## Public Sector Reports

## Michigan ECONOMIC BULLETIN

#### The Good News

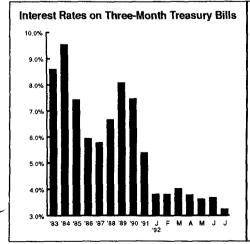
- Responding to a survey by the Commerce Department, U.S. businesses said that they plan to increase **spending on plant and equipment** by 4.3 percent this year. Although it is down from the first-quarter estimate of a 4.7 percent rise, the newest figure is above the 0.6 percent decline in spending posted in 1991. Businesses in the manufacturing sector, however, indicated that they planned to reduce capital expenditures by 3 percent from last year's level.
- Poor August employment figures drove the Federal Reserve to move once again to reduce **interest rates**: The Fed acted to cut the federal funds rate (the rate member banks charge on loans to one another) to 3 percent from the 3.33-percent average rate recorded during the first week of September. In response, yields on three-month treasury bills dipped below 3 percent for the first time in nearly 30 years.
- Michigan's unemployment rate declined to 9 percent in August from July's 9.4-percent rate. Although it has one of the highest rates in the country, Michigan was one of only two states among the eleven largest posting unemployment rates below those of one year ago.
- ➤ In early September the Commerce Department announced that, following a 0.3-percent decline in June, July's **index of leading economic indicators** rose 0.1 percent. The index—designed to foretell the state of the economy in the coming six months—has risen in five of the last six months.

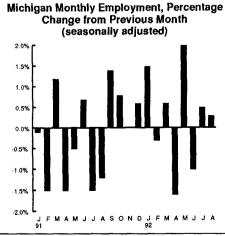
#### The Bad News

- Despite a slight decline in the **national unemployment rate** (from 7.7 percent in July to 7.6 percent in August), the employment picture continues gloomy. Although the government sector added 88,000 jobs during August, large declines recorded in manufacturing (down 97,000) and retail trade (down 71,000) resulted in **private payroll employment** decreasing by 167,000 jobs. The summer-month declines in the unemployment rate were attributed to increased employment among teenagers; unemployment among adults did not drop.
- ➤ As the result of the 0.2-percent monthly drop in the consumer price index, real average weekly earnings declined 0.2 percent in July; average hourly and weekly earnings both remained unchanged from the figures posted in June. Real weekly earnings were down 0.5 percent from July 1991.
- The value of **new construction** dropped 0.6 percent in July, following June's 0.4 percent decline. Lower interest rates, however, should allow revitalization of the sector during the next several months.

# IN THIS ISSUE Education Pays Off in Increased Earnings p. 2 Michigan Revenue Report pp. 3, 4 Publications of Interest p. 4 SPECIAL INSERT: ECONOMIC FORECAST

#### MICHIGAN ECONOMIC INDICATORS







SOURCE: Economic Indicators, Bureau of Labor Statistics, Michigan Employment Security Commission

# How Strongly Does Education Influence Income?

Recently released census data show that income rises with educational attainment. In 1991 Americans aged 18 and older who had completed four years of college earned a median income almost \$12,000 more (or 54 percent higher) than people who had completed four years of high school.

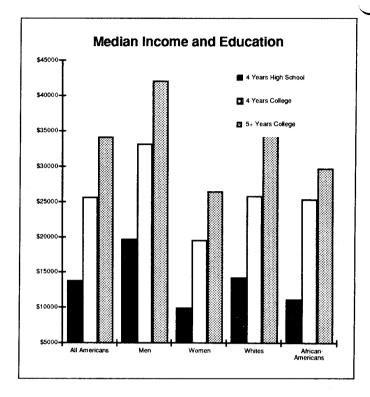
Completion of a full four years of college or high school also has an effect on income. In 1991 those who finished between one and three years of college earned a median income of \$17,003 compared with \$25,811 for those who finished four years. Similarly, earnings of those who completed between one and three years of high school were only 64 percent of the incomes of high school graduates in 1991.

