

PUBLIC POLICY ADVISOR

The Michigan Single Business Tax: Burden or Benefit?

by Robert J. Kleine, Vice President and Senior Economist

INTRODUCTION

The Michigan single business tax (SBT) has generated considerable controversy during its nearly 18 years of existence. One reason is that it is unlike any other tax levied in this country. Of the 45 states that levy a general tax on business, 44 use net income (or profits) as the tax base. Only Michigan uses the value added during the processing of a raw material or service, with a number of adjustments, as its business tax base. Most businesspeople do not understand the concept of value added, and many are unhappy with a tax that must be paid even when their business does not earn a profit. As a result, there have been numerous proposals over the years to repeal or sharply modify the SBT. This report, which is an update of a report issued October 1, 1988, discusses the concept of taxing value added, examines the history of the SBT, analyzes recent proposals, and recommends changes in the tax.

Most recently, a special House committee chaired by Susan Munsell has been holding hearings to examine alternatives to the SBT. Also, an increase in the SBT or other business taxes will be needed to replace all or a portion of school property taxes paid by businesses that were repealed by the legislature in July.

WHAT IS A VALUE-ADDED TAX?

A value-added tax (VAT) is a form of a sales tax levied on the difference between the cost of goods purchased from other businesses that went into the product and the value of the product at sale. In a typical business operation, a firm purchases materials from its suppliers and produces a product or service by processing, manufacturing, distributing, or otherwise "adding value" to goods, services, and materials purchased from other firms. The value added may be calculated in various ways, but it is easiest to think of it simply as the increase in value between a firm's purchases of goods and its sales. If a firm buys \$60 worth of raw materials from other firms and produces a product that sells for \$100, the

value added is \$40. A 10 percent tax would produce a tax liability of \$4.

Since most firms usually produce a good for the market, it is convenient to think of the retail price or value of a product or service as being equal to the total of all values added in the production and distribution process. A loaf of bread, for example, will sell for the total of the value added by the farmer, miller, baker, trucker, grocer, and anyone else involved in getting it to the consumer. Thus, a value-added tax that extends through the retail level would collect essentially the same amount of tax on a product as would a retail sales tax levied at the same rate of tax. The difference is that the sales tax is collected exclusively at the retail level, whereas a VAT is collected at each stage of the production-distribution process or directly from each firm, depending on the method of calculation used. (See discussion below.)

There are three ways in which a VAT may be levied: on gross product, on income, or on consumption. The difference is how capital is treated. If gross product is taxed, neither the cost of capital investment nor its depreciation is deducted. Under the income variant, the cost of capital investment is not deducted, but the depreciation on it is. A VAT levied on consumption provides a deduction for the cost of capital investment but not for its depreciation. The Michigan SBT law requires that depreciation be added back to the tax base as it is deducted from federal taxable income, which is the starting point for calculating the tax. The Michigan SBT is a consumption VAT.

Although value added is most easily thought of as the difference between a firm's sales and its purchases, the tax liability may be calculated by three methods: subtraction, credit, or addition. The three methods are illustrated in Exhibit 1. Under the subtraction method, a firm calculates its VAT liability by subtracting its outside purchases from its sales and applying the tax rate to the difference.

**Exhibit 1: Comparison of Three Methods of Calculating Value-Added Tax Liability
(10 percent value-added tax)**

| | Stage of Production | | | Total Economy |
|-------------------------------------|------------------------|----------------------|--------------------|---------------|
| | Firm A Manufacturer | Firm B Wholesaler | Firm C Retailer | |
| 1. Subtraction Method | | | | |
| Sales | \$350 | \$850 | \$1,100 | \$2,300 |
| Purchases | 100 | 350 | 850 | 1,300 |
| Value added (sales minus purchases) | 250 | 500 | 250 | 1,000 |
| VAT | 25 | 50 | 25 | 100 |
| 2. Credit Method | | | | |
| Sales | \$350 | \$850 | \$1,100 | \$2,300 |
| Tax on sales | 35 | 85 | 110 | 230 |
| Purchases | 100 | 350 | 850 | 1,300 |
| Tax on purchases | 10 | 35 | 85 | 130 |
| VAT liability (tax on purchases) | 25 | 50 | 25 | 100 |
| 3. Addition method | | | | |
| Factor payments plus net profit | | | | |
| Wages | \$150 | \$300 | \$200 | \$650 |
| Rent | 50 | 100 | 20 | 170 |
| Interest | 25 | 75 | 20 | 120 |
| Profit | 25 | 25 | 10 | 60 |
| Total | 250 | 500 | 250 | 1,000 |
| VAT | 25 | 50 | 25 | 100 |

SOURCE: U.S. Department of the Treasury, *Tax Reform for Fairness, Simplicity, and Economic Growth*, November 1984.

