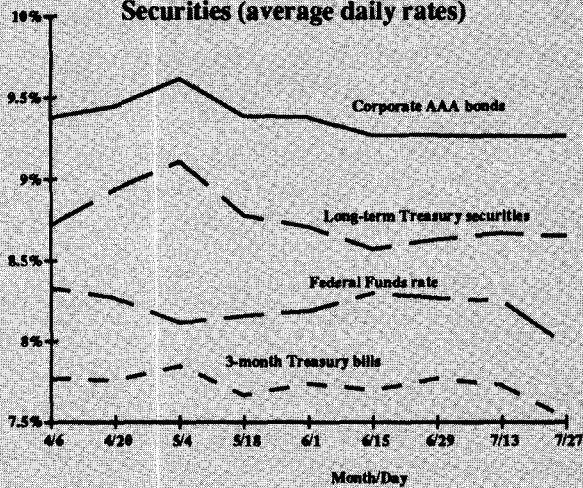
In April and June, negative or zero contributions were recorded for seven of the index's eleven components, while seven were positive in May. The index seemed to give mixed economic signals in 1990 II, with its rise or fall contingent upon rather large changes in one or two elements. In April there were considerable declines in the number of building permits issued and in plant and equipment orders (somewhat offset by a rise in materials' prices), and the May increase was spurred by a substantial gain in the average workweek. Despite a cut in manufacturers' unfilled orders, the June index was unchanged. Only two elements—materials' prices and delivery times—contributed positively to the index in each of the three months, and one—manufacturers' unfilled orders—declined throughout the quarter.

Despite some good signals, the index seems to point to a weakening economy. The workweek gain in May followed a large decline the previous month, and the May increase in materials' prices is likely the result of tight credit rather than greater demand. In addition, the gain recorded that month in orders for consumer goods was offset by an almost equal decline in June.

*Monetary Policy***Review**

Federal Reserve Chairman Alan Greenspan has been attempting a very delicate balancing act, trying to allow interest rates to decline without fanning inflationary fears. The Fed eased monetary policy in May but tightened it in June, resulting in a federal funds rate that changed little over the quarter (8.33 percent at the beginning of April and 8.27 percent at the end of June; see Exhibit 5).

It was in July that Greenspan began his high wire act. Stating its concern about tight credit, the Fed eased up, which resulted in a general decline in interest rates. At the same time, to dispel inflation anxiety, Greenspan denied that the move was in response to a softening economy and reiterated that controlling inflation was still the Fed's primary concern. He conceded, however, that additional adjustments may be necessary if credit conditions worsen, and further loosening could occur if budget negotiations result in a substantial deficit reduction.

EXHIBIT 5**Selected Interest Rates and Yields on Securities (average daily rates)**

SOURCE: Federal Reserve Bank of St. Louis, *U.S. Financial Data*, June 14, 1990, and August 2, 1990.

Outlook

Although Chairman Greenspan initially may have been successful in dampening inflationary fears, events in the Middle East very likely will be his undoing. Energy prices had been declining slightly but suddenly skyrocketed; more increases are almost assured as oil stockpiles are gobbled up in anticipation of shortages and additional price hikes. The Fed, poised to loosen its grip on credit even further in order to kindle a weak economy, now faces the dilemma of doing so and possibly igniting inflation or maintaining monetary restraint and allowing the economy to sag into recession.

Fiscal Policy**Review**

President Bush finally conceded mounting difficulties with the federal budget deficit by permitting the "T word" to cross his reluctant lips. Through June of this fiscal year (which ends in September), the deficit totalled \$163.1 billion, up from \$105.4 billion (54.7 percent) from the same period in 1989. Estimates are that from \$85-101 billion in additional spending cuts will be needed to stave off automatic, across-the-board reductions (or sequester) mandated by Gramm-Rudman. In light of the problems with the current budget and setbacks in the negotiations for the coming fiscal year, the president admitted the need for "tax revenue enhancements" in order to meet FY 1991 targets.

The question now seems to be which taxes will be hiked. The number of plans put forward thus far conceivably may exceed the number of politicians in Washington. Nearly every existing levy has been mentioned as a potential candidate. Proposals include higher taxes on energy (such as the BTU and carbon tax, which would place and/or increase

assessments on selected forms of energy), stock market transactions, the personal income of wealthy individuals, and "sin." The administration earlier had indicated that a budget package must include a reduction in the capital gains tax in exchange for increases in other assessments, and this stipulation may be one cause of the stalled negotiations.

Compounding existing deficit problems is the savings and loan disaster, already estimated to have cost \$100 billion. William Seidman, president of the Resolution Trust Corporation (the agency in charge of the bailout), recently testified that an additional \$100 billion will be required in the coming year alone. While some of the expense will be recovered by the government's sale of assets purchased or seized, losses are likely to be substantial due to declines in real estate values and the collapse of the junk bond market (two major forms of assets held by many of the failed savings and loans).