#### Is Gender a Factor?

Major differences exist between the sexes in the relationship of educational attainment to income. As shown in the exhibit, women earned less than men at all education levels. For example, men with four years of college earned a median income of \$33,261, while women with the same education earned \$19,724. In addition, there are disparities within gender groups in the way that education relates to income, as women who go to college appear to benefit more from their educations than college-educated men. For instance, women with four years of college earn almost twice as much (196 percent) as women with high school diplomas. Incomes of men with four years of college, however, are only 167 percent of the earnings of men who graduate from high school.

#### Is Race a Factor?

As with gender, race affects the degree to which education relates to income. African-Americans earn less than whites at all education levels (refer again to the exhibit). However, whites who have completed four years of college earn about 181 percent more than whites with a high school diploma, while African-Americans with four years of college education earn a median income more than 225 percent higher than African-Americans with only a high school education. The income disparity between African-Americans with higher education and those without is, therefore, much greater than for whites.



#### What Do The Differences Mean?

While education raises the incomes of all Americans, the data show that the influence of education on income is magnified for certain groups. African-Americans earn less than whites at all education levels but are able to "catch up" to some degree through higher educational attainment. For example, African-Americans with high school educations earn only 79 percent of what comparable whites do, but with four years of college the percentage rises to 98 percent of their white counterparts' earnings.

As with African-Americans, women can lessen income disparities through education. Even though women at all education levels earn less than equally educated men, schooling raises women's incomes more than it raises men's. For example, women with high school educations earned only 51 percent of what male high school graduates earned in 1991; women with four years of college earned 59 percent of what equally educated males earned.

From this data we can see that the effect of education on income is different for different groups of Americans. Education is best able to raise incomes of blacks but also substantially raises the incomes of women. While education pays off the least for American white males, it is still a powerful determinant of their standard of living.

# MICHIGAN ECONOMIC BULLETIN Special Insert • September 1992

#### **Economic Forecast**

INTRODUCTION The year started off with betterthan-expected economic expansion but stalled in the second quarter, hampered by pessimistic consumers, a tight-fisted banking system, and an overwhelming federal budget deficit. The Federal Reserve (Fed) continues to try to stimulate the economy by reducing interest rates, but banks have been holding government securities to boost profits rather than expanding their loan portfolios. Declines in interest rates also have led to foreigners selling government debt holdings, causing a decline in the value of the dollar. This will stimulate export demand, though gains likely will not occur until late 1992 and could be curbed by foreign economic problems. Finally, the federal government is limited by the politics of an election year and hampered by the inability to cut taxes or raise spending in the face of the deficit. Growth, therefore, is expected to continue at a minimal pace throughout the rest of the year and 1993.

GROSS DOMESTIC PRODUCT Economic malaise was evident in the second-quarter figures for gross domestic product (GDP). GDP managed to grow at a seasonally adjusted, annual rate of only 1.4 percent during the second quarter of 1992 following a revised increase of 2.9 percent in the first quarter. Lower interest rates seemed to have provided what little stimulus there was, as private sector investment was the only area demonstrating vigor. Nonresidential investment increased by 12.8 percent and residential investment by 8.4 percent; this was offset, however, by a fairly significant increase in business inventories, which rose by \$1 billion after declining by \$12.6 billion in the previous quarter. Businesses likely stockpiled inventory due to listless consumer demand, down 0.3 percent from the previous quarter. The combination of deepening foreign economic problems and falling interest rates dampened the export sector. Net exports slid 67 percent as the result of a 3.8 percent decline in exports and a 6.2 percent increase in imports. Total government spending was up only 0.3 percent for the quarter, with state and local government purchases up a mere 0.1 percent.