Under the credit method, which is used most commonly in levying a VAT, a firm's tax liability is determined by allowing the firm to subtract the VAT it paid on purchases from the tax it owes on its sales. An important characteristic of the credit method is that the tax on a product depends on the tax rate that prevails at the final taxable stage, such as the retail level. Thus, any VAT evaded by firms prior to the retail level would result in higher taxes at that level. This discourages tax evasion and is a major reason why the VAT is widely used in Europe and elsewhere in the world.

Under the addition method, which is used to calculate the Michigan SBT, a firm's VAT liability is calculated by adding up the components of value added (wages, rent, interest, depreciation, and profit) and applying the tax rate to that sum.

HISTORY OF THE MICHIGAN SBT

The Michigan SBT was adopted in 1975 (effective January 1, 1976) to replace the corporate income

tax, the financial institutions income tax, the corporate franchise tax, the savings and loan association privilege fee, the insurance privilege tax, the local property tax on inventories, and the intangibles tax on business. The adoption of the SBT marked a return to the value-added concept that prevailed from 1953 to 1967 in the form of the business activity tax (BAT). The BAT was never very popular with small businesses and was replaced by the corporate income tax in 1967 as a complement to the newly enacted personal income tax. The corporate income tax (the largest revenue source replaced by the SBT) was very unstable. For example, from 1973 to 1975 collections declined about 38 percent. It also was unpopular with many large corporations because it was applied to their worldwide income, and for this and other reasons it was the subject of much litigation.

The first effort to enact a true VAT was in 1972, when the tax was included in a ballot question that proposed changing the method of financing K-12 education. The proposal would have replaced a

portion of the revenues from the school property tax with revenues from a VAT and from an increase in the personal income tax. The proposal was not approved by the voters, and the VAT did not surface again until 1975, when the state was facing a fiscal crisis due to the deep 1974-75 recession.

In 1975 Governor Milliken proposed a value-added tax as a means to raise additional revenue and to reform the taxation of business in Michigan. The change was recommended for five major reasons.

1. The value added to goods and services is a much more stable tax base than corporate profits, particularly given the cyclical nature of the Michigan economy.

As indicated in Exhibit 2, SBT revenue grew at the about the same rate as personal income from its inception until FY 1987-88, and declined in only two years, FY 1980-81 and FY 1986-87, in the latter case due to factors not related to economic activity. However, collections have

been weak in recent years. After slow growth in 1989, collections declined in fiscal years 1990 and 1991 due to weakness in the economy, and particularly problems in the motor vehicle industry. In FY 1991-92, collections increased 6.3 percent, the best performance since FY 1987-88.¹

Collections have declined as a share of Michigan personal income and total taxes since 1988. This also occurred in the early 1980s and will always occur when economic growth is weak. A pure value added tax will grow at about the same rate as the economy; however, the SBT includes special provisions that make it more sensitive to changes in business profits and therefore more volatile than a pure VAT. More stability could be achieved by eliminating these special provisions.

1 Insurance premiums taxes are included beginning in FY 1986-87, because in that year insurance companies were given the option of paying the SBT or the premiums tax.