Outlook

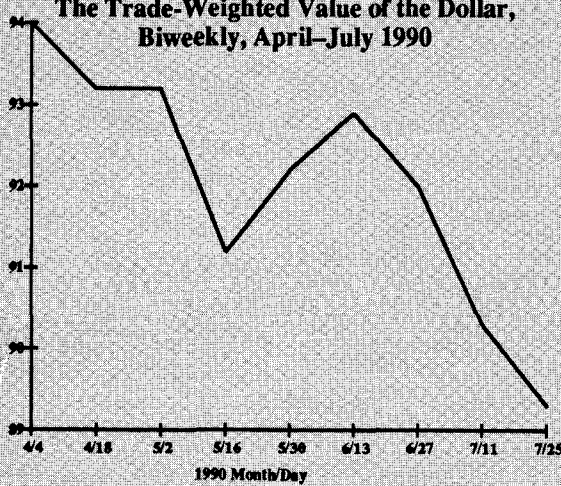
Although the president's concession on taxes appeared to pave the way for an early compromise on the FY 1991 budget, political maneuvering by all concerned has created an impasse. Agreement must be reached soon, however, or Congress risks triggering sequester. The national debt ceiling was raised in late July, making it possible for the government to continue operations through September. It will take more than tax enhancements, however, to deal with what could be the largest budget deficit in U.S. history. Both the administration and the Congressional Budget Office (CBO) have increased their projections for the FY 1991 deficit by about \$1 billion, bringing the total deficit to between \$149.4 billion (the administration's estimate) and \$230 billion (the CBO's figure, which exceeds the 1986 record deficit of \$221.2 billion). Both projections include the on-budget items associated with the savings and loan bailout and some of the effects from the Iraqi invasion of Kuwait. Neither, however, accounts for an increase in the cost of oil and the economic consequences of such an event; the administration estimates that a \$10 per barrel increase in the cost of oil could result in a decline in GNP of 1.2 percentage points, thus reducing government revenues even more than previously predicted. If oil prices were to rise this dramatically, it is likely that Congress would pass legislation allowing the Gramm-Rudman mandates to be exceeded, or at least decrease the size of the cuts necessary to meet the 1991 target of \$64 billion.

International Trade**Review**

From the March figure of \$8.4 billion, the merchandise trade deficit declined by nearly 13 percent in April, to \$7.3 billion. The slight rise in May—to \$7.77 billion (an increase of 0.6 percent)—was no cause for alarm, and the decline in the value of the dollar appeared to bode well for future U.S. exports (see Exhibit 6). The June figure bore this out, falling to \$5.07 billion, 35 percent below the figure posted in May, and was attributable to a record level of exports. (Exports in

EXHIBIT 6

The Trade-Weighted Value of the Dollar, Biweekly, April-July 1990



SOURCE: Federal Reserve Bank of St. Louis, *U.S. Financial Data*, various issues.

NOTE: Weekly data are averages of daily figures. Data are weighted averages of the foreign currency price of the U.S. dollar, computed using ten industrial country currencies.

June climbed 4.6 percent, to \$34.3 billion, while imports declined 29 percent, to \$394 billion.) The trade situation is very likely to be short-lived, however, in light of events in the Middle East.

In April there were declines in both exports and imports, the latter led by a drop of more than 20 percent in the dollar value of energy-related petroleum products; imports of such products shrank from a daily average of 8.4 million barrels in March to 7.5 million barrels in April. A drop in oil prices of \$1 per barrel in May (to \$15.57) could not offset the effect of a larger import volume, an average of 8.9 million barrels per day. (The May rise in oil imports was tempered by export growth in motor vehicles, parts, and engines as well as capital goods.) June's decline in imports was primarily a result of a \$631 million decrease in the value of oil imports; volume in June averaged 8.4 million barrels per day at an average price of \$14.64 per barrel.

On a current dollar basis, unadjusted, the year-to-date trade deficit is 17.1 percent below the figure for the first six months of 1989. The deficit with developed countries narrowed by more than 42 percent compared to last year (from \$26.7 billion to \$15.4 billion), led by an expansion in our surplus with Western Europe, which exceeded \$4.3 billion during January to June (versus \$7.4 million during the same period in 1989). The U.S. trade deficit with the developing world, including the OPEC countries, grew by only 3.2 percent during the first half of 1990 compared to the first six months of 1989.

Outlook

For several quarters, foreign trade has been the only consistently bright spot in the U.S. economic picture, but the invasion of Kuwait could change that. Although the value of the dollar probably will continue to decline, the trade deficit

is likely to worsen during the next several quarters; by late August oil prices were more than \$30 per barrel. Therefore, the value of oil imports likely will outweigh any effects on exports of relatively lower U.S. goods prices.