Outlook In our previous forecasts we predicted 1992 GDP growth of 1.8 percent, a figure that it appears will hold true. Exports likely will resurge as the falling dollar spurs exports and provides some economic stimulus. Despite this, growth will remain hampered by the ever-burgeoning budget deficit, and little action to control its expansion is likely until some time next year at the earliest. We predict third- and fourth-quarter GDP to grow by 1.3 percent in the third quarter and 1.5 percent in the fourth and 1993 GDP growth to be in the 2 to 2.5 percent range.

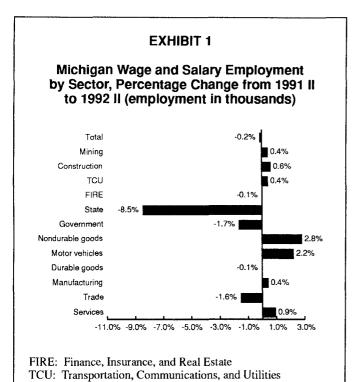
EMPLOYMENT AND INCOME U.S. employment has improved modestly in recent months but is still very weak when compared with previous recoveries. Following a small decline in the first quarter, the number of nonfarm jobs increased 288,000 in the second quarter and 198,000 in July, with most of the gains in services and government. There also were small gains in retail trade, while employment in manufacturing and construction were flat. The news was grim in August, however, as the number of jobs fell by 83,000 despite an 88,000 increase in government summer jobs. Private employment fell by 167,000, with manufacturing jobs dipping 100,000 and retail trade jobs off by 71,000.

The U.S. civilian unemployment rate averaged 7.5 percent in the second quarter, up from 7.2 percent in the first. The rate peaked at 7.8 percent in June then declined to 7.7 percent in July and 7.6 percent in August; the July/August decreases, however, were all attributable to government summer teen employment programs.

U.S. personal income rose at an annual rate of only 3.3 percent in the second quarter, down sharply from a first-quarter increase of 5.9 percent. Part of the weakness was due to a 6.8-percent (annual rate) decline in interest income, which accounts for almost 15 percent of total personal income.

The Michigan labor market shows few signs of improvement. In the second quarter Michigan wage and salary employment fell 0.2 percent from the year-ago level (see Exhibit 1). The major areas of weakness continue to be government, construction, and trade. Government employment was flat due to declines in state employment, reflecting continuing state budget problems. The increase in manufacturing employment from the second-quarter 1991 level was due mainly to a 2.2-percent rise in motor vehicle production (the result of a large first-half increase in vehicle production) and an increase in nondurable goods manufacturing employment. The services sector continues to set the pace, with employment gains led by a 2.4-percent rise in health services jobs. July wage and salary employment fell about 40,000 from the June level but was unchanged from a year ago. The July declines were concentrated in government, manufacturing, and trade (down by 27,000, 18,000, and 11,000 jobs, respectively). Service sector employment gained about 8,000 jobs.

The state unemployment rate averaged 8.9 percent in the second quarter (seasonally adjusted), down slightly from 9.1 percent in the first quarter. The rate jumped to 9.4 percent in July, however, then dipped to 9 percent in



August. Michigan's July unemployment rate was tied for second highest, with New York, among eleven large states.

SOURCE: Michigan Employment Security Commission (spe-

cial release) and Public Sector Consultants' estimates.

Michigan personal income increased at an annual rate of 5 percent in the first quarter of 1992 (latest data available), a modest improvement over most recent quarters. Income was boosted by an 18.4-percent increase (annual rate) in transfer payments (social security, welfare, and unemployment). On the down side was a 7.2 percent decline in dividends, interest, and rent, due to the sharp decline in interest rates. Wage and salary payments increased at an annual rate of only 3.6 percent. Most sectors were flat, but payments in services increased at an annual rate of 8.7 percent. As shown in Exhibit 2, wages and salaries are up 5.8 percent from the quarter last year, due

largely to the increase in manufacturing wages from the depressed year-ago quarter.

Michigan personal income increased only 2.2 percent in 1991, well below the 3.1-percent increase nationwide and the annual average growth rate of 5.9 percent experienced between 1986 and 1990. Per capita personal income rose 2 percent in 1991 (equivalent to the national growth rate) to \$18,679, 97.9 percent of the national average.

