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Analysis of Ballot Proposals C and D: Environmental and Recreational Bond Issues

by Frances Spring, Economist

INTRODUCTION

On September 7 the legislature passed House Bill 4995 and Senate bills 651, 865, 866, and 867 creating two bond proposals that will appear on the November ballot. Proposals C and D will ask voters to approve the issue of a total of $880 million in general obligation bonds that would be used to finance environmental and recreational projects. This paper contains a brief explanation of these proposals and an analysis of Michigan's current debt standing and the effect passage of the proposals would have on both the level of debt and expenditures on debt retirement. The implicit costs of the addition of new long-term debt is also discussed, as is the effect of new federal tax legislation on the tax deductibility of any interest earned on the bonds.

ANALYSIS

Types of Debt Obligations in Michigan

There are three general classifications of long-term debt issued by the state of Michigan: general obligation debt bonds, special revenue debt bonds, and special authority revenue debt bonds.[1]

General obligation (G.O.) bonds are guaranteed by the full faith and credit of the state, with interest and principal on these issues paid from general fund appropriations. With the exception of those issues used to provide loans to school districts, G.O. bonds are subject to voter approval.

Special revenue bonds are issued for specific purposes, such as transportation or state parks. They differ from G.O. bonds in that they are funded from dedicated revenue sources and are not guaranteed by the state's credit.

Special authority revenue bonds are issued by state authorities (the Michigan Higher Education Facilities Authority, for example) in order to finance construction projects or to acquire facilities for the state or its institutions. These bonds are the obligations of the issuing authorities and are not direct obligations of the state. Debt retirement of one type of these bonds—those of the State Building Authority—are financed in part by appropriations from the general fund in the form of lease payments.

1 Definitions taken from Michigan Department of Treasury, *The Annual Report of the State Treasurer, FY 1986–87*.

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THE PROPOSALS

Proposal C will ask voters to approve a $660 million issue of general obligation bonds to be used for environmental protection programs. Of this amount, $425 million would be allocated for the removal of toxic waste, $150 million for solid waste clean-up programs, and $85 million for water pollution control and clean-up.

From the $425 million toxic waste funds, $40 million would be used to clean up those sites that have been identified under the Michigan Environmental Response Act as having economic development potential but that have not yet been allocated funds. Up to another $5 million could be used to investigate sites not yet identified as being contaminated and to provide funds (in the form of grants and loans to local governments) to develop those sites found free of contamination.

The $150 million for solid waste projects would be available for state projects, local projects (in the form of grants and loans), and private concerns (in the form of loans). At least $17 million of the funds would be used in recycling projects, including assistance in recycling, the development of markets for recycled materials, and recycling research.

The remaining $85 million of the issue would be put into two funds that would allocate monies for water control and protection projects. The State Water Pollution Control Revolving Fund would receive $60 million, and $25 million would be used to fund the state's participation in a yet-to-be-formed Regional Great Lakes Protection Fund. (If this fund is not established within two years, the funds will be allocated to hazardous waste clean-up projects.)

Proposal D will ask voters to approve $140 million in funds to be used to develop, construct, and expand recreational facilities within the state. Half of the funds would be allocated for use in state facilities, and $65 million would go for grants and loans to be used in local recreational projects. The remaining $5 million would be used to redevelop abandoned and/or vacant manufacturing and industrial sites for recreational use.

For each of the proposals, the issue of the debt would occur over a three-year period, with no more than 34 percent of the total debt issue occurring in the first year, and no more than 33 percent being issued in each of the succeeding two years. Provisions in the proposal call for the yearly appropriation of sufficient funds to pay the interest and principal on the bonds upon maturity. The bonds would also be exempt from all state and local taxes.

MICHIGAN'S CURRENT DEBT SITUATION

As of the end of fiscal year 1986–87, Michigan had $6.8 billion in total outstanding debt. Total principal on outstanding debt consisted of $157.7 million in general obligation debt, $413.0 million in special revenue debt, and $6.2 billion in special authority revenue debt. (See Exhibit 1.) Since FY 1981–82, total state debt has grown by 113 percent. In that year, outstanding principal on total state debt was $3.6 billion. In per capita terms, total state debt has increased by 90.0 percent, from approximately $390 per capita in FY 1981–82 to $741 per capita in FY 1986–87.[2]

2 Per capita debt calculations are based on U.S. Bureau of the Census estimates provided by the Michigan Department of Management and Budget in "Population and Census News," Spring 1988.