Motor Vehicle Sales and Production

Review

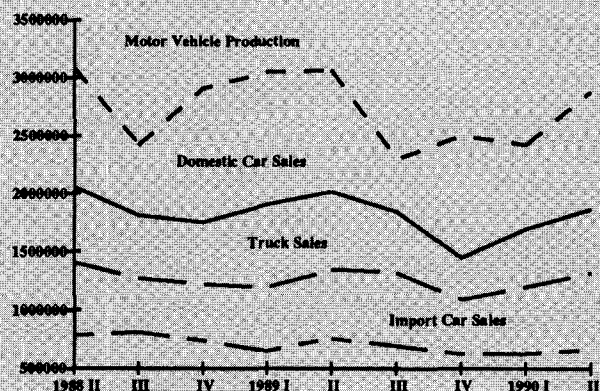
Motor vehicle sales slumped in the second quarter, falling 7 percent below the year-ago level; the decline for passenger cars was 8.9 percent. Domestic sales dropped 7.5 percent, and imports fell 12.6 percent. The import share was 26.3 percent in 1990 II, compared with 27.3 percent a year ago, due partly to a 17.8 percent increase in sales of vehicles produced here by foreign manufacturers (transplants). Compared to last year, truck sales declined only 3.3 percent in the second quarter (see Exhibit 7).

Motor vehicle production was down 6.1 percent in 1990 II from the year-ago level. Unlike the last few quarters, production and sales were closely matched in the second quarter, which meant little change in inventory levels. The 62-day supply of domestic passenger cars on hand as of July 1 compares with 64 days on April 1 and 92 days on January 1 (which prompted the 20 percent production decline in the first quarter).

As shown in Exhibit 8, the best-selling domestic passenger cars in the first half were Lincoln and Chevrolet, although sales of the latter declined in 1990 II. The losers were Dodge, Mercury, Oldsmobile, Ford, and Plymouth. Pontiac sales were off 9.8 percent from the first half of 1989, but an improvement in the second quarter increased market share from 6.3 percent in 1990 I to 6.9 percent in the first half. Among imports, the winners were Mitsubishi, Toyota, and Honda, the latter increasing its market share from 8.2 percent

EXHIBIT 7

Motor Vehicle Production and Sales of Domestics and Imports, Quarterly, 1988 II-1990 II



SOURCE: Automotive News, various issues.

Import Share: 1990 II - 26.3%; 1989 II - 27.3%

% change between 1989 II and 1990 II: Production, -6.1%; Domestic car sales, -7.5%; Import car sales, -12.6%.

EXHIBIT 8

**U.S. Passenger Car Sales, Market Share, Largest Gains
and Losses, First Half of 1989 and 1990**
(more than 1% of 1990 market)

Marketing Unit	Percentage Share, First Half 1989	Percentage Share, First Half 1990	Percentage Change
Mitsubishi	1.0%	1.9%	90.8%
Toyota	6.2	8.0	24.2
Lincoln	2.0	2.6	20.4
Honda	7.5	9.0	14.3
Mazda	2.2	2.4	4.1
Chevrolet	14.4	15.4	1.6
Pontiac	7.3	6.9	-9.8
Chrysler	2.2	2.1	-12.3
Plymouth	2.9	2.7	-11.4
Ford	15.7	14.5	-12.6
Nissan	5.1	4.7	-13.8
Oldsmobile	6.3	5.6	-15.3
Mercury	5.0	4.1	-22.0
Dodge	4.8	3.6	-28.2
Hyundai	1.9	1.4	-29.0
Subaru	1.5	1.1	-29.5
TOTAL PASSENGER CARS	100.0%	100.0%	-5.0%

SOURCE: *Automotive News*, August 13, 1990. Calculations by Public Sector Consultants, Inc.

in 1990 I to 9 percent in the first half. Subaru, Hyundai, and Nissan continued to do poorly.

Outlook

There is no sign of an imminent improvement in motor vehicle sales. The economy continues to weaken, and passenger car sales fell 3.3 percent in July. The uncertainty in the Middle East will dampen motor vehicle sales in the next few months, as evidenced by the 17 percent decline in domestic sales in August. We are reducing our forecast for passenger car sales (from 9.45 million to 9.4 million units) and for trucks (from 4.9 million to 4.85 million units). We thus project a total of 14.3 million units in 1990, 4 percent below the 1989 level.