Outlook While the labor markets in Michigan have shown slight improvement, wage and salary employment is still below the year-ago level. In 1992 we expect national employment to increase by less than one percent; while representing a significant improvement from 1991, employment still will be well below the 1990 level. In 1993 we are forecasting modest employment gains of one to 1.5 percent. The unemployment rate will average about 7.5 percent this year and fall to slightly below 7 percent in 1993. U.S. personal income is projected to increase 4.5 to 5 percent in 1992 and 5.5 to 6 percent in 1993.

Because of continued employment cutbacks in the motor vehicle industry, we are expecting slightly slower growth in Michigan than nationwide. As a result, we forecast a 0.5-percent increase in wage and salary employment in 1992 and slightly more than a one percent increase in 1993. The unemployment rate will average about 9 percent in 1992 and 8.25 to 8.5 percent in 1993.

We forecast Michigan personal income to grow 4 to 4.5 percent in 1992. Income growth will be constrained by lower interest rates, but transfer payments will continue to provide a stimulus. Wage and salary income is forecast to increase 4.5 to 5 percent in 1992. The outlook for 1993 is only slightly brighter. Lower interest rates are not providing as much stimulus as expected, and fiscal policy is moribund due to the large annual federal budget deficit. Some impetus eventually will come from exports, and in Michigan motor vehicle sales will continue to improve modestly. As a result, we are projecting 1993 personal income to rise by 5 to 5.5 percent, with wage and salary income gaining at a slightly faster pace.

	Michig	an Personal I	ncome, Selected C (dollars in millions	omponents, 19	988–92	
Year	Total Personal Income	Wages and Salaries	Manufacturing Wages	Services Wages	Transfer Payments	Dividends, Interest, and Rent
1988	\$152,286	\$93,369	\$33,507	\$17,838	\$23,793	\$22,998
1989	163,322	98,564	34,595	19,493	24,626	26,622
1990	171,170	102,368	34,175	21,255	26,820	27,845
1991	174,982	103,152	33,363	21,917	29,648	27,565
1992 I	180,245	106,397	35,056	22,768	31,658	26,728
Percentage change						
1991 I to 1992 I	5.2%	5.8%	11.8%	5.2%	9.3%	-4.3%

SOURCE: Bureau of Economic Analysis, U.S. Department of Commerce. Calculations by Public Sector Consultants, Inc.

PRICES The U.S. consumer price index (CPI-U) increased at a meager annual rate of 3.2 percent in the second quarter, up only 3.1 percent from the year-ago period; excluding the volatile food and energy components, prices were up 2.9 percent, well below the first-quarter increase of 4.8 percent. The weak economic recovery continued to dampen inflation in July, when consumer prices rose at an annual rate of 2.4 percent.

Michigan consumer prices (as measured by the Detroit-Ann Arbor CPI, released every two months) expanded at annual rate of 2.2 percent during the first half of 1992. Declines in the prices of apparel, transportation (despite a sharp increase in motor fuel prices), and food offset above-average gains in energy, medical care, and housing costs (see Exhibit 3). Excluding energy, prices rose at an annual rate of 0.8 percent in the first six months of 1992. Price increases remained low in August.

As the result of a run up in energy prices (mainly in June), **producer prices**—which generally foreshadow changes in consumer prices—increased at annual rate of 3.2 percent during the second quarter. Excluding energy prices, the cost of finished goods rose only 1.6 percent in the second quarter, and July producer prices increased at an annual rate of 1.2 percent.

Outlook The recent fall in long-term bond rates provides clear evidence that inflation is dead; unfortunately, so is the economy. The demise assures that there will be no resurgence of inflation anytime soon. Energy prices increased more than expected in the first half of the year, but fell steeply in August. The only negative is the decline in the value of the dollar, which will increase import prices. In our last quarterly forecast we projected that consumer prices in Michigan would increase 3 to 3.5 percent in 1992, but it now appears that the rise will be only 2.5 percent in 1992 and slightly above 3 percent in 1993. We expect

prices at the national level to increase about 0.5 percent faster than Michigan prices in both 1992 and 1993.