**EXHIBIT 2: Michigan Single Business Tax and Insurance Premiums Tax Collections,
FY 1975-76 to FY 1991-92**

| Fiscal Year | SBT | Insurance Premiums | Total Collections | % Change from Previous Year | Collections as % of Michigan Personal Income | Collections as % of State Taxes |
|--------------------|---------|--------------------|-------------------|-----------------------------|--|---------------------------------|
| 1976 | \$288.5 | | \$288.5 | NA | NA | NA |
| 1977 | 803.5 | | 803.5 | NA | 1.12% | 16.90% |
| 1978 | 899.4 | | 899.4 | 11.90% | 1.12 | 16.70 |
| 1979 | 1,001.3 | | 1,001.3 | 11.30 | 1.13 | 16.70 |
| 1980 | 1,076.0 | | 1,076.0 | 7.50 | 1.14 | 17.60 |
| 1981 | 942.3 | | 942.3 | -12.40 | 0.94 | 15.20 |
| 1982 | 943.2 | | 943.2 | 0.10 | 0.93 | 14.50 |
| 1983 | 999.7 | | 999.7 | 6.00 | 0.93 | 13.60 |
| 1984 | 1,289.2 | | 1,289.2 | 29.00 | 1.09 | 15.20 |
| 1985 | 1,372.7 | | 1,372.7 | 6.50 | 1.08 | 15.40 |
| 1986 | 1,521.9 | | 1,521.9 | 10.90 | 1.12 | 16.40 |
| 1987 | 1,497.6 | \$138.9 | 1,636.5 | 7.50 | 1.15 | 17.10 |
| 1988 | 1,828.7 | 43.9 | 1,872.6 | 14.40 | 1.23 | 18.20 |
| 1989 | 1,829.1 | 76.6 | 1,905.7 | 1.80 | 1.17 | 17.60 |
| 1990 | 1,798.6 | 78.6 | 1,877.2 | -1.50 | 1.10 | 17.00 |
| 1991 | 1,573.7 | 176.0 | 1,749.7 | -6.80 | 1.00 | 16.20 |
| 1992 | 1,685.1 | 175.6 | 1,860.7 | 6.30 | 1.01 | 16.60 |
| 1977-88 (% change) | | | | 133.10 | 111.40 ^a | |
| 1988-92 (% change) | | | | -0.60 | 20.90 ^a | |

SOURCE: Senate Fiscal Agency. Calculations by Public Sector Consultants.

^aPercentage change in Michigan personal income.

2. A VAT is more favorable to capital investment than a corporate profits tax, as it allows the immediate deduction of capital investment (under the consumption variant) and is levied on both labor and capital, whereas the corporate profits tax is levied on capital only. The investment write-off can be particularly beneficial to new firms.
3. Compared to other business taxes, a VAT is fairer because it covers all forms of business, not just corporations, and is more neutral because it taxes all business activity, not just profits. The more neutral a tax, the less it interferes with the natural workings of the marketplace.
4. A single tax on business is easier to administer and to pay than are several separate taxes.
5. The transition from the old to the new system of taxation resulted in a one-time revenue gain of about \$200 million needed to balance the budget. (On an annual basis, however, the SBT rate was set to generate the same revenue as had been generated at the time of adoption by the taxes it replaced.)

Two additional advantages of a VAT compared with a corporate income tax are that (1) the VAT is not directly tied to the federal tax code and subject to the vagaries of Congress, and (2) the VAT, in effect, is a sales tax on services, which escape taxation in many states. The tax proposal originally submitted to the legislature was for a 2 percent addition method VAT with a low base exemption and no credits or other exemptions. When it became apparent that many firms would be faced with very large tax increases, however, the legislature made numerous changes and added several special provisions. Some were designed to ease the transition to a new system, and others were the result of heavy special interest lobbying.

The major changes include an increase in the base exemption, a deduction for firms with high labor costs, a deduction that limited the tax base to 50 percent of gross receipts, and a credit for unincorporated businesses. Accommodating these measures required an increase in the tax rate to 2.35 percent. Largely because of the small business and labor intensity provisions of the SBT, revenues have been more cyclical than under a pure VAT.²

The SBT barely passed in the legislature and was soon under attack from a number of firms that found their tax bill much higher than under the old system. Protests came mainly from unincorporated businesses in the services sector, particularly such professionals as doctors and lawyers, and from construction contractors, farmers, and low-profit corporations in manufacturing and services. In response to the storm of criticism, Governor Milliken appointed a task force to recommend revisions. The major change proposed was a credit for small, low-profit firms with (1) gross receipts of \$3 million or less, (2) adjusted business income of \$300,000 or less, and (3) no shareholder or officer paid more than \$60,000. The credit, which was limited to 50 percent of the tax liability, was adopted by the legislature in 1977 along with several other changes, including the exemption of agriculture from the SBT.

Beginning in 1984, the eligibility limits for the small business tax credit were increased to (1) gross receipts of \$6 million, (2) adjusted business income of \$450,000, and (3) shareholder or officer income of \$90,000, and the 50 percent maximum was raised to 90 percent. Subsequently, the limit was increased to gross receipts of \$10 million and the credit was changed to a profits tax of 4 percent, with the rate later reduced to 3 percent.