Housing and Construction

Review

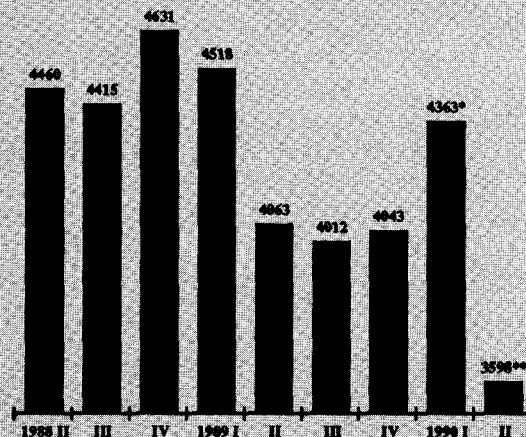
The general decline in the economy was evidenced in housing and construction. Starts of new privately owned housing declined in each month of 1990 II, totalling only 3.6 million (seasonally adjusted rate) (see Exhibit 9). This was down 17.5 percent from 1990 I and 11.4 percent from 1989 II. Permits for privately owned housing, an indicator of future trends, experienced even more significant declines. Permits totalled 3.28 million for the quarter, down 23.1 percent from 1990 I and 17.8 percent from 1989 II.

Construction figures remained flat in the second quarter. The Bureau of the Census reported that the value of construc-

tion put into place rose at an annual rate (seasonally adjusted) of only 0.4 percent, to \$1,343.9 billion, from the 1990 I mark of \$1,337.9 billion. Gains were recorded in nonresidential and public sector construction (up 1.2 and 2.6 percent, respectively), but the residential category declined by 0.8 percent, led by a significant decrease (4.5 percent) in the value of new single-family housing units.

EXHIBIT 9

**New Privately Owned U.S. Housing
Units Started, 1988 II-1990 II**
(in thousands, seasonally adjusted, annual rate)



SOURCE: Bureau of the Census, U.S. Department of Commerce, "Housing Starts," *Current Construction Reports*, various issues.

*Revised
**Preliminary

The fall-off in this sector compared to the first quarter can be attributed in part to the stimulation provided by unseasonably mild weather in 1990 I. In addition, trepidation on the part of lenders resulted in unusually tight credit and rising mortgage rates in 1990 II. Although the Fed has been easing credit of late, mortgage rates (as reported by the Federal Home Loan Mortgage Company) rose in each of the first five months of the year (from 9.9 percent in January to 10.48 percent in May). A decline finally came in June, however, to an average of 10.16 percent, the lowest rate recorded since January and a significant decrease from the previous month's peak.

Outlook

It likely will require more than a fall in interest rates to prop up the sagging housing and construction sector. Consumer confidence has been shaky since March, which could mean delays in spending for new homes and big ticket items. In addition, many regions in which construction had been booming (especially the Northeast and Southwest) are now faced with gluts of commercial properties and are in the midst of recession. Events in the Middle East probably will prevent rates from declining very much (see "Monetary Policy" above), leading us to expect that housing will continue soft through the end of the year.

Prices

Review

The U.S. consumer price index (CPI) increased at an annual rate of 4 percent in 1990 II, down from a rate of 8.5 percent in the first quarter (see Exhibit 10). The reason was a sharp turnaround in prices for food, down 0.4 percent in 1990 II (compared to a 10.8 percent increase in 1990 I), and energy, which rose only 0.8 percent (compared with a 14.4 percent hike in 1990 I). Apparel and medical care prices again rose at rates well above average in the second quarter. The 1990 II CPI was 4.5 percent above a year ago; medical care (8.9 percent) and other goods and services (7.7 percent) rose at above-average rates. Transportation prices were only 1.9 percent above 1989 II, due largely to a decline of 2.2 percent in motor fuel prices.

The producer price index (PPI), which foreshadows increases in the CPI, rose at an annual rate of only 2.5 percent (seasonally adjusted) in 1990 II, down from 6.4 percent in the first quarter. Excluding food and energy goods, which fell 1.6 percent and 14.4 percent, respectively, the PPI increased at an annual rate of 4 percent, up from 3.2 percent in 1990 I. After falling 0.3 percent in April, the PPI rose 0.3 percent in May and 0.2 percent in June; excluding food and energy, increases were 0.2 percent in April and May and 0.6 percent in June. The index fell 0.1 percent in July but is likely to increase sharply in the next month or two due to energy prices.

EXHIBIT 10

U.S. Consumer Price Index and Percentage Changes, by Major Component, 1990 II, 1989, and 1979-89

Component	Relative Importance (December 1988)*	1990 II	Percentage Change			
			1990 II from 1990 I (seasonally adjusted annual rate)	Percentage Change from 1989 II	Percentage Change, 1989 Average over 1988 Average	Percentage Change, 1979-89 (annual rate)
Food and beverages	16.2%	130.6	-0.4%	4.9%	5.7%	5.6%
Housing	42.3	127.4	3.5	4.3	3.8	5.8
Apparel and upkeep	6.4	125.2	14.6	4.6	2.8	3.4
Transportation	17.2	117.7	2.4	1.9	5.0	4.9
Motor fuel	3.1	92.8	10.6	-2.2	9.4	NA
Medical care	6.0	160.8	8.6	8.9	7.7	8.3
Entertainment	11.9	131.7	4.0	4.8	5.2	5.1
Other goods and services		156.7	5.4	7.7	7.9	7.9
All items	100.0	129.3	4.0	4.5	4.8	5.5
Special Indices:						
Energy	7.3	97.3	0.8	0.2	5.6	3.7
All items less energy	92.7	133.8	4.3	4.9	-	-

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, News, selected issues, Calculations by Public Sector Consultants, Inc.
*Indicates the item's contribution to the total market basket.