MONETARY AND FISCAL POLICY After remaining fairly inactive since April, the Federal Reserve recently moved to stimulate the economy by reducing interest rates. During the first week of July, the Fed reduced the **discount rate** (the rate the Fed charges member banks on short-term loans) to 3 percent from the 3.5-percent rate that had been in effect since December. The July cut in the rate resulted in an additional 0.5 percentage point reduction in the **federal funds rate** (the rate member banks charge on loans to each other). In early September the Fed once more (in response to the August employment figures) reduced the federal funds rate, which fell to about 3 percent.

During the first nine months of the fiscal year (which ends September 30), the on-budget federal deficit totaled \$227.4 billion, 22.5 percent above the level recorded in the first nine months of FY 1991. Indicative of the slow-moving economy, total on-budget receipts were up only 3.2 percent, while outlays rose 8.7 percent. Also symptomatic of the lethargic economy was the decline in personal income tax and nontax receipts: During the second quarter of calendar year (CY) 1992, income tax collections were down by a seasonally adjusted 5.3 percent (annual rate) from the previous quarter and were 2.3 percent below CY 1991 secondquarter collections. Total government spending rose slightly, up 3.8 percent (seasonally adjusted, annual rate) from the first quarter. Transfer payments—which account for 42.6 percent of total on- and off-budget outlays-increased 3.7 percent (to \$615.4 billion), state and local grantsin-aid grew 11.6 percent (to \$169.9 billion), government subsidies rose 18.9 percent (to \$26.9 billion), and purchases were up 1.6 percent (to \$446.8 billion). Low interest rates allowed net interest payments to rise only 0.6 percent (to \$187.1 billion).

	Detroit-Ann Arbor Co	nsumer Price Index,	June and August, 1992	
Component	June 1992 Index	August 1992 Index	Percent Change, December 1991– June 1992 (annual rate)	Percent Change, June 1992- August 1992 (annual rate)
Food and beverage	132.9	133.5	-2.0%	3.0%
Housing	131.9	132.5	4.8	3.0
Apparel	127.4	127.8	-1.6	1.5
Transportation	130.1	128.6	-1.2	-7.2
Motor fuel	100.8	94.1	8.9	-36.6
Medical care	181.0	182.1	6.1	3.6
Entertainment	131.0	130.2	2.8	-3.6
Other goods and services	170.4	175.8	3.0	3.2
All items	135.5	135.8	2.2	1.3
Energy	106.3	103.3	17.2	-16.8
All items less energy	139.8	140.6	0.8	3.6

The ability of the Fed to provide any addi-Outlook tional stimulus to the economy is becoming increasingly limited. Lower interest rates have not greatly spurred lending, as banks have been foregoing credit risk and holding government securities. For the first time since 1951, banks are holding a larger proportion of their assets in the form of government paper than in commercial and industrial loans. The drop in interest rates—now at 30-year lows—also has caused investors to dump American securities in favor of foreign securities. Any further action to cut rates would have limited economic effect. In terms of fiscal policy, Congress and the president appear hamstrung as well, as the deficit situation and the political realities of an election year limit their ability to act either to significantly cut taxes or raise spending in an effort to induce economic activity. We therefore predict that the FY 1992 federal on-budget deficit will reach \$375 billion, with the total deficit (which includes social security and other surplus funds) at \$320 billion. Assuming "business as usual," we forecast that the FY 1993 deficit will reach \$390 billion. with an on-budget shortfall of \$330 billion.