EXHIBIT 1

Combined Schedule of Bonds and Notes Payable by Fiscal Year
(in thousands)

Item	1982	1983	1984	1985	1986	1987
	Debt Outstanding on September 30					
GENERAL OBLIGATION DEBT						
School Loan	$53,000	$44,300	$35,300	$26,700	$27,000	$20,700
Water Resources	144,000	133,000	122,000	144,000	133,000	120,000
Public Recreation	18,000	14,000	10,000	6,000	3,000	2,000
Vietnam Veteran Bonus	146,000	118,000	92,000	65,000	35,000	15,000
Total General Obligation Debt	$361,000	$309,300	$259,300	$241,700	$198,000	$157,700
NONGENERAL OBLIGATION DEBT						
Special Revenue Bonds						
Michigan Department of Transportation Tax Dedicated Bonds	$212,435	$331,415	$424,720	$409,905	$423,705	$403,850[a]
Joint Venture Tax Dedicated Highway Bonds	15,375	8,315	1,010	0	0	0
Department of Natural Resources State Park Revenue Bonds	12,165	11,500	10,795	10,045	9,255	8,430
Public Building Corporation Bonds						
State Office Building Corporation (Mason Building)	1,466	1,326	1,186	1,046	906	766
Special Authorities-Revenue Bonds and Notes:						
International Bridge Authority	8,179	7,850	7,850	7,850	7,850	7,850
Mackinac Bridge Authority	21,692	13,714	8,988	3,285	0	0
Mackinac State Park	540	500	480	480	430	505
Michigan Economic Development Authority	0	39,580	34,085	0	0	0
Michigan State Housing Authority	1,452,170	1,657,856	1,810,049	1,949,430	1,930,004	1,896,815[a]
Michigan State Hospital Finance Authority	914,892	1,081,626	1,366,583	1,698,959	1,827,798	1,686,327
Michigan Higher Education Facilities Authority	3,160	5,880	9,685	69,015	68,310	66,275
Michigan Higher Education Student Loan Authority	211,000	267,000	252,000	192,982	140,653	123,377
Michigan Job Development Authority	163,517	188,694	316,745	0	0	0
Michigan Municipal Bond Authority		0	0	0	570,400	564,506[a]
Michigan State Building Authority	189,225	444,015	542,475	539,535	616,178	778,792
Michigan Strategic Fund[b]		0	0	614,175	1,030,800	1,119,286
Michigan Family Farm Development[c]		0	3,500	4,884	5,047	4,749
Total Nongeneral Obligation Debt	$3,205,816	$4,059,541	$4,790,151	$5,501,591	$6,631,336	$6,661,528

SOURCE: Michigan Department of Treasury, *The Annual Report of the State Treasurer*, FY 1985–86 and 1986–87.

[a]All or part of the principal amount not presented and not represented in the totals due to the advance refunding of all or part of this obligation.

[b]On September 26, 1985, the MSF acquired and succeeded to all the rights, properties, obligations, and duties of the Michigan Job Development Authority and the Michigan Economic Development Authority. The MSF has two types of obligations outstanding: direct obligation—Oil and Gas Revenue Bonds and direct obligation of MSF. Not included in above amount are $21,510 oil and gas refund bonds.

Limited obligation bonds—Obligation of the MSF limited to the payments made by the user of the proceeds.

[c]The $4,748,809 outstanding principal is audited and adjusted for principal retirement on a calendar annual basis.

The growth of total debt was due to increases in nongeneral obligation debt. Since FY 1981–82, nongeneral obligation debt has more than doubled, with an average yearly growth rate of 16 percent. (See Exhibit 2.) Special revenue debt increased by 71 percent (from $241 million in FY 1981–82 to $413 million in FY 1986–87), and special authority debt rose by 111 percent (from nearly $3 billion in FY 1981–82 to $6.6 billion by the end of FY 1986–87). Nongeneral obligation issues also claim a larger share of the state's total debt pie, up from 89.9 percent in FY 1981–82 to 97.7 percent of total outstanding issues. (See Exhibit 3.) This was due to the increase in special authority issues. The $157.7 million of outstanding general obligation principal, however, amounted to only 2.3 percent of total outstanding state debt. This is a significant reduction from FY 1981–82 when general obligation debt stood at $361 million and accounted for 10.1 percent of total outstanding state debt. The last issue of long-term G.O. bonds was in FY 1983–84 (for water resources), and most current outstanding G.O. debt—66 percent—was issued prior to 1979. (See Exhibit 4.) Because of the small amount of this type of debt issued by the state since that time, the payments necessary to retire existing G.O. bonds have been declining. These payments will fall significantly after FY 1990–91, by which time a majority of the current outstanding G.O. debt (58.6 percent) will have been retired. (See Exhibit 5.) According to the Senate Fiscal Agency, payments made from general fund/general purpose (GF/GP) appropriations on total state debt (G.O. appropriations plus State Building Authority lease payments) are estimated to peak in FY 1988–89.[3]