Outlook

In the last forecast we projected prices would rise at an annual rate of 4 percent during the last three quarters of the year. The 1990 II increase was right on the mark, but the Iraqi invasion changes the picture. Energy prices have jumped but could settle down if the situation in Kuwait is resolved peaceably. A higher rate of inflation appears likely, but we are not changing our forecast until events become clearer. Assuming a 4 percent rate in the second half, the average annual price increase for 1990 will be 4.8 percent. The weakness of the economy is likely to exert downward pressure on inflation.

THE MICHIGAN ECONOMY

Employment and Income

Review

The condition of the state's economy is reflected in the employment data: Nonagricultural wage and salary jobs in 1990 II were only 0.1 percent above the year-ago quarter, the

poorest performance since 1982. As shown in Exhibit 11, the weakness was widespread. Manufacturing employment declined 3.3 percent, a smaller drop than in the first quarter as workers laid off by large auto production cuts were called back. (See Exhibit 12.) Particularly troubling are the 2 percent job decline in construction and the weak 1.3 percent increase in the services sector, both of which have provided a large share of the employment growth in recent years (refer to Exhibit 11). The fastest growing sector was government (2.8 percent), due partly to temporary census workers, but a sharp slowdown can be expected in the coming months, given the budget problems at all levels of government.

The Michigan unemployment rate averaged 7.2 percent in 1990 II, down from 8.2 percent in 1990 I. (Seasonally adjusted, the rate declined from 7.8 percent to 7.4 percent.) The July unemployment rate was 7.7 percent, up from 7.3 percent in July 1989. Michigan had the highest unemployment rate among 11 large states in 1990 II (see Exhibit 13).

Personal income data for 1990 I (the latest available) confirm that Michigan is in a mild recession (see Exhibit 14). Total personal income did not change (seasonally adjusted) from 1989 IV to 1990 I, and the wages and salaries component

EXHIBIT 11

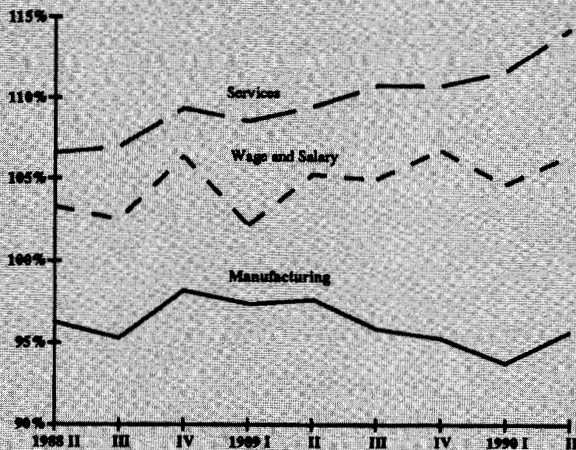
Michigan Wage and Salary Employment, by Sector, 1990 II, 1989 II, 1989, and Five-Year Growth Rates

Sector	1989 II (thousands)	1990 II (thousands)	Percentage Change	1989 Average	Percentage Change, 1989 from 1988	Average Annual Growth Rate, 1983-88
Mining	11.1	10.7	-3.9%	11.0	4.8%	3.1%
Construction	138.9	136.1	-2.0	136.0	1.9	9.1
Manufacturing	977.2	945.3	-3.3	943.0	-0.4	1.5
Durable	741.3	710.8	-4.1	720.0	-0.5	1.1
Furniture and fixtures	35.9	35.0	-2.4	34.0	0.9	8.7
Industrial machinery	126.9	121.8	-4.0	123.0	3.1	0.4
Fabricated metal products	126.0	123.8	-1.7	118.0	0.5	1.7
Motor vehicles and equipment	293.1	275.0	-6.2	288.0	-2.4	-0.3
Nondurable	235.9	234.5	-0.6	233.0	-0.4	-2.8
Food and kindred products	44.2	44.6	0.8	43.0	-4.0	-0.3
Chemical and allied products	44.7	45.0	0.5	42.7	2.9	0.8
Printing and publishing	44.0	45.1	2.5	43.0	1.7	4.5
Rubber and miscellaneous plastic products	54.0	51.1	-5.5	48.0	1.1	9.3
Transportation, communications, and public utilities	152.2	153.2	0.6	154.0	-0.5	2.1
Wholesale and retail trade	920.4	926.0	0.6	915.0	3.0	4.4
Eating and drinking places	249.4	253.8	1.7	247.1	3.6	3.9
Finance, insurance, and real estate	188.8	191.9	1.7	43.0	3.1	4.7
Services	907.2	918.6	1.3	882.0	3.4	4.8
Personal	39.1	39.7	1.5	43.0	3.1	4.7
Business	171.5	175.2	2.1	194.0	4.1	12.4
Health	288.0	293.8	2.0	283.0	1.6	1.6
Other	408.6	409.9	0.3	133.6	10.2	8.8
Government	632.5	650.3	2.8	633.0	1.2	1.9
Total nonagricultural employment	3,928.1	3,932.1	0.1%	3,862.0	1.7%	3.3%

SOURCE: Michigan Employment Security Commission, *Monthly Report on Employment, Hours, and Earnings*, various issues.