#### MOTOR VEHICLE SALES AND PRODUCTION

Motor vehicle sales slipped a little in the second quarter. rising only 2.1 percent compared with a first-quarter gain of 4 percent. Again, trucks sales led the way, increasing 9.6 percent. Japan continued to lose ground to the Big Three, with sales of Japanese-produced vehicles down 7.7 percent, compared to a 5.5 percent rise in sales of domestic models. A major reason for this shift is the strength in truck sales, a market dominated by the Big Three. Motor vehicle sales were down 2.4 percent in July and flat in August. The weakness was in passenger car sales, which were off 5.2 percent in July and 6.7 percent in August. Truck sales rose 3.1 percent in July and 12.7 percent in August.

The best selling make this year is Ford, which, on the strength of a 13.1-percent increase in sales in the first eight months of the year, increased its market share from 17.6

percent to 20 percent. Ford's success has come largely at the expense of Chevrolet/Geo, whose market share fell from 18.1 to 17.2 percent. Saturn, Pontiac, Dodge/Plymouth, Mercury, GMC, and Jeep also have significantly increased market share this year.

Production continued to outpace sales in the second quarter, increasing 10.1 percent above the year-ago quarter. Truck production rose 15.4 percent and car production, 9.9 percent. The first-half surge in auto production provided a strong boost to the Michigan economy. Production cannot continue to outpace sales, however, and cuts in output are likely in the last quarter of the year.

Michigan's share of total domestic motor vehicle production was about 24.5 percent in the second quarter, up from the first-quarter level and about 2.4 percentage points above a year ago. One negative is that the state produces only 16-17 percent of the fast-selling trucks and about 31 percent of the bestselling passenger cars.

Outlook Motor vehicle sales increased 3.4 percent in the first eight months of 1992, with truck sales up 10.8 percent and passenger car sales down 0.3 percent. We expect sales to be slightly weaker in the last four months of the year. Our 1992 forecast is for total sales of 12.75 million units (see Exhibit 4). We expect motor vehicle sales to improve modestly in 1993 due to lower interest rates, a small improvement in consumer confidence, and a modest increase in real incomes. Our 1993 forecast is for motor vehicle sales of 13.4 million units. It appears that the improving quality of domestic vehicles, the rising tide of anti-Japan sentiment, the strength of light-truck sales, and the declining value of the dollar have combined to reverse the steady increase in the Japanese market share. We expect this trend to continue in 1993, although the decline in the Japanese market share will not be as sharp as in 1992.

## **EXHIBIT 4** Car and Light Truck Sales, 1988–91, 1992, and 1993 (sales in thousands)

Passenger Cars

		rassenger	Vais			
Year	Domestic, Big 3	Transplant	Imports	Total	Light Trucks	Total Motor Vehicles <sup>a</sup>
1988	6,910	616	3,069	10,595	4,878	15,476
1989	6,236	779	2,698	9,713	4,779	14,492
1990	5,792	1,061	2,453	9,306	4,591 <sup>b</sup>	13,897
1991	4,948	1,124	2,104	8,176	4,159	12,335
1992 (est.)	4,950	1,220	2,030	8,200	4,550	12,750
1993 (est.)	5,150	1,350	1,950	8,450	4,900	13,350

SOURCE: Automotive News. Estimates by Public Sector Consultants, Inc.

Exludes heavy duty truck sales of about 300,000 annually.

Public Sector Consultants, Inc.

<sup>&</sup>lt;sup>b</sup>Excludes transplant sales of 203,000. (Transplants and imports account for about 17 percent of truck sales.)

### Michigan Revenue Report

Revenue growth was mixed in July and August largely June and July) activity. (Refer to tables below and on page 4.) Personal income tax withholding collections increased an adjusted 10.6 percent in July but fell an adjusted 2.5 percent in August. Income tax refunds have been higher than expected and could exceed the fiscal year estimate by as much as \$50 million.

Single business tax collections increased sharply in July but fell even more sharply in August. For the two months combined, collections were down 13.1 percent from the year-ago level. This decline is overstated, however, as third-quarter collections last year were inflated by payments that had been delayed pending resolution of the court case concerning the capital acquisition deduction.