Michigan's current debt situation compares favorably with the rest of the country. As of FY 1986–87, Michigan state and local guaranteed debt per capita ranked 27th among the 50 states (higher number ranks are assigned to those states with less debt per capita). Michigan ranked 41st in state and local nonguaranteed debt per capita and 42nd in the amount of total state and local debt per capita.[4]

EXHIBIT 2

Growth of State Debt from Previous Fiscal Year

Year	G.O. Debt	Non-G.O. Debt	Total State Debt
1983	-14.3%	26.6%	22.5%
1984	-16.2	18.0	15.6
1985	-6.8	14.8	13.7
1986	-18.1	20.5	18.9
1987	-20.3	0.4	-0.1
Average yearly growth rate	-15.1%	16.0%	4.1%

SOURCE: Calculations made by Public Sector Consultants based on data provided by the Michigan Department of Treasury.

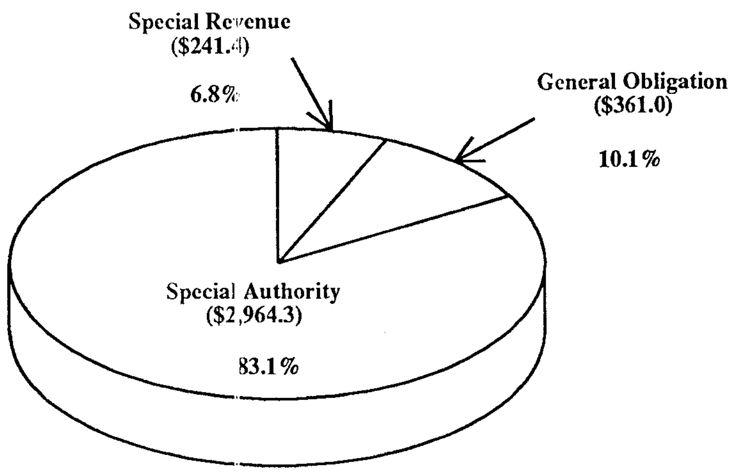
3 Senate Fiscal Agency, *Notes on the Economy and Budget*, Issue #48, February 1988.

4 Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism*, vol. II, 1988. Total state and local debt ranking calculated by Public Sector Consultants based on this information.

EXHIBIT 3

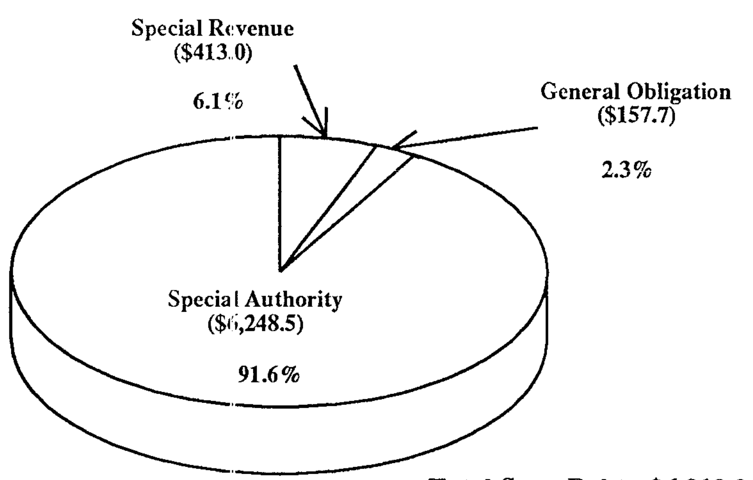
Size and Relative Shares of Total State Debt for FY 1982 and FY 1987
(millions of dollars)

1982



Total State Debt: $3,566.8

1987



Total State Debt: $6,819.2

SOURCE: Michigan Department of Treasury, *Annual Report of the State Treasurer, FY 1986-87*.