Criticisms of SBT

Despite the various revisions, there has been periodic criticism from segments of the business community. Dissatisfaction with the SBT increases when the economy is weak and many firms experience low profits or losses. The major complaints have been that the SBT imposes a large burden on small businesses, that it is levied even when a firm loses money, and that unemployment and workers' compensation payments should not be included in the base of the tax. From time to time, automobile

2 Even without all the special provisions the SBT would not be a pure VAT because rent paid is excluded from the base and rent received is included, and the tax is levied on a destination rather than a point of origin basis. Firms having sales in the state but no payroll or property in the state are subject to the tax, whereas a pure VAT would tax only firms with payroll and property in the state. This could be done by using a two-factor (payroll and property) allocation formula rather than a three-factor (payroll, property, and sales) allocation formula. Such a change would be unpopular, however, as it would increase taxes on in-state firms and reduce taxes on outstate firms. In 1991 the legislature moved in the opposite direction and changed the allocation formula to double weight the sales factor.

dealers have protested inclusion of interest paid in the base.³

The decision to use the addition method to calculate the tax base probably has contributed to dissatisfaction because it makes the taxable components more visible. The advantage of the addition method, however, is that it makes the tax more understandable and is similar to that used to calculate an income tax, with which most business taxpayers are familiar.

There are several criticisms of the tax that should be addressed. First, its unpopularity can be partly attributed to the fact that many people have short memories regarding the tax structure prior to the enactment of the SBT. The SBT replaced taxes that were strongly disliked by businesses, such as the corporate franchise tax and the personal property tax on inventories. These taxes were more inequitable than the SBT.

Second, the argument that the tax discourages firms from hiring new workers is without merit. For one thing, the tax is too small to affect hiring decisions, as it amounts to only 0.41 percent of gross receipts. Also, a company's tax liability will not increase if it hires a new worker unless its revenues increase. If a company increases its payroll without increasing revenues, its profits will decline by an equal amount or its loss will increase, resulting in no change in the tax liability. In our firm's experience, the SBT liability is fairly stable from year to year, and it is treated as a cost of doing business, like other costs such as utilities or insurance. The SBT has never been considered in a hiring decision by our firm.

Third, we believe that the tax is unfairly criticized for being complicated. The complexity of the tax results from special provisions that reduce the tax burden for many businesses. It is not likely that many businesses would be willing to pay higher taxes for a simpler tax system. And it must be remembered that the SBT replaced seven other taxes.

Fourth, the tax has recently been criticized because it has declined as a share of state revenue. It is true that the tax has declined as a share of state

taxes since 1988 due to a weak economy, but it is about the same share as in 1977, adjusted for changes in the taxation of insurance companies (refer to Exhibit 2). If an adjustment were made for tax breaks granted to many firms, the tax would likely make up a slightly larger share of total state taxes. In any event, this is a baseless argument, as a number of taxes have declined as a share of state revenue.

COMMENTS AND RECOMMENDATIONS

In our view, any effort to replace the SBT with a tax on profits is misguided. Unfortunately, a foot is already in the door, as firms with gross receipts of less than \$10 million already have the option to pay a 3-percent tax on profits. There are four major problems with this approach.

First, a system that imposes different types of taxes on firms on the basis of their size or profitability is inequitable. It is likely that two competing firms of similar size, for example, with \$9 million and \$11 million in gross receipts, respectively, could be taxed on completely different bases. The tax burden would be shifted from low-profit to high-profit firms. In many cases, efficient firms would be subsidizing government services for inefficient firms: An efficient firm that is profitable should not be so penalized.

Second, allowing a profit option adds more instability to a tax system than does a straight profits tax. During an economic downturn, when profits are lower, many firms would choose the profits tax; during a recovery, when profits are higher, they would switch to the SBT. This would cause wide swings in revenue collections, although limiting this option to small firms reduces the effect significantly.

Third, it is fallacious to argue that small (or any size) firms should not pay taxes when they report no profits. The underlying concept of a value-added tax is that firms should pay for the government services they receive. Since these services continue even when a firm is unprofitable, paying taxes to support them also should continue. The local property tax is a benefits received tax in that payments are made regardless of the profitability of the firm, yet no one is proposing to turn the property tax into a profits tax. Furthermore, critics of the SBT fail to remember that most of the taxes repealed when the SBT was enacted also were not based on profits.