One pleasant surprise was a surge in sales and use tax collections, which increased 5.7 percent in July and 7.5 percent in August. Motor vehicle sales rose 23.1 percent in July and 9.1 percent in August. Excluding motor vehicles and the volatile use tax, sales tax collections increased a robust 7.7 percent for the two months combined. The rise is surprising given the continued weakness of the economy and is unlikely to be sustained in the coming months.

Lottery sales continued strong, increasing 26.7 percent in July due to a large lotto jackpot and 3.9 percent in August (preliminary data).

MONTHLY	TAX COL	LECTIONS	5 (de	ollars i	n thousands)	

Type of Revenue	Preliminary July 1992	% Change from Last Year	Past 3 Months' Collections	% Change from Last Year	FY 1991–92 Year-to-Date	% Change from Last Year
Personal Income Tax						
Withholding	\$353,019	2.9%	\$1,072,642	5.5%	\$3,290,908	4.1%
Quarterly and Annual Payments	7,729	-15.7	120,650	-19.7	598,564	-4.4
Gross Personal Income Tax	360,748	2.4	1,193,292	2.2	3,889,472	2.7
Less: Refunds	-42,396	-12.5	-344,384	9.3	-1.190.228	10.3
Net Personal Income Tax	318,352	4.8	848,908	0.0	2.699.244	-0.4
Sales and Use Taxes	296,885	5.7	841,388	5.4	2,376,978	2.1
Motor Vehicles	50,455	23.1	141,733	13.5	344,973	8.9
Single Business Tax	160,809	10.4	467,837	9.1	1,191,834	-2.4
Cigarette Tax	22,081	7.2	60,678	-6.5	182,841	-3.4
Public Utility Taxes	16,881	0.0	17,250	NM	89,832	0.2
Oil and Gas Severance	3,492	-9.5	9,401	-19.0	31,210	-17.6
Lottery <sup>a</sup>	46,284	26.7	130,413	7.1	409,046	6.4
Penalties and Interest	465	-38.8	16,288	4.6	60,560	-1.8
SUW—Annuals and Undistributed <sup>b</sup>	988	<i>–77.7</i>	5,742	-11.6	25,747	-8.8
Other Taxes <sup>c</sup>	55,924	41.4	129,862	-5.9	419,067	11.5
TOTAL TAXES (GF & SAF) <sup>d</sup>	\$922,161	8.0%	\$2,527,767	3.0%	\$7,486,359	0.8%
Motor Fuel Taxe	\$58,699	-0.1%	\$171,109	-0.3%	\$515,490	1.6%

SOURCE: Data supplied by Michigan Department of Treasury.

NM = Not meaningful

These revenues are distributed to the sales, use, and withholding (SUW)

accounts when final numbers for the month are reconciled.

<sup>c</sup>Includes intangibles, inheritance, foreign insurance premium, corporate

organization, and industrial and commercial facilities taxes. dExcluded are beer and wine, liquor, and horse racing taxes.

The motor fuel tax is restricted to the Transportation Fund.

<sup>&</sup>lt;sup>a</sup>The state share of lottery sales in 40.1 percent (FY 1991). The previous year's figures are adjusted to the current year's profit margin; the percentage change reflects the increase in ticket sales.