EXHIBIT 4

General Obligation Debt by Issue
(dollar amounts in thousands)

Item	Issue Date	Maturity Dates	New Issues	Principal Payments	Interest Payments	Outstanding Principal as of September 30, 1987
School Loan Notes and Bonds[a]						
Series IV	1978	1980-89	$0	$2,300	$297	$5,200
Series V	1981	1986-89	0	4,000	1,174	8,000
Series VI	1986	1988-95	0	0	444	7,500
Water Resources Bonds[b]						
Series II	1970	1980-90	0	1,000	240	3,000
Series III	1971	1979-99	0	3,000	974	24,000
Series IV	1971	1973-99	0	2,000	1,035	24,000
Series V	1971	1985-87	0	3,000	180	3,000
Series VI	1972	1974-98	0	2,000	864	18,000
Series VII	1972	1974-92	0	2,000	690	15,000
Series VIII	1984	1987-94	0	0	3,019	33,000
Public Recreation Bonds[c]						
Series V	1978	1979-89	0	1,000	117	2,000
Vietnam Veteran Bonus Bonds[d]						
Series II	1975	1983-87	0	15,000	855	0
Series III	1975	1976-89	0	5,000	1,018	15,000
Total General Obligation Debt			$0	$40,300	$10,907	$157,700

SOURCE: Michigan Department of Treasury, *The Annual Report of the State Treasurer, FY 1986–87.*

aArticle Nine of the Constitution of the State of Michigan provides that the state may borrow from time to time such amounts as shall be required for the purpose of making loans to school districts. Requirements are established biennially, and general obligation debt is issued as needed. Series I, II, and II have been retired.

bAct 76, Public Acts of 1968, provided for the issuance of $335 million general obligation bonds, of which all have been issued. Series I has been retired.

cAct 257, Public Acts of 1968, provided for the issuance of $100 million general obligation bonds, of which all have been issued. Series I, II, III, and IV have been retired.

dA majority vote of the electors and Act 106, Public Acts of 1974, provided for the issuance of $205 million general obligation bonds, of which $15 million remain unissued. However, the program expired on June 30, 1980, and no further issues are anticipated. Series I has been retired.

EXHIBIT 5

Payments Schedule for Currently Existing General Obligation Bonds

For Period Ended September 30	Principal	Interest	Total
1988	$28,500	$8,392	$36,892
1989	26,200	6,621	32,821
1990	19,000	4,989	23,989
1991	14,000	3,980	17,980
1992	14,000	3,153	17,153
1993	14,000	2,350	16,350
1994	11,000	1,613	12,613
1995	11,000	866	11,866
1996	6,000	375	6,375
1997	5,000	243	5,243
1998	5,000	142	5,142
1999	4,000	61	4,061
TOTAL	$157,700	$32,785	$190,485

SOURCE: Michigan Department of Treasury, *The Annual Report of the State Treasurer, FY 1986–87.*

Passage of proposals C and D would significantly increase Michigan's general obligation debt. The increase appears large, however, only because of the small number of new issues over the last 13 years. The effect on total state debt of passage of both proposals would be to increase total outstanding bond principal by 11.7 percent over FY 1986–87 levels; the G.O. bond share of total state debt would rise to 12.6 percent of total debt. Passage would raise G.O debt per capita from $17 to approximately $104, and total state debt from $741 to $828 per capita.

New bonds would not begin to be issued until FY 1990–91, with retirement beginning in the following year. Because of the retirement of so much old G.O. debt, increases in GF/GP appropriations should not be significantly larger than in past years.

Because the legislation required to put the proposals on the ballot was passed so late in the session, few details of the bonds' issuance are known at this time. Exhibit 6 provides an example of a straight-line bond retirement of $800 million issued over a three-year period (the fastest rate at which the bonds may be issued under the proposal), with the corresponding changes in GF/GP appropriations.