EXHIBIT 12

**Michigan Employment, Percentage Change,
1988 II-1990 II (1987 I=100)**



SOURCE: Michigan Employment Security Commission, *Monthly Report on Employment, Hours and Earnings*, various issues.

declined 1.6 percent; on the national level this compares with increases of 1.9 percent and 1.1 percent, respectively. In Michigan, wages in manufacturing and in finance, insurance, and real estate were particularly weak, declining 6.8 percent and 5.2 percent, respectively. The strongest sectors were construction, services, and government. The increase in construction wages probably was due to the unseasonably mild weather and not to real economic strength. The large jump

EXHIBIT 13

**Unemployment Rates for Eleven Large States,
1990 I and 1990 II (seasonally adjusted)**

	1990 I	1990 II
Michigan	7.8	7.4
Texas	5.7	6.2
Florida	5.6	5.9
Illinois	5.9	5.8
Ohio	6.0	5.7
Massachusetts	5.1	5.6
California	5.1	5.2
Pennsylvania	5.4	5.1
New York	4.9	5.0
New Jersey	4.6	4.8
North Carolina	3.6	3.8
United States	5.7	5.3

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, *News*, various issues.

in the "other" category was owing to a 42.8 percent rise in farm earnings. Total personal income was boosted by a robust 3.6 percent increase in transfer payments (such as Social Security and unemployment). Michigan personal income in 1990 I was 5.1 percent above the year-ago quarter, and wages and salaries were 3 percent above 1989 I. Adjusted for inflation, wages and salaries were down about 1.5 percent from the first quarter of 1989.

EXHIBIT 14

**Michigan and U.S. Personal Income and Changes from Previous Period, 1989 IV and 1990 I
(dollars in millions at seasonally adjusted annual rates)**

	Michigan		United States		Percentage Change, 1989 IV to 1990 I	
	1989 IV	1990 I ^a	1989 IV ^b	1990 I	Michigan	United States
Earnings	\$121,396	\$120,215	\$3,230,793	\$3,290,097	-1.0%	1.8%
Construction	5,954	6,177	195,800	201,657	3.7	3.0
Manufacturing	40,535	37,796	627,472	629,677	-6.8	0.4
Transportation and public utilities	6,169	6,237	212,326	218,508	1.1	2.9
Wholesale and retail trade	18,051	18,321	517,711	528,399	1.5	2.1
Finance, insurance, and real estate	5,524	5,235	237,767	225,799	-5.2	-5.0
Services	27,361	27,966	828,401	849,587	2.2	2.6
Government	16,162	16,490	512,175	522,889	2.0	2.1
Other	1,638	1,994	99,141	113,582	21.7	14.6
Other labor and proprietors' income	20,589	20,984	606,281	636,737	1.9	5.0
Dividends, interest, and rent	28,557	28,867	799,551	812,562	1.1	1.6
Transfer payments	25,623	26,548	649,828	672,649	3.6	3.5
Total personal income	\$168,145	\$168,172	\$4,462,173	\$4,548,951	0.0%	1.9%
Addendum:						
Wages and salaries	\$100,806	\$99,231	\$2,624,512	\$2,653,360	-1.6%	1.1%

SOURCE: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce, April 1990.

^aPreliminary

^bRevised

Outlook

It now appears that employment will be flat to slightly down in the second half of the year. We are revising our jobs forecast from an annual increase of 0.8 percent to 0.5 percent. The unemployment rate is likely to rise significantly in the next few months and may reach 8.5–9 percent by the end of the year.

Personal income growth also will slow in the second half of 1990, to about 3.5–4 percent, slightly below the rate of inflation. Our estimate for 1990 has been reduced from 5 percent to 4.5 percent, the slowest rate of increase since 1982.

Consumer Prices

Review

After jumping sharply in February, Michigan consumer prices (as measured by the Detroit–Ann Arbor CPI, released every two months) moderated in April and June, increasing at an annual rate of 3.6 percent in both periods (see Exhibit 15). In April, the small rise in food and beverage prices and a decline in transportation prices offset above-average hikes in apparel, medical care, and housing. In June, declines in the apparel and entertainment indices offset large increases in the other goods and services, medical care, housing, and transportation categories. The June CPI was 4.6 percent above the year-ago level. Medical care cost 8.7 percent more than in June 1989, while apparel was up only 1.5 percent and transportation prices only 2.3 percent (motor fuel was down 1.8 percent).