M																		

Type of Revenue	Preliminary August 1992	% Change from Last Year	Past 3 Months' Collections	% Change from Last Year	FY 1991–92 Year-to-Date	% Change from Last Year
Personal Income Tax						
Withholding	\$370,629	16.2%	\$1.117.676	8.6%	\$3,681,379	5.6%
Quarterly and Annual Payments	9,575	-6.5	114.051	-1.9	611.160	-4.7
Gross Personal Income Tax	380,204	15.5	1,231,727	. 7.5	4,292,539	4.0
Less: Refunds	-19,709	-34.7	-110.407	-12.2	-1.209.847	8.8
Net Personal Income Tax	360,495	20.5	1,121,320	$\bar{0}.\bar{1}$	3,082,692	ž.ž
Sales and Use Taxes	286,133	7.5	858.210	5.3	2.656.634	2.4
Motor Vehicles	48,083	9.1	142,896	11.5	393.053	$\tilde{8}.9$
Single Business Tax	168,344	-27.8	386,480	-10.4	1.361.416	-6.7
Cigarette Tax	22,746	-7.9	63,923	-6.7	205,577	-4.0
Public Utility Taxes	56,308	0.0	73,565	NM	146,144	0.9
Oil and Gas Severance	3,470	-10.1	9.985	-12.9	34,699	-16.8
Lottery <sup>a</sup>	39,980	3.9	128,290	5.4	447,136	5.8
Penalties and Interest	290	-24.9	13,661	-23.1	66.131	-7.7
SUW—Annuals and Undistributed <sup>b</sup>	7.176	-9.1	-106	$-1\overline{01.3}$	18,974	-40.0
Other Taxes <sup>c</sup>	27,034	22.4	94,361	32.8	446,417	12.1
TOTAL TAXES (GF & SAF) <sup>d</sup>	\$971.976	2.2%	\$2,749,689	4.2%	\$8,465,820	0.8%
Motor Fuel Taxe	\$57,512	0.1%	\$179,030	-0.2%	\$578,220	1.7%

SOURCE: Data supplied by Michigan Department of Treasury.

NM = Not meaningful

accounts when final numbers for the month are reconciled.

#### **PUBLICATIONS OF INTEREST**

Three recent publications of the United States General Accounting Office (GAO) focus on the problems caused by the national budget deficit.

United States GAO, Prompt Action Necessary to Avert Long-Term Damage to the Economy, GAO/OCG-92-2 (Washington, D.C.: GAO, June 1992); Budget Policy: Long-Term Implications of the Deficit, Testimony, Statement of Charles A. Bowsher, Comptroller General of the United States, GAO/T-OCG-92-4 (Washington D.C.: GAO, June 5, 1992); and The Budget Deficit and Long-Term Economic Growth, Statement of Sidney G. Winter, Chief Economist, GAO/T-OCE-92-1 (Washington, D.C.: GAO, June 11, 1992).

Some of the data reported in this month's Monthly Focus column can be found in two education-related publications, both by the same authors, recently released by the Census Bureau. Both contain demographic data on educational attainment in the United States, and either can be obtained

by calling the U.S. Government Printing Office at 202/783-3238. There is a charge for these publications.

Robert Kominski and Andrea Adams, Economics and Statistics Administration, Bureau of the Census, U.S. Department of Commerce, Educational Attainment in the United States: March 1991 and 1990, Current Population Reports, Series P-20, No. 462 (Washington, D.C.: U.S. Government Printing Office, May 1992) and School Enrollment-Social and Economic Characteristics of Students: October 1990, Current Population Reports, Series P-20, No. 460 (Washington, D.C.: U.S. Government Printing Office, April 1992).

Provide data on years of school completed by age, sex, race and Hispanic origin, marital status, labor force status, occupation, and metropolitan and nonmetropolitan residence as of March 1991. Also provided are data for selected metropolitan statistical areas and the 25 largest states as well as for mean 1990 income levels by educational attainment, sex. race, and Hispanic origin.

<sup>&</sup>lt;sup>a</sup>The state share of lottery sales in 40.1 percent (FY 1991). The previous year's figures are adjusted to the current year's profit margin; the percentage change reflects the increase in ticket sales.

These revenues are distributed to the sales, use, and withholding (SUW)

<sup>&</sup>lt;sup>c</sup>Includes intangibles, inheritance, foreign insurance premium, corporate organization, and industrial and commercial facilities taxes.

Excluded are beer and wine, liquor, and horse racing taxes.

<sup>&</sup>lt;sup>e</sup>The motor fuel tax is restricted to the Transportation Fund.