THE EFFECT OF FEDERAL TAX REFORM ON BOND INTEREST DEDUCTIBILITY

The interest on the bonds that would be issued due to passage of proposals C and D would be exempt from all state and local taxes. Exemption of the interest from federal taxation would depend upon whether the issue complies with federal law and, more specifically, with the 1986 Tax Reform Act. This act limits the size and type of bonds that a state may issue as well as the amount of benefit that private firms can receive from bond funding. Only 10 percent of a bond's issue may be spent on facilities that will be used

EXHIBIT 6

Payments Stream Necessary for Retirement of $800,000,000 Bond Issue

FY	1st Issue ($272,000,000)	2nd Issue ($264,000,000)	3rd Issue ($264,000,000)	Total
1990-91	Year of issue	—	—	—
1991-92	$27,703,200	Year of issue	—	$27,703,200
1992-93	27,703,200	$26,888,400	Year of issue	54,591,600
1993-94	27,703,200	26,888,400	$26,888,400	81,480,000
1994-95/2010-11	27,703,200	26,888,400	26,888,400	81,480,000
2011-12		26,888,400	26,888,400	53,776,800
2012-13			26,888,400	26,888,400

NOTE: Estimates assume 20-year bonds issued at an 8 percent rate of interest. Total principal and interest on issue: $1,629,600,000.

by private firms, and no more than 10 percent of the principal and interest on the issue may be paid by private entities.[5] If spending of funds does not comply with these restrictions, they are classified as "private activity bonds." Some private activity bonds may be tax exempt, but a state is restricted in the total amount of funds of this type that it can issue. Late passage of the legislation placing the proposals on the ballot limits our knowledge of specifics with respect to the bonds' issuance. The loan provisions provided within the two proposals make it possible that the bonds to be issued under proposals C and D could be classified as private activity bonds, making any interest earned on them non-tax deductible on federal returns. This problem is likely to be overcome in the manner in which the spending of the funds is structured. In addition, corrections to the Tax Reform Act are currently being written, and litigation regarding this issue is pending, causing the tax-deductibility of the bonds to be in question.

APPROPRIATION VS. DEBT

In general, bonds are issued because the funds necessary to enact specific new programs or projects are substantial. Allocation of funds from the existing budget would require that current programs be cut or eliminated or the new programs be implemented slowly, with only small portions of the total funds necessary being allocated at any one time. By issuing bonds, the necessary funds are raised and the project implemented more swiftly than with allocation, while allowing for payment of the project over a long period of time. Thus, the project is implemented without requiring cuts in existing programs, and the benefits to be derived from the new program begin to accrue immediately. In addition, by spreading the repayment of the issue over a long period, current and future generations, both of which will benefit from the project's implementation, pay for it.

Bond-financed programs have the added advantage of being relatively low cost. Interest received from state-issued bonds are tax deductible (at least at the state and local level) and, therefore, can compete with

5 Carroll A. Campbell, Jr., "Tax Reform and Public Finance," *The Journal of State Governments*, vol. 61, no. 4, July/August 1988.

comparable bonds issued at higher rates of interest that are not tax deductible. General obligation bonds are also considered to be low risk due to the state's full faith guarantee to pay principal and interest on the issue. Both of these facets of G.O. bonds allow them to be issued at interest rates below market rates.

Using the example of a bond retirement schedule in Exhibit 6, the issue of bonds under proposals C and D would increase GF/GP spending levels in FY 1991–92 by approximately $15 million over that of FY 1983–84, when spending on G.O. bond retirement was slightly more than $65 million. While the increase is not large, this does not imply that the securities issued would be without cost. There are implicit costs associated with the issuance of new debt. For example, funds freed up by the retirement of old debt could be spent on other programs rather than used to service new debt. In addition, incurring additional long-term debt today will limit the amount that can be issued in the future. Some worthy projects may not be undertaken due to the state incurring additional debt today.

According to the Michigan Constitution the state can vote to issue as much long-term debt as it pleases, but in reality, this is not the case. Massive issuance of long-term debt is not practical because it can call into question the ability of the state to retire that debt upon maturity, which results in a loss of faith and a decline in the state's credit rating, causing future borrowing to become more costly.

CONCLUSIONS

Due to the restraint of state government with respect to the issuance of new debt over the last 13 years, Michigan's credit situation is sound. The funds asked for under proposals C and D are not excessive, and the amount of spending on debt retirement would not have to increase substantially over the levels of the last several years. The proposals call for portions of the funding to be provided to projects that would aid in economic development (via loans to local governments and private concerns) and to infrastructure repairs that would help foster continued development, especially with respect to the tourism industry. We therefore endorse passage of the bonding proposals.

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