Outlook

The rate of inflation is not likely to exceed 4 percent for the remainder of this year and at least the first half of the next. The economy is too weak to support high prices for an extended period. We forecast an inflation rate of about 4 percent in 1990 and 1991. As mentioned above, higher energy prices likely will spur inflation, but we are not changing our projection until the Middle East situation becomes clearer.

Housing and Construction

Review

Despite a decent statewide showing in April, Michigan's housing and construction sector continued to exhibit weakness during 1990 II. For the first month of the quarter, planned construction activity (measured by the number of residential permits) was only 1.4 percent off last year's pace, but then came rising mortgage rates and a slowing economy. Furthermore, there had been an upswing in 1990 I generated by the mild weather. Permits issued in Michigan in May (4,124) and June (4,620) were 16.1 and 11.2 percent, respectively, below the levels recorded in 1989.

The picture was worse in the Detroit area, where permits issued in April (1,493) were down a whopping 25.2 percent from a year ago. The story was somewhat better in May and June, when declines were similar in that area to those experienced statewide (11.1 percent and 12.1 percent, respectively).

EXHIBIT 15

**Detroit–Ann Arbor Consumer Price Index and Percentage Changes,
by Major Component, April and June 1990, 1989, and 1979–89**

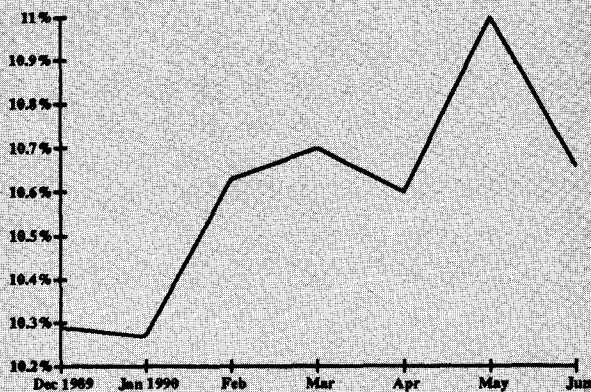
Component	April 1990	June 1990	Change		Change from June 1989 to June 1990	Change, 1989 average over 1988 average	Change, 1979–89
			from February to April 1990 (annual rate)	Change from April to June 1990			
Food and beverages	125.4	126.5	0.6%	5.4%	5.2%	5.2%	47.2%
Housing	125.0	126.5	6.0	7.2	5.0	4.5	72.8
Apparel and upkeep	131.0	122.9	20.4	-37.2	1.5	6.4	37.0
Transportation	120.2	121.7	-1.2	7.2	2.3	6.8	66.5
Motor fuel	94.4	96.3	13.2	12.0	-1.8	10.4	NA
Medical care	156.5	158.9	7.2	9.0	8.7	4.9	99.6
Entertainment	127.7	126.8	-2.4	-4.2	6.1	5.2	45.9
Other goods and services	143.9	146.5	-0.6	10.8	6.6	5.9	96.9
All items	126.9	127.7	3.6	3.6	4.6	5.3	71.3
Addendum:							
All items less energy	130.9	131.5	3.6%	3.0%	5.0%	5.2%	69.0%

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, *News*, selected issues. Calculations by Public Sector Consultants, Inc.

The good statewide showing in April was likely caused (at least in part) by the decline in home mortgage rates that month; the average effective rate of 10.6 percent was one-tenth of a percentage point below the rate recorded in March and the first decline since January (see Exhibit 16). In May, however, rates rose an average of four-tenths of a percentage point, the largest one-month increase since June 1989. Continued signs of statewide economic recession and the activity early in the year likely contributed to the decline in plans for new home construction in 1990 II.

EXHIBIT 16

Recent Effective Mortgage Rates in Michigan



SOURCE: Industry Analysis Department, Federal Home Loan Bank of Indianapolis, August 1990.

NOTE: Result of a survey of federal savings and loans; loan-to-value ratio on 25-year, new single-family home loans.

Outlook

The housing market is forecast to remain soft through the end of the year. Uncertainty generated by events in the Middle East (and the effect on interest rates—see “Monetary Policy”) as well as the possibility of a major autoworker strike are likely to dampen plans for future construction.