³ Auto dealers did not benefit from the repeal of the personal property tax on inventories, as motor vehicles were already exempt from the personal property tax.

Fourth, the perception that the SBT places an unfair burden on small businesses is false. On average, firms with tax bases of less than \$500,000 pay a lower-than-average effective rate. Specifically, the effective rate rises from 0.32 percent for the smallest firms to 1.54 percent for businesses with tax bases between \$2 million and \$5 million; it then declines to 1.49 percent for firms with tax bases above \$5

million. As Exhibit 3 shows, firms with a tax base of \$500,000 or less account for 53.1 percent of all businesses, but they pay only 1.26 percent of the total tax. Also, the total dollar burden is light for most small firms, averaging \$736 or less for 79 percent of all firms. About 67 percent of all firms have no SBT liability. (See Exhibit 4.) In a 1985 report on the SBT the Michigan Department of Treasury concluded:

EXHIBIT 3: Distribution of Businesses by Apportioned Tax Base

| Apportioned Tax Base Class | No. of Businesses | % of Businesses | % of Michigan Tax Base | % of Adjusted Tax Base | % of Tax Paid |
|----------------------------|-------------------|-----------------|------------------------|------------------------|----------------|
| \$0-.99 | 10,025 | 6.77% | -0.74% | -1.95% | 0.09% |
| \$1-39,999 | 3,875 | 2.62 | 0.01 | -0.08 | 0.01 |
| \$40,000-99,999 | 4,888 | 3.30 | 0.03 | -0.11 | 0.01 |
| \$100,000-499,999 | 30,188 | 20.37 | 0.94 | 0.25 | 0.15 |
| \$500,000-999,999 | 29,757 | 20.08 | 2.17 | 1.81 | 1.09 |
| \$1,000,000-1,999,999 | 26,186 | 17.67 | 3.78 | 3.56 | 2.66 |
| \$2,000,000-4,999,999 | 41,221 | 27.82 | 32.56 | 34.69 | 29.32 |
| \$5,000,000-9,999,999 | 1,110 | 0.75 | 7.80 | 8.36 | 8.36 |
| \$10,000,000-49,999,999 | 779 | 0.53 | 15.15 | 16.09 | 16.64 |
| \$50,000,000-99,999,999 | 71 | 0.05 | 4.89 | 5.18 | 5.60 |
| \$100,000,000+ | 63 | 0.04 | 33.39 | 32.20 | 36.07 |
| TOTAL | 148,163 | 100.00% | 100.00% | 100.00% | 100.00% |

SOURCE: Michigan Department of Treasury, November 1993.

EXHIBIT 4: Single Business Tax Liability By Liability Classification, 1988-89

| Tax Liability-Class | Number of Firms | Percent of Businesses | Cumulative Percent of Businesses | Amount of Tax Paid | Percent of Tax Paid | Cumulative Percent of Tax Paid |
|-------------------------------|-----------------|-----------------------|----------------------------------|----------------------|---------------------|--------------------------------|
| Did not file—no liability | 89,987 | 31.75% | 31.75% | \$0 | 0.00% | 0.00% |
| Filed short form—no liability | 45,301 | 15.98 | 47.73 | 0 | 0.00 | 0.00 |
| \$0-9 | 55,151 | 19.46 | 67.19 | 4,768 | 0.00 | 0.00 |
| \$10-99 | 5,530 | 1.95 | 69.14 | 280,907 | 0.02 | 0.02 |
| \$100-499 | 14,822 | 5.23 | 74.37 | 4,172,585 | 0.28 | 0.30 |
| \$500-999 | 12,448 | 4.39 | 78.76 | 9,163,354 | 0.62 | 0.92 |
| \$1,000-4,999 | 37,171 | 13.11 | 91.87 | 90,186,490 | 6.06 | 6.97 |
| \$5,000-9,999 | 8,934 | 3.15 | 95.02 | 62,558,536 | 4.20 | 11.18 |
| \$10,000-49,999 | 10,729 | 3.79 | 98.81 | 231,443,269 | 15.55 | 26.72 |
| \$50,000-99,999 | 1,783 | 0.63 | 99.44 | 122,866,414 | 8.25 | 34.98 |
| \$100,000-499,999 | 1,350 | 0.48 | 99.91 | 269,513,847 | 18.10 | 53.08 |
| \$500,000-999,999 | 135 | 0.05 | 99.96 | 92,869,381 | 6.24 | 59.32 |
| \$1,000,000+ | 110 | 0.04 | 100.00 | 605,625,675 | 40.68 | 100.00 |
| TOTAL | 283,451 | 100.00% | 1.00% | \$488,685,226 | 100.00% | 100.00% |

SOURCE: Michigan Department of Treasury, November 1993.