Regional Economies

Review

Unlike the first quarter, when employment growth was sluggish in most labor markets, there were some bright spots in 1990 II despite a statewide slowdown. Again, the Upper Peninsula led with a 4.9 percent increase above the year-ago quarter. The main growth sectors there have been construction and services, and the small amount of manufacturing jobs (only 14 percent of the total) is too minor to have a dampening effect. Job growth improved sharply over 1990 I in Saginaw-Bay-Midland, Ann Arbor, Grand Rapids, and Flint, due in part to callbacks in the motor vehicle industry. The weakest labor market was the Detroit MSA, where employment declined 0.5 percent from the year-ago quarter. This poor performance affected statewide employment growth, as the Detroit MSA accounts for about half the jobs in Michigan. Jobless rates in 1990 II increased above 1990 I levels in all labor markets except Flint, where the rate declined 0.8 percent (see Exhibit 17). In the past year Flint has rebounded modestly from the deep cutbacks at General Motors. The largest unemployment increases were in Jackson (1.3 percent), Grand Rapids (1.2 percent), and Muskegon (1 percent).

EXHIBIT 17

Wage and Salary Employment, Unemployment, and Percentage Changes, Major Michigan Labor Markets, 1989 II, 1990 II, and 1989 (employment in thousands)

Labor Market	Employment			1989	Change from 1988	Unemployment Percentage Point Change from 1989 II		
	1989 II	1990 II	Change			1990 II Rate	1989 II	1989 Rate
Upper Peninsula	107.9	113.2	4.9%	108.0	5.4%	9.0%	0.8%	8.2%
Saginaw-Bay-Midland	158.2	163.4	3.3	158.8	1.0	7.1	0.4	7.0
Ann Arbor	172.0	177.3	3.1	175.3	2.7	4.1	0.3	4.1
Grand Rapids	343.1	351.2	2.4	340.1	5.2	6.1	1.2	5.3
Flint	166.5	169.7	1.9	168.4	0.9	8.4	-0.8	10.4
Battle Creek	60.2	60.8	1.0	59.3	2.1	7.8	0.8	7.4
Benton Harbor	67.3	67.9	0.9	66.7	2.9	7.3	0.4	7.4
Kalamazoo	110.9	111.7	0.7	110.7	4.0	5.4	0.6	5.0
Jackson	54.4	54.7	0.7	54.6	6.2	7.8	1.3	6.8
Lansing-East Lansing	215.4	215.9	0.2	214.2	4.3	5.4	0.2	5.6
Muskegon	58.5	58.5	0.0	57.7	1.4	9.7	1.0	8.9
Detroit	1,949.8	1,939.5	-0.5	1,938.0	3.7	7.1	0.4	7.0
Michigan	3,928.1	3,932.1	0.1%	3,904.5	2.2%	7.2%	0.5%	7.1%

SOURCE: Calculated by Public Sector Consultants, Inc., from data supplied by Bureau of Research and Statistics, Michigan Employment Security Commission.

The latter replaced Flint as the labor market with the highest unemployment rate, 9 percent. At 4.1 percent, Ann Arbor continued to have the lowest.

Outlook

There will be little employment growth in any of Michigan's labor markets in the second half of the year. Those least dependent on the auto industry—Ann Arbor, Grand Rapids, and the Upper Peninsula—should do the best. The weakest areas are expected to be Detroit, Muskegon, and Lansing—East Lansing; the latter will be affected by problems in both the auto industry and the state budget.

ROBERT KLEINE, Senior Economist and editor of PSC's *Public Sector Reports*, formerly was senior analyst in public finance at the Advisory Commission on Intergovernmental Relations in Washington, D.C., and director of Michigan's Office of Revenue and Tax Analysis.

FRANCES SPRING, Economist, assists in preparing PSC's revenue and economic forecasts as well as issue papers on tax and economic matters. She is the co-author, with Mr. Kleine, of PSC's study on K-12 education, *Profiling Michigan's School Districts*.

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Its principal consultants are

Gerald A. Faverman, Ph.D., *Chairman and Senior Consultant for Public Policy*

Craig Ruff, M.P.P., *President and Senior Consultant for Public Policy*

William R. Rustem, M.S., *Vice President and Senior Consultant for Environmental Policy and Economic Development*

Robert J. Kleine, M.B.A., *Senior Economist and Editor of PUBLIC SECTOR REPORTS*

Christine F. Fedewa, *Director of Operations and Senior Consultant for Public Policy*

Michael French Smith, Ph.D., *Director of Research and Senior Consultant for Marketing and Economic Development*

Donald A. Wheeler, M.A., FACHE, *Director of the Health Care Division and Senior Consultant for Health Policy*

William E. Cooper, Ph.D., *Senior Consultant for Environmental Science*

Linda Headley, *Senior Consultant for Education and Environmental Policy*

David Kimball, *Senior Consultant for Public Policy*

Peter Pratt, Ph.D., *Senior Consultant for Health Policy and Editor of BILL ANALYSIS SERVICE for HEALTH*

Gerrit Van Coevering, *Senior Consultant for Taxation and Revenue Policy*

Keith Wilson, *Senior Consultant for Waterways Development*

Wilma L. Harrison, *Senior Editor and Research Associate*

Frances L. Faverman, *Editor of the Health Policy Bulletin and Consultant for Health Policy*

Kimberly S. Garner, *Consultant for Public Relations*

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