The SBT does not discriminate against smaller firms, but rather taxes smaller firms at a lower rate, on average. Firms with a tax base of less than \$500,000 have an effective SBT rate below the state average. For these smallest firms, the \$40,000 statutory exemption and the capital acquisition deduction are the major factors reducing taxes.

Our view is that the SBT is a fair, stable source of revenue and should be retained with minor modifications. In FY 1991-92, the SBT generated about \$1.68 billion in revenue, approximately 16 percent of total state tax revenue. To generate the same amount of money with a corporate income tax would require a rate of about 15 percent (in an average year). This would be the highest rate in the nation, act as a powerful disincentive for capital investment, and obviously hurt the Michigan business climate. Also, in a major downturn, revenues could decline by as much as \$700 million, creating nearly unmanageable budget problems.

We also believe it would be a mistake to replace the SBT with a gross receipts tax. The major reason that small businesses do not like the SBT is that it

requires taxes to be paid even if a firm loses money. A gross receipts tax is no different. All that would be achieved would be to increase uncertainty in the business community and create a new group of perceived losers complaining to Lansing about the unfairness of a gross receipts tax. As shown in Exhibit 5, an equal yield gross receipts tax would require a rate of about 0.4 percent. This would result in a tax reduction for firms in the wholesale trade, retail trade, and finance, insurance, and real estate sectors and increases for firms in manufacturing, transportation, and communications and utilities.

Any reforms of the SBT should be designed to simplify the tax, remove special provisions, and reduce the tax rate. Specifically, all special provisions, other than the capital acquisition deduction and a small statutory exemption, should be phased out over several years. These should be replaced with a sliding scale credit based on adjusted business income (the credit should not exceed 50 percent), and the SBT rate should be reduced to 1.8 or 1.9 percent. The changes proposed here would make the tax simpler for the taxpayer and the tax collector as well as more equitable for business, and would improve the business climate in Michigan.

EXHIBIT 5: Measures of SBT Liability by Business Sector, 1988-89

| Sector | All Businesses | | Michigan Businesses | |
|------------------------------------|--------------------------|----------------------------|--------------------------|----------------------------|
| | Tax as % of Compensation | Tax as % of Gross Receipts | Tax as % of Compensation | Tax as % of Gross Receipts |
| Forestry, fishing, and agriculture | 1.73% | 0.44% | 1.48% | 0.38% |
| Mining | 3.02 | 0.57 | 3.56 | 0.68 |
| Construction | 1.64 | 0.42 | 1.56 | 0.41 |
| Manufacturing | 2.26 | 0.52 | 1.97 | 0.47 |
| Non-durable | 2.68 | 0.50 | 2.08 | 0.42 |
| Durable | 2.18 | 0.52 | 1.95 | 0.49 |
| Primary metals | 2.38 | 0.53 | 2.18 | 0.50 |
| Fabricated metals | 2.08 | 0.62 | 1.90 | 0.59 |
| Machinery, excluding electrical | 1.96 | 0.62 | 1.78 | 0.65 |
| Transportation | 2.16 | 0.47 | 1.68 | 0.25 |
| Other durable | 2.33 | 0.60 | 2.11 | 0.49 |
| Transportation | 1.73 | 0.53 | 1.50 | 0.36 |
| Comm and utilities | 4.61 | 0.73 | 4.96 | 0.77 |
| Wholesale trade | 2.57 | 0.27 | 2.17 | 0.24 |
| Retail trade | 1.86 | 0.24 | 1.74 | 0.26 |
| Finance, insurance, real estate | 3.03 | 0.24 | 3.32 | 0.28 |
| Services and other | 1.68 | 0.41 | 1.59 | 0.48 |
| Total | 2.17 | 0.41 | 2.00 | 0.38 |

SOURCE: Michigan Department of Treasury, November 1993.

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